

# Summary of 9<sup>th</sup> Living Knowledge Conference 2022 in Groningen, The Netherlands

## Table of content:

-  page 2      Report of the LK9 conference
-  page 5      Plenary Speakers and panelists
-  page 11     Advisory board and local organising team
-  page 13     Book of abstracts
-  page 132    Videos of the LK9 conference

## Report of the 9<sup>th</sup> Living Knowledge Conference 2022 Groningen, The Netherlands

### Wednesday 29th of June 2022

*Science shop, Wetenschapswinkel, Bazar de las Ciencias or Forskningstorg...* Many names for organizations that have the same goal in mind: the co-creation of research with citizens and their organizations to find solutions and therefore have a positive impact on real world problems.

Henk Mulder kicked off the first plenary session, welcoming all 280 participants from 25 different countries! He started the session of the 9<sup>th</sup> Living Knowledge Conference on the concept of the Living Knowledge Conference and the Living Knowledge Network. With 'To meet, to learn and to collaborate' as the theme for this year's conference, today was all about meeting each other and the questions of the day reflected this theme: who did you meet today and why was that interesting?

### Plenary Session

To get a sense of place, the plenary session started with an introduction to the Groningen Science Shop by the local team of the conference. The local team highlighted several recently finished projects, among one was the research project at [Stichting \(On\)gestoord \(The \(Un\)disturbed foundation\)](#). We met Esther Jansen, the founder of Stichting (On)gestoord and Wieke Steenbruggen, a Master student in education in human and social sciences from the University of Groningen. They joined the session to talk about their research at Stichting (On)gestoord about the effect of the corona pandemic on people who are or have been in need of mental health care.

Henk introduced us to Kate Morris from [Campus Engage](#), an organization that aims to bring Irish universities and society together to address societal challenges. And we met Rowinda Appelman, she gave a talk about [City Deal Kennis Maken](#), an initiative that aims to strengthen knowledge partnerships, help solve societal issues, and create a rich learning environment. Rowinda ended the talk with an interesting take home message, she said: "Be a wallflower, do enough to be noticed, but don't do enough to actually upset anyone. It actually helps and that way you can slowly keep building."

### Parallel Sessions

After a short coffee break at the Harmonie building, most of us joined one of many parallel sessions. People from the [Living Lab Project from Victoria, Canada](#), talked about land-based learning, eco-cultural restoration and art as an accessible form to reach people and create awareness. Another group discussed the importance and power of [illustration in \(research\) projects](#). How do you visualize your idea and your research and how can that be helpful? The session ended with the group mapping out their morning travel to the conference or drawing one of their research projects to get the conversation started.

## Welcome reception

We ended this lovely and sunny first day of the conference at the welcome reception in the [A-Kerk](#). Jouke de Vries, president of the University of Groningen, opened the evening with a warm welcome to our international participants and the inspirational collaborations in our network. Some people enjoyed a tour by one of the artists Aimee ter Burg of the exhibition on Bittersweet Heritage while others chatted or listened to the music of the band Anamesa.

## Thursday the 30th of June

### Plenary Session

This day was all about learning, so the question of the day was: “What did you learn today and how could you use it?” Before continuing with the program, someone from the audience made a nice comment on science shops in general. She said that science shops are not like dinosaurs, as they are not dying out. According to her, science shops were more like sharks, since they can always bite back with the many teeth they have!



The plenary session went on to [reflect on methodologies used to create living knowledge](#) with a [panel](#) of critical thinkers: Rajesh Tandon, internationally acclaimed leader and partitioner of participatory research, Lisa Herzog, professor in political philosophy at the University of Groningen, and Claudia Göbel, researcher at the institute for higher education and research in Halle-Wittenberg. Under guidance of Nick Nieuwenhuijsen, they discussed all kinds of topics related to distrust in science.

They talked about the tradeoff between scientific quality and genuine community engagement, and between activism and scientific objectivity or rigor. Do attempts to democratize research run the risk of doing away with expertise and knowledge hierarchies altogether? The first round of today’s parallel sessions was of a serious and instructive nature. We learned about inclusivity and diversity, about preparing students for the future and about empowering vulnerable groups of people and the use of platforms in citizen science.

### Parallel sessions and poster session

After the lunch break, people could attend multiple laid-back parallel sessions. They had the chance to have accessible conversations with their fellow attendees during the poster session. Furthermore, there were several art-based sessions involving music and making collages among others.

During the last round of parallel sessions, the main stage in the Marie Loke hall was used for a [workshop about learning from your mistakes](#). This session was all about breaking the taboo on making mistakes, the necessity of making mistakes in processes of learning, development, and innovation, and helping attendees to share their mistakes so we all might learn from each other. The most noteworthy remark of this workshop was

as follows: “Being direct does not have to mean that you are rude.” The presenter used this remark to show multiple ways of dealing with difficult or awkward situations.



After a long day of talks and interactive sessions, participants could enjoy the conference dinner at De Rietschans, a lovely restaurant at the shores of the Paterswoldse meer. What is a conference in The Netherlands without water activities?! Small and big boat tours were on the menu, and of course some food!

## Friday 1st of July

On the last day of the 9th Living Knowledge Conference, there was a very relaxed atmosphere. There were some great parallel sessions on the programme once again. Inclusion, citizen science, public engagement and conspiracy theories were some of the topics that were discussed.

Before heading into the closing plenary session, Henk Mulder hosted a session about the [Ideas Fund](#). The Ideas Fund is a grants programme run by the British Science Association (BSA) and funded by Wellcome, which enables the UK public to work with researchers to develop and try out ideas that address problems related to mental wellbeing. The Fund aims to reach people and communities who are often overlooked by this type of work, including young people and those in rural communities. A panel of several people who owe a lot to the Ideas Fund, both on a personal level and for their work, shared their stories with the rest of the attendees.

The [closing plenary session](#) was filled with many words of thanks. The organization thanked everyone for coming and all present thanked the organization with a thunderous applause. Some last words were said about what it meant to have such a lovely group of like-minded people together in one place. Although today’s question of the day “What is your plan for collaboration after this conference?” was not explicitly mentioned, many people answered this question without even knowing it. The entire audience agreed when the message came to them that [Living Knowledge is more than an organization or a community. It was described as a family that should be cherished at all costs.](#)

In the afternoon, people joined various trips to, for example, the University Museum or Forum Groningen, or they prepared for a long journey home...

# Plenary Speakers and Panelists

**WEDNESDAY June 29<sup>th</sup>**

**9.00-10.00: OPENING and WELCOME**

- Henk Mulder (Conference Chair, Science Shop, University of Groningen),
- Norbert Steinhaus (Coordinator Living Knowledge Network @ Science Shop Bonn, Germany),
- Saskia Visser (Chair Groningen University's Science Shops)
- Groningen Science Shop Team with Esther Jansen en Wieke Steenbruggen from Stichting (On)gestoord (= Foundation (un)disturbed).

**10.00-11.00: SESSION 1: How to create meaningful synergies?**

**We've asked Kate Morris and Rowinda Appelman to share their experiences and inspire us. Sophie Duncan will guide us through a discussion with them.**

**Kate Morris, Head of Campus Engage, Irish Universities Association**



Kate leads Campus Engage, which is based within the Irish Universities Association. Campus Engage is dedicated to supporting Irish higher education institutions to embed, scale and promote civic and community engagement across staff and student teaching, learning and research. Kate will speak about the collaborative effort that makes Campus Engage.

Campus Engage aims at supporting Community-based Teaching and Learning; Engaged Research and Innovation for Societal Impact; Student Volunteering and building a national Framework for measuring and evaluating the positive social impact of higher education civic and community engagement.

Kate has over 15 years' experience in stakeholder engagement for policy and practice change. She has much experience in working with policy makers, funding agencies, research staff, practitioners and the public in Ireland, France, and UK. Prior to joining the IUA Kate worked at the Centre for Effective Public Services, the French National Institute for Demographic Studies, and UNESCO NI.

**Rowinda Appelman, programme manager City Deal Kennis Maken, Netherlands**



Rowinda is the programme manager of the Dutch "City Deal Kennis Maken" and she will speak on how to get a variety of organizations to work together on generating knowledge to help tackle wicked societal issues. In Dutch, "Kennis Maken" has a double meaning: "Making Knowledge" and "Getting Acquainted". This exactly what this programme of the National Research Council facilitates. The focus of this City Deal is primarily on involving students, researchers and teachers in urban challenges in rich

learning environments. It aims to involve students at all levels, from vocational schools, to universities of applied sciences and research universities. Therefore, in the official English translation it is called the City Deal on Education.

After doing a Social Innovation Fellowship at the U.S. State Department, as one of the first seven Europeans, Rowinda is now responsible for the design and implementation of the City Deal Kennis Maken-programme, which funds collaborations in the 19 largest knowledge cities of The Netherlands. She runs the national network, oversees the strategic collaboration with ministries, umbrella organizations and main partners, and discusses the programme's progress with the Ministers of Research, Internal Affairs and the leadership of involved partners.

## Sophie Duncan, co-director National Coordinating Centre for Public Engagement (NCCPE), UK



Sophie co-directs the NCCPE. Established in 2008, the NCCPE supports universities to develop their engagement work. Since its early days the NCCPE have sought to provide tools and resources to the sector, to cultivate the conditions where engagement can thrive. Sophie regularly supports university leaders to understand the value of engagement to their work, and develop practical approaches to supporting their staff to engage in mutually beneficial ways with others.

A physicist by training, Sophie has worked in engagement throughout her career including at the Science Museum, NESTA and the BBC, where she led national engagement campaigns including Breathing Places, a campaign to improve biodiversity in the UK. She sits on several advisory panels, including STFC's Advisory Panel for Public Engagement. She has published a range of papers on evaluation, culture change, and engagement.

As co-editor of Research for All, Sophie is particularly interested in the evidence base for effective public and community engagement, and what this looks like across different disciplines. She has expertise in evaluation, evidencing impact, and partnership working, leading programmes to support mutually beneficial partnerships between university staff and a range of different partners including community organisations; cultural organisations; and schools.

## THURSDAY JUNE 30<sup>th</sup>

### 9.00-10.30: SESSION 2: A critical reflection on research with and for society in a world of contested expertise

In this conference, we focus on generating living knowledge in the form of research with and for communities. Methodologies like citizen science, participatory action research, living labs, community based research, etc. are used to obtain this kind of living knowledge. These methodologies can be viewed as critiques of more standard scientific methodologies in which professional scientists are the ones in charge of the research, research which aims for “objective” knowledge obtained under ideal conditions using idealizing abstractions.

However, our own critical methodologies themselves are in need of critical reflection. This is particularly relevant because we are now living in a world of contested expertise, post-truth and alternative facts. This raises a number of questions and apparent tensions which we want to address in our panel discussion: Is there a trade-off between scientific quality and genuine community engagement, or between activism and scientific objectivity or rigor? To what extent do methodologies like participatory action research become simply a form of activism, politics by other means? Can this concern simply be brushed away by saying that science is always political or value-laden and that objectivity does not exist? And if our research methodologies are a form of political activism, do we thereby not contribute to the current demise of the authority of science and the general distrust of science and scientific experts? More generally, do attempts to democratise research run the risk of doing away with expertise and knowledge hierarchies altogether?

We have invited a panel of critical thinkers to discuss these issues with us:

### Rajesh Tandon, Founder-President of Participatory Research in Asia (PRIA)



Rajesh is an internationally acclaimed leader and practitioner of participatory research and development. He is Founder-President of Participatory Research in Asia (PRIA), global centre for participatory research & training since 1982. He is also Co-Chair of the UNESCO Chair on Community Based Research and Social Responsibility in Higher Education since 2012.

The UNESCO Chair grows out of and supports UNESCO's global lead to play 'a key role in assisting countries to build knowledge societies.

As a pioneer of participatory research, Rajesh Tandon has given new meaning to academic research by redefining the relationship between the researcher and the researched. He has championed the cause of building organisations and capacities of the marginalised through their knowledge, learning and empowerment, contributing to the emergence of several local, national and international groups and initiatives to promote authentic and participatory development of societies. Dr Tandon has served on numerous expert committees of Govt of India, UGC, UN, Commonwealth & World Bank. In 2015, the Indian Adult Education Association (IAEA) awarded Dr Tandon the Nehru Literacy Award.

For his distinguished work on gender issues, the Government of India honoured him with the prestigious Award in Social Justice in March 2007. The University of Victoria, Canada, awarded Dr Tandon the degree of Doctor of Law (Honoris Causa) in June 2008. He is the first Indian to be

### **Lisa Herzog, Faculty of Philosophy and the Center for Philosophy, Politics and Economics of the University of Groningen**



Lisa works at the intersection of political philosophy and economic thought. Between 2016 and 2019, she was professor for political philosophy and theory at the Technical University of Munich, since 2019 she works at the Faculty of Philosophy and the Center for Philosophy, Politics and Economics of the University of Groningen. She holds a master (Diplom) in economics from LMU Munich, and an M.St. in Philosophy and D.Phil. in Political Theory from the University of Oxford. She has worked at, or visited, the universities of St. Gallen (CH), Leuven (BE), Frankfurt/Main (D), Utrecht (NL), and Stanford (US). She was a Rhodes Scholar (2007-2011), and in 2019, she received the Tractatus-Preis and the German Award for Philosophy and Social Ethics. Herzog has published on the philosophical dimensions of markets (both historically and systemically), liberalism and social justice, ethics in organizations and the future of work. The current focus of her work are workplace democracy, professional ethics, and the role of knowledge in democracies.

### **Claudia Göbel, researcher at the Institute for Higher Education Research Halle-Wittenberg (HoF)**



Claudia is passionate about interfaces between science and publics through research, education, activism, policy and art. Main topics of her work are open (research) organisations, equity and inclusiveness in participatory research, Citizen Science as international research policy field and relations to Open Science. She tries to link scientific reflection from a science and technology studies perspective with making things happen as a practitioner. As researcher at the Institute for Higher Education Research Halle-Wittenberg (HoF) she currently investigates the landscape of participatory research in the social sciences and humanities in Germany. As guest researcher at the Museum für Naturkunde Berlin, she analyses the institutionalisation of Citizen Science in Europe. She helped establish the European Citizen Science Association (ECSA) in its foundational years through coordinating the secretariat and running the EU-funded project "Doing-it-Together science". In order to create space to learn from each other and do things together for members of ECSA and Living Knowledge, she initiated the joint working group on "Empowerment, Inclusiveness and Equity in Citizen Science and Community-Based Research" together with Michael Sjøgaard Jørgensen (Aarhus University Copenhagen).

## Nick Nieuwenhuijsen, Specialist Strategy and Development for the Fire Brigade of the Safety Region Groningen



The session will be chaired by Nick. He is an ethicist and local politician. He has been employed at the Knowledge Centre Philosophy, the Science Shop of the Philosophy Department, and as the academic advisor of the Honours College of the University of Groningen – an interdisciplinary hotbed in which students work and learn together on complex, interdisciplinary problems. He is interested in local social policies, poverty, healthcare, digitalization and the participation of students within practical societal issues.

Nick has been a member of the Groningen City Council from Jan 2019 – March 2022. He's currently working as Specialist Strategy and Development for the Fire Brigade of the Safety Region Groningen.

## FRIDAY JULY 1<sup>st</sup>

### 11.00-12.00: SESSION 3: A semi-plenary on the Ideas Fund: Putting communities in the lead.

The Ideas Fund is a grants programme run by the British Science Association (BSA) and funded by Wellcome, which enables the UK public to work with researchers to develop and try out ideas that address problems related to mental wellbeing. The Fund aims to reach people and communities who are often overlooked by this type of work, including young people and those in rural communities. To date, 49 projects across four areas of the UK (Hull, Oldham, North West Northern Ireland and the Highlands & Islands of Scotland) have been supported, totalling £1.8m.

The Fund is trialling a different approach to supporting this work, with individuals, informal groups and charities applying for the funds and leading the projects, and researchers working in support of the community's plans. Projects are funded following a simple application process, with small grants awarded to build relationships and develop ideas, and 1:1 support being provided. Funded projects are brought together regularly to share their learning.

In this session, we will share more information about the Fund's approach, and what we've learned since launching in January 2021, from the following panel members:

### Chris Manion, Head of Grants at the British Science Association (BSA)



Chris has responsibility for delivering The Ideas Fund, which is piloting a new way of supporting communities to work with researchers. The BSA's vision is of a future where science is more relevant, representative and connected to society, and The Ideas Fund plays a key role in informing this work through supporting a range of individuals and organisations. Around £1.8m in funding has been awarded so far.

Chris has 15 years' experience in delivering grant making programmes both in the UK and internationally, ranging from a £240m programme designing and building youth centres across England, to supporting livelihoods for disabled people in East Africa. He co-founded a 'Shift the Power' movement of UK based funders looking to work differently in international funding, and is passionate about exploring how funding practice needs to change in order to achieve long-term impact.

Since joining the BSA in November 2020, Chris has overseen the launch of the Fund and the piloting of two funding rounds, designed to help reach groups who are often overlooked by this type of work. The team are currently exploring what infrastructure needs to be supported in order to remove the barriers faced by communities and researchers who are looking to work together.

### Lewis Hou, Founder and director of the Science Ceilidh



Lewis is one of the Development Coordinators, who has been supporting groups to run their projects, including some who are working with a researcher and managing a grant for the first time, and also convening wider stakeholder networks to share learning.

Lewis Hou is founder and director of the Science Ceilidh, an independent intermediary organisation connecting communities, education, research and culture across Scotland. He consults on equitable community engagement both nationally and internationally and is an organising member of the Anti-Racist Educator collective and the cross-Europe DiverSci Community of Practice. He was a UK Creative Community Fellow and awarded the Public Engagement Innovator Medal with the Royal Society of Edinburgh. Currently, Lewis is an associate trainer with the National Coordinating Centre for Public Engagement and working with the British Science Association supporting groups in the Highlands and Islands of Scotland to lead public engagement and community-based research around mental wellbeing and climate change.

We'll also hear from two of the projects, about the work that they're doing, what they've gained through working with the researcher, any challenges they've come across, and where they'd like to go next with their ideas: Yellow Wood Consultancy (Northern Ireland) and the OPEN Space project (Shetland Islands).

### Declan Thompson, Yellow Wood Consultancy Peer Mentor/Researcher



Declan is involved in the planning, design, delivery and research of our mental well-being programme. Declan has walked the path of stress and burnout, and alongside our other Peer Mentors Emma Bond and Jenny Coyle have worked closely with Yellow Wood Consultancy, Clarendon Medical Practice and Ulster University to explore what was needed to aid wellness and recovery at community level.

Declan has 30 years' professional experience in peer-led programmes in Youth Social Services, and since joining Yellow Wood Consultancy programme has developed deeper interests in coaching/mentoring, and exploring alternative therapies such as Reiki, Reflexology and Visual Relaxation techniques as creative ways to explore the inner self. **Yellow Wood Consultancy** in collaboration with our community Peer Mentors, Clarendon Medical Practice and Researcher co-create programmes of support using creative and innovative approaches to community action research and improve connection and relationship to self.

### Rosemary Bradley, Yellow Wood Consultancy Director/Facilitator



Rosemary is a Yellow Wood Consultancy Director/Facilitator. Rosemary has a background in Psychological therapies and has worked across many Health and Social Care settings over the last 18 years supporting people to improve physical, emotional, and mental well-being. Rosemary also applies her training in Emotional Freedom Techniques (EFT) to demonstrate alternative resources to improving well-being.

The **OPEN Space** research team has developed an innovative approach to empower young people in community action research. Sharing skills and experiences to design and carry out research with young people, engaging with service providers and presenting the findings at strategic and other levels to influence change and improvements.

### **Akira Foster. OPEN Peer Researchers, Voluntary Action Shetland**



Akira is responsible for the design and delivery of the OPEN Space Project. She has over 8 years experience as an OPEN peer educator, with expertise in designing and delivering peer education workshops in all high schools in Shetland.

She and her colleague Shannon have been working closely with the professional researchers and Da Cafe youth committee to design and carry out youth-led community action research. “Gathering evidence of need for a space for young people in Shetland”

### **Una Murray, OPEN project coordinator, Voluntary Action Shetland**



Una is responsible for supporting the research team made up of Da Café Youth Committee. She founded the OPEN project in 2011, with expertise in peer education methodology.

Finally, we’ll discuss the BSA’s longer term vision for this work – how can we influence others and support these approaches to be embedded in wider practice? What needs to be done or funded differently to enable this? What can we learn for future collaborations in research with and for society and our work in the Living Knowledge Network?

### **Henk Mulder, Programme Director of the Master Science Education and Communication at Uni Groningen**



The Ideas Fund representatives will discuss these issues under the guidance of Henk. He joined the Science Shop at the Science and Engineering Faculty in 1989. He is also a lecturer, and Programme Director of the Master Science Education and Communication.

Henk has a long experience in research with and for civil society organizations and the co-creation of knowledge. His interests are public engagement in research, dialogues, science (communication) policies and European/international networking for citizen engagement in all phases of the (responsible) research and innovation process, including agenda-setting. He led the EU funded project “PERARES” and was partner in “Engage2020”, and is on various Advisory Panels. He has degrees in Chemistry and Energy and Environmental Sciences.

## Local Organising Committee

The local committee consists of the staff of all six Science Shops of the University of Groningen (UG) and the UG Green Office. They are supported by the Groninger Congressbureau (GCB), the local conference bureau, who will facilitate the conference.

### Local conference workgroup

Vincent Hazelhoff  
Henk Mulder  
Marc Pauly  
Saskia Visser  
Kim Dumoré

### Groningen Congress Bureau

Maria Valbuena  
Sandra Mulder

### University of Groningen Science Shops

Karin de Boer  
Vera Verhage  
Vincent Hazelhoff  
Denise Leidelmeijer  
Henk Mulder  
Marc Pauly

Karin Ree  
Saskia Visser  
Irene Maltagliati  
Francine Nijp  
Yorick Karseboom  
Jolien Mouw

## International Advisory Committee

Catherine Bates (Dublin Institute of Technology)  
Anne-Sophie Gresle (IS-Global, Barcelona)  
Budd Hall (University of Victoria/UNESCO)  
Daniel Ludwig, University of Vechta  
Michael Søggaard Jørgensen (Aalborg University, Copenhagen)  
Emma Mc Kenna (Queens University Belfast)  
Peter Levesque (Institute for Knowledge Mobilisation, Ottawa)  
Reka Matoley (Corvinus University of Budapest)  
Glen Millot (Sciences Citoyennes, Paris)  
María Jesús Pinazo (IS-Global, Barcelona)  
Kahn Rahi (Loka Institute, University of Toronto and CBRN Canada)  
Norbert Steinhaus (Wissenschaftsladen Bonn)  
Rajesh Tandon (PRIA/UNESCO, New Dehli)  
Andrea Vargiu (Università di Sassari)

# University of Groningen Science Shops

Since 1979, The University of Groningen Science Shops make academic research possible for civil society groups and organizations. Currently, the University of Groningen has six Science Shops, which give access to most of the university's research fields:

1. Bèta Science Shop (Science and Engineering)
2. Science Shop Education (Behavioural and Social Sciences)
3. FEB Student Consultancy (Economics and Business)
4. Knowledge Center Philosophy (Philosophy)
5. Science Shop Language, Culture and Communication (Arts and Humanities)
6. Science Shop Public Health and Medicine (Medical Sciences – University Medical Center Groningen)

If you want to know more about our research, news or activities, make sure to [check our website](#).

## ***University of Groningen Green Office***

The UG Science Shops coordinators work together with the Green Office, the university department that inspires students and staff to think and act more sustainable. Like Science Shops, the Green Office [offers student projects and organises activities about sustainability](#). They are also intensively involved in making the Living Knowledge Conference as sustainable as possible.

## ***Wijk Inzet Jongeren en Studenten (WIJS)***

WIJS ([Wijk Inzet Jongeren en Studenten](#) – Dutch website) is a collaboration of the Hanze University of Applied Sciences with the Municipality of Groningen, WIJ-Groningen (the Social Work Teams of Groningen, Alfa-college and Noorderpoort-college and University of Groningen. WIJS translates as “WISE” and the Dutch abbreviation means “Neighbourhood Efforts of Young People and Students”. WIJS sets up student projects in the city, with and for citizens, social work teams, etc, and offers a place where citizens can have walk-in advisory sessions concerning taxes, rent, legal issues, etc. WIJS and the University of Groningen Science Shops work together to help civil society organizations with their questions and to create joint projects. WIJS resides in the Paddepoel shopping center in the north of the city.



PROGRAMME

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BOOK OF ABSTRACTS

## Contents

CONFERENCE PROGRAMME OVERVIEW .....	3
LOCATIONS AND MAPS .....	6
TUESDAY JUNE 28 <sup>th</sup> .....	11
PRE-CONFERENCE.....	11
SOCIAL ACTIVITIES TUESDAY .....	11
WEDNESDAY JUNE 29 <sup>th</sup> .....	12
PLENARY SESSIONS 1: WEDNESDAY 9.00-11.00.....	12
PARALLEL SESSIONS 1: WEDNESDAY 11.30-12.30.....	14
PARALLEL SESSIONS 2: WEDNESDAY 13.30-15.00.....	28
PARALLEL SESSIONS 3: WEDNESDAY 15.30-17.00.....	37
SOCIAL PROGRAMME WEDNESDAY .....	46
THURSDAY JUNE 30 <sup>th</sup> .....	47
PLENARY SESSIONS 2: THURSDAY 9.00-10.30 .....	47
PARALLEL SESSIONS 4: THURSDAY 11.00-12.30 .....	49
PARALLEL SESSIONS 5A: THURSDAY 13.30-14.15 .....	64
PARALLEL SESSIONS 5B: THURSDAY 14.15-15.00.....	67
PARALLEL SESSIONS 6: THURSDAY 15.15-16.45.....	71
SOCIAL PROGRAMME THURSDAY .....	78
FRIDAY JULY 1 <sup>st</sup> .....	79
PARALLEL SESSIONS 7: FRIDAY 09.00-10.30.....	79
PARALLEL SESSIONS 8/SEMI-PLENARY 3: FRIDAY 11.00-12.00.....	93
CLOSING PLENARY: FRIDAY 12.00-12.30 .....	98
SITE VISITS and SOCIAL PROGRAMME: FRIDAY from 13.30.....	98
Social Programme - Tuesday-Sunday: Free access to the University Museum .....	102
POSTERS (THURSDAY 13.30-15.00) .....	103

## CONFERENCE PROGRAMME OVERVIEW

This Book of Abstracts lists all sessions with their presenters, co-presenters/co-authors and abstracts.

PLEASE: DO GO TO THE PARALLEL SESSIONS, THERE ARE SO MANY TO CHOOSE FROM!

PLEASE: IF YOU GO TO A SESSION, BE ON TIME! And switch off your cell phone upon entering the room...

IF YOUR FAVOURITE SESSION IS FULL, PLEASE GO NEXT DOOR AND LET THAT OTHER SESSION SURPRISE YOU!

FINALLY: PLEASE ONLY CHANGE ROOMS BETWEEN WORKSHOPS OF 45 MINUTES, IF YOU REALLY WANT TO. DO NOT CHANGE ROOMS IN BETWEEN 5 MINUTE-PITCHES, RESEARCH PRESENTATIONS OR STORY TELLING SESSIONS. THE RUNNING ORDER AND TIMING WITHIN THE SESSION MAY DIFFER FROM THE ORDER GIVEN IN THE PROGRAMME!

We have tried to group all presentations into coherent sessions of similar format and content. Obviously, this wasn't always possible, because of non-matching numbers, late withdrawals, or people that we couldn't put in two rooms at the same time.

NOTE ON THE POSTER PRESENTATION: All presenters will be at their posters for the full 90 minutes. There are a few (shorter) sessions in parallel, making it easy for you to combine a visit to the posters with another session.

### THEMATIC STRANDS:

The first letter of the abstract number indicates the theme of the presentation, for your quick reference:

- A: Diversity and Inclusion (Gender, Migration, Minorities, Poverty, Inequalities)
- B: Education, Youth
- C: Energy, Climate, Nature, Environment, Responsible Consumption and Production
- D: Health and Well-being, Hunger, Food, Water, Sanitation
- E: Industry, Innovation, Infrastructure, Transportation, Work and Economic Growth
- F: Peace, Justice, and Strong Institutions
- G: No specific theme (general/broad)

The different **FORMATS** run approximately as follows:

**Posters:** The poster presentation is easily the most interactive session type, allowing for in-depth conversations on the ones that appeal to you. All presenters will be at their posters and are looking forward to giving you further context and engaging with you!

**Research Presentations** demonstrate theoretical underpinning and original research, in 10 minute speaking time. The session chair decides on how the Q&A will be organized. This could be 5 minutes after each presentation with some more general discussion at the end.

**5-min pitch:** Speakers have 5 minutes speaking time; if there are e.g. 5 speakers in a 60 min session, this leaves about 30 minutes for people to have follow-up discussions in various corners of the room, and have a more in depth conversation with the speakers of their liking. These 5 min expose's are suitable for e.g. practice insights, in which speakers describe, demonstrate and/or evaluate specific practices. New ideas, in which speakers present work in progress on research or practice, including ideas under development or that have yet to be implemented or need partners.

**Story Telling Sessions** invite a story – a genuine and authentic experience of a team or community – to be (preferably jointly) told in 20 minutes, including reflection from the various stakeholders involved. A story should also describe the challenges faced and overcome – in full or partially. Short Q&A (10 min) afterwards .

### **Workshops**

**Workshops** provide a space for further development of theories or practice. Organizers may work on developing a certain tool or methodology and need you to further develop it, or want to discuss with you how to improve current practice, develop strategy, etc.

**Skills-training workshops** will help you develop a specific skill.

**Problem-solving sessions or Dilemma sessions** provide an opportunity to explore challenges, difficulties, problems encountered during the presented cases. Presenters not only bring their cases but also provide the method to engage participants and to work on the problem

**Arts-based sessions** use interactive formats, like living labs, design games, film, poetry, art work, photo-voice, video etc.

**Panels and plenary sessions** discuss a central theme from various angles.

## **ROOMS**

“Offerhaus” is at the Academy Building.

All other rooms are at the “Harmony” Building.

The Expo-room (in Dutch: Expositieruimte) will have additional posters display and videos on rotation. Walk in and have a look!

PROGRAMME OVERVIEW



Programme at a glance				
	Tuesday	Wednesday	Thursday	Friday
	Jun-28	Jun-29	Jun-30	Jul-01
8:00		Registration	Registration	
8:15		Registration	Registration	
8:30	Registration	Registration	Registration	Registration
8:45	Registration	Registration	Registration	Registration
9:00	Pre-Conference	Plenary/Opening	Plenary/Opening	Parallel Sessions 7
9:15	Pre-Conference	Plenary/Opening	Plenary/Opening	Parallel Sessions 7
9:30	Pre-Conference	Plenary/Opening	Plenary/Session 2	Parallel Sessions 7
9:45	Pre-Conference	Plenary/Opening	Plenary/Session 2	Parallel Sessions 7
10:00	Pre-Conference	Plenary/Session 1	Plenary/Session 2	Parallel Sessions 7
10:15	Pre-Conference	Plenary/Session 1	Plenary/Session 2	Parallel Sessions 7
10:30	Pre-Conference	Plenary/Session 1	Break	Break
10:45	Pre-Conference	Plenary/Session 1	Break	Break
11:00	Pre-Conference	Break	Parallel Sessions 4	Semi-Plenary 3/Parallel Sessions 8
11:15	Pre-Conference	Break	Parallel Sessions 4	Semi-Plenary 3/Parallel Sessions 8
11:30	Pre-Conference	Parallel Sessions 1	Parallel Sessions 4	Semi-Plenary 3/Parallel Sessions 8
11:45	Pre-Conference	Parallel Sessions 1	Parallel Sessions 4	Semi-Plenary 3/Parallel Sessions 8
12:00	Pre-Conference	Parallel Sessions 1	Parallel Sessions 4	Plenary Closing
12:15	Pre-Conference	Parallel Sessions 1	Parallel Sessions 4	Plenary Closing
12:30	Lunch	Buffet Lunch	Buffet Lunch	Packed Lunch
12:45	Lunch	Buffet Lunch	Buffet Lunch	Packed Lunch
13:00	Lunch	Buffet Lunch	Buffet Lunch	Packed Lunch
13:15	Lunch	Buffet Lunch	Buffet Lunch	Packed Lunch
13:30	Pre-Conference	Parallel Sessions 2	Parallel Sessions 5A	Site Visits/Soccer Game/Open Space
13:45	Pre-Conference	Parallel Sessions 2	Parallel Sessions 5A	Site Visits/Soccer Game/Open Space
14:00	Pre-Conference/City Walk	Parallel Sessions 2	Parallel Sessions 5A	Site Visits/Soccer Game/Open Space
14:15	Pre-Conference/City Walk	Parallel Sessions 2	Parallel Sessions 5B	Site Visits/Soccer Game/Open Space
14:30	Pre-Conference/City Walk	Parallel Sessions 2	Parallel Sessions 5B	Site Visits/Soccer Game/Open Space
14:45	Pre-Conference/City Walk	Parallel Sessions 2	Parallel Sessions 5B	Site Visits/Soccer Game/Open Space
15:00	Pre-Conference/Registration	Break	Break	Open Space/Enjoy the City
15:15	Pre-Conference/Registration	Break	Parallel Sessions 6	Open Space/Enjoy the City
15:30	Pre-Conference/Registration	Parallel Sessions 3	Parallel Sessions 6	Open Space/Enjoy the City
15:45	Pre-Conference/Registration	Parallel Sessions 3	Parallel Sessions 6	Open Space/Enjoy the City
16:00	Pre-Conference/Registration/City Walk	Parallel Sessions 3	Parallel Sessions 6	Enjoy the City
16:15	Pre-Conference/Registration/City Walk	Parallel Sessions 3	Parallel Sessions 6	Enjoy the City
16:30	Pre-Conference/Registration/City Walk	Parallel Sessions 3	Parallel Sessions 6	Enjoy the City
16:45	Pre-Conference/Registration/City Walk	Parallel Sessions 3		Enjoy the City
17:00		Welcome Reception		
17:15		Welcome Reception		
17:30		Welcome Reception/Speech		
17:45		Welcome Reception	Bus departure	
18:00	City Walk	Welcome Reception	Pre-dinner Activity	
18:15	City Walk	Welcome Reception	Pre-dinner Activity	
18:30	City Walk	Welcome Reception	Pre-dinner Activity	
18:45	City Walk		Pre-dinner Activity	
19:00			Conference Dinner	
19:15			Conference Dinner	
19:30		Optional	Conference Dinner	
19:45		Dinner Matching	Conference Dinner	
20:00		Optional	Conference Dinner	
20:15		Dinner Matching	Conference Dinner	
20:30		Optional	Conference Dinner	
20:45		Dinner Matching	Conference Dinner	
21:00		Optional	Conference Dinner	
21:15		Dinner Matching	Conference Dinner	
21:30			Conference Dinner	
21:45			Conference Dinner	
22:00			Bus departure	
22:15				

## LOCATIONS AND MAPS

### **Academy Building**

Broerstraat 5, 9712 CP Groningen, The Netherlands

### **Harmonie Building**

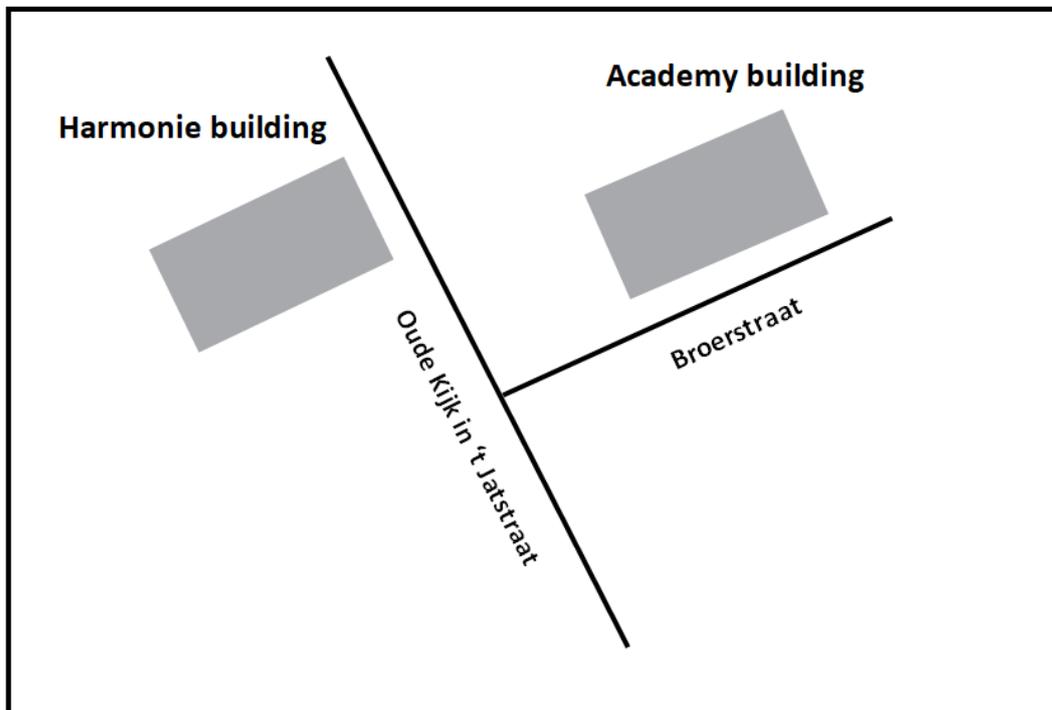
Oude Kijk in 't Jatstraat 26, 9712 EK Groningen, The Netherlands

The conference will be held at the University of Groningen, The Netherlands. We will use a large conference hall in the **Academy Building** and rooms for parallel sessions at the Faculty of Arts (**Harmony-Building**); they are just a 3 minute walk apart and located in the City Center of Groningen.

**Harmony Building**, Oude Kijk in 't Jatstraat 26



**Academy Building**, Broerstraat 5

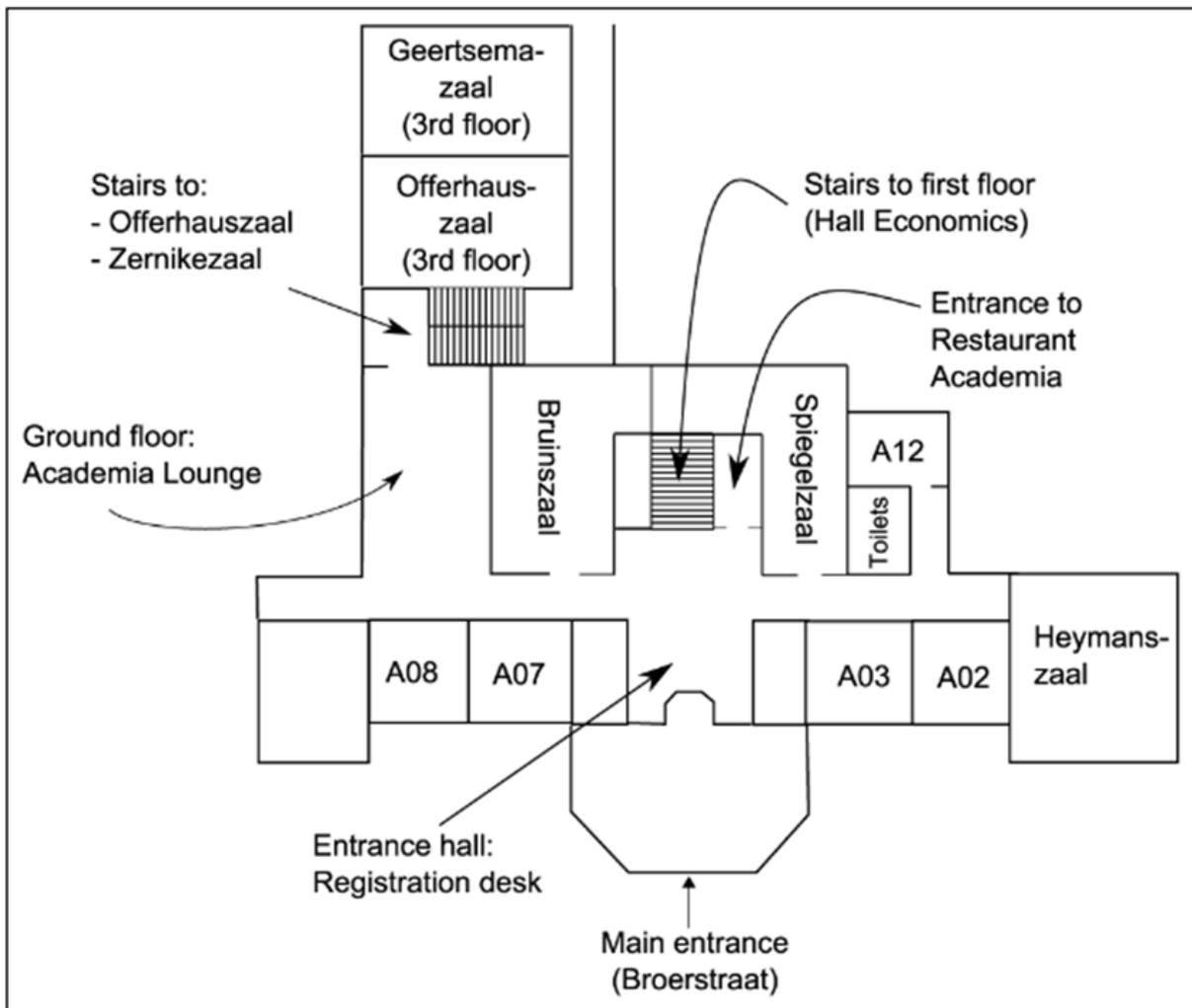


**MAP Academy Building**

We are using the Offerhaus-hall, which is on the 3rd floor. Use the stairway next to it (not the main stairway in the central hall).

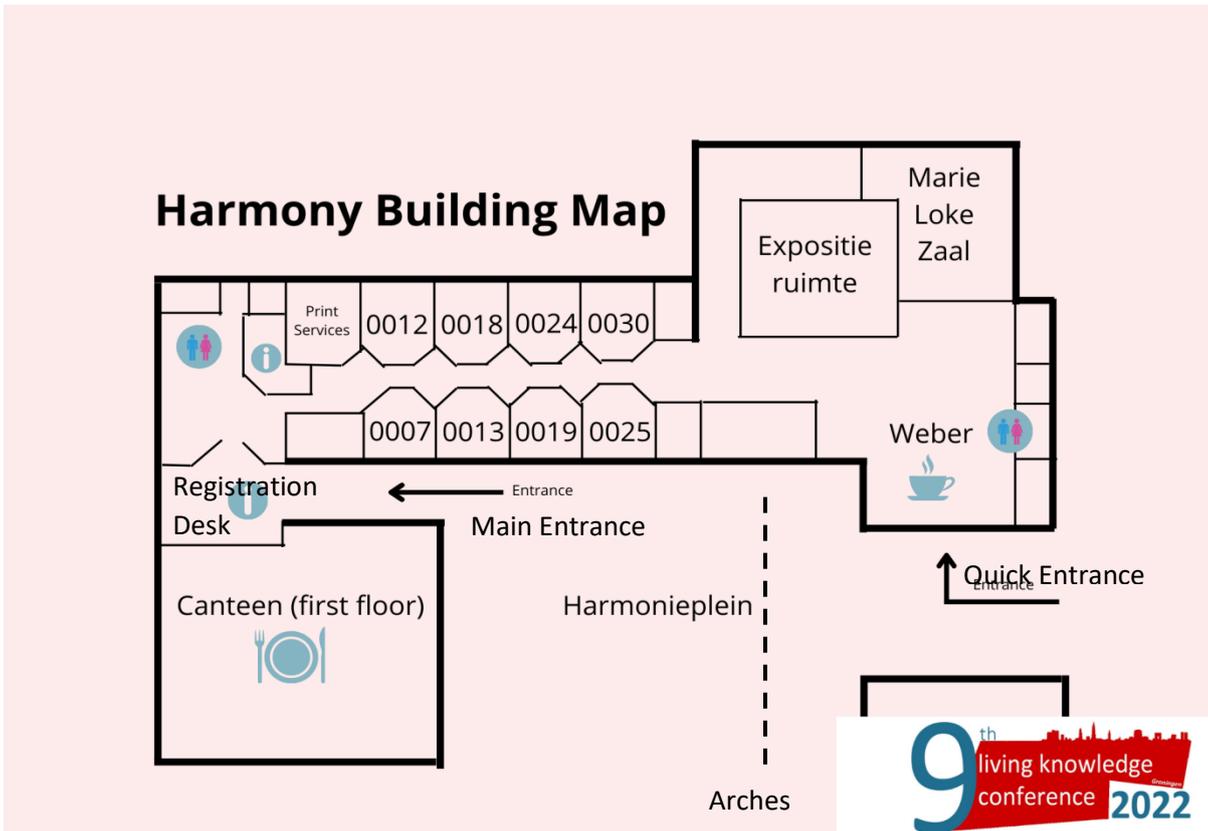
There are elevators as well. There is an entrance on the left side of the building for wheelchair access.

Coffee for those attending two consecutive sessions in the Offerhaus-hall will be provided at the Academy Building (all other coffees will be served at the Harmony Building).



**Map Harmony Building.**

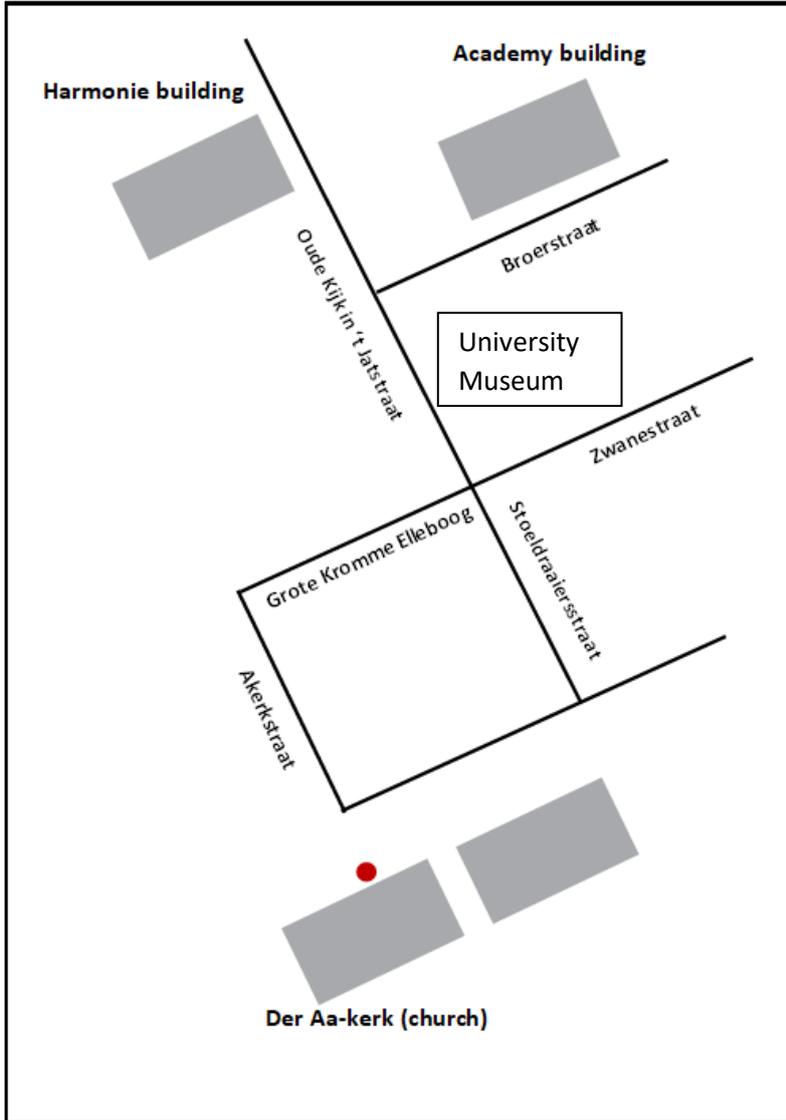
All our rooms are on the same corridor on the ground floor (the 1312-wing).  
Lunch is in the canteen on the first floor. Coffee breaks in the Weber foyer.  
For the main entrance, pass under the arches to the revolving door.  
The side entrance will normally be open for quick entrance during the conference.



Oude Kijk in t Jatstraat

Welcome Reception (Wednesday) is in the A-Kerk, a 5-10 minute walk from the conference locations (Akerkhof 2, Groningen).

On this map also the University Museum is indicated, just a few minutes from the conference location. The entrance is through a short, small alley from the Oude Kijk in 't Jatstraat.

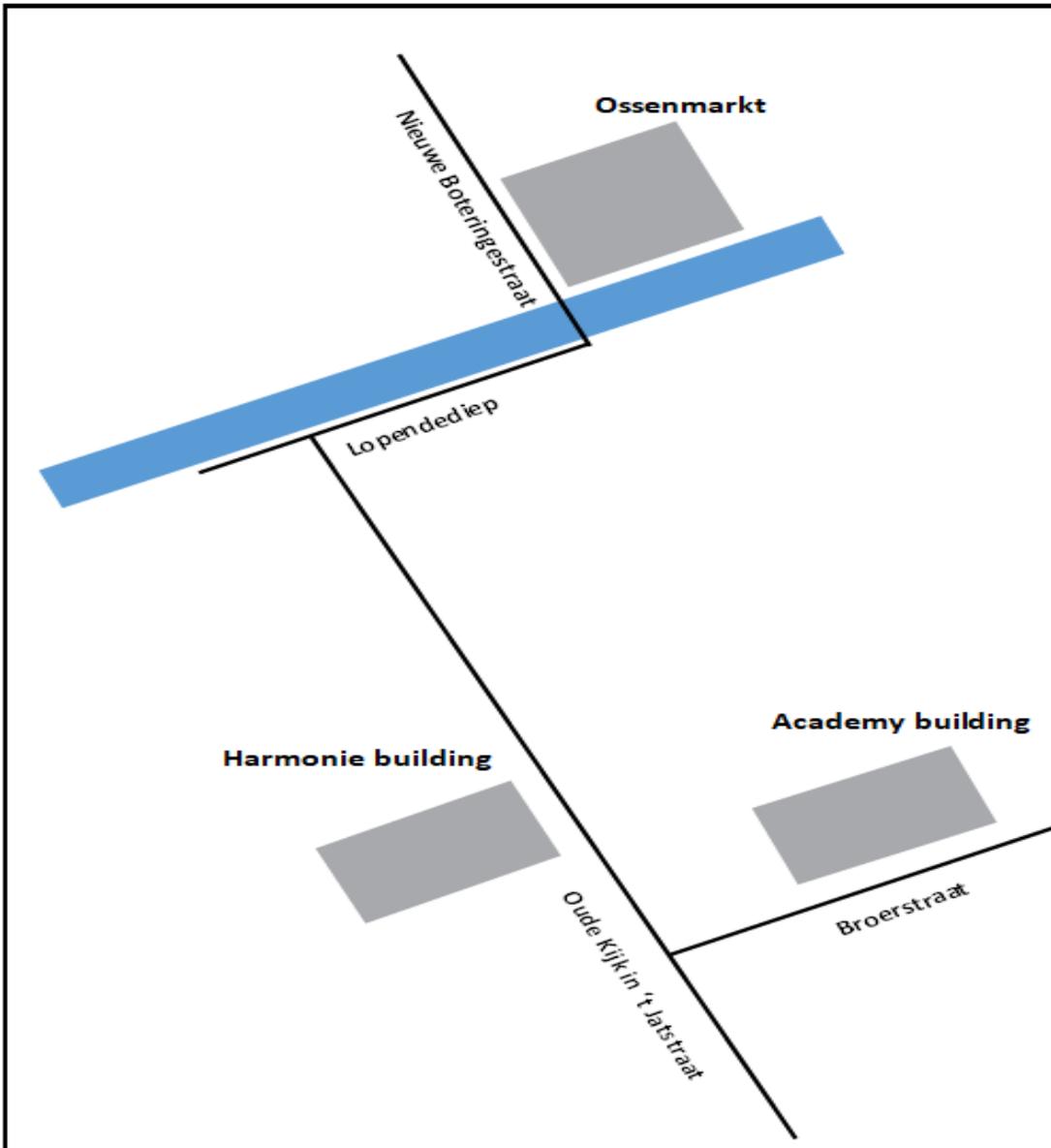


The A-Kerk.



The entrance to the University Museum.

**Conference Dinner (Thursday):** Busses leave from the Ossenmarkt, a square at 10 min walk from the conference location. Be on time, busses leave between 17.45 and 18.00.



Restaurant: De Rietschans, Meerweg 221, Haren



The Ossenmarkt

TUESDAY JUNE 28<sup>TH</sup>



TUESDAY JUNE 28<sup>th</sup>

## PRE-CONFERENCE

On Tuesday 28<sup>th</sup> we will have the two pre-conference Programmes. These will be in the Harmony Building and start at 9.00hrs. Registered participants have received more information on the programme.

Both programmes are SOLD-OUT and are only accessible to participants that have registered for those.

Science Shop Summer School (Henk Mulder, Emma McKenna, Norbert Steinhaus): 1312.0018

Master Class Community-Based Participatory Research (Suriani Dzulkifli, Rajesh Tandon): 1312.0024

## SOCIAL ACTIVITIES TUESDAY

### City Walk

This walking tour offers a little introduction to the city of Groningen and its more obscure history. Stories with different themes like music history, queer history and squatting history will paint a colourful picture of subversive energies that have contributed in shaping the city.

Start: 14:00 hrs, 16:00 hrs, and 18:00 hrs.

Duration: one hour. No registration necessary!



Pickup: Statue of Aletta Jacobs, right in front of the entrance of the Harmonie Building.

Your Guide: Fiona van den Bergh

WEDNESDAY JUNE 29<sup>th</sup>

From 08.00: Registration @ Academy Building. Moving to Harmony Building at 10.00

## PLENARY SESSIONS 1: WEDNESDAY 9.00-11.00

<p>Offerhaus</p> <p>09.00-10.00</p>	<p><b>Plenary Opening:</b></p> <p>Henk Mulder (Conference Chair, Science Shop, University of Groningen), Norbert Steinhaus (Coordinator Living Knowledge Network @ Science Shop Bonn, Germany), Saskia Visser (Chair Groningen University's Science Shops) and the Groningen Science Shop Team, with Esther Jansen en Wieke Steenbruggen from Stichting (On)gestoord (= Foundation (un)disturbed).</p> <p>Introducing the Conference Theme, the Living Knowledge Network, and the Groningen Science Shops and their work. Esther and Wieke will tell us about their project with and for people with a psychiatric history.</p>
<p>Offerhaus</p> <p>10.00-11.00</p>	<p><b>Plenary Session 1: How to create meaningful synergies in Public Engagement and Co-Creation?</b></p> <p>We've asked Kate Morris (Campus Engage Ireland) and Rowinda Appelman (City Deals "Making Knowledge", Netherlands) to share their experiences and inspire us. Sophie Duncan (National Coordinating Center for Public Engagement, UK) will guide us through a discussion with them.</p> <p><b>Kate Morris, Head of Campus Engage, Irish Universities Association</b></p> <p>Kate leads Campus Engage, which is based within the Irish Universities Association. Campus Engage is dedicated to supporting Irish higher education institutions to embed, scale and promote civic and community engagement across staff and student teaching, learning and research. Kate will speak about the collaborative effort that makes Campus Engage. Campus Engage aims at supporting Community-based Teaching and Learning; Engaged Research and Innovation for Societal Impact; Student Volunteering and building a national Framework for measuring and evaluating the positive social impact of higher education civic and community engagement. Kate has over 15 years' experience in stakeholder engagement for policy and practice change. She has much experience in working with policy makers, funding agencies, research staff, practitioners and the public in Ireland, France, and UK. Prior to joining the IUA Kate worked at the Centre for Effective Public Services, the French National Institute for Demographic Studies, and UNESCO NI.</p>  <p><b>Rowinda Appelman, programme manager City Deal Kennis Maken, Netherlands</b></p> <p>Rowinda is the programme manager of the Dutch "City Deal Kennis Maken" and she will speak on how to get a variety of organizations to work together on generating knowledge to help tackle wicked societal issues. In Dutch, "Kennis Maken" has a double meaning: "Making Knowledge" and "Getting Acquainted". This exactly what this programme of the National Research Council facilitates. The focus of this City Deal is primarily on involving students, researchers and teachers in urban challenges in rich</p>

learning environments. It aims to involve students at all levels, from vocational schools, to universities of applied sciences and research universities. Therefore, in the official English translation it is called the City Deal on Education. After doing a Social Innovation Fellowship at the U.S. State Department, as one of the first seven Europeans, Rowinda is now responsible for the design and implementation of the City Deal Kennis Maken-programme, which funds collaborations in the 19 largest knowledge cities of The Netherlands. She runs the national network, oversees the strategic collaboration with ministries, umbrella organizations and main partners, and discusses the programme's progress with the Ministers of Research, Internal Affairs and the leadership of involved partners. Finally, she is responsible for the knowledge exchange and collective learning among partners and coordinates the national events of the network. Rowinda is an education pioneer and social entrepreneur, and holds degrees in Political Sciences and Communication and Information Sciences.



**Sophie Duncan, co-director National Coordinating Centre for Public Engagement (NCCPE), UK**

Sophie co-directs the NCCPE. Established in 2008, the NCCPE supports universities to develop their engagement work. Since its early days the NCCPE have sought to provide tools and resources to the sector, to cultivate the conditions where engagement can thrive. Sophie regularly supports university leaders to understand the value of engagement to their work, and develop practical approaches to supporting their staff to engage in mutually beneficial ways with others.



A physicist by training, Sophie has worked in engagement throughout her career including at the Science Museum, NESTA and the BBC, where she led national engagement campaigns including Breathing Places, a campaign to improve biodiversity in the UK. She sits on several advisory panels, including STFC's Advisory Panel for Public Engagement. She has published a range of papers on evaluation, culture change, and engagement.

As co-editor of Research for All, Sophie is particularly interested in the evidence base for effective public and community engagement, and what this looks like across different disciplines. She has expertise in evaluation, evidencing impact, and partnership working, leading programmes to support mutually beneficial partnerships between university staff and a range of different partners including community organisations; cultural organisations; and schools.

11.00-11.30 Coffee Break

## PARALLEL SESSIONS 1: WEDNESDAY 11.30-12.30

Offerhaus	<p><b>The INSPIRES legacy: an EU-funded international project to support (new) Science Shops. Chair: Leonardo de la Torre-Ávila, IS-Global, Barcelona, Spain</b></p> <p>This session combines:</p> <p><b>(G1089): InSPIRES legacy, Leonardo de la Torre-Ávila, IS Global, Barcelona, Spain.</b>        With: Anne-Sophie Gresle (1-2), María-Jesús Pinazo (2) on behalf of the InSPIRES consortium. 1. Fundación Privada Instituto de Salud Global Barcelona, ISGlobal. 2. Hospital Clínic i Provincial de Barcelona.</p> <p>We we want to summarise the journey of our project towards the LK supportive community of practice. For this, we aim to present the InSPIRES Legacy page, an all-in-one document designed for the end-user. Here, any practitioner will have direct access to our main results and publications.</p> <p>The session will provide a quick introduction to the sections of this tool, each of which presents the story of an objective initially set and the final result actually achieved, sometimes far from what was imagined.</p> <p>The sections are:</p> <p>Meet our 123 implemented Science Shop projects: They have tackled mainly health, social and environmental concerns, some of them following a Transnational and Transdisciplinary approach.</p> <p>Meet our framework for Science Shop process: A process-based framework of Science Shops work, conceived through in the implementation of 31 pilot projects in seven countries.</p> <p>InSPIRES Open Platform: Meet our online collaborative and crowdsourced database featuring Science Shops, Citizen Science and similar structures and their related projects, as well as offering an integrated impact evaluation tool capable of producing real-time project evaluation report.</p> <p>Our complete training legacy: The InSPIRES e-learning platform offers six learning modules introducing Science Shop processes and other forms of collaboration between science and society. Additionally, we offer a repository of the a) InSPIRES webinars, b) the downloadable InSPIRES Science Shop card-game; c) a motivational video serial; and, finally, d) news and materials related to our Summer Schools.</p> <p>InSPIRES Open Call: Forty-three proposals were received and finally six projects were supported to address key societal challenges in Uganda, Benin (and other six African countries plus Haiti), Bolivia and Ecuador, Greece, Turkey and Romania.</p> <p>National and regional hubs and networks: Meet and contact our partners at the Italian network of Science Shops, the Iberoamerican “Communities and Science” Network and the French speaking Science Shop network.</p> <p>Meet our publications: Emerged from InSPIRES Science Shop projects or related to reflexive and theoretical quests, we have 17 publications to shared. Additionally, 10 more are being prepared for future release.</p> <p>As you see, it will be a pleasure to share the details of the unique opportunity we have experienced in 51 months of collaboration and learning.</p> <p><b>(D1021): Towards sustainability: The Experience of “Science Together “, The Institut Pasteur de Tunis Science Shop, Hichem Ben-Hassine, Institut Pasteur de Tunis, Tunisia.</b> With MAATOUG Sonia (Institut Pasteur de Tunis), BELGHITH Meriam (Institut</p>
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	<p>Pasteur de Tunis), KABBAGE Maria (Institut Pasteur de Tunis), FERCHICHI Asma (Institut Pasteur de Tunis), ZITOUNA Nadia, ABDELHAK Sonia (Institut Pasteur de Tunis)</p> <p>“Science Together”, the Institut Pasteur de Tunis (IPT) Science Shop (IPT-SS-ST) was set up in 2017, thanks to the H2020 InSPIRES (1) project. The Science Shop has been conceived to fit with IPT’s main missions, which are answering in a socially responsible way to public health needs.</p> <p>In this abstract, we propose to share the experience of IPT Science Shop and the strategy that has been established to ensure its sustainability.</p> <p>Since the creation of the Science Shop, our aim has been to be the most impactful possible, by demonstrating the transformative potential of this structure in a Public Health Research Center.</p> <p>Therefore, we adopted an approach open to the needs of Tunisian civil society that has shown a strong impact on decision making since the revolution of 2011.</p> <p>The selected priority area was health, its environmental determinants and vulnerable populations, with no specific topic in the calls launched online for social needs. In 3 years, we received 120 needs, we implemented 10 research SS projects, involving more than 1200 participants.</p> <p>Mobilizing various actors from multiple disciplines to co-design scientific projects on the selected needs allowed to construct highly motivated teams and resulted in impactful and structuring projects that included all the stakeholders.</p> <p>This was done, thanks to a strong commitment from the “Science Together” team to maintain a balance of power between the actors, support and monitor the projects’ teams, through training, support in ethical aspects, project management, communication and advocacy.</p> <p>In addition, to ensure the sustainability of the SS and maximize its impact, an internal and external communication strategy was established. The communication at the institutional level was ensured by the scientists involved in the projects and we also developed additional activities (science education, panel session, video trainings, etc) At the external level, the Science Shop initiatives were continuously supported by outreach activities, including decision makers. This helped to convince our Ministry of Research and Higher Education to support the creation of the first Institutional Unit in charge of Science and Society collaboration, in Tunisia.</p> <p>Now, new challenges are ahead. “Science Together” has to maintain the enthusiasm it has arised. It means, being open to new types of fundings, developing new activities and promoting the Science Shop model at all levels, to make allies, develop networks and be more autonomous.</p>
Marie Loke	<p><b>Two Development/Problem Solving Workshops</b></p> <p><b>11.30-12.00: (G1059) Challenges in participatory action research and sustainable partnerships; Maaïke Smulders, Faculty of Behavioural and Social Sciences, University of Groningen, Netherlands.</b> With Cobie Jeanne Poppinga, Globalisation Studies, University of Groningen</p> <p>Due to processes of globalisation and digitalisation, society is increasingly becoming more complex. To find innovative answers to this complexity, inter-institutional collaboration is required. However, the process of building such collaborations is a delicate one. To address issues like skills mismatches at the labour market, participatory action researchers are increasingly involved in projects where a wide variety of partners join hands in finding future proof solutions. Drawing on our own experiences and</p>

	<p>learning from experiences of the participants in this workshop, we would like to further our understanding of leading principles to initiate and moreover, maintain, sustainable partnerships. Using a fishbowl discussion we invite the participants to react on our initial findings and add to them from their own experiences to build a common understanding. The outcome of the discussion will be shared among the participants and can hopefully be used in their future endeavours to build sustainable partnerships.</p> <p><b>12.00-12.30: (G1069) Integrating the UN Sustainable Development Goals within the Curriculum; John Barimo, University College Cork, Ireland.</b> With Catherine O'Mahony, Gerard Mullally, John O'Halloran, Edmond Byrne, Darren Reidy, Martin Galvin and Maria Kirrane (all University College Cork, Ireland)</p> <p>Higher education plays a major role in contributing to the SDGs by preparing lifelong learners for the challenges of the 21st century. This challenge is often approached through informal and hidden curriculum. However, the integration of SDGs across the formal curricula has proved difficult and thereby impacts student access to Education for Sustainable Development. We present an approach to foster the development of globally minded and action-oriented citizens who are empowered to develop innovative solutions for a sustainable future.</p> <p>In this Development Workshop we will actively engage participants with a framework to enrich their curriculum (or funding proposals) with concepts of sustainability through the lens of the U.N. Sustainable Development Goals (SDGs). This 90-minute interactive workshop will commence with an overview of the SDGs and consider their broad scope and interconnected nature. Then participants will learn a technique to map and frame their teaching or learning courses / modules to corresponding SDGs targets. Finally, we will together, co-design a transdisciplinary teaching unit that addresses a cross-cutting societal challenge (e.g. climate change) and that directly impacts a broad suite of SDG targets.</p> <p>The workshop will also touch upon principles of Education for Sustainable Development. Concepts expressed in this workshop can help align collaboratively designed community-based research proposals with the SDGs. This is not a prescriptive approach and functions best when space is provided for peer-to-peer interactions in break-out groups. We seek to expand this technique beyond the Irish context and hope to gather input from participants by multiple means of engagement.</p>
1312.007	<p><b>Healthy Communities: three research presentations</b>  <b>Chair: Sinead McCann, TU Dublin</b></p> <p><b>(D1064) Empowering youth to create experiments for healthy lifestyles and increase STEM interest: the Science Engagement to Empower aDolescentS (SEEDS) project; Annemieke Wargers, Erasmus Medical Center, Rotterdam, Netherlands.</b> With Judit Queral*2, Famke JM Mölenberg1, Wilma Jansen1,3, on behalf of the SEEDS consortium. 1. Department of Public Health, Erasmus MC, University Medical Center Rotterdam, The Netherlands; 2. Universitat Rovira i Virgili, Facultat de Medicina i Ciències de la Salut, Functional Nutrition, Oxidation, and Cardiovascular Diseases Group (NFOC-Salut), Institut d'Investigació Sanitària Pere Virgili (IISPV), Spain; 3. Department of Social Development, Municipality of Rotterdam, The Netherlands</p> <p>Background: Overweight and obesity, and its high prevalence among adolescents from lower socioeconomic status (SES) communities, is a major public health problem. As adolescents can be considered the experts of their own behaviour, it is important to</p>

work together in designing and implementing interventions. Citizen science is a way to engage young people in the design and delivery of interventions, however, very few studies engaged adolescents on the topics of health. Moreover, using citizen science might also boost the interest in science, technology, engineering, and maths (STEM), specifically for adolescents living in lower SES neighbourhoods. A lack of STEM interest also represents a challenge.

The Science Engagement to Empower aDolescentS (SEEDS) project aims to engage and empower adolescents from lower SES neighbourhoods in designing interventions to promote healthy and active lifestyles, and to seed interest in STEM.

**Methods:** The SEEDS project will run in four countries (Greece, the Netherlands, Spain and the United Kingdom) and will be evaluated by means of a cluster randomised control trial. Six high-schools from lower SES neighbourhoods will be recruited in each country, and adolescents aged 13 to 15 years are our target population. Schools will be randomised into intervention and control schools. In each country, 15 adolescents from the intervention schools called ambassadors will be recruited. Ambassadors will be engaged throughout the project by creating, developing and implementing the intervention and disseminating the findings. First of all, focus groups with ambassadors and stakeholders will concentrate on healthy and active living and STEM interest. During a Makeathon event ambassadors and their peers will then co-create an intervention inspired by the issues raised in the focus groups. They will be supported by stakeholders. The resultant intervention will be implemented in intervention high-schools. In total, we aim to recruit 1,440 adolescents who will complete questionnaires related to healthy and active living and STEM interest at baseline (November 2021) and follow up (June 2022).

**Results:** The SEEDS study aims to advance in the field of collaborative research about healthy and active lifestyle by empowering, listening to and working together with adolescents from lower SES communities. Final results of the SEEDS project are expected by the end of 2022. Results on focus groups and Makeathons will be shared during the conference.

**(D1023) A Grounded Theory on Collaborative Interactions in a Community-academia Partnership: The Case of Youth in the Public Space; Alexis Dewaele, Ghent University, Belgium.** With Emelien Lauwerier & Noel Klima (Ghent University), Lindsey Anderson (University of Exeter), Diète Glas & Filip De Sager (City of Ghent)

This study aimed to answer the question “what are conditions that facilitate or hinder successful collaborative interactions aimed towards solving a shared challenge between partners from different organisations?”. Using a grounded theory (GT) approach, four co-creation sessions regarding nuisance caused by youth in a specific parc in the city of Ghent, were analysed to enable a theoretical contribution from an inductive perspective, developing learnings related to understanding collaborative processes. The participants of the co-creation sessions were key stakeholders, such as youth welfare workers, a representative from the public prosecutor’s office, a social director, a youth inspector et cetera.

The different levels of collaboration were perceived by the participants as critical in understanding what facilitates or hinders collaboration. At both the micro- and mesolevel, conditions to manage that complexity and to eventually achieve success through collaboration were perceived. Other difficulties that the participants mentioned, were problems related to sharing confidential information and miscommunication amongst the stakeholders. The ever-evolving situation at the parc in the city of Ghent was another complexity that made it more challenging to establish a

	<p>shared knowledge base between the different levels. On the microlevel, a perceived lack of feedback loops and a disconnectedness from the youth in the parc. On the mesolevel, the roles and mandates of stakeholders within each organisation and its pursued goals determine ‘chains’ of actions and flows of information within and between organisations, which can create a tension between those that consider ensuring safety and protecting individuals and communities from harm their main goal, and those that focus on building a relationship with youth in order to support their well-being. The “internal chains” of actions often remains a black box to partners unfamiliar with the structure and workings of an organisation. Whether it is more desirable to build collaborative partnerships on the micro or mesolevel, was a point of discussion between the participants. On the one hand, developing good personal contacts between organisations was seen as fundamental to build trust and exchange (even confidential) information, however, it might not be sustainable on the long term. On the other hand, a more structural collaboration brings in stability and sustainability, but might be less flexible.</p> <p><b>(C1032) Viability of ecological knowledge in Dutch faith communities: how it differs from ecological knowledge in Indigenous and peasant communities; Maup van de Kerkhof, WUR Science Shop, Wageningen, Netherlands.</b> With Aline Aarts, Roel Kapteijns and Anouck Fietje (all with WUR Science shop).</p> <p>Due to several factors, the role of the church and monasteries has been declining in Western countries. The Netherlands is one of the most secularised countries in the West and here, too, an ever growing decrease of interest in the church can be seen. Because of this, the viability and maintenance of the body of knowledge that has built up over several centuries is at stake. The Dominican monastery in Zwolle recognized this trend and requested research on the viability of specifically ecological knowledge as found in monasteries around the Netherlands. Through analysing raw interview data of interviews held with 7 different faith communities in the Netherlands, conclusions could be drawn about the ways in which ecological knowledge is kept viable in Dutch faith communities. The results are compared with two other forms of ecological knowledge that have experienced similar trends. These regard Indigenous knowledge and peasant knowledge. After comparing the three, the differences between their strategies to keep their knowledge viable is discussed. Through this, we discover that the viability of ecological knowledge as found in Dutch faith communities is different from that in Indigenous and peasant knowledge. Both connective and collaborative relationships are identified as central to the viability of ecological knowledge in Dutch faith communities.</p>
1312.0012	<p><b>Community Engagement: 5 Minute Pitches and Discussion</b>  <b>Chair: Karin de Boer, University of Groningen, Netherlands</b></p> <p>Because of a late withdrawal, there is more time for discussion in this session than anticipated. Enjoy!</p> <p><b>(G1083) Building Communities in mobile Apps for Citizen Science &amp; Public Engagement; Philipp Hummer, SPOTTERON Citizen Science Platform, Austria</b></p> <p>On the SPOTTERON Citizen Science platform (<a href="http://www.spotteron.net">www.spotteron.net</a>), Communities are one of the core columns of Citizen Science engagement. Through digital tools like Smartphone Apps and integrated functionalities, digital communities can transform and shape the impact of citizen science with the help of the public. Philipp Hummer introduces how digital communities are built in modern and interactive Citizen Science</p>

Apps on the platform and gives practical insights into the benefits of including participants on a social communication basis.

Running modern Smartphone Apps for Citizen Science should never be just about data collection alone. With the innovative SPOTTERON Framework, we have developed a user-driven and customizable solution for interactive Citizen Science with deep collaboration synergies between projects and the involved partners from universities, institutions, NGOs and public initiatives across Europe and beyond. A broad spectrum of integrated tools, features, and functionalities form a technology ecosystem that allows user interaction and communication directly in a project's Apps for a better impact, data quality, and fostering inclusion. Such feature-rich and user-driven digital tools provide a framework for empowerment in projects to engage people directly in Citizen Science activities or local agendas and stimulate exchange and communication.

In this 5-Min exposé, a glance at live Apps on-screen spices up the presentation by showing practical approaches to community building and Citizen Science in real projects. Philipp will highlight the core elements of what a digital community is built from and what benefits mobile technology can bring to all forms of public projects. While showcasing the approach and SPOTTERON community model, we will make a Citizen Science contribution to an example project live on stage (or in screen sharing if online) and show how users and the project team members can interact directly with the newly created data point. The short Exposé concludes with an invitation to everyone to continue after the session in person to get more insights on Citizen Science Apps, talk about collaboration possibilities, and share knowledge and experiences about the practical use of modern technology in projects.

**(G1027) KU Leuven Engage: a sustainable new Science Shop home?; Jozefien De Marrée, KU Leuven, Belgium.** With Sara Vantournhout, KU Leuven

In 1979, a handful of committed voluntary students and researchers set up the first Science Shop in the Belgian city of Leuven. Despite their enthusiasm and that of the civil society organizations they were in touch with, the volunteer organization perished in the early 1990s due to a lack of personnel, operating resources and publicity.

More than 40 years later, in 2020, KU Leuven Engage was established as a community for engaged KU Leuven students, staff and partners. The KU Leuven Engage platform identifies and gives visibility to a wide variety of community engagement programs and initiatives, both curricular—such as the already well-established Service-learning program—and extracurricular—such as volunteer opportunities. In addition, KU Leuven Engage functions as an incubator for new engagement initiatives such as the Leuven Science Shop! The anchoring within KU Leuven Engage seems to offer the Science Shop a stable new base. But will it be able to deliver? Will the new Leuven Science Shop keep its head above water after its pilot year? Are the KU Leuven students and researchers as enthusiastic as the civil society organizations that flood the database with research questions? And, importantly, will the research output be impactful for society? Discover whether the new Leuven Science Shop is set to thrive or wither in an exciting 5-Min Exposé!

**(D1111) Community Support; Nelly Heijs, Community Support, Netherlands.** With Vera Verhage (Science Shop of Medicine and Public Health, UNCG, Groningen), and two students.

Community Support, both an organization and evidence based method, supports people with different kinds of vulnerabilities to be self-reliant with the support of others. The

	<p>main goal of Community Support is: "Increasing co-reliance so that customers can deal with emotional and social challenges in daily life with the help of their social network." The Community Support methodology offers support for solving everyday problems. The target group consists of people who do not receive sufficient support from the social network to be self-reliant in one or more areas of life. The intervention is aimed at increasing the ability of customers to achieve co-reliance. Individual characteristics, such as psychiatric and physical vulnerabilities, living situation, financial situation and social support are factors that affect social participation. Research shows that, among this vulnerable group, there is a need for increased participation. It also states that individual differences and needs of this diverse group should be taken into account when providing opportunities for participation.</p> <p>Together with the science shop of Medicine and Public health we started a project about our method called 'Community Support'. This research is aimed at families with parenting problems. This will often be in combination with other problems such as a physical and/or mental disability, psychiatric problems and psychological problems. In the 5-Min Expose we will present our main findings and demonstrate our specific 'Community-support' practice. We further want to share our experiences and practice insights and hope to learn from others.</p>
1312.0018	<p><b>Inclusion in CBR and science shops – 5 minute pitches and discussion</b> <b>Chair: Glen Millot, Sciences Citoyennes, Paris, France</b></p> <p><b>(A1041) Enabling Diverse and Inclusive Collaborations Within the 'Our Health' Interdisciplinary, Community-based Research Programme; Helen Szoor-McElhinney, University of Edinburgh, Scotland, UK. With Liam Gilchrist, The University Of Edinburgh.</b></p> <p>The proposed 5 minute expose will explore how 'Our Health' can enable diverse and inclusive collaborations within the 'Our Health' interdisciplinary, community-based research programme.</p> <p>EPSRC Our Health is the University of Edinburgh's (UoE) Community-University Interdisciplinary Research Programme. The programme focuses on interdisciplinary research and offers a novel model for community-university engagement. 'Our Health' operates both locally (Edinburgh), nationally (UK), and globally (India) and works in partnership using participatory action research to improve health literacy and tackle health inequality. The projects are developed to directly respond to the United Nations Sustainable Development Goals (SDGs) and deliver education for sustainable development.</p> <p>Access to university and successful learning experiences whilst at university should not be limited because of race and social class, but we know that many young people still face discrimination and exclusion within our society. This can negatively impact their ability to access higher education and fulfil their potential during their degree programmes.</p> <p>'Our Health' has developed a strategy that widens access to the programme and supports diversity and inclusion. As part of this work 'Our Health' has partnered with the Cowrie Scholarship Foundation, a UK wide charity that removes the financial barriers to higher education for BAME students, to create exciting and new undergraduate interdisciplinary community-based research projects for Cowrie Scholars on degree programmes across the UK.</p> <p>'Our Health' is also working closely with the UoE Race Equality and Anti Racist Group and teaching and learning staff to ensure that the projects offered to Cowrie scholars are designed to better support their overall learning and experience whilst studying at</p>

university.

Delegates will benefit from the proposed expose by learning how wider universities strategies and sector wide initiatives can align with engaged teaching and learning to encourage and support diverse and inclusive collaborations and amplify impact.

**(A0003) Promoting Inclusion and Knowledge Democracy in the Americas; Antonio Torres-Ruiz, Centre for Research on Latin America and the Caribbean (CERLAC), York University, Canada**

As part of a group of like-minded academics and community activists based in the Americas, who are committed to a bottom-up approach to social research and transformation, I will share with others the basic principles, and the actions taken so far, behind our collective efforts and plans. Our more immediate aim has been the promotion of democratic values and practices, through community-based participatory action research. And we want to build on our previous and ongoing engagement with indigenous and Afro-descendant peoples in the Americas. For instance, in our work in Cuba and Mexico, we have collaborated with our local counterparts towards the strengthening of their capabilities to communicate their own concerns and, in turn, articulate their understandings of the required public policies to counter marginalization's effects. Our local partners have developed community-based projects, which collectively identified specific challenges and their potential solutions, with the goal of leading the people directly affected by them to engage in built-in knowledge mobilization. Our long-term goal is to become a transnational catalyzing network and force, at the Pan-American level, for the advancement of collective knowledge production and ownership, including multiple socio-cultural, scientific, and artistic expressions. And our main strategy is defined by the mapping and reinforcement of existing collaborations, and the encouragement of new initiatives, or public and private partnerships, committed to participatory work and mutual learning that embrace epistemic diversity. The current sense of urgency, given the multiple social and politico-economic crises at the continental level, leads us to further promote transnational cooperation and mutual support, with an eye on the consolidation of democratic practices in all spheres of life and at all levels.

**(A0005) Co-production via the science shop model as a mechanism for decolonization of climate science; Kristin Timm, Alaska Center for Climate Assessment and Policy (ACCAP), University of Alaska Fairbanks, USA. With Tina Buxbaum and Sarah Trainor, Alaska Center for Climate Assessment and Policy (ACCAP), University of Alaska Fairbanks, USA.**

Alaska, & the Arctic as a whole, is warming at a rate more than 2x the rate of the lower latitudes. Northern inhabitants are experiencing the effects of climate change including permafrost thaw, reduced sea ice, changing precipitation patterns, & changes in subsistence resources. Dependent on local resources, rural Native communities are among those most directly impacted by the changing climate. They are facing immediate impacts to infrastructure, travel, subsistence activities, & their culture and lifestyle. The Alaska Center for Climate Assessment & Policy (ACCAP) a NOAA Regional Integrated Sciences and Assessment program (RISA) located at the University of Alaska Fairbanks, researches & provides decision support for Alaska's vulnerable & underserved communities. We are at the forefront of a growing interest amongst tribes to learn about climate change & to prepare for its physical & socioeconomic impacts.

At the same time there is a movement for decolonization within the Alaska Native community. Decolonization once viewed as the “formal process of handing over the instruments of government, is now recognized as a long-term process involving the bureaucratic, cultural, linguistic and psychological divesting of colonial power.”[1, 2]

- Decolonization restores the Indigenous world view
- Decolonization restores culture and traditional ways
- Decolonization replaces Western interpretations of history with Indigenous perspectives of history

Moving beyond democratizing science, we would like to explore the idea of co-production of knowledge & the science shop model as it is being applied to decolonize science. We are striving for climate science to be designed and conducted in full partnership with communities. The science is done collaboratively with indigenous ways of knowing & respectful and inclusive of TEK with the goal of addressing community identified issues.

We would like to explore with others if & how this type of work is being done in other areas (both geographic & discipline) & what others have learned working in this emerging arena.

“Decolonization requires non-Indigenous individuals, governments, institutions and organizations to create the space and support for Indigenous Peoples to reclaim all that was taken from them.”[2]

[1] Pihama, L. (1993. No, I will not be a post... . Te Pua, 2(1-2), 35-37; [2] A Brief Definition of Decolonization and Indigenization - <https://www.ictinc.ca/blog/a-brief-definition-of-decolonization-and-indigenization>

**(A1015a) Community Based Research Capacity-Building Among Students - Two Views from North America: USA; Beth Tryon, Retired from University of Wisconsin-Madison, USA.**

**(A1015b) Community Based Research Capacity-Building Among Students - Two Views from North America: Canada; Joanna Ochocka, Community-Based Research Canada.**

Practitioners in North America continue to problem-solve regarding students that need more preparation before being sent to engage with communities, especially when they come from different cultural and racial backgrounds. What can be shared with the global community about ways to engage students/universities in CBR capacity-building processes that address a general lack of understanding of what “community” is today, what community-based research \*really\* means, and how to practically implement value-laden principles of this approach so that the reality matches the rhetoric?

1. Beth Tryon from the U.S. is publishing a guidebook of strategies and methods for training students before they engage in CBR or service work with communities. The content has been gathered in her work over the last decade, and contributors from universities throughout the U.S. have shared success stories. She will give a sneak peek at the book and share some of the strategies for overcoming implicit bias, power and privilege issues, savior complex that have emerged out of this compilation from all segments of American higher education.

2. Joanna Ochocka, (as Co-Chair for CBRCanada), is developing a national training program for the next generations of Canadian CBR Researchers. Why this program? ~Making inroads into alleviating problematic health and social inequalities requires fresh approaches that leverage the expertise of those most impacted. ~Universities are struggling to be more relevant to communities and be more community- engaged, responsive institutions. ~Communities and governments are increasingly interested in “evidence-based” practice.

	<p>This dynamic national training program to recruit, train and support a cohort of PhD students to become experts in community-based research will mobilize a national community of practice to support them and to learn together. The development and obstacles of implementing this exciting program will be shared.</p> <p>After each taking a 5-min segment to introduce the fundamentals of this work, small groups will explore ideas regarding meaningful student preparation and community involvement, and ways to find financial support for underserved communities involved in research. How do we “walk the talk” authentically?</p>
1312.0024	<p><b>Curriculum development and community learning: 5 Minute Pitches and Discussion Chair: Marc Pauly, University of Groningen, Netherlands</b></p> <p><b>(B1037) Learning from your mistakes: building good communication skills in a third level academic context while developing a CERL project for the curriculum; Shannon Dickson, TU Dublin, Ireland</b></p> <p>Communication in an academic context regarding management and developing a CERL project for the curriculum - reflection and development</p> <p><b>(B1133) Curriculum development: Exploring ways of teaching students that science communication matters; Maelíosa Theresa Mc Crudden, Queen’s University, Belfast, Northern Ireland.</b> With Laura Mc Shane, Centre for Biomedical Sciences Education, Queen’s University, Belfast</p> <p>In the academic year 2020/21, a new two-year Professional Skills module, “Skills for Scientists” was introduced into the two undergraduate degree programmes offered by the Centre for Biomedical Sciences Education at Queen’s University Belfast (QUB), namely, BSc. Biomedical Sciences and BSc. Human Biology. These modules were developed as a consequence of the observed need for evidence of development of key professional skills by the student body, beyond those obtained in the “wet laboratory” environment.</p> <p>Split over two academic years, the module content in year one focuses on honing scientific and personal integrity, exploring themes including equality, diversity and inclusion, and transparency in research. The module content in year two then builds upon year one experiences and activities and complements other modules being undertaken by the students. Opportunities to showcase and reflect on the skills and attributes our students are developing throughout their undergraduate studies are central to this module.</p> <p>One study cycle in year two of the module is “Outreach and public engagement” and explores various means of engaging the public with science; the importance of accurate science dissemination and beginning to explore theories of why science communication should, and in fact does, matter. The concept for this study cycle arose from previous personal experience working with patient and stakeholder groups in pharmaceutical co-design workshops, thus beginning to engage with the principles of Community based research and learning (CERL). But how can these concepts, and importantly their relationship and relevance to the student experience, be exemplified in a taught module?</p> <p>The aim of this exposé is therefore to share a short narrative of this study cycle journey, while learning from the experiences of others about ways to engage our students with new, multidisciplinary content.</p>

**(C1092) Citizen science as a tool to empower communities to use science and research to tackle local relevant challenges and opportunities; Maria Verissimo, Open Science Hub - Portugal (Plataforma de Ciência Aberta - Municipality of Figueira de Castelo Rodrigo).** With Ana Peso - Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Paulo Jorge Lourenço - Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Célia Paraíso - Agrupamento de Escolas de Figueira de Castelo Rodrigo | Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal Catarina Seabra - Centro de Neurociências da Universidade de Coimbra | Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Catarina Guerra - Gabinete de Ambiente do Município de Figueira de Castelo Rodrigo, Portugal; Inês Saavedra - Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Filipe Pinto - Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Carlos Martins - Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; José Varela - Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Maria Vicente - Plataforma de Ciência Aberta, Portugal, Município de Figueira de Castelo Rodrigo - Universidade de Leiden; Pedro Russo - Plataforma de Ciência Aberta - Universidade de Leiden, Netherlands

Figueira de Castelo Rodrigo is located in the northeast of Portugal, a low density territory, close to the border with Spain, traditionally with limited access to science, culture and innovation. Hydric resources are highly relevant to this territory, since it is physically delimited by rivers. However, water here is facing several anthropogenic-driven threats, such as touristic pressure from the cruises that sail the Douro river. The Open Science Hub (OSHUB) - Portugal, in Portuguese Plataforma de Ciência Aberta, is a social innovation project that strives to bring together science, technology and innovation with the daily lives of these local communities. In doing so, we collaborate with schools, universities, companies and policy-makers to tackle local relevant challenges, such as the preservation of fresh water quality at the Douro river. In this regard, we use citizen science as a tool to empower schools and local stakeholders to use science and research to tackle local relevant challenges and, as such, we have joined the european citizen science project Drinkable Rivers to, together with citizens, obtain data that could inform public policy and facilitate the dialogue with the touristic companies.

So far, we have raised awareness to this topic by involving students, teachers, civil society and policy makers in periodical water monitoring sessions; built bridges with two portuguese universities to help us with the scientific interpretation of the data collected and the specificities of our original hypothesis; and developed a Massive Open Online Course (MOOC), in collaboration with the French Natural History Museum, designed to guide educators through the process of incorporating citizen science in their daily school practices, in a relevant and organic way, creating meaningful learning experiences for students through the development of projects and activities aimed at tackling local relevant challenges based on collaborative work with local partners.

Along the way, our main challenge has been the generation of relevant scientific knowledge to tackle our local challenge but, as the schools' interest grew on this matter, we are currently working with local schools to create a water monitoring program extended to the whole region.

Through this communication we hope to highlight the importance of creating partnerships with experts and local agents to tackle lifeworld relevant challenges through citizen science and look to learn from the experience of other participants.

	<p><b>(B1043) “Switch on STEM” goes virtual during COVID-19; Leanne Harris, TU Dublin, Ireland</b></p> <p>COVID-19 brought many challenges to teaching and learning at third level and one significant challenge to community-engaged learning was transitioning from live, interactive STEM events to virtual, online formats. A TU Dublin ‘Students Learning with Communities’ project focused on “Switch on STEM” events for school children was incorporated into a Scientific Communication &amp; Dissemination module for Stage 2 Biosciences students to achieve the following learning outcomes:</p> <ol style="list-style-type: none"> <li>1. Demonstrate effective presentation and communication skills including the use of technologies.</li> <li>2. Develop dissemination skills to engage the scientific community and the general public with Bioscience topics.</li> </ol> <p>This project was a joint collaboration between TU Dublin Stage 2 Biosciences students and TU Dublin Access &amp; Civic Engagement. The “Switch on STEM” events focused on Biology themed workshops with primary school children from the local area. Small groups of TU Dublin students developed interactive resources to deliver 10-minute demonstrations on a Biology topic of their choice. Students chose topics that they had expertise in and had studied within their programme modules. Students developed workshop content and materials around their specific disciplines and delivered them to primary school children through virtual Zoom sessions. Topic examples ranged from “Pump it Up” and “Busy Bacteria” to “The Food Race” and “The Water Cycle”. The Stage 2 Biosciences students guided the children in the online classroom to carry out simple experiments and ask questions around their specialty topics. They developed many resources including educational infographics for the children, which formed the assessment piece for this module component, and work packs for the children to complete at home including word searches, crosswords and puzzles. While we encountered challenges in the development and delivery of these virtual sessions, there were also beneficial changes to our teaching and learning approaches in this module that will be fed forward into our future Switch on STEM events.</p>
1312.0025	<p><b>Two Stories about engagement for Healthy Living.</b>  <b>Chair: Henk Mulder, University of Groningen</b></p> <p><b>(D1080) How to implement a transdisciplinary project across the Mediterranean Sea: a case study about mental health among Ph.D. students; Cyrine Bouabid, Science Shop Institut Pasteur de Tunis, Tunisia.</b> With Cyrine Bouabid (Science Shop Institut Pasteur de Tunis), Olfa Maghrebi (Young Researchers Association Institut Pasteur de Tunis), Hichem Ben Hassine (Science Shop Institut Pasteur de Tunis), Giovanna Pacini (Science Shop University of Florence), Franco Bagnoli (Science Shop University of Florence), Andrea Guazzini (Department of Education, Languages, Interculture, Literatures and Psychology, University of Florence)</p> <p>Transdisciplinary research has increasingly been promoted as a key approach to tackle complex societal issues from a wide range of academic disciplines as well as non-academic actors. There have been thriving studies on how to conduct a transdisciplinary project. However, reported empirical studies reinforcing this approach are rare. In the context of the H2020 InSPIRES project, whose objective was to implement research projects, based on social needs, through Science Shops, a Transdisciplinary and Transnational approach was promoted to set up new types of projects. One of the projects implementing this approach was about mental health (MH) among</p>

PhD students from Tunisia and Italy. In fact, the PhD journey provides a unique opportunity for the student to become an expert in a field and to make an original contribution to the knowledge while acquiring valuable skills. However, during this period, students are constantly dealing with intellectual and emotional challenges. These challenges may lead to a state of poor well-being. This phenomenon has been observed by various CSOs including “Young researchers Association of IPT” and other CSOs from Italy stressed the need to shed light on Ph.D. student's MH and ultimately to support them.

This need was submitted to two Science Shops in Tunisia and Italy. The focus of this study was to assess an overview of the mental health among PhD students and identify the factors influencing their MH.

To achieve our objective, a transdisciplinary framework study was established, and a team from different backgrounds including psychologists, anthropologists, biologists, CSOs and Science Shops representatives was formed. Together, We co-designed the research process by involving PhD students and mentors. Then, the multidisciplinary team co-produced solution-oriented using surveys and interviews/focus groups. Finally, we shared our results with the different actors, especially CSOs for their advocacy policy.

Throughout this study, we demonstrated the importance of implementing a Transdisciplinary and Transnational project to have a holistic view of a complex issue such as mental health. We did assess the most important mental health indicators, like depression and anxiety and their impact on different factors such as interrelationship between student and supervisor, financial issues, violence. We also showed the value of building a collaborative project and the skills earned by the different actors at the end of this project

**(B1054) Why is living a healthy lifestyle so hard?; Claire Murray, European Citizen Science Association, Berlin, Germany.** With Annemieke Wargers, Famke JM Mölenberg, Wilma Jansen (all with Erasmus Medical Centre and City of Rotterdam, Netherlands), on behalf of the SEEDS consortium

Teenagers are creative, innovative and curious. They have access to an amazing amount of resources online and through their family and friends, but still many of them are struggling to live healthy lifestyles. People often try to help, but a key point here is that interventions to support the teenagers are usually top down. Researchers tell them what to do and how to do it. But what happens when we flip this on its head? What if teenagers are in charge of picking ways for themselves to be healthy? That's what is happening in the SEEDS project, where we do science by teenagers for teenagers. We are exploring how empowering teenagers through citizen science can increase their engagement in Science, Technology, Engineering and Maths and improve their health. The SEEDS project has multiple important groups of people who play a role: the ambassador, the researcher, the policy maker and the stakeholder. Ambassadors are some of the teenage-scientists who represent their class and their peers to develop interventions increasing physical activity, reducing sedentary time and improving healthy snacking choices in events called Makeathons. Researchers will play a facilitating role and support students when developing the intervention. Policy makers take part in sustaining and carrying out the SEEDS approach and its results during and after the project. The stakeholders within the SEEDS project are experts on the field of physical activity and nutrition, but also teachers or other people working closely together with adolescents. They will support the teenage-scientists when designing, but also implementing the intervention. This abstract is a collective opportunity to share

	<p>experiences of all parties playing a role in SEEDS (in person and/or through videos) and to reflect on the challenges and successes so far.</p>
1312.0030	<p><b>The story and dilemma's of action research in a Hungarian village</b>  <b>Chair: Pál Géza Balogh, University of Pécs, Hungary</b></p> <p>This session combines a story and a dilemma-session:</p> <p><b>(A1097) Tale of two researches. Anthropologists in action in a Hungarian village; Pál Géza Balogh, Department of European Ethnology and Cultural Anthropology University of Pécs, Hungary.</b> With Éva Orbán, Research Assistant, Centre for Economic and Regional Studies; Bence László Gonda, Political scientist, MA student of International Relations at ELTE Faculty of Social Sciences; Rebeka Márta Kiss, Ethnographer; Horticultural engineering BSc Student, Hungarian University of Agriculture and Life Sciences (MATE).</p> <p>We would like to share the findings of our action research in a village in Hungary using the storytelling method. Our story focuses on the transformation of our notion of the "local knowledge" and "research" concepts over the years. We want to tell the story of how a team of researchers from outside the village shifted from traditional applied ethnographic research to a more in-depth collaborative work with the villagers, action anthropology, and participatory action research. Our premise was the static view of local knowledge, where outsider researchers explore and archive local knowledge using the standard methodology. We arrived at a more dynamic approach to local knowledge from this static approach, where knowledge from different levels meets and interact in the local space. With this dynamic approach, a collaborative knowledge production process emerges with close cooperation between external and local participants. We also found that local knowledge plays an essential secondary role beyond its primary applications: the process of its discovery contributes to community building and empowerment. This story is also a self-reflection of our participatory action research.</p> <p><b>(A1098) Locals, urban newcomers, researchers. The dilemmas of engagement in an action research; Pál Géza Balogh, Department of European Ethnology and Cultural Anthropology University of Pécs, Hungary.</b> With Éva Orbán, Research Assistant, Centre for Economic and Regional Studies; Bence László Gonda, Political scientist, MA student of International Relations at ELTE Faculty of Social Sciences; Rebeka Márta Kiss, Ethnographer; Horticultural engineering BSc Student, Hungarian University of Agriculture and Life Sciences (MATE)</p> <p>We have been conducting action research in a Hungarian village of 700 people in a mountainous forest setting for the past five years, where local NGOs invited us. What began as an applied ethnographic approach has evolved into participatory action research. We are playing an increasingly important role in expanding the participation of the locals while they often consider us as outside researchers. There is an increasing number of urban migrant arrivals with different goals and backgrounds. Their presence brings cultural differences and significant conflicts into the local community. In our project, locals, newcomers, universities, researchers, and volunteers all participate, so we act as a bridge between the indigenous and the newcomers. However, this raises a series of interrelated dilemmas. As outsiders, how can we effectively involve local actors? How should we balance implementing the visions of external actors and the needs of the native population? How should we balance the involvement of different</p>

	local interests and opinions? In this session, we seek to answer these dilemmas, guided by the hope that participants' experiences can contribute to our future experiments in finding solutions.
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12.30-13.30 Buffet Lunch, Canteen 1st floor Harmony Building

## PARALLEL SESSIONS 2: WEDNESDAY 13.30-15.00

Marie Loke	<p><b>(A1007) SKILLS WORKSHOP: How to get started with Citizen Science approaches and methods in your own research; Margaret Gold, Citizen Science Lab, Leiden University, Netherlands, with members of the NPOS-CS Working</b> (<a href="https://www.openscience.nl/projecten/project-i-citizen-science">https://www.openscience.nl/projecten/project-i-citizen-science</a>)</p> <p>Citizen Science methods and approaches are becoming increasingly well recognised as an important means to bring science and society together in closer collaboration - they are embedded in the formally adopted UNESCO Recommendation on Open Science, described and supported in the recently ratified new legal instruments within the Aarhus convention, and are emphasised throughout the European Commission's Horizon Europe funding programme, to engage society and citizens in the aims of the European Green Deal, the Missions, and the New European Bauhaus.</p> <p>However, for career researchers it is not always clear where to start. To address this, members of the community of Citizen Science practitioners in the Netherlands formed a Working Group that was supported by the Dutch National Programme Open Science (NPOS) to address questions such as - 'Where do you start?', 'What are the pitfalls?', 'How do you set up effective communication between professional scientists and citizen scientists?', 'How do you guarantee the quality of the process and outcomes?', and 'How can the collaboration become sustainable?'</p> <p>In this interactive workshop, members of the Working Group will present the resource that they developed to answer these questions - the Citizen Science Quality Matrix - which builds on The 10 Principles for Citizen Science of the European Citizen Science Association (ECSA). The Matrix translates these principles into success factors that provide guidance when designing and assessing citizen science projects, with a focus on both scientific and societal quality.</p> <p>After time for Q&amp;A about both the 10 Principles and the Matrix, we introduce three interactive segments of the workshop:</p> <p>First, we will look at various stages of the research journey, to brainstorm about how we could include societal participants in each of those stages within our own areas of research or innovation development.</p> <p>Second, we will break out into groups, and use the Quality Matrix to consider how might plan for engaging with societal actors at each of these stages, how this can be managed, and how we would measure our successes in light of each of the Principles..</p> <p>Finally, the breakout groups will return to the Plenary session to share any insights with the whole group, ask any follow-up questions of the speakers, and make recommendations for how to move forward with Citizen Science approaches in practice.</p>
1312.007	<b>Two Workshops on Social Impact</b>

**13.30-14.15: (A1008) Bridging Knowledge Cultures; Lesley Wood, North-West University, South Africa.** With Karen Venter, University of the Free State, South Africa

For over twenty years, policy has stipulated community engagement as one of the three core activities of public universities. To increase their social impact, university researchers can build mutually beneficial community-university research partnerships (CURPS) to enable service-learning and community-based research. Such partnerships are necessary to generate knowledge that is useful, relevant and responsive to local social issues and needs. However, this is easier said than done as it requires a drastic paradigm shift on the part of both university and community partners. Specific ideas within the academy about the ownership, validity and purpose of knowledge have been built up over centuries and are not easily discarded. Communities also have their own knowledge cultures which are very different to those of the university. Knowledge cultures are concerned with topics such as the democratisation of knowledge (e.g. who has the right to knowledge), the validation of knowledge (e.g. who decides if knowledge is valid, useful, etc.) and the dissemination of knowledge (e.g. who will have access to the knowledge and how will those in the know gain access). To bridge knowledge cultures requires an exploration of more complex knowledge constructs such as the level of knowledge (e.g. whether knowledge is entrenched or superficial), the generality of knowledge (e.g. whether knowledge can be simplified and/or made understandable for people with no/little education), the level of atomization of knowledge (i.e. uptake), the modality of knowledge, and the structure of knowledge. In this workshop, the presenters will give a short overview of knowledge cultures, what they are and how they can play out in community university research partnerships, using a case study from one such partnership for improving community health outcomes in rural South Africa. Attendees will then be asked to contribute their ideas/strategies for bridging knowledge cultures in terms of how knowledge is created, validated and used to bring about sustainable social change.

**14.15-15.00: (G1013) The evaluation of more than 50 Science Shops projects using an online impact evaluation tool; Leonardo De la Torre Ávila, Barcelona Institute for Global Health, Spain.** With Anne-Sophie Gresle, ISGlobal, Hospital Clínic, Universitat de Barcelona, Barcelona, Spain; Anna Cigarini, Universitat de Barcelona Institute of Complex Systems, Barcelona, Spain; Departament de Física de la Matèria Condensada, Universitat de Barcelona, Barcelona, Spain; Herman Dempere, Departament de Matemàtiques i Informàtica, Universitat de Barcelona, Barcelona, Spain; Mireia Ribera, Departament de Matemàtiques i Informàtica, Universitat de Barcelona, Barcelona, Spain; Eloi Puerta, Departament de Matemàtiques i Informàtica, Universitat de Barcelona, Barcelona, Spain; Josep Perelló, Universitat de Barcelona Institute of Complex Systems, Barcelona, Spain; Departament de Física de la Matèria Condensada, Universitat de Barcelona, Barcelona, Spain; María Jesús Pinazo, ISGlobal, Hospital Clínic, Universitat de Barcelona, Barcelona, Spain; on behalf of the InSPIRES Consortium

The Impact Evaluation Tool developed in the framework of the InSPIRES EU funded project offers the community an intuitive and automated impact evaluation tool to capture processes and results in a harmonized way among all the different projects and structures.

For the construction of the InSPIRES Impact Evaluation Tool we carried out a systematic review and series of 80 interviews to key players. Together with the contributions of the PERARES projects, the metrics developed in the framework of the MoRRI and RRI-Tools EU Projects for RRI monitoring project, and the criteria proposed

	<p>by Kieslinger and his colleagues for the evaluation of Citizen Science Projects served as the basis for the realization of the tool and served as the conceptual basis for the construction of the InSPIRES Evaluation Tool. As a result, it captures indicators under five dimensions are: 1) Knowledge Democracy 2) Citizen-led Research; 3) Participatory Dynamics; 4) Transformative Change; 5) Integrity.</p> <p>The InSPIRES Evaluation Tool contains specific questionnaires for 4 phases of the project: kick-off, mid-project, the end and 6 months later. In each phase 4 types of questionnaires have been constructed according to the agent profile: Civil Society organization, Students, Project Managers and Scientists.</p> <p>The automatized evaluation results can be accessed at three visualization levels: public, for project members and for project managers.</p> <p>Two self-reflection questionnaires are also contemplated, which are intended to be incorporated before the project starts (Q1) and just at the moment when the project ends (Q2). They are designed to guide the research process into a more reflexive, participative, open, gender and human rights based research. They include questions related with six Open Science pillars: Ethics, Gender Equality, Open Access, Governance, Public Engagement.</p> <p>In this workshop, we will present the tool as well as the results of more 50 Science Shops projects that used the tool to evaluate their practices and projects.</p> <p>The structure of the proposed workshop is as follows:</p> <ul style="list-style-type: none"> <li>- Presentation of the tool and its evaluation dimensions (15 min).</li> <li>- Presentation of the results of evaluation (15 min)</li> <li>- Debate on the potentialities of using the tool in different contexts (15 min)</li> </ul>
1312.0012	<p><b>Stories and Arts – Indigenous Resurgence on the West-Coast of Canada</b> <b>Chair: Maeve Lydon, UVIC, Canada</b></p> <p>This session combines a story and a workshop:</p> <p><b>(B1143) The story of Restoring Tl'Ches: Archaeology, Indigenous Science and Resurgence on Canada's wild west coast; Maeve Lydon, Living Lab- University of Victoria, Canada.</b> With Darcy Mathews- Archaeologist-Ethnobotanist- UVic Professor of Env Studies; Lyndsey Joseph- Songhees Nation member- UVic education and Indigenous language student.</p> <p>Tl'Ches is the Lekwungen- Coast Salish name for a group of Islands off the coast of one of Canada's largest cities- Victoria in British Columbia. For at least 4-5000 years Indigenous peoples lived sustainably in what is most of the world's most diverse and pristine ecosystems. The local Indigenous Songhees Nation has allowed the community-based researcher and archaeologist Darcy Mathews, an Environmental Studies Professor at the University of Victoria to work with them to carefully uncover and identify the community dwellings - longhouses and traditional food gathering sites for the first time. The Living Lab Project is co-governed by the Songhees and other Indigenous Nations, NGOs and the University of Victoria. Together they have created a citizen science and youth engagement program to support the community - based research and cultural-land based restoration and revitalization and reclamation work on T'Ches. This presentation is an amazing story of hope and healing and the relevance for Indigenous communities, youth and learners. It also illustrates how embracing "living knowledge" via land-based learning and eco-cultural restoration creates profound transformation in interdisciplinary research - knowledge production and impact to address social, environmental and climate justice.</p>

	<p><b>(B1144) Eco-Art, Song, Healing and Indigenous Resurgence: Song and Storysharing with Jess, Robert and Sarah from the West Coast of Canada; Maeve Lydon, Living Lab- University of Victoria, Canada.</b> With Jess Joseph- Songhees Nation youth- Digital Artist; Living Lab Arts and Youth Engagement Programmer; Sarah Jim - Pauquachin Nation - Visual Artist / UVic Fine Arts graduate and PEPAKEN HAUTW restoration staff. (<a href="http://www.livinglabproject.ca">www.livinglabproject.ca</a>)</p> <p>Eco-Art, Song Healing and Indigenous Resurgence: Song and Storysharing with Jess , Robert and Sarah from the West Coast of Canada. This storytelling presentation by one Indigenous man and two young Indigenous women artists is focused on the intersection between artistic expression, music , personal and ecosystem-community healing and Indigenous resurgence and justice in the Canadian and educational context. Robert will share the gift of his voice and traditional song and Jess and Sarah will, share connect their appreciation for the natural world (and involvement with Living Lab and PEPAKEN HAUTW 's ecosystem restoration and land-based / youth empowerment programs) with their graphic design and visual art. Jess and Sarah will bring along samples and copies of their work and an audiovisual presentation. The session will begin with an opening song, an interactive welcome and small group table work followed by the presentation and an open invitation ( for 10 minutes) for participants to share their own work or visions for this eco-cultural expression, creativity and personal-community healing and restoration movement.</p>
1312.0013	<p><b>Diversity and Civic Engagement: Two Stories and a Problem Solving Workshop</b>  <b>Chair: Khan Rahi, Loka Institute &amp; Canadian Community-Based Research Network, Canada</b></p> <p><b>(A1128) Story: Health inequalities, so what?; René van der Most, Health Care Innovation Forum (Zorg Innovatie Forum), Netherlands.</b> With Karst Dekkema, Kans voor de Veenkoloniën and Zorg Innovatie Forum, The Netherlands, and Erik Buskens University Medical Center Groningen, The Netherlands</p> <p>Despite the increased attention and efforts to decrease health inequalities over the past years, disparities in health between social groups did not diminish significantly. In this workshop we will interactively investigate the question what is needed to effectively reduce health gaps.</p> <p>Historically we see a health inequality between the so called Veenkoloniën in Drenthe and Groningen in comparison to the rest of the Netherlands. For many years attention is drawn to this situation and various attempts have at best had modest effects. One of the more recent initiatives is the eight year program ‘Kans voor de Veenkoloniën’, supported by the Ministry of Health. Eleven municipalities, welfare – and care organizations, health insurance companies, different universities and knowledge institutes, sport organizations and citizens collaborate to structurally boost to the health of everyone in this region. Its focus lies on the underlying factors that influence people’s health. Thus explicit attention is paid to moderating effects of poverty, opportunity inequality, low literacy and solitude. Moreover, to guarantee a more healthy next generation, much attention has been paid to prevention and improvement of (inter)-professional collaboration in birth care. Engagement of citizens and experts by experience is one of the main keys to sustainable change.</p> <p>In this workshop we will elaborate the program, and look forward to exchange of ideas, solutions and reflections on the complex topic of health inequalities. We will actively look for those key elements that are important in the approach of health</p>

	<p>inequality.</p> <p><b>(A0019) Story: Democratization of Knowledge: Lessons Learned and Dilemmas from Street Level Citizens Engagement; Khan Rahi, Loka Institute &amp; Canadian Community-Based Research Network, Canada</b></p> <p>Democratization of Knowledge unfolds a lesson learned application of CBR (or CBPR) method, widely understood to provide tools to gather data, listen to “hidden-transcripts”, identify community strengths and assets to articulate issues rooted in the community with a greater degree of authenticity and clarity (Meredith Minkler, 2003). The CBR’s scientific benefits provided relevance and insights into affected communities and issues; created team research (Jagosh, Justin 2015). The application of RRI Keys enhanced citizens’ engagement in collaboration and knowledge production. The project created a conduit designed to recognize civil society and its role in producing knowledge and acting independently on existing knowledge (Hess, David 2007). Civil society organizations, universities, local businesses and government and faith community actors engaged in innovative multidisciplinary collaboration to impact science and society capacity building interaction among participating residents to define the problem, the choice of solutions and to design the delivery of interventions (Minkler, Meredith 2003). The project is inspired by the Loka Institute’s “Democracy Project” (Sclove, Richard 1995) and also by Khan Rahi’s “social cohesion” methods. It assumes that openly accessing extensive knowledge of the societal issues is vital, leads to building strong civic culture and empowers everyday citizens. For two years, without extramural funding, this grassroots project brought everyday citizens and residents from designated, racialized and affected neighbourhoods and communities in the City of Toronto to discuss a range of issues in Conversation Circles formats. We implemented a series of thematic, evidence-based research and practice debates to inform, engage and empower the participants to enhance capacity building to democratize knowledge production of issues that mattered to them the most. Following an introduction, an open forum addresses dilemmas and challenges using guiding questions: 1. What would be a pivotal mechanism to enhance the impact of local and regional specificity of CBR and RRI Keys application to remove barriers to dissemination and the democratization of knowledge? 2. Would CBR projects without extramural funding, voluntarily supported by multiple collaborators create obstacles to legitimate their scientific research status to inform research and intervene in the policy decision-making process?</p> <p><b>(A1052) How to ‘root and grow’ capacity building initiatives founded in collaborative partnerships and local knowledge – A problem solving session; Ruth Unstead-Joss, UCL, London, UK. With Gemma Moore (UCL, UK)</b></p> <p>The conference theme invites us to consider new synergies in research with and for communities. In this session, participants will:</p> <ol style="list-style-type: none"> <li>1. Learn about our co-created approach to building capacity of community-based organisations in understanding and demonstrating their impact; and</li> <li>2. Consider how best to shift collaborative programmes built on the strength of individual relationships from phases of ‘trying and doing’ to ‘rooting and growing’.</li> </ol> <p>Voluntary and community organisations in the UK want, and are under pressure to, improve their capacity to evaluate their work, whilst universities have corresponding research skills and expertise. We look at a university response to this need, drawing on the experience of the Evaluation Exchange. The Evaluation Exchange is a partnership</p>
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	<p>between UCL and community-infrastructure organisations Compost London in east London and Voluntary Action Camden in north London.</p> <p>The Evaluation Exchange developed through a co-creative process between the university and our community partners building on successes and learning over 4 years. Its success is dependent on strong individual relationships and local knowledge. The relaunch of the Evaluation Exchange during COVID-19 and the roll-out more recently in a north London community for the first time have offered us opportunities to learn and adapt. More remote working through the COVID-19 pandemic opened opportunities for international participation from researchers in other countries. We now ask ourselves, what next? Who else would benefit from the collaborative capacity building model? How can we make the most of a programme that offers a valuable development opportunity for researchers, increases the resilience of organisations involved and strengthens understanding between academia, the voluntary sector and communities?</p> <p>In keeping with the ethos of the conference we propose an interactive problem-solving workshop in which participants will learn from our experience, from each other and discuss:</p> <ul style="list-style-type: none"> <li>• How can (and should) we increase reach whilst maintaining the value of co-created and collaborative approaches?</li> <li>• What does it mean to ‘scale up’ a programme? What is lost and gained? What wider systems of support are needed?</li> <li>• What opportunities are there for local programmes to connect, nationally and internationally?</li> </ul> <p>We anticipate that our session will create a lively discussion, opportunities for interaction and feedback between delegates, and potentially new networks for future collaboration.</p>
1312.0018	<p><b>Two Workshops on local partnerships, including students</b></p> <p><b>13.30-14.15: (B1145) Solving wicked problems: the use of societal problems as an effective context for innovative learning environments; Denise Leidelmeijer, Science Shops University of Groningen, Netherlands.</b> With Colleagues of the partnership WIJS.</p> <p>In 2015 “WIJS” (literally translated: “neighborhood effort by young people and students” but also meaning WISE in Dutch), a local partnership in the city of Groningen (in the Netherlands) was set up between the Hanze University of Applied Sciences, the municipality of Groningen and a local welfare organization. The aim is to build the bridge between these two worlds (students versus other citizens) and use the knowledge and talents of students to help solving societal problems. Nowadays, more than 1000 students each year work on local social challenges by executing (research) assignments, receiving credits for their effort.</p> <p>An approved grant proposal in November 2019 made it possible to expand the WIJS network with students of multiple educational levels. The University of Groningen and two secondary vocational education institutions, Alfa-college and Noorderpoort, have joined the partnership, and together with the Hanze University of Applied Sciences, we designed a joint educational program; project ‘SamenWIJS’ (literally: “together WISE”) was born. We created heterogeneous groups of enthusiastic students (from different educational levels and educational disciplines) to collaborate in “solving loneliness”. We used design-based research to systematically develop possible interventions with and for citizens of neighborhoods in the municipality of Groningen. This innovative method of collaborative learning and co-creation is quite challenging. One of the most</p>

challenging parts is keeping the balance between learning process of the students and the product for the other stakeholders, meaning: the intervention for the neighborhood and it's residents.

In this workshop we would like to improve the current practice, using the collective minds of participants to improve the use of effective methods to solve societal problems within a learning environment with students from different educational levels and educational disciplines. The value of the participants lies in the possibility to use their own example of solving social problems in society and/ or challenges the participants face, working with heterogeneous teams of students. We will use the outcomes of the session to improve the current method of solving societal challenges within the partnership WIJS.

**14.15-15.00: (D1121) Developing a hybrid impact evaluation in social innovation - a complexity-orientated community-based approach; Paul Beenen, Hanze University, Groningen, Netherlands.** With Marije Bosch, University of Groningen, The Netherlands; Johan de Jong, Hanze UAS, The Netherlands; Matthias Guett, SPIN, Germany.

Context: Cop4HL is an Erasmus+ strategic partnership project aiming at the sustainable communities of practice (COP) in order to stimulate innovation in the area of Healthy Ageing. We started COPs in five countries and initiated social innovations to improve the lifestyle of the residents in the different communities. From the experiences of creating these networks and finding out how results are achieved, guiding principles for future COPs were extracted. In this workshop we focus on the COP in the Groningen neighbourhood 'Europapark'. Starting point was the collaboration of different local stakeholders; businesses, the government and higher education.

Rationale towards hybrid impact methodology: Although the project demanded a pre-defined output with accompanying criterion-based impact measurements, we realised that COPs are sitting in the realm of complexity. A complexity-oriented approach is based on the underlying philosophical shift from a conventional Newtonian (linear, cause-effect) perspective to a systems perspective that embraces non-linear causality. The initial project team first involved the end-users (residents, students and employees) by asking their needs and assets. After that, the project team and the end-users together formed a COP and started to formulate a more broad common agenda. To get out of the conventional framework and engaged in an mission orientated agenda anticipating complexity, took time. However, along the way, the COP developed into a learning space full of interaction, creativity and commitment. In order to capture both anticipated and emergent impact, a hybrid impact methodology was built based on developmental and principles focused evaluation. In this workshop we present this model as a prototype.

Methods of the workshop: We would like to present the case in a wooden puppet show, illustrating and emphasizing the complex system approach with all the social (inter-)actions. This offers a creative opportunity to visualise the landscape and show the process in all its complexity. Based on this story all workshop participants use prototyping with some guided questions to improve the hybrid impact methodology. Results: For the participants it offers a new example for mission and complexity-orientated impact measurement that democratizes and is necessary for the complex societal challenges we are collectively facing. Besides that, the workshop will also enrich the proposed methodology.

1312.0024	<p><b>(G1093) WORKSHOP: Joint exploration of what the young generation expect from science shops - A space to collaboratively think about what tasks university based science shops should take on in the 21st century; Gisela Prystav, Science shop Kubus, TU Berlin, Germany.</b> With MCKENNA, Emma, science shop Queen's University Belfast, United Kingdom; LEGRIS, Martine, Boutique de Science, Université de Lille, France; STEFFAN, Dominik: science shop kubus, Technische Universitaet Berlin, Germany.</p> <p>Since the founding of the first science shops in the 1980s, the science shop's ideals have remained constant: Opening up HEIs knowledge and research for the demands of civil society, initiate and support dialogue and cooperation between civil society and scientists and students, foster mutual learning - these are still core ideas and meet societal needs. At the same time, the global social coordinate systems have shifted. Science Shop's working modes, methods and thematic foci have to adapt simultaneous to changes in society and HEIs and problem dimensions: Climate change, social division, economic transformation, loss of biodiversity and not least pandemic events. In addition, many science shops are facing a generational change. This is an important moment to reflect on the current societal and university situation and the demands on science shops. In which direction should science shops develop and elaborate their work?</p> <p>We address old and new science shop enthusiasts and in particular young people interested in science shops and ask them to contribute their views and ideas. We will start with 3 short oral inputs:</p> <p>a) Societal situation and demands of civil society: We face societal (political) fractionalisation and challenges of climate change. There are more participatory formats and citizen involvement on political level, but is it "real" participation?</p> <p>b) Changes in HEIs: we experience institutional changes in higher education and in the understanding of the role of HEIs. Science shops are no longer alone in the field of engaged research. Not only for this reason science shops have to prove their raison d'être.</p> <p>c) (Our) science shops: How do we perceive the todays situation? What is special about (our) science shops and the science shops model in common? Which opportunities do open up in the future? What constraints do we face?</p> <p>Each speaker brings in his / her perspective from Belfast/Ireland, Berlin/Germany or Lille/France.</p> <p>After these inputs we split up into moderated groups about guiding questions: What tasks do you see for science shops? In what direction should they develop resp. modernise? What is the reason why they should not simply die out?</p> <p>Results will be exchanged and discussed in a plenary and harvested on a poster. The workshop participants are invited to share their ideas about the future of science shops in an article for the living knowledge magazin together with the organizers of the workshop.</p>
1312.0025	<p><b>(C1078) WORKSHOP: Co-creating climate action within the TeRRIFICA project – What can we learn from and for collaborations with different stakeholder groups?; Norbert Steinhaus, Bonn Science Shop, Germany.</b> With Glen Millot, Sciences Citoyennes, France; Pawel Churski and Joanna Morawska-Jancelewicz, Adam Mickiewicz University, Poland; Hannah Hoff, University of Vechta, Germany; Tanja Adnađević, Dobrivoje Lale Erić, Center for the Promotion of Science, Serbia; Núria Jové and Marta Cayetano, Associació Catalana d'Universitats Públiques, Spain</p> <p>The Poznan Metropolis Association connecting the municipalities of the Poznan</p>

	<p>Agglomeration, French Agriculture High Schools, the public administration of the metropolitan area of Barcelona, the City of Belgrade secretary for environmental protection, and a German local heritage association – the collaboration partners within the TeRRIFICA (Territorial Responsible Research and Innovation Fostering Innovative Climate Action) project are diverse leading to a bouquet of valuable experiences. The EU funded project has established co-creation teams in six European pilot regions in order to work on urgent local climate issues. The aim is to co-creatively develop action plans for “climate hot spots”- identified through crowd-mapping - and to facilitate the realization of these plans. Co-creation processes typically imply a quite high amount of time investment of all people involved. Different motivations and expectations, diverging views on the shared values, but also relevant funding that will secure the sustainability of solutions can become relevant barriers in the process. Focusing on the identification and usage of synergies might be a good strategy for a successful facilitation of a co-creation process.</p> <p>During this collaborative session and to ‘fuel’ the discussion, TeRRIFICA partners from different pilot regions will give short insights into their work with the different stakeholder groups, especially into the experienced challenges and barriers. To allow an active participation of all workshop attendants on the question: “What potential synergies exist or can be generated to facilitate the co-creation work with different stakeholder groups?”, we will use elements of the Design Sprint method (Working with persona, a closer look at the individual needs, and “How might we”- questions). The session is open for people without a background in multi-stakeholder co-creation processes but participants sharing their knowledge and personal experiences are welcome, too.</p> <p>Applying the Design Thinking approach (even though the session timing only allows a very basic implementation) will help to jointly generate new ideas and approaches to shape multi-stakeholder collaborations.</p> <p>The results of the workshop will be directly integrated in the work of the TeRRIFICA pilot regions (which last until the end of 2022) and can also be considered to be included in the final publications of the TeRRIFICA project.</p>
1312.0030	<p><b>(G0012) PANEL Evaluation &amp; impact assessment of Science Shop work and projects; Catherine Bates, TU Dublin, Ireland.</b> With Karen Nelson, University of Guelph, Canada; Jozefien De Marrée, KU Leuven, Belgium; Brecht Van der Schueren, Vrije Universiteit Brussel, Belgium; Réka Matolay, Corvinus University of Budapest, Hungary; Emma McKenna, Queen's University Belfast, UK; Caroline McGowan, TU Dublin</p> <p>Impact is the main aim for those doing, or supporting, research with, and for, communities. Impact on society, on civil society organisations (CSOs), on students, on lecturers/researchers, and on higher education. But what kind of impact can we demonstrate, based on tangible evidence? How can stakeholders evaluate the projects they have been involved in, with the people they have worked with? How can Science Shops better evaluate collaborative projects?</p> <p>This interactive roundtable session draws on synergies and variations in approaches to impact assessments and evaluations of student research with and for communities, across six university Science Shops in Europe and Canada. Participants will be engaged in exploring different ways to evaluate processes and outcomes of community engaged research and learning projects, from ‘quick and dirty’ to in-depth. The session will be facilitated by a group of Science Shops who have been actively collaborating since Living Knowledge 8 in 2018, to share learning and ideas on impact assessment and evaluation. These include: Corvinus University of Budapest (Hungary), KU Leuven</p>

	<p>(Belgium), Queen's University Belfast (UK), Technological University Dublin (Ireland), University of Guelph (Canada) and Vrije Universiteit Brussel (Belgium).</p> <p>The session begins with a brief overview of a wide range of approaches to evaluation/impact assessment. Following this, session facilitators will present a variety of approaches to evaluation, and reflect on what has worked well for them.</p> <p>Having briefly heard about different possibilities, session participants, working in smaller groups, will spend time discussing evaluation and assessment approaches that resonate most with them (including the who, what, where, why, when and how of evaluation) Together, participants will generate practical ideas to try out at home, to understand and improve the impact of their Science Shop work, and feel more confident in evaluating it. At the end of the workshop each participant will be encouraged to identify an individual action item to carry out.</p> <p>To create long term impact from this session, the facilitators will develop a short, but practical, resource for Science Shops, based on the knowledge and ideas harvested during the roundtable, to be made available on the Living Knowledge website.</p> <p>Target participants: this session will be of most benefit to people who have experience with Science Shop work: experienced science shop staff, academics and CSO staff. No experience of evaluation or impact assessment is needed.</p>
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15.00-15.30 Coffee Break

### PARALLEL SESSIONS 3: WEDNESDAY 15.30-17.00

Marie Loke	<p><b>(G1104): WORKSHOP: The TEFCE Toolbox: An Institutional Self-Reflection Framework for Community Engagement in Higher Education; Thomas Farnell, Institute for the Development of Education, Croatia.</b> With Bojana Ćulum Ilić, University of Rijeka, Croatia; Tine Rams, University of Antwerp, Belgium; Sílvia Llach Carles and Alicia Betts, University of Girona, Spain.</p> <p>Universities engage with their external communities in a variety of ways across a range of university activities: through teaching, research, knowledge exchange, service and student activities, as well as through management-level initiatives and partnerships. Mapping and assessing community engagement activity is therefore complex. To respond to this, a new European initiative has developed the 'TEFCE Toolbox', an institutional self-reflection framework for community engagement in higher education. TEFCE toolbox provides tools for identifying community engagement practices and reflection on achievements, as well as room for further improvement. The TEFCE Toolbox has been applied by 7 different types of universities in 7 European countries, and interest for the framework is growing on a global scale.</p> <p>The workshop will be structured as follows:</p> <p>1) OPENING SESSION (30 minutes): Presentation of the TEFCE Toolbox and with testimonies of lessons learnt by three universities that have applied the TEFCE Toolbox: the universities of Rijeka (Croatia), Antwerp (Belgium) and Girona (Spain).</p> <p>2) INTERACTIVE WORKSHOP (40 minutes): Two thematic discussion groups will apply specific aspects of the TEFCE Toolbox</p>
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	<p>framework:</p> <p>Group 1: Strengths and areas with potential for development: Participants will reflect on their own institutional experiences to identify:</p> <ul style="list-style-type: none"> <li>- what aspects of community engagement are best carried out in their own institutional contexts?</li> <li>- what aspects of engagement should be improved and could realistically be addressed?</li> <li>- what aspects of engagement are less prominent in their institutional contexts, or should be considered as less of a priority?</li> </ul> <p>Group 2: Opportunities and threats to community engagement: Participants reflect on factors that could improve or impede community engagement of their institutions (at the level of their own departments or the institution as a whole). The discussion will focus both on factors inside their institutions, and on broader factors outside their institutions.</p> <p>3) JOINT SESSION: What now? Institutional self-reflection as an evidence-based platform for action (20 minutes): Participants will jointly reflect on the value of self-reflection processes and on how to implement conclusions and recommendations, as well as how a university can use a process like the TEFCE Toolbox to advocate the agenda of community engagement.</p>
1312.0012	<p><b>Visual communication for every context - A story and a workshop</b> <b>Chair: Saskia Visser, University of Groningen, Netherlands</b></p> <p><b>(A1016) Creation of culturally appropriate visual tools, lessons from the field; Laure Garancher, The Ink Link, France</b></p> <p>Illustrations are massively used to convey messages. They are often chosen because they allow to</p> <ul style="list-style-type: none"> <li>- Create "generic" characters that readers can identify with, as opposed to realistic photos.</li> <li>- To stage places and emotions, angles of view to involve the reader emotionally.</li> <li>- Use metaphors to popularize knowledge. Especially in environments where reading is difficult.</li> <li>- To free oneself from reality to make problems more palpable (an illustration can make animals or particles speak, for example).</li> <li>- Facilitate the memorization of information</li> <li>- Add humor.</li> </ul> <p>But these "facilities" have created a new problem. Too many images are created without taking into account the reality of the beneficiaries for whom they are intended.</p> <p>The NGO The Ink Link was born from this observation. During a project on access to health care in the Amazon, the indigenous populations made it clear that they no longer wanted to work with the local authorities if they continued to develop visual supports without consulting them. Indeed, if the supports they were receiving were effective for a young city dweller, they were completely incomprehensible in their context.</p> <p>The Ink Link thus proposes to join together professionals of the comic strip (artists, editors...) and professionals of the development to create adapted supports.</p> <p>The difficulty when we create images is to succeed in forgetting our "knowledge". A lot of concepts seem obvious, "innate" when in fact they are acquired: the change of scale, color codes, humor... We must overcome this bias of selective perception. Since</p>

	<p>its creation 5 years ago, The Ink Link has accompanied about a hundred projects, which has allowed us to establish simple criteria to overcome this bias and ensure that visual tools are culturally adapted.</p> <p>The use of three criteria makes it possible to exceed our bias of perception to create effective visual tools. Through concrete examples of projects carried out by The Ink Link, we will develop those criteria</p> <ul style="list-style-type: none"> <li>- Acceptability, in relation to the transtheoretical model of change</li> <li>- Understandability by taking into account: Reading skills, the perception of the body and health, abstraction skills (the role of symbols, fonts, change of scale, perspective) and Cultural codes (Humor, color, gestures, narrative habits...)</li> <li>- Memorability, based on several points: identification, creation of emotions, surprise, aesthetic, gamification, interactivity...</li> </ul> <p><b>(G1130) Make it visible! - Project visualisations as a conversation starter for students and communities; Saskia Visser, Science Shop Language, Culture &amp; Communication, University of Groningen, Netherlands.</b> With Jan-Philipp Bussmann, Science Shop Language, Culture &amp; Communication, University of Groningen.</p> <p>Working with a variety of partners can be challenging. How can we capture all voices and make sure everyone is on the same page? Are words always the best way to communicate something to everyone and create synergy? Sometimes images can help to shape thoughts, capture a discussion, explain what matters and help our memories. Images can also overcome the gap between academics, professionals and communities who are all using their own jargon. In this workshop, we will introduce two ways to visualise a project and use pictures as a conversation starter.</p> <p>The Science Shop Language, Culture and Communication (University of Groningen) developed a visualisation training for students on mapping and infographics. During this training, students learned how to use interactive maps as a tool to start a conversation about their research topic, and made an infographic to visualise their project plan. We would like to share our experiences with this training, and learn from your views and practices.</p> <p>In the workshop you will have the chance to visualise your own project. After a short introduction about mapping and infographics, you can choose to work with either mapping or infographics.</p>
1312.0013	<p><b>(A1014) WORKSHOP Institutionalizing university community engagement – theoretical and practical challenges and the way forward; György Málovics, University of Szeged, Hungary.</b> With Zoltán Bajmócy, Judit Juhász, Judit Gébert, Boglárka Méreiné Berki - University of Szeged, Faculty of Economics and Business Administration, Research Centre, Hungary</p> <p>University community engagement (UCE) is hardly institutionalized on a higher education institution (HEI) level. Even though there is a growing narrative of UCE's importance by policymaking bodies, related financial initiatives are more or less missing (Goddard 2016). UCE as a "Cinderella mission" (Benneworth 2018) is rather initiated and carried out by (small groups of) individuals or units (e.g. research groups), mostly on a voluntary basis. Furthermore, numerous factors hinder the institutionalization of UCE, including (1) "inner" tensions of the UCE concept; (2) cultural factors characteristics to academia; and (3) structural issues.</p> <p>During the collaborative session we aim to address the following questions with participants:</p>

	<ul style="list-style-type: none"> <li>• What are the pros and cons of institutionalizing UCE?</li> <li>• How to institutionalize UCE in a way that (1) it pervades university practice (including teaching and research) and (2) provide the pros and avoids the cons identified in RQ1? The session is planned to contain 3 blocks to serve reflection:</li> <li>• Highlighting some dilemmas of institutionalizing UCE based on the literature and the work of the Research Centre of the Faculty of Economics and Business Administration of the University of Szeged (Hungary) – the Research Center is a university that is committed to community engagement, social justice and equality and run numerous cooperative research process during the past decade with and for marginalized communities (15 min)</li> <li>• Discussing research question 1 one in small groups (20 minutes) based on the related experiences of workshop participants followed by a workshop-level reflection (15 minutes)</li> <li>• Discussing research question 2 one in small groups (20 minutes) based on the related experiences of workshop participants followed by a workshop-level reflection (15 minutes)</li> <li>• Wrap-up (5 minutes)</li> </ul> <p>References</p> <p>Benneworth, P., Culum, B. Farnell, T., Kaiser, F., Seeber, M., Šćukanec, N., Vossensteyn, H., &amp; Westerheijden, D. (2018). Mapping and Critical Synthesis of Current State-of-the-Art on Community Engagement in Higher Education. Zagreb: Institute for the Development of Education.</p> <p>Goddard, J. (2016). National higher education systems and civic universities. In. Goddard, J. – Hazelkorn, E. – Kempton, L. – Vallance, P. (eds) The Civic University. The Policy and Leadership Challenges, Cheltenham: Edward Elgar, 94–113.</p>
1312.0018	<p><b>Two Workshops on Collaboration</b></p> <p><b>15.30-16.15 (B0032) PROBLEM SOLVING WORKSHOP Fostering strong collaborations between knowledge institutes and societal partners/business community to shape education with impact; Hanna Eppink, Society Based Education, Wageningen University and Research, Netherlands.</b> With Tosca Veerbeek, Society Based Education Wageningen University and Research, The Netherlands</p> <p>Wageningen University &amp; Research (WUR), facilitates academic education with impact through Society Based Education (SBE). SBE encourages and supports WUR programs to integrate real-life and authentic learning experiences in their curricula and teaching practices. We do this by seeking active cooperation with companies, startups, knowledge institutes, networks and non-profit organizations in order to connect WUR students to relevant and meaningful real-life challenges.</p> <p>By being exposed to society based learning students become well-trained professionals who are familiar with looking at issues from different perspectives - those of government, NGO, business, consumer, etc. They can therefore collaborate with people from different disciplines and are able to come up with real solutions to complex issues that play a role worldwide.</p> <p>This workshop starts with a short presentation of 10 minutes in which we will introduce SBE, our goals, methods of working and our dilemmas/challenges we are exposed to while doing our work.</p> <p>After this brief introduction we will continue in smaller groups around a topic of your own choice. If time allows we will do two rounds of brainstorming. Our aim is to generate a dialogue among the participants on how to strengthen collaborations between knowledge institutes and societal partners/business community to shape</p>

education with impact.

Hereby the topics we propose:

- Education with societal impact; why and how to create education with societal impact?
- Building an ecosystem societal partners; This type of education asks for real-life assignments. What are your experiences with acquiring and maintaining an active network of possible case-owners?
- Collaboration case-owners and teachers; The real-life assignments should be aligned with the learning outcomes of the study program/course. How to facilitate collaboration between academic teachers and societal partners? What are your experiences and challenges?
- Teacher professionalisation; Teaching with real-life assignments offers a challenge for teachers as different skills are required. How can these teachers be supported in this type of education?
- Assessment of students; Students work on diverse real-life assignments towards similar learning outcomes. How to deal with this?
- Another topic of your liking

**16.15-17.00 (G1101) WORKSHOP: Social innovation of the university-community cooperation; Michael Jørgensen, Aalborg University, Copenhagen, Denmark.** With Jens Dorland, Roskilde University, Denmark

The session combines research about transformative aspects of social innovation with research about community-based research and the role of universities and civil society empowerment. This combination is used for an analysis of agency and dynamics in university cooperation with civil society actors. The session builds upon analyses of transformative social innovation in the EU-FP7 funded project TRANSIT (Transformative Social Innovation Theory). The session analyses co-creation spaces at universities as a type of transformative social innovation. The overall aim is to combine research about social innovation with research about community-based research and civil society empowerment by analyzing agency and empowerment in three concepts within university-civil society cooperation: Science Shops, research centre and Fab Labs. In the TRANSIT project and in subsequent research at Aalborg University, a framework has been developed for analysis of initiatives within university-civil society cooperation as spaces for co-creation, focusing on the spaces' materiality (e.g. the need for physical space and equipment), relations within the space and local, place-specific adaptation of the space. An introductory presentation in the session presents a framework, which help characterizing and distinguishing different co-creation spaces involving universities and can support important choices in the planning of such new co-creation spaces. These aspects are the need for physical facilities, target groups, organizational model, participation of university actors, relation to civil society, knowledge production, relations to university research and curricula, co-production with local university-society relations, and empowerment of civil society. After the introductory presentation, the participants in the session apply the framework to characterise and compare their Science Shop, their Fab Lab or another initiative within university-community cooperation. This discussion will support the development of a common language among community-based research practitioners and thereby support analyses of the shaping and the impact of such initiatives.

1312.0019	<p><b>Two Workshops on Engaged Research and Learning</b></p> <p><b>15.30-16.15 (G0031) Miss Undercover Reloaded - On Civil Society Needs in Service Learning; Julia Derkau, University of Mannheim, Germany.</b> With Jörg Miller, Head of UNIAKTIV, University of Duisburg-Essen, Germany</p> <p>Service Learning (SL) pursues the idea that students and scientists work with civil society partners on projects that also reflect civil society needs (Godfrey, Illes &amp; Berry 2005). In SL practice, however, it is often unclear how civil society needs are to be determined. Different concepts of phenomenon of civil society (e.g. sector-model (Anheier et al. 1997) or civil sphere as symbolic interactions (Alexander 1998)) can be found. For SL practitioners it is challenging to refer these concepts on the given Service-context in a community. It can be described as a transfer problem. Additionally, it depends on the perspective, if a SL-project is linked to a civil need. The aim of the workshop is to reflect on occasionally concealed civil society needs in SL and on the necessity of criteria for successful SL as well as the conflict potential that may arise by putting them into practise. The title of the proposal takes up this idea, since the needs of civil society are sometimes hidden.</p> <p>Our central questions are: What points of orientation can there be for determining civil society needs? And which country-specific and culture-specific dimensions have to be considered?</p> <p>Starting with a storytelling-input based on a movie clip of 'Miss Undercover' and a short input phase about theoretical concepts of civil society we want to explore these questions with the participants by discussing criteria based on - intended controversial - practical examples in SL.</p> <p>By presenting and debating the "German Reference Framework for Successful Service Learning" (published by the German HEI Network 'Education through Responsibility') with the participants and benefitting from their (international) expertise and assessment we hope to engage all participants in a lively discussion on</p> <ul style="list-style-type: none"> <li>• how to use existing criteria on civil society needs and their implementation in concepts of SL projects,</li> <li>• on how to handle conflicting definitions and dimensions and - where appropriate –</li> <li>• on ways to reconcile them.</li> </ul> <p>Suggestions, ideas and impulses that the participants contribute to the discussion will be collected and saved during the session via interactive presentation software (<a href="http://www.mentimeter.com">www.mentimeter.com</a> &amp; <a href="http://www.padlet.com">www.padlet.com</a>) and subsequently documented.</p> <p>Alexander, G. (1998): Citizen and Enemy as Symbolic Classification. In: ders. (Hrsg.): Real Civil Societies. Thousand Oaks: Sage, S. 96-114.</p> <p>Anheier, H.K./Priller, E./Seibel, W./Zimmer, A. (1997): Der Dritte Sektor in Deutschland. Berlin: edition sigma.</p> <p><b>16.15-17.00 (G1150) Seeding the skills for Engaged Research across Ireland, Michael Foley, Trinity College Dublin, Ireland.</b> With Sarah Bowman, Trinity College Dublin, Ireland; Kate Morris, Campus Engage – Irish Universities Association, Ireland</p> <p>How do you seed the skills needed for Engaged Research that can lead to societal impact across an entire country? In Ireland, a coalition of Campus Engage, the Irish Universities Association, the Higher Education Authority, and The National Forum for the Enhancement of Teaching and Learning have created a facilitated online course to do just that.</p> <p>The course, Engaged Research &amp; Innovation for Societal Impact, has been created to</p>
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	<p>build a cohort of facilitators across Ireland's universities that can foster the skills needed by researchers for Engaged Research. These skills, such as how to engage with a broad range of stakeholders, how to identify ways to influence public policy and practice, or how to articulate the potential impact of their work, are fast becoming core skills for researchers who are being called upon by funders and governments to show that the public investment in their work is either contributing to economic growth or is having tangible results in the quality of people's lives. In Ireland, the public sector and media are increasingly turning towards academia for evidence informed solutions that can tackle the societal challenges that the country faces such as health service reform, youth crime, housing shortages and climate change. The proposed 'Development Theory/Strategy/Methods' 45-minute session will use the experience of developing and piloting this course as a basis for a 'fishbowl' conversation among an international audience about how we orient researchers towards being able to consider, capture and share the impact of their work: the societal benefits, the barriers and the potential dangers of an impact focused research community. A fishbowl provides an opportunity for a small group of volunteers to discuss the issue in the round while others who do not wish to participate but who would like to spectate can look on.</p>
1312.0024	<p><b>Two Workshops on Education and Society</b></p> <p><b>15.30-16.15 (B1096) Diversity Map - Shared exploration of the varied community engaged practices in science shop course projects; Reka Matolay, Science Shop, Corvinus University of Budapest, Hungary.</b> With Judit Gáspár, Andrea Toarniczky, Márta Frigyik, Corvinus Science Shop, Hungary</p> <p>How can we capture the diversity of science shop course projects? We have made efforts to map the variety of practices in our science shop with regard to numerous aspects of community engagement in teaching and learning.</p> <p>Our aims: This diversity map will be put to the test in the workshop. We invite practitioners and lecturers in community engagement to explore: (1) how the map resonates with their experiences and (2) what – practical and/or research – questions may support the learning about this diversity. The latter element contributes not only to develop our research further via gathering potential conceptual references to and questions for research, but the questions generated in the workshop may become the foundation of a developmental/evaluation tool for science shop course projects as e.g. supporting (self)-reflection of lecturers on their community engaged teaching practices.</p> <p>Our background: We have been analysing course projects of a university-based science shop with a 5-year background in Central and Eastern Europe in management, economic and social sciences. We are a competence development centre for community engagement launching our educational research activities. Currently, we start preparing a publication about the diversity map open to all science shop lecturers as co-authors to experiment with collaborative writing, to strengthen collaborative research culture as well as to challenge the scientific publication ideal of limited number of authors. This workshop may contribute to both the competence development and the research activities.</p> <p>Our workshop: First, we introduce the diversity map. Then participants of the workshop are invited to ask exploratory questions within the frame of their own role in community engaged teaching and learning related to that practice they would like to understand more in depth. During the workshop we collect the questions in small-</p>

group discussions, and we address their exploratory power.

The desired outcome of the workshop is a collection of questions inspiring further research and projecting a future (self)-reflection tool for science shop lecturers. Participants will gain insights to the various aspects of community engaged practices in a certain science shop in a structured format (diversity map), contributing to their more in-depth, reflected understanding of course projects from an educational perspective. The diversity collated in our context may trigger transdisciplinary adaptation to other contexts.

**16.15-17.00 (B1091) How can Open Schooling be an asset for different stakeholders?; Ines Saavedra, Open Science Hub - Portugal (Plataforma de Ciência Aberta -**

**Município de Figueira de Castelo Rodrigo).** With Maria Vicente, Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Ana I. Faustino, Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Ana Cristina Perpétuo - Agrupamento de Escolas de Figueira de Castelo Rodrigo, Portugal; Maria João André - Agrupamento de Escolas de Figueira de Castelo Rodrigo, Portugal; Ana Peso, Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Carlos Martins, Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Célia Paraíso, Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Filipe Pinto, Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; José Varela, Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Maria Inês Veríssimo, Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Paulo Jorge Lourenço, Plataforma de Ciência Aberta - Município de Figueira de Castelo Rodrigo, Portugal; Pedro Russo - Leiden University, Netherlands

The Open Schooling (OS) approach fosters environments where schools, in cooperation with stakeholders, become agents of community well-being by engaging in real-life projects that meet societal needs. As such, this approach has the potential to promote student's citizenship and engagement with community challenges, which becomes particularly relevant in communities with vulnerable socio-economic backgrounds, where student's school motivation and performance is generally low. This is the case of Figueira de Castelo Rodrigo (FCR) which is a low density territory in the northeast of Portugal and where the Open Science Hub Portugal (OSHub-PT), a partner of the H2020 OS Hub Network, is located. Since 2018, OS Hub-PT, in partnership with the school group of FCR (sgFCR), has established a school-driven science shop, where community challenges, research and innovation practices and stakeholder collaboration are at the core of school projects, namely in the discipline of Citizenship and Development.

One of the pillars of OS is stakeholder engagement, however it is also one of the main challenges. This is due to several reasons, namely reduced school institutional culture and training towards external out-of-school collaborations or lack of institutional incentives (from schools and partners). So, how can schools promote more effective stakeholder engagement and how can OS become an asset for stakeholders? How could one build a win-win situation where both schools and stakeholders see an advantage in working together on OS projects?

Our workshop aims to facilitate some answers to the above questions, through a co-creation workshop based on Design Thinking and Social Business Model tools. As such, we propose a reflection based on participants' professional and/or personal socio-cultural experiences/knowledge to co-analyze challenges, opportunities and solutions

	<p>for the engagement of stakeholders in OS projects. These outcomes will be treated and used in the OS Handbook, organized by the OSHub Network, which will be widely disseminated in 2022.</p> <p>So, as a school-driven science shop, we want to support citizens and stakeholders to look at their schools as collaboration hubs that contribute to local development by incorporating in their educational projects the needs and challenges of their communities. As such, the main objective of this workshop is to stimulate the reflection on how each of us, citizens and professionals within our communities, can contribute to this.</p>
1312.0025	<p><b>NOTE: TALKS WILL BE IN FRENCH (WITH ENGLISH SLIDES)</b></p> <p><b>(G1022) PANEL: The Francophone Network of Science Shops between formalization and restructuring; Hichem Ben Hassine, Institut Pasteur de Tunis, Tunisia.</b> With Glen Millot, Sciences Citoyennes (France); H��l��ne Chauveau, Boutique des Sciences de Lyon (Universit�� Lumiere Lyon 2, France); Mamane ABDOU OUMAROU, Centre de Recherche M��dicale et Sanitaire (CERMES) Niger; Bertrand Bocquet, Boutique des sciences de l'Universit�� de Lille, Universit�� de Lille et Conservatoire National des Arts et M��tiers, Paris, France; St��phanie Bost, MSH-Sud (France); Nestor Tamba Mara, "Boutique des Sciences et Savoirs de l'universit�� G��n��ral Lansana Cont�� de Sonfonia-Conakry." (Guin��e).</p> <p>In this round table, we propose to share our experience in the restructuring of the French speaking network and the activities of the three Working Groups, and launch a debate in order to collect feedback from the participants on strengths and weaknesses of the network and on its future activities in synergy with other initiatives and networks.</p> <p>The francophone science shop network was created in 2015. Since then, based in three continents and more than a dozen countries, it is continuously growing and it has offered several opportunities for mutual learning and mentoring based on a diversity of experiences and models. From participatory action research to services provided by universities to communities and Civil Society Organizations, the Science Shops gathered in this network share a common goal which is to offer answers to societal needs.</p> <p>This informal network benefited from projects such as PERARES, InSPIRES, SOHA to grow, to include new Science Shops, and to conduct common actions (proposals, projects, trainings, webinars) among other challenges that overcome the linguistic barriers.</p> <p>After the LK festival in June 2021, in order to further formalize the network activities, a survey was launched among members of the network. in order to assess the functioning of the network in its initial phase and to have feedback from its members on its future development. Based on the results of the questionnaire, it has been decided to create three Working Groups on the following structuring topics : Advocacy-Communication, Project engineering and Funding; Training activities and Webinars. In addition, it appears that horizontal work on the establishment of a common chart of values is important for strengthening the network cohesion.</p>
1312.0030	<p><b>(F1068) SKILLS WORKSHOP: Community-Based Evaluation to Advance and Localize Sustainable Development Goals (SDGs); Sarah Switzer, Centre for Community Based Research, Canada.</b> With Jean de Dieu Basabose, Madeline Docherty, Rich Janzen, Janna Martin (all with Centre for Community Based Research, Canada) and Paul</p>

	<p>Heidebrecht, Conrad Grebel University College, Canada/Centre for Community Based Research, Canada</p> <p>Increasingly, the United Nation's Sustainable Development Goals (SDGs) are taking centre stage in policy and programming conversations. However, to be implemented, SDGs must be localized and relevant to communities. Locally-driven approaches to the SDGs will be successful only to the extent that they engage community stakeholders in collaborative reflective practice. This interactive workshop will explore how a community-based approach to evaluation can be one strategy to achieving SDG targets.</p> <p>The trend of community-based evaluation has shifted the focus from seeing evaluation reactively and expert-driven, to seeing evaluation proactively for healthy community development (Janzen et al. 2017). It does this by stressing that evaluation: 1) be driven by and practically relevant to community groups; 2) meaningfully involves stakeholder throughout the process; and 3) is utilization-focused, providing evidence for collective decision-making (Ochocka and Janzen 2014). Such an approach to evaluation holds promise when localizing SDGs, as it equips local actors to both do evaluation and use evaluation results to maximize their desired impact.</p> <p>This workshop will engage participants in a discussion about the opportunities and challenges of localizing the SDGs in their community, and learn how community-based evaluation can help support localization efforts. Participants will receive a link to a web resource containing resources including recorded webinars, slide decks, and workbooks to encourage further reflection, training and support.</p>
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## SOCIAL PROGRAMME WEDNESDAY

### Welcome reception (17.00-18.30; welcome speech at 17.30)

The reception at the end of the first conference day will be held in the A-kerk. This church is one of the top locations in Groningen and has a history that reaches back to before the 13th century. Time 17.00-18.30 Hours. At 17.30, prof Jouke de Vries, President of the University of Groningen, will welcome you. After this, those interested can join artist Aimee ter Burg for a short tour and explanation of the current exhibition in the church, which is part of the Bittersweet Inheritance activities, remembering the abolishment of slavery. (Akerkhof 2, Groningen)

### Optional Dinner Matching (from 19.30)

On the first day of the conference we offer the opportunity to have dinner with other, random, conference participants. It's an easy way to meet new people! We will make reservations at various downtown restaurants, and you can register yourself for a restaurant of your choice at the registration desk of the conference. A table will be reserved for the conference at the given time/location. Obviously, you do have to pay for your own dinner. We will indicate the price range of the selected restaurants (low/mid/high).

If you sign up, please DO go and do not leave a seat empty, as that would be disappointing for the other participants, the restaurant and us... ☹.

Dinner tables for 6 persons each are reserved from 19.30 at various restaurants.

THURSDAY JUNE 30<sup>th</sup>

From 08.00: Registration @ Academy Building. Moving to Harmony Building at 10.00

## PLENARY SESSIONS 2: THURSDAY 9.00-10.30

Offerhaus	<p>Introduction by <b>Marc Pauly, University of Groningen</b></p> <p><b>Session: A critical reflection on research with and for society in a world of contested expertise. Rajesh Tandon (Participatory Research in Asia, India), Lisa Herzog (University of Groningen, Netherlands), Claudia Göbel (Higher Education Research Halle-Wittenberg, Germany). Nick Nieuwenhuijsen (formerly University of Groningen, Netherlands) will guide us through a discussion.</b></p> <p>We will open the session with a brief look back at the first day of the conference and the questions generated. Next, we will focus on an important issue concerning all of us, with all our diverse backgrounds.</p> <p>In this conference, we focus on generating living knowledge in the form of research with and for communities. Methodologies like citizen science, participatory action research, living labs, community based research, etc. are used to obtain this kind of living knowledge. These methodologies can be viewed as critiques of more standard scientific methodologies in which professional scientists are the ones in charge of the research, research which aims for “objective” knowledge obtained under ideal conditions using idealizing abstractions.</p> <p>However, our own critical methodologies themselves are in need of critical reflection. This is particularly relevant because we are now living in a world of contested expertise, post-truth and alternative facts. This raises a number of questions and apparent tensions which we want to address in our panel discussion: Is there a trade-off between scientific quality and genuine community engagement, or between activism and scientific objectivity or rigor? To what extent do methodologies like participatory action research become simply a form of activism, politics by other means? Can this concern simply be brushed away by saying that science is always political or value-laden and that objectivity does not exist? And if our research methodologies are a form of political activism, do we thereby not contribute to the current demise of the authority of science and the general distrust of science and scientific experts? More generally, do attempts to democratize research run the risk of doing away with expertise and knowledge hierarchies altogether?</p> <p>We have invited a panel of critical thinkers to discuss these issues with us:</p> <p><b>Rajesh Tandon</b> is an internationally acclaimed leader and practitioner of participatory research and development. He is Founder-President of Participatory Research in Asia (PRIA), global centre for participatory research &amp; training since 1982. He is also Co-Chair of the UNESCO Chair on Community Based Research and Social Responsibility in Higher Education since 2012. The UNESCO Chair grows out of and supports UNESCO’s global lead to play ‘a key role in assisting countries to build knowledge societies’. A pioneer of participatory research, Rajesh Tandon has given new meaning to academic research by redefining the relationship between the researcher and the researched.</p>
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He has championed the cause of building organisations and capacities of the marginalised through their knowledge, learning and empowerment, contributing to the emergence of several local, national and international groups and initiatives to promote authentic and participatory development of societies. Dr Tandon has served on numerous expert committees of Govt of India, UGC, UN, Commonwealth & World Bank. In 2015, the Indian Adult Education Association (IAEA) awarded Dr Tandon the Nehru Literacy Award. For his distinguished work on gender issues, the Government of India honoured him with the prestigious Award in Social Justice in March 2007. The University of Victoria, Canada, awarded Dr Tandon the degree of Doctor of Law (Honoris Causa) in June 2008. He is the first Indian to be inducted to the International Adult and Continuing Education (IACE) Hall of Fame (class of 2011).



**Lisa Herzog** works at the intersection of political philosophy and economic thought. Between 2016 and 2019, she was professor for political philosophy and theory at the Technical University of Munich, since 2019 she works at the Faculty of Philosophy and the Center for Philosophy, Politics and Economics of the University of Groningen. She holds a master (Diplom) in economics from LMU Munich, and an M.St. in Philosophy and D.Phil. in Political Theory from the University of Oxford. She has worked at, or visited, the universities of St. Gallen (CH), Leuven (BE), Frankfurt/Main (D), Utrecht (NL), and Stanford (US). She was a Rhodes Scholar (2007-2011), and in 2019, she received the Tractatus-Preis and the German Award for Philosophy and Social Ethics. Herzog has published on the philosophical dimensions of markets (both historically and systemically), liberalism and social justice, ethics in organizations and the future of work. The current focus of her work are workplace democracy, professional ethics, and the role of knowledge in democracies.



**Claudia Göbel** is passionate about interfaces between science and publics through research, education, activism, policy and art. Main topics of her work are open (research) organisations, equity and inclusiveness in participatory research, Citizen Science as international research policy field and relations to Open Science. She tries to link scientific reflection from a science and technology studies perspective with making things happen as a practitioner. As researcher at the Institute for Higher Education Research Halle-Wittenberg (HoF) she currently investigates the landscape of participatory research in the social sciences and humanities in Germany. As guest researcher at the Museum für Naturkunde Berlin, she analyses the institutionalisation of Citizen Science in Europe. She helped establish the European Citizen Science Association (ECSA) in its foundational years through coordinating the



	<p>secretariat and running the EU-funded project “Doing-it-Together science”. In order to create space to learn from each other and do things together for members of ECSA and Living Knowledge, she initiated the joint <a href="#">working group on “Empowerment, Inclusiveness and Equity in Citizen Science and Community-Based Research”</a> together with Michael Søgaaard Jørgensen (Arhus University Copenhagen).</p> <p>The session will be chaired by <b>Nick Nieuwenhuijsen</b>. Nick is an ethicist and local politician. He has been employed at the Knowledge Centre Philosophy, the Science Shop of the Philosophy Department, and as the academic advisor of the Honours College of the University of Groningen – an interdisciplinary hotbed in which students work and learn together on complex, interdisciplinary problems. He is interested in local social policies, poverty, healthcare, digitalization and the participation of students within practical societal issues.</p> <p>Nick has been a member of the Groningen City Council from Jan 2019 – March 2022. He’s currently working as Specialist Strategy and Development for the Fire Brigade of the Safety Region Groningen.</p> 
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Coffee Break

**PARALLEL SESSIONS 4: THURSDAY 11.00-12.30**

<p>Offerhaus</p>	<p><b>(D1142) PANEL: Celebrating Living Indigenous Knowledge and Healing Relationships: Sharing the The Living Lab Community-Campus-Indigenous Partnership from Coast Salish Homelands /West Coast of Canada; Maeve Lydon, Living Lab - University of Victoria, Canada.</b> With Living Lab Team: Mavis Underwood- TSAWOUT Nation - UVic Ph.D student Anthropology ; Lyndsey Joseph - Songhees Nation- Education Student; Desiree Jones - Pauquachin Nation and Indigenous Studies-pre-Law student (UVic); Darcy Mathews- Archaeologist and Ethnobotanist Professor (UVic); Josephine Henry – WSANEC School teacher; Esther Morris, WSANEC Community and cultural leader, School Board staff; Robert Thomas, WSANEC School Board Teacher, Singer; Jessica Joseph - Songhees Nation, Visual-digital Artist; Sarah Jim - TSEYCUM Nation, Visual Artist - PEPAKEN HAUTW staff; Judith Lyn Arney - PEPAKEN HAUTW Restoration Program Ecosystem Director</p> <p>Healing ourselves, our communities and the local-gloal ecosystem requires the recognition that we are all connected; decolonizing and transforming knowledge systems and institutions to support this planetary healing requires collective and collaborative partnerships, learning and research. This roundtable presents the work of the Living Lab community- campus project (<a href="http://www.livinglabproject.ca">www.livinglabproject.ca</a>) ( and a new Indigenous-community-campus research/science –shop in the making!)( located on the traditional coastal territories of the Coast Salish Indigenous /First Nations people in what is also named British" Columbia and Canada. The Living Lab presenting team includes WSANEC and Lekwungen elders, knowledge keepers, artists and university students along with school-based educators, and community-based research</p>
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	<p>academics from the University of Victoria sharing their collaborative work and vision. The creative and dynamic format includes Indigenous songs and prayers and an interactive welcome (15 min) and closing (20 min) to recognize all attending this learning and healing circle. Four themes explored during the presentation include:</p> <ol style="list-style-type: none"> <li>1 Values and Principles - Relational ethics and personal and ecosystem healing framework and ways of knowing - being</li> <li>2 Creative and Experiential Ways of Learning - Arts and Land-Based Learning and Citizen - Indigenous Science</li> <li>3 Eco-Cultural Restoration and Science - Stories and Examples from the Archaeology-Ethnobotany and Ecosystem Restoration practitioners ( recognizing the UN Decade for Ecosystem Restoration)</li> <li>4 Indigenous Resurgence and Relevance: The relevance of this work to local and global higher education and societal contexts. ( e.g. Truth and Reconciliation Commission in Canada (2017) and UN Declaration of the Rights of Indigenous Peoples and the recent World Virtual Indigenous Circle on Open Science and the Decolonization of Knowledge ( November 2020) .</li> </ol>
<p>Marie Loke</p>	<p><b>(B1062) PANEL: Competencies development approaches to prepare students for society and labor market of the future; prof. Marjolein Zweekhorst, Vrije Universiteit. Amsterdam, Netherlands.</b> Co-chairs for the session: Dr. Eduardo Urias and Dr. Sarju Sing Rai.</p> <p>Panelists: Prof. Wolfgang Stark, Visiting Fellow at Vrije Universiteit Amsterdam, the Netherlands &amp; Professor Emeritus of Organizational and Community Psychology at University of Duisburg-Essen, Germany; Rosina Malagrida, Head of the Living Lab for Health at IrsiCaixa and co-coordinator of the Barcelona CaixaResearch Living Lab, Barcelona, Spain; Geertje Tijmsa, Lecturer and Researcher, Vrije Universiteit Amsterdam, the Netherlands; Marijke Visser, Lecturer and Researcher, Vrije Universiteit Amsterdam, the Netherlands; Jennie Weemhoff, Lecturer and Researcher, Vrije Universiteit Amsterdam, the Netherlands.</p> <p>The world is facing a complex set of global challenges, from Covid to climate change, from rising inequalities, migration, and aging populations, to managing the digital age for the common good. Confronting these challenges require new ideas and large scale innovation, economic and societal change, and international cooperation. These can only be achieved with changes in the organizational models of the key stakeholders involved and those affected by the challenges. These new models of organization will imply collaborative, decentralized and systemic approaches addressed within transformative networks or innovation ecosystems within a wide variety of stakeholders. Within higher education, this requires more societal accountability, engagement and partnership to help students connect with society and develop competencies to deal with real world societal challenges (Aramburuzabala et al. 2019). Various universities worldwide acknowledge these needs. The strategic agenda Higher Education and Research of the Dutch Ministry of Education (Ministerie van Onderwijs, 2019) highlights the need: (i) to better align societal needs with what Higher Education Institutes (HEIs) have to offer (p.71); (ii) for students to be equipped with the appropriate competences, such as awareness of the interrelatedness of societal challenges and the ability to think and act from an interdisciplinary perspective (p.73); The Dutch Ministry of Education wants to further support and stimulate recent developments towards societally-oriented HEI's, in which society serves as a rich learning environment for students as they are invited to contribute to addressing</p>

societal challenges as part of their education (p.86). Equipping (future) professionals in societally engaged work, interdisciplinarity, and co-creation requires explicit training (Di Giulio & Defila, 2019; Godemann, 2006; Roy et al., 2020), and thus knowledge of the underlying competences and pedagogical approaches to build and assess these competences. Existing research has identified competencies for community engagement and interdisciplinary collaboration, but still leave them and the learning process associated to them in a “black box” of unarticulated yet desirable elements in need of unpacking (Parker, 2010; Culhane et al. 2018). Therefore, this thematic session focuses on discussing approaches to competencies development in HEIs which is crucial in preparing students to address complex societal challenges and the labor market of the future.

**Prof. Wolfgang Stark**, Visiting Fellow at Vrije Universiteit Amsterdam, the Netherlands & Professor Emeritus of Organizational and Community Psychology at University of Duisburg-Essen, Germany

Title of presentation: Transformational Literacy’ as a Basic Model of Competences for Universities of the Future

Abstract: Based on his current research interest/work includes transformative learning and envisioning transformational processes in community/public engagement, Wolfgang will develop first steps toward a model of ‘transformational literacy’ based on ‘Theory U’ which will be needed for the future of HEI. In contrast to traditional models of academic knowledge building, universities of the future need go beyond giving answers to scientific challenges and to compete with other scholars. Future planetary and global societal challenges, especially in an era of rising global crises, will require a joint use of explicit, implicit/tacit and transcending knowing, which we will find in academic science, experiential knowing in society and artistic thinking. Learning how to collaborate and co-create and to establish a ‘transformational literacy’ therefore goes beyond step-by-step approaches and the idea of toolboxes. It is based on a rather fundamental approach to establish new relationships between partners (university – society – business and politics): learning how to listen, and learning how to ask questions.

**Rosina Malagrida**, Head of the Living Lab for Health at IrsiCaixa, Barcelona, Spain.

Title of presentation: Students as key agents to address our complex and persistent problems

Abstract: Rosina will present a collaborative and decentralized model of organization that is being piloted in Barcelona to improve the model promotion of healthy and sustainable diets, which is not effective enough. This approach is being facilitated through the so called Fit4FoodBcn network where a total of 113 different stakeholders from more than 48 organizations have already participated. Among these stakeholders, students in different education levels (4 universities and 1 secondary school) are contributing through participatory research processes. The changes being addressed aim at enhancing the impact of the current fragmented existing solutions and at stimulating the ideation and implementation of novel solutions that better respond to system complexity and to the needs and expectations of a wide variety of social actors both within and outside the scientific community. This network started within the EC funded project Fit4Food2030 and now it is being coordinated within the Barcelona CaixaResearch Living Lab. A similar approach is also being promoted within the EC funded project CONNECT where guidelines are being developed to stimulate similar initiatives to be led by secondary schools which become agents of change through participatory research and the movement of Open Schooling.

**Jennie Weemhoff**, Lecturer and Researcher, Vrije Universiteit Amsterdam, the Netherlands.

Title of presentation: Competencies development through transdisciplinary education

Abstract: Jennie will discuss her review on the development of competencies among students through transdisciplinary education (TDE). In order to prepare students to address complex global/societal challenges of the 21st century, more and more higher education institutions are offering TDE that provide students the opportunity to learn from, collaborate, and co-create with both academic (diverse disciplines) and non-academic (societal/global) actors. TDE is thus an overarching pedagogy that includes both interdisciplinary collaboration (interdisciplinarity) and societal engagement, and requires crossing of boundaries between not only academic disciplines but also between academia and society. The aim of this review was to explore what competencies/skills students develop through transdisciplinary research and education at Universities and how those competencies are trained.

**Geertje Tijmsma**, Lecturer and Researcher, Vrije Universiteit Amsterdam, the Netherlands. Title of presentation: Interdisciplinary community service learning module - an approach to educating future professionals in inter- and transdisciplinarity.

Abstract: Geertje will discuss her research on HEIs' need to innovate education in becoming responsive to 21st century issues by providing inter- and transdisciplinary education. In this research, the ambitions, accomplishments and challenges of the interdisciplinary Community Service Learning (iCSL) module developed and implemented at the Vrije University (VU) Amsterdam, the Netherlands will be discussed. We developed the iCSL module to prepare students for inter- and transdisciplinarity while aiming to ensure student and faculty commitment and safeguarding reciprocity. The program consists of two courses, the first course centres around the identification of sustainability issues in student-led multi-actor dialogue sessions (iCSL1), and the second on addressing those sustainability issues through interdisciplinary collaboration among master students that are simultaneously working on their own master thesis (iCSL2). We conducted continuous evaluations during the first 2 pilot years including community (partners), faculty and student perspectives based on semi structured interviews, students self-reported reflections, observations and written feedback. We found that the interactive design of the courses as well as the exposure to diverse disciplinary and community perspectives, allowed us to acquaint students with inter- and transdisciplinarity. In addition, students from all faculties show interest and commitment towards the program and faculty members appreciate involvement in the course as it could advance their own academic work and incentivises new connections within the university. Finally, community (partners) reported that they found the public iCSL events linked to the courses inspiring, in addition they noted opportunities for networking as well as long term collaborations.

**Marijke Visser**, Lecturer and Researcher, Vrije Universiteit Amsterdam, the Netherlands. Title of presentation: Developing a mindset for working across science-society interfaces

Abstract: Marijke will discuss how a first step can be made for developing competencies (knowledge, skills and attitude) for working across science-society interfaces. In her contribution, she will discuss her research that examines the behavior of students and the experiences of different actors (students, teachers, and societal actors) involved in an eight-week course that aims to equip master students for a first step towards transdisciplinarity. The course provides guidance in

	<p>understanding critical transdisciplinary concepts, the interaction with diverse societal actors and builds up to a public event, in which students co-host dialogue sessions with diverse societal and academic actors The analysis of students' behavior and the multi-actor perspectives shows how this (first)transdisciplinary interaction was experienced by all involved, and how the students develop in terms of competencies for transdisciplinarity.</p>
1312.0012	<p><b>Inspiration and experience in learning: five research presentations</b>  <b>Chair: Karin Ree, University of Groningen, Netherlands</b></p> <p><b>(G1046) Assessment of Ethical Practices and Challenges in Science Shop Projects within the InSPIRES project; Maria Kabbage, Institut Pasteur de Tunis, Tunisia.</b> With Jacqueline Tilley (Instituto de Salut Global Barcelona, ISGlobal), Hichem Ben Hassine (Institut Pasteur de Tunis), Anne-Sophie Gresle (ISGlobal), , Irene Jimeno Maroto (ISGlobal), María Jesús Pinazo (ISGlobal) and Sonia Abdelhak (Institut Pasteur de Tunis)</p> <p>Background and Objective Regarding the increasing importance of ethical aspects in the conduct of participatory research, it becomes crucial to raise ethical awareness and promote ethical practices within Science Shops (SS) projects social and locally adapted, in particular those involving communities (CBPR). Considering the importance placed on ethics within the framework of the InSPIRES project and in order to identify and analyze different challenges faced during the co-creation and implementation of SS projects, our main goal in this study was the assessment of ethical issues and practices in all the consortium as well as identifying foremost ethical challenges faced in SS research process.</p> <p>Methods This study was carried out in two phases. The first phase was a quantitative assessment that focused on procedural aspects of ethical issues within each SS project in nine different scenarios (geographical and topic-related) by elaborating a simple questionnaire. The second phase was a more in-depth semi-structured interview guide constructed with the aim of qualitative assessment project strategy and policies based on the CBPR ethical pillars.</p> <p>Results and Discussion Our principal findings pertained to ethical literacy and level of access to (ethical resources?) of institutions leading participatory projects as well as stigmatization of vulnerable participants, and result dissemination. Academics seemed to be more aware about ethical aspects and more familiar with informed consent forms, data protection policies and ethical committees' approval process. It has been concluded that this is probably due to the fact that they pertain to the public network of research institutions and usually have an ethical committee. Resistance to written consent was in some cases a challenge, mostly from illiterate and inaccessible participants particularly those that had stigmatizing diseases such as HIV or Chagas disease. Public and large dissemination of the results and results ownership between academic and civil organizations were also significant challenges discussed in this study.</p> <p>Conclusion This analysis allows us to give recommendations concerning lessons learned from InSPIRES partners experience when implementing participatory research in respect to community based participatory research (CBPR) and guidelines particularly regarding the ethics pillars.</p> <p><b>(B1001) Win - win! Citizen science and project-based learning; Irene Muller, North West University, South Africa</b></p>

Citizen science allows for community participants, although novices in scientific research, to contribute with the collection of scientific valid data (Buytaert & Zulkafli, 2014). The collection of scientific data spurs communities to a raised awareness of scenario in their context that can be problematic. Living in communities allow these citizen scientists to contribute with inventive solutions, often linked to problematic scenario. Citizen science acknowledges the contribution of citizens to knowledge that is often inaccessible to scientists who use traditional methods (Potschin & Haines-Young, 2006).

Project-based learning links knowledge to the context of application. The word project presents a broad class of learning experience, which include scientific experiments and scientific reporting, writing and art assignments, the making of artefacts. Project-based teaching is not an antidote to lecturing or an assessment opportunity, but a challenge to pre-service teachers to solve real-life problems with the world as the classroom (Solomon, 2003). Project-based teaching emphasizes learning through experience and often focuses on environmental concerns (Solomon, 2003). Through project-based teaching core curriculum knowledge is learned and applied when authentic problems are solved (Markham, 2011). Project-based teaching therefore imparts thinking competencies and creates flexible learning environments (Doppelt, 2003:255).

The combination of citizen science and project-based learning allows for unique skills to be implemented in teacher training. The use of participatory action research techniques, like longitudinal monitoring, implementation of international projects in local context, indigenous knowledge storytelling and Photovoice in hard core scientific subjects like Natural - and Physical Science will be shared during the presentation.

**(B1086) InSPIRES: Network Connections as Innovation Generation; Leonardo de la Torre Ávila, IS Global, Barcelona, Spain.** With Rita de Cássia Machado da Rocha (1;2, Roberto R. Ferreira(1,2), Anne-Sophie Gresle (3,4), Tania Araújo-Jorge(1,2), María-Jesús Pinazo (4). (1)Programa de Ensino em Biociências e Saúde/(2) Pesquisador CienciaArte IOC- LITEB - Instituto Oswaldo Cruz/Fiocruz/ (3)Fundación Privada Instituto de Salud Global Barcelona, ISGlobal; (4) Hospital Clínic i Provincial de Barcelona. \* Leonardo de la Torre-Ávila, Anne-Sophie Gresle and María-Jesús Pinazo contribute to this presentation on behalf of the InSPIRES consortium.

What do the actors of the InSPIRES project understand by the concept of network, its structure, visibility of actions and sustainability? What have we learned after the InSPIRES journey from a network approach? The InSPIRES Project (Ingenious Science Shops to Promote Participatory Innovation, Research and Equity in Science) gathered eight institutions aiming to develop Science Shops projects and reflect on this methodology (<https://inspiresproject.com/partners-advisory-board/>).

We conducted a semi-structured interview with nine actors involved in the project and one belonging to the Barcelona CaixaResearch Living Lab, a co-creation space emerging from the interactions of InSPIRES. Half of the interviewed partners (50%) carry out teaching, research and extension activities; 20%, extension; and 30%, teaching and research, all with the aim of meeting the demands of civil society and the democratization of science.

Regarding the perceptions of the network concept, some obtained results were: 40% understands networking as connection and linking; 40% as a search for interested people and 20% as a sense of being and belonging to a community.

Some actors mention the participation in Living Knowledge network, and other networks as important for the proactivity in a common cause. Regarding sustainability,

the actors emphasize the idea of strengthening in the network for the creation of projects with more participatory and co-creation dynamics. The network's members and the network itself learn the importance of maintaining affective bonds for the emergence of new projects, as well as spaces for knowledge sharing, collaborative alliances with other projects, and for the sustainability of future actions. As recently concluded, the issue of networking is not raised by InSPIRES partners and other members of the Science Shop movement because of the diverse opportunities it opens up for members of a community of practice, but because of its proven capacity to lead small units or groups (nodes) into environments of opportunity where the dream of continuity beyond a purely economic dimension can come true.

**(B1026) A pedagogy of Computational Thinking: Exploring the impact on the graphing abilities of pre-service Physical Science teachers with practical action research; Eunice Pretorius, NWU, South Africa**

The most desired yet challenging skill in the field of Physical Sciences is the ability to analyse and interpret graphs; specifically graphs of motion. Previous studies found that learners cannot 'relate one graph to another' and cannot distinguish between the shape of the graph and the actual path of motion of an object (Daud et al., 2015:43; McDermott et al., 1987:509). These same challenges still hold true in the present-day South Africa. The diagnostic report of the 2020 National Senior Certificate Physical Sciences Paper 1 revealed a 42% national performance average on this content (Department of Education, 2021:210). I have identified the same difficulties in my first year Physical Science Education module dealing with kinematics.

Historically Computational Thinking (CT) was a term associated with computer programming. However, in the 21st century this notion is used in a broader context as a thinking skill (Cansu & Cansu; 2019)). CT relies on five pillars namely decomposition, pattern recognition, abstraction, algorithm design and automation (Kalelioglu et al., 2016; Yadav et al., 2018). CT has been documented as an effective approach to teach 21st century skills inter alia critical thinking and problem solving (Ogegbo & Ramnarain; 2021 ;Cansu & Cansu; 2019; Hickmont et al., 2018). A teaching strategy of CT has not yet been used in relation to kinematics and the graphs of motion in physics education.

A practical action research design was used to pilot this idea during online lectures with a heterogeneous group of 22 first year education students majoring in Physical Sciences. Students were firstly explicitly instructed on CT as part of the classroom intervention. Secondly, the pillars of CT were employed in a novel way to analyse velocity-time graphs. The quantitative findings of this pilot study indicated a significant improvement in the ability to analyse and translate between graphs of motion.

Conversely, the qualitative findings suggested an improvement in the self-directed learning competencies of students by not only taking ownership of learning, but also fulfilment their own learning needs. Findings from this pilot study will be used in formal, empirical research and could contribute to the body of pedagogical content knowledge in Physical Sciences Education for secondary as well as tertiary learning environments, both physical and virtual.

**(B1124) Pedagogies of care: empowering higher education students to encounter the word in a caring way; Valentina Tassone, Wageningen University and research, Netherlands**

Empowering higher education students to care for the on-going ecological, social and

	<p>existential sustainability challenges and be responsible agents might feel right in sentiment as a noble aspiration. But how can we turn the notions of empowerment, care and sustainability into a living inspiring pedagogical and learning process? How can we empower students to care, in connection to their communities and to their places?</p> <p>This presentation will introduce key findings from a research study which focuses partly on investigating the pedagogical experiences of higher education teachers attempting to empower students to care in different contexts, and partly on the experiences of students in a specific higher education course focusing on empowerment for sustainability. Findings reveal that adopting, only partly, a transmissive-oriented pedagogy and, largely, an emancipatory-oriented one is a successful combination. Integrating science (head), arts (heart) and actions (hands) supports knowledge embodiment, deep learning and feelings of empowerment. Engaging students, through action-oriented pedagogies, into the creation of care-full initiatives aligned to their own personal motivation and in synergy with their communities, supports experiences of empowerment. One care-full initiative created by the students will also be shared, i.e. the first initiative “RememberEVA” with a video of 2.45 minutes: <a href="https://www.wur.nl/en/newsarticle/Creative-and-Arts-based-Students-Initiatives-in-the-ELS-Empowerment-for-Sustainability-course.htm">https://www.wur.nl/en/newsarticle/Creative-and-Arts-based-Students-Initiatives-in-the-ELS-Empowerment-for-Sustainability-course.htm</a></p> <p>Those findings can provide inspiration, and be an hands-on tool, for all those educators that wish to foster care and empowerment throughout the educational process. The presentation ends by asking participants to express, in a concise way through keywords, their thoughts or feelings or experiences when it comes to empowering students to care in connection with communities and their place.</p>
1312.0013	<p><b>Diversity and inclusion: three stories</b> <b>Chair: Vera Verhagen, University Medical Center Groningen</b></p> <p><b>(A1126) From research report to living practices: How to improve our inclusive organisational culture? Femke Bijker, Windesheim University of Applied Sciences, Netherlands.</b> With Dr. Sjiera de Vries, (professor of Social Innovation); Deanne Boisvert, PhD candidate (researcher and lecturer); Chadia Bannouh, Med (diversity and inclusion advisor)</p> <p>The mission of our university of applied sciences, located in the north of the Netherlands, is to contribute to a more inclusive society. Part of that mission is to work on becoming an inclusive university, with an inclusive organisational culture. We investigated whether the employees of our university experience the culture as inclusive, and if not, what would help to make it more inclusive. In this session we will share our research journey, bringing in the voices of our colleagues, and interact with the participants about the challenge to move towards a more inclusive organisational culture.</p> <p>In order to explore how our colleagues experience the inclusiveness of our organisational culture, we interviewed 21 colleagues and conducted three focus groups. We conclude that overall, the organisational culture is evaluated as positive. However, not all employees feel (fully) included. Colleagues experience incidents of discrimination, and/or a lack of recognition of qualities and uniqueness, because they do not fit within the norm. These incidents were mostly described as minor ones, but because they happen it becomes a burden.</p> <p>There seem to be two types of grounds of discrimination: a) more noticeable features, such as gender or (appearing to have) a migrant background and b) less noticeable</p>

features, more related to functioning, like limited Dutch language proficiency, or extrovert behaviour. The main problem regarding our organisational culture as identified by our colleagues, is a lack of urgency regarding inclusivity: problems experienced by a small group are not recognised by the majority of the employees. Our colleagues gave many suggestions on how to improve our inclusivity. Ranging from sharing and learning from our own stories, to organising courses on good leadership. Our biggest challenge however seems to actually implement changes. The organisation is complex, everybody is busy, and there seem to be a lack of (experienced) urgency. With the participants in the session, we want to explore how we can use our research to help our organisation complete its mission of inclusion. How can we make sure that 1) the voices of our colleagues who experience(d) discrimination will be heard, 2) suggestions by our colleagues to improve inclusivity will be implemented, and 3) we organise a continuous dialogue about inclusion?

**(A1108) Diamonds on the Soles of their Feet (Enacting participatory democracy with citizen science), Jaqui Goldin, University of the Western Cape, South Africa.** With Chantel Newmark - South Africa (free lance), Scott Downes -South Africa (free lance)

We present findings from a current project in Limpopo (SA) where citizen scientists are monitoring water in their wells in -remote rural settings. We propose inclusive, just and fair participatory methods with a focus on ethics and research integrity. We offer a citizen science frame to capture the idea of water literacy – where the material aspects of CS (dip-meters, rain gauges etc.) intersect with more intangible goods having to do with human well-being. We redress the bias where the focus tends to be on the natural science aspect rather than the humanities with attention to human well-being and the recognition of difference and diversity. Considering CS within the frame of feminist philosophy we adopt an ethics of care approach, which is personally transformative with the element of ‘surprise’ - the end point is undetermined. We emphasise diversity and difference across and within segments in the catchment. Our argument is that participatory parity has intrinsic value (equity and a more just social context) but also extrinsic value (addressing a hydrological void, better data and plotting of map features for remote rural areas otherwise difficult to access). Our main focus is the presentation of very practical methods which have to do with what we call ‘authentic’ learning, which is very participatory. Using these tools, we propose that CS can powerful, transformative and emancipatory and is able to generate virtuous cycles of trust, inclusion and equality. The methods are deployed to achieve participatory democracy. CS moves from a passive state of non-engagement with science, to acting as scientists. People who are disempowered now have a sense of being part of the betterment of their world. We frame the above ideas in a short and snappy presentation– taking up around 7 minutes. After this we don’t ‘present’ but rather engage. We have several tools in our kit: river of life (a 15 minute participatory exercise), knowledge café (a problem solving tool that promotes voice and is empowering), participatory monitoring and evaluation (together with participants we select indicators and find ways to measure them – again engaging with participants in an interactive way. We introduce stories of change (inviting participants to tell stories about their lives and ‘practice’ ways in which to engage citizens who might have different levels of literacy and different levels of willingness to engage); we use story boards and graphic facilitation to share findings.

**(A1087) Promoting Democratic Competencies through Service-Learning and International Mobility; Martin Galvin, University College Cork, Ireland.** With Dr Anna

	<p>Kingston (University College Cork), Dr Bozena Cierlik (University College Cork), Wojciech Bialek (Together Razem), Kieran O'Connell (Cork City Council), Martin Galvin (University College Cork) and Marita Foster (University College Cork).</p> <p>Erasmus students often fail to connect to the local community when they are abroad on learning exchanges. HE students often experience difficulties in adapting to the local context abroad, in establishing meaningful relationships with the local people, and opening up to cultural otherness and other world views and practices. With this in mind, the EU Erasmus+ University-Community-Learning (UNICORN) project has designed and tested a new Mobility Scheme for higher education students that combines international mobility with full ECTS accredited Service-Learning (S-L) modules that were co-designed with societal partners, including NGO's and Municipalities. The initiative includes five European HEI's, five community organizations and a South-African University, where the S-L methodology is widely adopted. The partnership includes 11 associate partners.</p> <p>In this session you will hear to story of UNICORN from the perspective of a community partner, a university lecturer, and a university administrator. This session will share the example of a University College Cork, ECTS accredited module, that teaches the History of the 1989 Revolutions in Poland and East Central Europe. Through Service Learning students apply and deepen their understanding of democratic concepts, learn about social justice, and examine the relevance of these topics in the real world, as well as in the local community. The module has a strong emphasis on learning from reflection and practice. Students apply course content as a basis for their analysis and understanding of key local societal challenges. Students participate in a service activity in partnership with Cork City Council Social Inclusion Department and Together Razem, a local NGO that supports the Polish community in Cork, Ireland.</p> <p>The session will specifically reference the Framework of Competences for Democratic Culture (Council of Europe 2018), which identifies the values, attitudes, skills and knowledge necessary to participate actively in diverse democratic societies, including civic mindedness, intercultural skills and openness to cultural otherness. Mobility abroad does not, per se, automatically guarantee that students develop these competences and attitudes (Shaules, 2007; Strong, 2011). However an S-L experience in the community, implemented through a collaboration between HEIs and local community organizations, involves learning such competencies though actively participating in an international intercultural setting.</p>
1312.0018	<p><b>(B1074) WORKSHOP How can universities effectively design professional development programmes to support lecturers to build Community Engaged Research and Learning into the curriculum?; Catherine Bates, Technological University Dublin, Ireland.</b> With Sinead McCann, TU Dublin, Ireland. Caroline McGowan, TU Dublin, Ireland. Shannon Dickson, TU Dublin, Ireland. Leanne Harris, TU Dublin, Ireland. Emma McKenna, Queen's University Belfast, UK. Gareth Tribello, Queen's University Belfast, UK. Judit Gáspár, Corvinus University of Budapest, Hungary. Aleida Giralte, Open University of Catalonia, Spain. Other coordinators from the consortium may also help facilitate the workshop, and we hope to involve one or two of the lecturers who participated in the module/learning circle as well.</p> <p>In this interactive development workshop we will facilitate collaborative discussion on how we can most effectively design supports for lecturers to build Community Engaged Research and Learning (CERL) into their teaching. We will start by presenting a brief case study on our newly designed supports for lecturers across Europe,</p>

	<p>developed collaboratively by 5 university partners on the EU-funded Erasmus+ Strategic Partnership project CIRCLET (Curriculum Innovation through Research with Communities: Learning circles of Educators and Technology). The project has involved 2 iterations of these Continuing Professional Development (CPD) programmes since 2020/1, exploiting synergies between partners.</p> <p>The CIRCLET project partners developed two CPD programmes for lecturers:</p> <ul style="list-style-type: none"> <li>- an innovative on-line accredited postgraduate module, exploring how to incorporate community engaged research into teaching, and enhancing collaboration through technology. The module development was led by TU Dublin, with lecturers from 4 universities as participants on both runs</li> <li>- each university set up local year-long learning circles to support peer learning among academic staff, led by Corvinus University of Budapest (the other partners are Queen's University Belfast (project coordinators), Vrije Universiteit Brussel, and the Open University of Catalonia). The 5 university partners also collaboratively developed an international learning circle for lecturers.</li> </ul> <p>This session will be delivered by coordinating staff from several CIRCLET partner universities, together with lecturers who were participants in the CPD programmes. Between us we have many years' experience of developing effective supports for lecturers to integrate CERL in their teaching. After introducing the new supports and describing the thinking behind them and participant feedback, we will ask participants to think about any supports or initiatives they have been involved in (either as coordinators or participants) to support lecturers to build CERL into teaching. Participants will be asked to pick a support that they felt was either particularly successful, or particularly ineffective, and to reflect on a few short questions about it, to tease out the learning. In small groups, participants will then share their responses. Drawing on these discussions, we will support the group to collaboratively devise a set of principles to guide the development of effective supports for lecturers for CERL. These can be published on the conference website, and/or on the CIRCLET website, to share learning.</p>
1312.0019	<p><b>Empowering vulnerable groups of people in different countries</b>  <b>Chair: Daniel Ludwig, University of Vechta - Science Shop Vechta/Cloppenburg</b>        This session combines a story and a dilemma workshop</p> <p><b>(B1056) STORY: Steam powering Communities of Practice in northern Mozambique; Josje van der Linden, UNESCO chair holder Lifelong learning, youth and work, University of Groningen, Netherlands. With Ana Rodrigues, Gothenburg University, Sweden</b></p> <p>Northern Mozambique features in the news with stories about Islamist insurgents, people fleeing their homesteads and extraction companies withdrawing due to insecurity. But, there is more going on. In the framework of an international cooperation project, teachers and students of two local universities and three agricultural training institutes encouraged the establishment of Communities of Practice (CoPs) around the institutes. In these CoPs, local farmers come together to experiment with innovative agricultural practices such as building composts, using bio-insecticides, and sun-drying fruits and vegetables to tackle food insecurity and generate income. Lecturers of the agricultural faculties accompany and support the CoPs with research.</p> <p>The objective of the project is to strengthen agricultural education by orienting educational programmes towards the needs of the community concerning food</p>

security and nutrition. Besides the University of Groningen and the two Mozambican agricultural faculties, a Portuguese higher institute for agricultural education participates in the project. After two initial visits of the European partners to Mozambique, Covid-19 made travelling impossible. The European partners resorted to online trainings in action research, attended by the staff of the agricultural faculties. The local partners got the task to initiate the CoPs.

The outcome was amazing. The CoPs moved forward with practical agricultural activities and cultivated a culture of collaboration among the community, the institutes and the universities, jointly evaluating successes and challenges. 'The power is local', observed Ana Rodrigues after a year of hard work. In fact, local stakeholders were the real implementers of the project.

A mid-term review by the Portuguese colleagues highlighted the dedication, hard work and results of the activities. However, the review also pointed at possible improvements on issues such as increasing students' involvement as well as strategies for sustainability through strengthening the link with institutions and integrating activities into the curriculums of the agrarian institutes. This is the kind of steam powering the CoPs need to stay alive and continuously innovate. We argue that action research conducted in the scope of the CoPs has a role to play in developing, documenting, and evaluating these innovations. After sharing narratives from the CoPs, this is what we propose to reflect on with the participants of our session

**(A1039) DILEMMA SESSION: How do we identify vulnerable people and engage them in Citizen science without causing them unintended harm?; Carolina Doran, European Citizen Science Association (ECSA) – COMPAIR & SocioBee Projects), Berlin, Germany.** With Beatriz Ortega-Noriega, ECSA, Berlin (COMPAIR & SocioBee Projects); Susie Ruston McAleer, 21C, UK (COMPAIR); Pavel Kogut, 21C, UK (COMPAIR)

Smog, greenhouse gasses and hazardous air pollutants adversely affect land, habitats and people's health. According to the WHO, air pollution causes more than 7 million deaths worldwide. 99% of the world population breathe air that exceeds the WHO guideline limits for pollutants with low-, and middle-income countries suffering the most. COMPAIR and SocioBee are two new H2020 initiatives designed to leverage existing environmental awareness and engage society in reducing air pollution through Citizen Science with the objective of co-creating greener behaviours. For both projects to deliver sustainable policy they need to represent all members of society. Studies show that participants in Citizen Science activities tend to be older, white and educated, yet environmental problems affect everybody. In fact those most burdened by poor air quality are the least likely to participate in research about it. This includes young people, older adults and those living near industrial areas. As a result, research outcomes are skewed by the lack of participation from those historically disenfranchised.

It is a high priority for both projects to ensure disenfranchised people are included in their citizen science experiments. People who are vulnerable, or at risk of vulnerability may have particular needs according to their physical, emotional or mental state and or their personal or social circumstances. They require a carefully considered approach by pilot partners and the researchers leading the citizen science experiments. It is important for COMPAIR and SocioBee to take advice both from others who have worked with vulnerable populations to explore the dilemma 'how do we identify vulnerable people and engage them in Citizen science without causing them unintended harm?'

In this session, the room is divided into 3 groups to interactively debate related topics,

	<p>before coming back together to discuss the results:</p> <ul style="list-style-type: none"> <li>- Introduce COMPAIR &amp; SocioBee and set context for debate (10 mins)</li> <li>- Split into 3 groups each taking one question (20 mins)</li> </ul> <p>(1) How to define vulnerable and why should they be included in citizen science?          (2) How can vulnerable people be recruited and supported?          (3) How can technology potentially support the inclusion of vulnerable groups?</p> <ul style="list-style-type: none"> <li>- Feedback on results and group discussion supported by interactive Sli.do (15 mins)</li> </ul> <p>Results will be integrated into both project's pilot work as well as published via a joint recommendation paper so other practitioners can benefit</p>
1312.0024	<p><b>(11.00-11.45) How contexts and platforms for citizen science influence its impact</b>  <b>Chair: Michael Jorgenson, University of Aalborg, Copenhagen</b>          This session combines a research presentation and one five minute pitch, which allows for more in-depth discussion time.</p> <p><b>(C1147) RESEARCH PRESENTATION and discussion: Empowerment and inclusiveness in environmental citizen science; Michael Jorgenson, ECSA Working group on empowerment, inclusiveness and equity/University of Aalborg, Copenhagen, Denmark.</b> With Marta Camara Oliveira.</p> <p>Citizen science can be considered as non-professional participation in one or more parts of research processes: Defining problem, research design, data collection, analysis and application of results. One of the areas where citizen science has been applied the recent years is environmental monitoring and governance. Citizen science is with its focus on citizen participation in research processes one of the possible approaches in community-based research. However, not all citizen science aims at empowering citizens, but rather as citizens' contribution to data collection and analysis within problems defined by university researchers and not by citizens or civil society organizations. It is therefore important to discuss aspects of empowerment in relation to citizen science.</p> <p>The concept of empowerment is often associated with the work of Paulo Freire, who defined empowerment as the ability to understand societal contradictions (also called conscientization) and also the ability to act against the oppressive influence on daily life. In line with Freire's thoughts, empowerment of civil society can be seen as improving of their ability to create and control material and social resources. As a critical paradigm, empowerment places collective action, and changes of unjust conditions and structures in the center.</p> <p>With a focus on empowerment of civil society, inclusiveness in citizen science in terms of who is participating in what activities becomes important. This includes who is defining the concern in focus in a citizen science activity and what social groups participate in the activity. Some scholars have warned about lack of participation of specific groups like low income and deprived socioeconomic groups. The use of digital tools in many citizen science projects is both seen as enabling and reducing the participation of such groups in citizen science.</p> <p>Based on a review of scientific articles about environmental citizen science initiatives, the presentation discusses how empowerment is addressed with in environmental citizen science initiatives. It provides insights into both enabling and challenging elements and propose strategies that can empower civil society through citizen science.</p>

**(C1139) 5-MINUTE PITCH: Decision-making in citizen science technologies: a spectrum of possibilities; Karen Soacha, Institute of Marine Sciences - Spanish National Research Council ICM-CSIC, Spain.** With Sonia Linán, Xavier Salvador, Jaume Piera, and Carlos Rodero (ICM-CSIC, Spain).

Decision-making in citizen science technologies: a spectrum of possibilities  
 More and more professional scientists and volunteers collaborate to co-produce useful knowledge for society. This collaboration, known as citizen science, has been expanding in the last three decades thanks to the use of technologies to collect, process and share data. Environmental and biodiversity monitoring is a clear example. The technologies that facilitate this type of public participation, such as mobile applications, websites, low-cost sensors, known as citizen science platforms or, in some contexts, citizen observatories, are facing multiple challenges: resources to ensure its sustainability, limited access to state-of-the-art technologies due to high costs, lack of connection with other platforms and of standardization that ensures the quality of the data, are just some of them. One of the cornerstones to face these challenges is the empowerment of the communities that use these platforms. Empowerment means actively participating in decision-making and its management. In other words, this type of participatory technology needs to move from the model of communities as “only users” to communities as “decision agents”. Documentation of experiences on how communities participate in decisions to manage citizen science technologies is quite limited. Although the topic of governance of data and infrastructure is the order of the day, the information available on this topic on citizen science platforms is almost non-existent. Our goal is to open the conversation on what dimensions, how and who should participate in the decisions for the comprehensive management of a citizen science technology platform? How to rethink the role of the social infrastructure that supports the technological infrastructure, thinking from the construction of responsible and socially inclusive technologies. The result of this conversation will be a key contribution to the construction of the MINKA citizen science observatory. MINKA is a technological platform in development that seeks to facilitate the monitoring of sustainable development objectives with an emphasis on environmental and biodiversity monitoring. We seek to build on what has been built and, above all, learn from the lessons of other platforms and communities that have developed technologies to solve the management of their data and information. We want to listen to them and continue building a governance model that is built with and for the citizen science community.

**11.45-12.30 (G1034) WORKSHOP: Cities and citizen science: experiences from the CitiMeasure project; Irene Vivas Lalinde, Eurocities, Belgium.** With Mohammad Gharesifard – Project Coordinator, Eurocities; Brooke Flanagan – Senior Project Coordinator, Eurocities.

CitiMeasure (2021-2023) aims to bring together the experiences and expertise of 19 European cities and 21 organisations, universities, and networks in implementing citizen science initiatives. CitiMeasure has developed three instruments (guidelines and tools) for tackling commons challenges in citizen science, namely, comparability of air quality measurement initiatives, competencies (skills, knowledge and attitude) for digital inclusion, and influence of citizen science initiatives on behaviour and policy changes.

By joining the CitiMeasure working groups, participants in the project have been co-

	<p>creating three instruments that are currently being tested in a number of pilot cities and projects. The first prototypes of the CitiMeasure instruments are publicly available. The project aims raise awareness of the importance of citizen science initiatives and capitalise on the results and tools of similar citizen science projects by creating an online European Knowledge Centre with a repository of good practices. In this workshop, participants will learn about the CitiMeasure project, its aims, outputs, and next steps. The workshop will introduce the prototype guidelines co-created by the CitiMeasure working groups and the challenges that the CitiMeasure working groups faced in the co-creation process. Participants will also gain insights about the first two months of the pilot phase. Participants will be invited to provide feedback to the guidelines design, development process and implementation and share best practices of similar projects or lessons learnt of citizen science initiatives. We will use a world café style, and participants will be asked to choose and visit two from the three available stations that correspond to the three CitiMeasure working groups. At each station, participants will discuss and provide feedback on the working group instruments. We will conclude the workshop by reflecting on the main discussion points at each station.</p>
1312.0030	<p><b>(F1028) WORKSHOP The changing role of science shops in a politically charged environment; Flora Laszlo, OSUN Science Shop, Austria/Hungary</b></p> <p>There's a surge of political actors that gain popularity and power by denouncing the achievements of the post-WW2 era such as universal human rights, rule of law and the net of democratic institutions. In doing so, they intend to politicise spaces of civic and professional life, which were though previously influenced and controlled to various extent but not openly charged with and divided by ideology and political power. As a consequence, we see actors of the cultural, educational and civil society sectors constantly prone to be contextualised and labelled as "good" or "bad", and threatened existentially through soft pressure (e.g. media attention), or financial and even legislative means.</p> <p>Being in the internode of the education and CSO sectors, those Science Shops which work in hostile political environments need to consider and reflect on this change. Developing new strategies to stay true to the core mission may call for unusual practices such as not sharing information on a project as it may put the community partner at risk.</p> <p>The Central European University (Hungary, relocated to Austria in 2019) and European Humanities University (Lithuania, in exile from Belarus since 2004) launched Science Shop as a collaborative initiative. Both institutions are bi-located, and partially operate in a hostile political environment, where civil society organisations are prone to be deprecated, restricted or banned, thus cannot legally, safely carry out their activities. We share our coping strategies in a constructive, positive approach, that are a mix of organisational awareness, reflection and practical consequences of daily work, and would like to invite participants to 1) reflect on the political context of their organisation, and if it has changed in the past years, 2) bring and share experiences, cases of good or bad coping strategies</p> <p>Audience: representatives of science shops, CSOs, labs, university units, research centres, etc.</p> <p>Method: work in smaller teams (3-5 max) along shared questions. Participants can choose to think more in general or give an illustrative case. Organisers also bring in their own cases and examples. Teams then exchange findings, and by doing so, create a poster of cases, strategies, contexts of the participants with the help of the facilitator</p>

	((Miro software or hand drawn), which will be the outcome of the workshop. The poster, if accepted by conference organisers, will be portrayed in the venue.
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12.30-13.30 Buffet Lunch, Canteen, 1<sup>st</sup> Floor, Harmony Building

### PARALLEL SESSIONS 5A: THURSDAY 13.30-14.15

Marie Loke	<p><b>Poster Session (13.30-15.00)</b>  <b>Chair: Vincent Hazelhoff, University of Groningen</b>          All presenters will be at their posters for the full 90 minutes, to engage with you!          A list of posters and a map is given on separate pages at the end of this document</p>
Expo	<p><b>13.30-14.15: (A1084) ARTS-BASED SESSION: It's PedalBox Gallery but it's Moving; Christine White, PedalBox Gallery, Concordia University, Canada.</b> With Mohammad Abdalreza Zadeh, Concordia University, Canada</p> <p>Close your eyes, imagine yourself exploring the city. You are becoming aware of the urban landscape: conversations between strangers, cars passing, a gust of wind, birds singing, someone asking for directions, the sound of loose change, the smell of garbage, the sound of a derelict building, the sound of laughter, the sight of tears and kids playing on the playground.</p> <p>In response to the Home(Housing) Crisis our work aims to question and explore people's relationship to land and place within the context of home. By exploring the architectural bounds of a neighbourhood and what social norms and traditions exist within it, our work attempts to re-imagine the meaning of home through spontaneous connections with strangers.</p> <p>Our project PedalBox Gallery (PB) is a mobile venue on a bike trailer that seeks to disrupt and question the meaning of home. In the summer of 2021, PB intervened in the City of Montreal and brought pop-up Art Hives and temporary interactive installations to the public. This work with PB aimed to create temporary spaces for people to connect during the pandemic and perhaps collectively explore our questions and concerns about the Home(Housing) Crisis.</p> <p>Our method is to use mobile disruptive architecture (a term adopted from the ON/OFF design studio in Berlin) as a tool for artistic community engagement, experiential learning and data collection. We explore how projects like PB can act as tools for subversion, qualitative data collection, analyses and presentation. Our analyses fuses sociological methods like thematic analyses with artistic expression. Rather than a hypothesis we are concerned with evocation. Instead of coming up with conclusions, our method seeks to ask better questions.</p> <p>We propose to bring a Wishing Wall (inspired by Yoko Ono's Wish Tree) to be set up for the duration of the conference. Participants are asked to answer the question, "What does home mean to you?" by writing it down on recycled paper and attaching it to the wall. During our presentation, we invite participants to read some of the answers out-loud to inspire a conversation around this question. By bringing reuse materials, we also aim to facilitate art making during our presentation for others to experience first hand this element of our methodology. We wish to provide and speculate on what tools can attempt to create a feeling of home in the spaces we share.</p>

1312.0013	<p><b>13.30-14.00: (G1107) STORY - Community engaged research and learning in mathematics; Gareth Tribello, Queen's University Belfast, Northern Ireland</b></p> <p>At first glance mathematics and community engaged research and learning perhaps seem like unusual bedfellows. It is easy to argue that the sort of abstract thinking that goes on in many mathematics classrooms does not lend itself to immediate application. In the last couple of years, however, much of the COVID debate has been about statistics and modelling, which are both areas where mathematicians have expertise. We have also seen that, although there are some exemplary scientists who are able to communicate their results to the media, the good communicators are in the minority. I believe that one reason for this is that in many mathematics courses students only opportunity to apply what they have learned comes when they present a research project. This research project is only ever read by university lecturers that are more expert in the methods that they are using than they are. In this context, I believe community engaged research, which forces students to write for a non-expert audience, makes them engage more deeply with questions surrounding how to communicate their results in a way that a traditional mathematics research project cannot. We will show how this synergy has worked by telling the story of a module that has been developed as part of a collaboration between Queen's University Belfast and a rural transport charity that is based in Fermanagh, Northern Ireland. In this module, students use what they have learned about modelling time-series of random variables to develop models that address the issues that affect the charity. The story of the module will be told by the lecturer who has developed the module but there will be recorded contributions from the community partner and students that have taken the module.</p>
1312.0018	<p><b>13.30-14.00: (G1079) STORY: Community Based Research Canada: Successes, tensions and dilemmas; Joanna Ochocka, Community Based Research Canada. With Janna Martin, Sarah Switzer and Steve Dooley, Community Based Research Canada</b></p> <p>Community Based Research Canada (CBRCanada) is a national catalyst in the community-campus research engagement movement that puts research and knowledge in action. Across the nation and globally, there has been many of community and campus research partnerships addressing social, health, economic, and environmental priorities working in isolation. Since its inception (2008) CBRCanada's intent has been to build an inclusive and open network to bridge capacities and spaces for community-campus research partnerships to tackle pressing societal issues. CBRCanada mission is to advance community-based research excellence by strengthening partnerships, bridging capacity, mobilizing knowledge and championing CBR among individuals, communities, and institutions. CBRCanada has a long and interesting history of developing this national network from a very informal stage to the much more formal structure of non-for-profit organization (2016), including Board of Directors and Secretariat. Since then, but especially in the last two years, CBRCanada has grown in membership as well as in delivering programs and activities. The award program, webinar series, online discussions, community of practice, C2UExpo (Community-Campus-Exposition), to name a few, have been connecting more and more people and attracting more and more institutions. Networking, when done well, effects in greater participation and amplified expectations. The growth and success at CBRCanada bring challenges and dilemmas. To address the financial sustainability the organization has been implementing a membership funding</p>

	<p>model and has been reaching to funders for sponsorships – both with various effects and tensions. The session will reflect on lessons learned about sustaining the community-based research national network in the environment of: 1) isolation, e.g., COVID 19 lockdowns; 2) academic competitions for grants; 3) growing numbers and expectations from the network; and 4) changing staff needs and priorities. The sessions will provide an opportunity to exchange information and experiences with others involved in developing research networks and research movements.</p>
1312.0024	<p><b>13.30-14.00: (A1081) ARTS-BASED SESSION: "Don't let them write our script": Videos that emerged from a participatory process in Chagas Disease- Civil society actors and change; Leonardo de la Torre Ávila, IS Global, Barcelona, Spain.</b> With Eva Muñoz-Valda(1), Laura Giménez (1), Irene Jimeno (1), Jordi Gómez i Prat (2), Isabel Claveria Guiu (2), Mario Torrecillas (3), Rita Machado (4), Elizabeth Posada (1-5), Anne-Sophie Gresle (1-5), María-Jesús Pinazo (5). 1. Fundación Privada Instituto de Salud Global Barcelona, ISGlobal (Spain); 2. Unitat de Salut Internacional Drassanes (Vall d'Hebron-PROSICS) (Spain); 3. PDA Films (Spain). 4. Ensino em Biociências e Saúde- CiênciaArte IOC- LITEB - Instituto Oswaldo Cruz (Brazil); 5. Hospital Clínic i Provincial de Barcelona (Spain).</p> <p>In previous experiences, it has been described how people affected or at risk of suffering from the neglected Chagas Disease (which causes 10,000 deaths a year, according to World Health Organization) can overcome the condition of patients and become protagonists of increased access to care for their families and relatives. In a new joint experience, at the Barcelona CaixaResearch Living Lab, which emerged from the interactions of InSPIRES, we decided to ask this Civil Society group what other search for a solution to Chagas disease they wanted to get engaged in through a process of co-creation.</p> <p>Among other lines of work, the group prioritised "Communication, De-stigmatisation and Awareness Raising". In seven face-to-face and virtual workshops between 2020 and 2021, the group developed a proposal. It was then decided to co-create three videos based on testimonies and aimed to be easily disseminated through social networks. The videos (produced by PDA Films) have used pixilation and illustration techniques to convey how the protagonists perceive the fear of a positive diagnosis of Chagas disease (a monster that makes it impossible to breathe), migration, the myth of incapacity and the "pending task" (the wall of silence), among other issues.</p> <p>This experience shows how Civil Society involvement in communication initiatives can be strengthened through peer-to-peer co-creation processes. Victor Orosco, member of the working group, explains it best: "We will be able to move forward, working together, without obstacles. Don't let them write the script for us.</p> <p>We aim to engage the audience by reconstructing the co-creation process of one of the three resulting videos. In 20 minutes of total time, we will present the idea gathered in our workshops with community as a starting point, the proposal to condense that idea into a metaphor, the validation carried out, the recording of the testimony, the editing process, the projection of the resulting video (3 minutes) and its dissemination in the service of a strategy agreed with all the actors. We will ask the workshop participants to help us imagine alternative options to the decisions taken in the process.</p> <p>The resulting videos will soon be available at this link:  <a href="https://www.isglobal.org/en/vocesdelchagas">https://www.isglobal.org/en/vocesdelchagas</a></p>
1312.0030	<p><b>13.30-14.15 (A0006) WORKSHOP The art of being (un)connected - With Twitter Functions!?!; Jako Jellema, When Telecoms Fail - a citizen science initiative,</b></p>

	<p><b>Netherlands</b></p> <p>How can the ethnic minorities in rural areas across the world learn from each other? In the late 90s the International Institute for Development hoped that Esperanto &amp; ICTs could be useful to connect these communities. In the past decades the socio-technological systems that facilitate communication have changed significantly. The Living Knowledge community has been innovative in using technology such as e-mail in learning and research. To what extent can we push the boundaries of interaction with machine supported translation?</p> <p>A key question at LK9: “How can we collaborate”</p> <p>One of the platforms &amp; suites of technology that we use is partially owned by Twitter Incorporated originally based in the Silicon Valley of the United States of America. This platform is extensively used with the Living Knowledge community with both old and relatively new ‘users’ such as @LivingGro</p> <p>CONSTRUCTIVE DIALOGUE: Birds of a feather (BOF), flock together? When we meet, we speak. We listen and talk. We repeat &amp; respond. How is technology changing this conversation? How does a commercial platform like Twitter help communities meet with academics? How can we experiment at #LKgro with new interventions in the digital dialogue to augment the face to face meetings?</p> <p>FACILITATOR: Jako Jellema is an engineer with a Twitter addiction. He communicates in Dutch and English about various subjects using different digital identities and project accounts. This ranges from music &amp; theology to arts, politics, telecoms, citizen science &amp; cyber security. See: @Jakojellema, @WTFxpert, @Sda74 &amp; @HoepoeNL</p> <p>OPEN SPACE: Together with participants of LK9 we wish to augment the Twitter conversation with a ‘birds-of-a-feather’ session. A face to face meeting where participants can link digital identities to real people. NonTwitterUsers are also very welcome to taste the online conversation.</p> <p>At the start of each BOF-session, Jako will summarize the conversation that has been on Twitter about LK9 since the previous session and this inspires the agenda for the short daily open space sessions.</p> <p>Action Catalogue Rules of engagement:</p> <p>P1) Whoever comes is the right people.        P2) Whatever happens is the only thing that could have happened.        P3) Whenever it starts is the right time.        P4) When it is over, it is over</p> <p>REFERENCES</p> <p>[1] ‘Call for Proposals   9th Living Knowledge Conference’,        [2] ‘Living Knowledge GRO’ op Twitter: “We are live!” 26/6/19.        [3] ‘ActionCatalogue - Method: Open Space Technology’,  <a href="http://actioncatalogue.eu/method/7401">http://actioncatalogue.eu/method/7401</a>.</p>
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## PARALLEL SESSIONS 5B: THURSDAY 14.15-15.00

Marie Loke	<p><b>Poster Session (13.30-15.00)</b></p> <p><b>Chair: Vincent Hazelhoff, University of Groningen</b></p> <p>All presenters will be at their posters for the full 90 minutes, to engage with you!</p> <p>A list of posters and a map is given on separate pages at the end of this document</p>
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Expo	<p><b>14.15-15.00: (A 1113) ARTS-BASED SESSION: The Jug Band Colline Metallifere's non-formal education tour 2022: June 30 – Groningen; Andrea Giacomelli, pibinko.org network, Italy.</b> With Eith Dario Canal, Simone Sandrucci, Wolfgang Scheibe, Mauro Tirannosauro. All are resident in Italy and are the core components of the Jug Band Colline Metallifere</p> <p>The Jug Band dalle Colline Metallifere, aka JBCM (or Metalliferous Hills Jug Band, in English) is an international and inter-generational collective proposing a combination of music and environmental practice, where melody, rhythm, storytelling and outreach are merged in the same space, often (but not always) with limited monetary funding sources. The JBCM is based in one of the lesser known parts of Tuscany, spanning across the provinces of Grosseto, Pisa, Livorno and Siena, and where the typical “Tuscan postcard” themes are mixed with the legacy of one of the largest mining areas in Europe, and a geothermal energy district, thus combining rural and industrial issues and perspectives. The JBCM was launched 2018, after three years of preparation, merging expertise by professionals with multiple years of research experience on environmental, territorial, rural, and musical issues. In particular, the JBCM has combined the guitar and vocal capabilities of two Tuscan rock boys, with three albums and hundreds of concerts around Italy, the 50+ years of activity of a supposedly retired German street musician, who also happens to be a certified biodynamic agriculture advisor and a hand-made print master, all aggregated by a German-born British-raised Tuscan-blood PhD who decided to do something for his parents’ homeland, starting in 2007 by bringing a team of 20 players of an ancient hand ball game (a version of what in the Netherlands is known as kaats) from the Metalliferous Hills to be part of the Summer Calendar of the Chicago, Illinois, Department of Culture, and triggering multiple interdisciplinary engagement projects thereon.</p> <p>The combination of these paths has led in less than three years, with circa 50 events and an initiative launched in March 2020 in full lockdown mode (see Participatory Lithology in Falling Walls Engage 2020), to evolve from a proof-of-concept phase, to an operating non-formal education platform, using live music as its primary, but not exclusive, vehicle.</p> <p>The Groningen gig on June 30 will be the flagship event of our 2022 non-formal education tour</p> <p>One month before the tour, a list of songs and topics which will be used as the basis for a jam session during the presentation will be published, with the goal of auditioning new members for the project, to be invited for future projects. The page <a href="http://www.pibinko.org/jugbandcollinemetallifere/jamgro/">http://www.pibinko.org/jugbandcollinemetallifere/jamgro/</a> will contain all relevant information.</p> <p>For the LK9 event the confirmed line-up will be Jack O’Malley with Mauro Tirannosauro, i.e. a one-and-a-half-man band format.</p>
1312.0012	<p><b>14.15-15.00: (B1112) PROBLEM SOLVING WORKSHOP Supporting International Students in Community Engaged Research and Learning Projects; Emma McKenna, Queen's University Belfast, Ireland.</b> With Réka Matolay and Márta Frigyik, Corvinus University Budapest and Emma McKenna and Eileen Martin, Queen's University Belfast</p> <p>The EU has a strategy to increase the number of international students studying in Europe, as well to encourage student mobility within Europe. What are the implications of this for students undertaking community engaged research and learning (CERL) projects? This 45 minute session seeks good practices from participants working with international students on CERL projects.</p>

	<p>Queen's University Belfast and Corvinus University Budapest both have a strategic goal of increasing the proportion of international students who study with them. Both universities also have strong Science Shops who are committed to ensuring equality of access to CERL projects for students from a range of backgrounds. Equally both are committed to creating high quality outcomes for Civil Society Organisation (CSO) partners.</p> <p>Both are exploring how to ensure high quality experiences for students and a high quality of outcome for the CSOs involved given that there are sometimes wide variations in cultural expectations both amongst students themselves and between students and CSOs. Questions that may arise include: How do we ensure a shared cultural awareness amongst students from diverse cultural background when working in groups? How do we manage language and cultural issues and questions around power and hierarchical decision making? How do we ensure that students understand the commitment they are making to CSOs? How do we best support different types of students in working on CERL projects? How do we manage working through the English language in Universities where CSOs do not speak English?</p> <p>This session will present a case study from each University to highlight the opportunities and tensions involved in international students working on hyper-local CERL projects with CSOs. Key topics for discussion will be suggested by the facilitators and tested with the participants, who will be asked to spend a few minutes working in pairs to check whether these key topics reflect their own experience and identify any further topics. Facilitators will revisit the key topics and update them and participants will then be invited to work in small groups to generate ideas on how these issues could be addressed, based on their own experiences. Each group will be asked to share 1-2 ideas at the end. These will be available at the end if participants want to do a 'gallery walk' Outcomes of the session will be shared in a summary paper on the Living Knowledge website and may be used to inform project outputs for the CIRCLET project (see <a href="http://www.circlet.eu">www.circlet.eu</a> )</p>
1312.0018	<p><b>14.15-14.45: (A1095) ARTS-BASED SESSION: Active Space Performance: Spaces of possibilities - Feeling free and able to act; Jens Brandt, Tampere University, Finland/Belgium.</b> With Robin Lybeck, Doctoral candidate, Sociology, Åbo Akademi University, Finland; Manuela Viezzer independent visual artist, based in The Netherlands</p> <p>Active Space Dialogue - ASD - is a fast paced and highly structured "super site specific" method. It combines elements from performance, pervasive games, psychogeography with the more traditional workshop and discussion. It is a process of unplanned collaborations and naming the world together. Spatialising dialogue and the imaginary. The ASD can involve up to 36 persons - both from the conference and a local community. The location should be a public space that is relevant for local problems/possibilities and have diverse spatial qualities.</p> <p>The aim is to work with a low threshold for participation to generate ideas "in, with and for" a concrete local community while at the same time reflect over the methodology of the ASD as a contribution to the Living Knowledge conference. The gameplay for the ASD has 3 main elements: See gameplay link above.</p> <p>A: Exploring individually using all senses        B. Groups name the world together        C. Rhythm between plenum and breakout sessions.</p> <p>The argument: We see our inability to address painfully urgent challenges such as inequality and climate change as examples of what we call Tunnelvision: The lack of</p>

	<p>peripheral vision that makes us unable to choose where to focus our sight/attention and in a wider sense: How to perceive, navigate and act in a complex world.</p> <p>The ASD claims that the urban - public and socially produced spaces - with an embodiment of the social, has an overlooked power for societal transformation. This transformative power is closely linked to a body presence and what we call peripheral perception. This includes all our senses and an experience with a high level of complexity.</p> <p>This is where spaces of possibilities can be discovered with a sensation of radical openness that sparks the motivation and inspiration to act. This motivation is at first non verbal but still part of a socially produced space. Combining the energy of motivation and the openness that still relates to the social can unleash societal transformation.</p> <p>We see transformation as “playing the game while writing the rules” that challenge forms such as the written and spoken language. By creating a rhythm that moves between the verbal and non verbal of socially produced spaces we create a signifying process that empower language and action for possible societal transformation.</p> <p>Link to Gameplay for the Active Space Dialogue here:  <a href="https://drive.google.com/file/d/1RICDmtVOiFzsvkxXbunv7ad6oxTpqPiZ/view?usp=sharing">https://drive.google.com/file/d/1RICDmtVOiFzsvkxXbunv7ad6oxTpqPiZ/view?usp=sharing</a></p>
1312.0030	<p><b>14.15-14.45: (G1019) STORY: Dutch-German encounters on the impacts of Covid-19; Saskia Visser, Science Shop Language, Culture and Communication, University of Groningen, Netherlands.</b> With Michael Klafft, Jade Hochschule Wilhelmshaven, Germany; Daniel Ludwig, Science Shop Vechta/Cloppenburg, Germany</p> <p>In times of crises we tend to stick to the core of our work and life. The essentials must be met and all the rest seems too much effort. But as a crisis prolongs we experience that we miss out on real collaboration, the synergy that drives our motivation and creativity. On the other hand a crisis can also offer new opportunities. That is what we experienced in this collaborative project in the border region of Germany and the Netherlands. As well in our project group as between the engaged citizens in the research.</p> <p>We like to tell you our story about how the Covid19-crisis divided people on both sides of a border AND brought them together. We organised 5 thematic online meetings in which Dutch and German citizens from the border region discussed the effects of the Covid-19 pandemic on their day-to-day life. The meetings were on Education, Social and family life, Health care and risks, Work life and Economics and business. In a final meeting we shared their input with politicians from both sides of the border. The project brought to light how national and local policies can overlook simple things for people regularly crossing the border. But it also gave citizens the opportunity to inform each other and gain different perspectives on matters, as well as creating living knowledge on coping with a pandemic. The stories they shared painted a rich and in depth picture of various problems and solutions in times of crisis.</p> <p>We like to share the results of the research and the ways we made a transnational collaboration work (and our struggles) with the participants and inspire them to do similar projects.</p>

15.00-15.15 Coffee Break

PARALLEL SESSIONS 6: THURSDAY 15.15-16.45

<p>Marie Loke</p>	<p><b>Screw Up: Learning From Mistakes (WORKSHOP)</b>  <b>Chair: Cesco Homminga, Screw Up, Groningen</b>                  An invited workshop</p>  <p>Everyone makes mistakes, but unfortunately, we rarely know how to deal with them in a work environment. Everybody knows it is “good” to make mistakes, but when you or a colleague makes an epic fail, it’s hard to see the truth in that. Screw Up helps teams and organizations to innovate. We look at making mistakes from an organizational viewpoint, and we help create a safe environment with room for the personal side of making a mistake.</p> <p>In this session, we break the taboo on making mistakes, talk about the necessity of making mistakes in processes of learning, development, and innovation, and help you share your mistakes so we all might learn from each other. We offer you hands-on tips you can use in your team or organization to create a more failure-friendly work environment.</p>
<p>Expo</p>	<p><b>(C1044) ARTS-BASED SESSION: Art, science and community research; Oli Moore, University of Oxford, UK.</b> With Elizabeth Hays, Fundraising Manager, Daybreak, UK                  Jules Bishop, Artist and Climate Activist, Watlington Climate Action Group, UK                  Rawz, Founder/Director/Lead Practitioner, Urban Music Foundation, UK                  Rachel Ashwanden, Science Engagement Officer, University of Oxford, UK</p> <p>What happens when eight Oxfordshire community groups are given access to the skills, knowledge and resources of the University of Oxford and Oxford Brookes researchers? SCIENCE TOGETHER is a brand new, grass-roots programme that harnesses the power of community-led collaborative research projects to overcome challenges and seize opportunities for people who live and work in Oxfordshire, UK. It is bringing together diverse people and expertise to address major issues and questions impacting local people’s lives.</p> <p>In this interactive session attendees will experience some of the projects where the creativity and collaboration of art and science together is a central theme. This session will incorporate the research projects of three communities including Daybreak, who provide social and therapeutic respite days for people living with dementia, Watlington Climate Action Group, who aim to help local residents address the Climate Emergency, and the Urban Music Foundation (UMF) which delivers lyric writing and poetry workshops to young people in a wide variety of settings.</p> <p>Join us for a fun and engaging session that combines mental-wellbeing, the natural environment and hip-hop. Where else can you experience all three together?!</p>
<p>1312.0012</p>	<p><b>CANCELLED</b></p>

1312.0013	<p><b>(G1053) WORKSHOP: How to organize a Citizens' Convention at national, european and international levels?; Fabien Piasecki, Sciences Citoyennes, Paris, France. With Glen Millot (Sciences Citoyennes, France)</b></p> <p>Citizens conventions are detailed rigorous procedures that foster informed expression of citizen recommendations, based on multiple expressions of contradictory expertise (on social, environmental and political issues). !! il faudrait mettre la sélection en amont des 3 phases. They combine three phases: initial training (during which a randomly selected group of citizens are learning), an active discussion and exchange of opinions, and a collective process of formulation of policy recommendations. A Citizens' Convention offers an appropriate setting for general concerns without any geographical restriction. The only limitation is the level of maturation of the topic at hand, for which there must be a sufficient level of maturity of the options to be studied.</p> <p>This process can be adapted to different geographical levels and to many controversial topics. Nevertheless, organising such a process at European or global level raises several unsolved issues amongst which: how to address the different levels of governance and decision making processes? How to reach out to marginalised people? How to overcome language issues? etc.</p> <p>The session will be organised as a world-café, after a short presentation of the principles ensuring a rigorous and efficient procedure. Some experiences will be described (Citizens' Convention for Climate in France and Germany, Irish Assemblies...). We propose that the three tables of the world café collectively try to find solutions for the above mentioned difficulties, for three geographical scopes : country level, EU, World.</p> <p>The overall objective of this workshop will be to gather ideas to improve the soundness of our advocacy activities towards different types of national and international institutions. Ideally we wish to start an International Observatory of Participatory Practices in Research and Innovation (IOPPRI).</p> <p>So as to better prepare this workshop, we will be glad to receive any research papers or press articles related to such recently organised procedures (citizens' conventions, citizens conferences, citizens assemblies, jury panels...).</p>
1312.0018	<p><b>Community Health: A workshop and an Arts-Based Session</b></p> <p><b>15.15-16.00: (D0033) WORKSHOP Listening to the People: Determining Community Readiness for Action on Health and Science Issues; Christina Standerfer, University of Arkansas Clinton School of Public Service, USA. With Jason Lochmann, Louisiana Health Department, USA; Emily Loker, University of Colorado-Boulder, USA; Brian Wegner, Colorado Department of Community Engagement, USA</b></p> <p>Scholars and practitioners alike have extolled the virtues of dialogue and deliberation as effective methods to get citizens involved in policy analysis and creation, but few have considered communities' readiness for collective action. This workshop focuses on how scholars and practitioners can assess community readiness for action to set realistic expectations concerning the efficacy of methods used to engage them. The impetus for this workshop is a research project funded by the Kettering Foundation in Dayton, OH, USA. From January 2017 to May 2019, we worked in 15 communities across a Southern, mainly rural, state in the U.S. investigating the comparative effectiveness of three types of communication-based community interventions related to curbing rates of diabetes. We initially defined effectiveness as participants' stated</p>

willingness to engage in collective or individual actions related to curbing diabetes as well as their actual collective or individual actions reported six months after the interventions. However, as we coded and analyzed data collected, we realized that our most important finding related to community readiness to engage in any action related to democratic participation in policy making. We developed a matrix of community readiness for action that includes four components: issue literacy, community literacy, issue alignment, and ability to visualize a different future. We will present the matrix and a progressive step model for community engagement and invite workshop participants to apply the matrix/model to cases based on communities we engaged in our research and to discuss how the model may/may not apply to their own work related to community engagement on health or science issues. We will use a 1-2-4-all structure for these explorations with two goals in mind: 1) Assessing the strengths and weaknesses of the matrix/model; and 2) Exploring possibilities of collaborative research to further test the matrix/model. The workshop will offer participants a chance to share their own experiences, both triumphs and challenges, related to engaging communities in collective action on public health issues and policy creation. We will compile ideas generated during the workshop and share with all participants. Depending on the results of the discussion, we will modify the matrix and model as warranted and contact those interested in exploring the matrix/model further through collaborative research to develop a plan for that work.

**16.00-16.45: (A1136) ARTS-BASED SESSION Benefit stories from people with severe disabilities; Aidan Worsley, UClan, UK.** With Louise Hardwick: University of Liverpool, UK; Lindsay Lowcock: Independent Artist, UK; Nanette Newman: CEO The Brain Charity, Liverpool, UK; Molly Hardwick: University of York, UK

In this two-part presentation we combine an overview of collaborative research which gathered narratives of people with disabilities, with the use of an imaginative audio-visual element which captured the words, feelings and expressions of those interviewed

Part One: Our starting point is to examine the ‘systemic violence’ towards people with severe disabilities reliant on benefits in the UK. We aim to provide new insights into the repercussions of recent policy shifts by applying Judith Butler’s (2016) exploration of the ‘ungrievable’: those who are exposed to systemic violence and fail to elicit appropriate levels of empathy, outrage, or redress. Whilst drawing specifically on experiences in the UK, this presentation will resonate with a far broader, European audience where state welfare structures present challenges to people with disabilities. We present the findings from a small-research study, developed with local charities including The Brain Charity (Liverpool, UK), that gathered in-depth benefit stories from six people with severe disabilities. A retrospective timeline narrative approach was used to focus on chronology in the context of both personal biography and broader policy issues.

Part Two: Following an introduction, the artist will present audio-visual material showcasing an installation as an artistic response to the benefits stories in the study. Voice is an important part of inclusion in life: being recognised; taking part; being heard. This will be achieved by the voices of the participants becoming vocal performances that will be heard through six monolithic speakers. Each performance will consist of one word taken from the study which distils their experience of depending on disability benefits. The combined audio and physical interactional experience create an oppressive, confining, and demoralising response, akin to that experienced by study participants.

	<p>Beyond the field of sound, a light is to be situated: a tall and thin slit of simulated sunlight. This represents Judith Butler's (2016) concept of recognition. In contrast, in the field of sound, the vocal performances and the people they represent occupy a hinterland not comprehended to the unimpaired, and in that hinterland they remain unrecognised. The installation preview can be accessed here: <a href="http://www.an-artistic-response-to-benefit-stories.com/">http://www.an-artistic-response-to-benefit-stories.com/</a></p> <p>The session will conclude with time for delegates to reflect on the presentation, share their thoughts and take part in a short performance</p>
1312.0019	<p><b>From juniors to university curricula: three stories on engaged learning with communities</b>  <b>Chair: Andrea Vargiu, UNISS, Italy</b></p> <p><b>(B1061) K4C-4-Kids - A junior researcher training programme for 11-13 year olds; Niamh O'Sullivan, UL Engage, University of Limerick, Ireland.</b> With Prof. Maura Adshead, Head of UL Engage, University of Limerick, Ireland; Dr. Sarah Hayes, Synthesis and Solid State Pharmaceutical Centre, University of Limerick, Ireland; Maria Healy, UL Engage, University of Limerick, Ireland; Eileen Hoffler, UL Engage, University of Limerick, Ireland; Dr. Martin McHugh, Synthesis and Solid State Pharmaceutical Centre, University of Limerick, Ireland; Eilís Ní Chonchúir, Gaelscoil Sheirse Clancy</p> <p>The K4C-4-Kids programme fits within the Learning and Science, Technology, Engineering, Maths and Medicine portfolios of the University of Limerick's K4C hub. Working Group Composition:</p> <ul style="list-style-type: none"> <li>• K4C mentors based in the University of Limerick</li> <li>• Education and public engagement staff from the research centre involved (<a href="http://www.sspc.ie">www.sspc.ie</a>)</li> <li>• Staff from the UL Engage team</li> <li>• School teacher in the partner school</li> <li>• Students of the CWELL (Community Wellness, Empowerment, Leadership and Life skills) Diploma course which lies within the University's KC4 Learning Portfolio. It is envisaged that the students on the CWELL programme would support the pupils with their research projects.</li> </ul> <p>The 6-8 week K4C-4-Kids programme is aimed at 11-13 year olds and has been co-designed with the class teacher in the partner school. This is to ensure that the programme links well with the national curriculum for primary schools and that is appropriate to the school community. The programme will culminate in a research presentation day for the students and their families/those who care for them on-campus in early June.</p> <p>The aim of the programme is to work with children whose school is in an area designated by the Irish government as socio-economically disadvantaged, an area where there would be low levels of participation in higher education. The programme would have two objectives:</p> <ol style="list-style-type: none"> <li>1. Introduce the children to the concepts of research and in particular, community based participatory research. This would give them some training in how to approach and conduct research and allow them to do some research of their own. A lot of research takes place in schools that are designated as disadvantaged. This would allow pupils to become the authors of research rather than the subjects of research.</li> <li>2. Create a positive relationship between the University, the school and the pupils to help the children to see higher education as an option for them in the future.</li> </ol>

The team would like to tell the story of how the programme was designed and delivered to this age group and the learnings that can be taken from it. It is our aim that the programme would be rolled out to other schools in the coming years once feedback from all of the participants has been taken on board. The team are very interested in an open discussion with others who might have run something similar or who would be interested in working collaboratively on the next iteration of the programme to see if an international element could be brought to it.

**(B1129) A story about stories! Case study of ‘Literacy Lift-off! Service-learning English programme in Galway, Ireland - lessons learned and adapting to the ‘new normal’; Demot Burns, NUI Galway, Ireland**

The benefits of service learning to local communities and third-level students are plentiful and regularly recorded by researchers (Eyler et al., 2001; Procario-Foley & Van Cleave, 2016; Strait et al., 2015). This pedagogy of enabling students to apply their skills and knowledge to address expressed community needs has been employed at NUI Galway for over a decade through an undergraduate English module, ‘Literacy Lift-off!’ which offer students the opportunity to engage with the local community via a placement in a primary school in order to develop practical skills and experience in the field of literacy and reading support. Students learn to apply theoretical information on reading and literacy to the ‘real life’ situation of supporting children in a DEIS school which caters for socio-economically deprived pupils and a high proportion of immigrant families, some of whom do not have English as their primary language. In addition to attending one, two-hour reflective seminar per week, students spend one hour supporting children with their reading in a teacher-supervised classroom. Moreover, the students are required to write newspaper articles (some of which are published in, for example, The Irish Times), and write reflective journals for their assessment tasks on the importance of reading and literacy support for children who are socio-economically disadvantaged. This story-telling paper relates the symbiotic benefits of using the pedagogy of service-learning to foster literacy skills and a love of reading in local communities. It will also consider how such courses may continue to operate during and after the Covid-19 pandemic. Examining, in particular, Britt’s (2012) 3 typologies of service-learning, and the spectrum ranging from traditional service learning to extreme e-service-learning proposed by Waldner et al. (2010), this paper contemplates how, at a time when we are being constantly warned to maintain social distance from one another, to wear face masks, and to consider anyone we meet as a potential threat in terms of infection, it is more pressing than ever to preserve and promote the human element of service-learning by reinventing our course offerings.

**(B1077) Working out a community engaged curriculum: challenges and lessons learned; Andrea Vargiu, Università di Sassari and IntHum Association, Italy.** With Francesca Antongiovanni (Università di Sassari and IntHum Association), Stefano Chessa (Università di Sassari), Mariantonietta Cocco (Università di Sassari), Marta Congiu (Università di Sassari and IntHum Association), Valentina Ghibellini (Università di Sassari and IntHum Association)

We will present and discuss an ongoing process of engaged curriculum design for the MA Course in Social Work and Social Policies at the University of Sassari. We will point out some of the challenges arising from the overall Higher Education (HE) policy context within which the need for an engaged curriculum arises. This will

	<p>set the framework to kickstart our storytelling session, as it will briefly point out the need for change that is at the base of any story.</p> <p>We will then present the different stages of the process through which the curriculum design progressively evolved till its present shape. This will be done by referring to the progressive concatenation of three different projects, respectively named PERARES – Public Engagement with Research and Research Engagement with Society, EnRRICH – Enhancing Responsible Research and Innovation through Curricula in Higher education, and K4C – Knowledge for Change.</p> <p>At each turning point of the story we will point out emerging challenges, so that, at the end of the presentation, we will be able to share some of the lessons learned with the public.</p>
1312.0024	<p><b>(C1042) ARTS-BASED SESSION: Pigeons in the City -Counting feral pigeons as means to engage school children in life sciences; Vivian Goerlich, Utrecht University, Faculty of Veterinary Medicine, Netherlands.</b> With Wouter Schaake, Academie Tien Utrecht; Myrthe van Dijk, Academie Tien Utrecht; Charlotte Gentenaar, Universiteitsmuseum Utrecht – UMU; Rebecca Nordquist, Utrecht University, The Netherlands</p> <p>Children living in cities have little concept of nature, despite the abundance of wildlife in the urban environment. To motivate school children to experience and appreciate urban nature, we set up a Citizen Science project together with the Utrecht school Academy Tien and the Universiteitsmuseum Utrecht – UMU (<a href="https://www.uu.nl/nieuws/duiven-tellen-voor-de-wetenschap">https://www.uu.nl/nieuws/duiven-tellen-voor-de-wetenschap</a>). In this project, after learning about the biology of feral pigeons, the school children are asked to think up a research question concerning the birds. They then go out into the city to gather data with which to answer their research question. By sharing results and experiences with classmates and teachers, the children are familiarized with the scientific method. Apart from teaching children about empirical research, this project further serves to collect data on urban pigeon populations for long-term research. We also aim to assess whether our project enhances the appreciation of participants for the feral pigeon and urban wildlife in general.</p> <p>Feral pigeons are very suitable for introducing young people to the various aspects of the human-animal relationship, given their worldwide presence in urban areas and the highly divergent public opinions toward them. To test whether this project affects attitude towards feral pigeons students were asked to fill in a short questionnaire (Animal Attitude Scale) prior and subsequent to the project.</p> <p>We believe that this project inspires students and researchers alike. The students actively engage in research and explore their city through the lens of scientific inquiry. Conversely, getting to know children’s attitudes and view of the world may inspire researchers to think outside conventions. In a world where humans and animals live closely together, expanding knowledge on human-animal relationships is fundamental to a respectful coexistence with nature.</p> <p>At the Living Knowledge conference, we would like to present our observations and various results from both the UMU online module (<a href="https://www.lessonup.com/nl/channel/umu/lesson/EDJwHDDHM69GMevY5">https://www.lessonup.com/nl/channel/umu/lesson/EDJwHDDHM69GMevY5</a>) and the physical module at Academie Tien. For a more immersive experience, we would like to engage conference participants in a short round of counting pigeons. With use of an interactive voting tool (Wooclap) we would further like to test whether there are similar changes in attitude towards feral pigeons in conference participants as in our student populations.</p>

1312.0025	<p><b>(B1018) WORKSHOP: Coming full CIRCLET: Join us to share your experiences of building Science Shop projects into curricula, as an academic, practitioner, partner or student; Emma McKenna, Queen's University Belfast, Northern Ireland.</b> With Catherine Bates, Sinead McCann and Caroline McGowan Technological University Dublin; Judit Gáspár and Márta Frigyik, Corvinus University of Budapest; Brecht Van der Schueren, Vrije Universiteit Brussel; Aleida Giralte Montero, Universitat Oberta de Catalunya</p> <p>The Erasmus+ funded CIRCLET project was designed to develop and support the role of academics in Science Shop projects, especially as supervisors and course co-ordinators. 100+ academics have been experimenting with building community engaged research and learning (CERL) into their teaching across a wide range of disciplines in our five partner universities. This session will share and test our learning so far on what has and hasn't worked. We are asking for reflection and feedback from participants based on their own experience and knowledge with a goal of producing a usable resource for Science Shops and academics. Topics covered will include:</p> <ul style="list-style-type: none"> <li>• How to work with communities in respectful and reciprocal ways and find common ground between what the community partner asks and what academics can offer through the curriculum?</li> <li>• How to work with students on CERL projects, how to support students to work with communities and produce good research and encourage reflection as part of this process?</li> <li>• How to design activities in the curriculum to facilitate CERL projects. Refocusing course activities to enable projects to happen. Is it necessary to (re)write learning outcomes and revise assessment?</li> <li>• How to support yourself through the process. Supporting students through CERL projects can bring new challenge to the academic role and how it is perceived in their department or university. What supports can you bring for yourself?</li> </ul> <p>In the world cafe format we will offer discussion sessions on: Issues arising within the curriculum, Issues arising when working with CSO partners within the curriculum; Issues that arise when working with students on CERL topics; Building reflection into these processes. One partner will host each table and share experiences and participants will be offered the opportunity to circulate to different tables. We will ask participants to engage with some of our learning and reflect back on it from their own perspective using a world café format. Topics will be shared and presented in the form of a short case or problematic, inviting lively debate amongst participants at different tables. Each table will be equipped with large papers, inviting participants to take notes, make drawings, write down extra questions, ... as the discussion proceeds.</p> <p>At the end of the World Café, facilitators will summarise the discussion at their table. Conclusions will be shared in the post-reporting of the Living Knowledge Conference and on the CIRCLET website as a blog. For the CIRCLET consortium, this learning will also be used in our series of 'how to' guides for academics who want to embed CERL in their modules. These will be available in early autumn and will be shared with the Living Knowledge Network for wider use.</p> <p>The CIRCLET (Curriculum Innovation through Research with Communities, Learning circles of Educators and Technology) project is an Erasmus + Strategic Partnership project. We used peer-learning circles and an innovative online continuing professional development module as a way of bringing together academics who were interested in developing their curricula so that students can engage in research with and for communities. During this conference, session 1074 shares more information on our</p>
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	project activities. For more information about our work see <a href="http://www.circler.eu">www.circler.eu</a>
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## SOCIAL PROGRAMME THURSDAY

### **Conference Dinner (for those having registered for it); busses leave 17.45-18.00 from Ossenmarkt**

The conference dinner will be at the lovely “Rietschans” restaurant at Lake Paterswolde. Prior to the dinner we will go for a short walk or boat trip at the location. Bus transport is included in your ticket, as we go a little outside of the city. (Meerweg 221, Haren). Busses leave at 17.45 from the Ossenmarkt, a 10 min walk from the conference venues. You will be back in town by about 22.15hrs.

FRIDAY JULY 1<sup>ST</sup>

From 08.30: Registration @ Harmony Building

PARALLEL SESSIONS 7: FRIDAY 09.00-10.30

Offerhaus	<p><b>DIVERSE PARTICIPATORY INCLUSION IN RESEARCH: FIVE RESEARCH PRESENTATIONS</b>  <b>Chair: Reka Matolay, Science Shop Corvinus University, Budapest, Hungary</b></p> <p><b>(A1024) “We have seen researchers come and go!”: Changing the narrative of community-university engagement through community-based research; Giulia Pizzolini, Birmingham City University, UK.</b> With Kusminder Chahal, Senior Teaching Fellow at Birmingham City University, UK</p> <p>Birmingham is the second largest city in the United Kingdom and often described as ‘super-diverse’ and a ‘majority-minority’ city. It is home to 4 major universities and a geography that spans wealth and deprivation, gentrification, regeneration and class and race-based ‘segregation’. UK universities are actively seeking to be ‘publicly engaged’. As anchor organisations their role is shifting to a recognition of being more embedded in local communities and to have a stronger civic awareness and purpose. In 2019, the School of Social Sciences at Birmingham City University developed an initiative called ‘Birmingham 2029’. This is the School’s flagship community-university engagement project and aims to develop robust and long-lasting partnerships with neighbourhoods, community groups and voluntary and statutory organisations. The presentation will provide a contextual discuss to the development of this initiative and describe an on-going partnership project in East Birmingham.</p> <p>East Birmingham has a diverse population of over 240,000, has a younger population and is an area of entrenched deprivation and inequality where residents fare poorly in terms of health, employment and educational attainment and is heavily impacted by traffic congestion and pollution. Birmingham 2029 is working in partnership with Birmingham City Council in supporting the East Birmingham Inclusive Growth Strategy. Following the broad principles of community-based participatory research we are working directly in three locations with residents and communities; recruiting, training and supporting residents as community researchers and aiming to connect micro, local issues to the macro, city wide decision makers.</p> <p>The project has undertaken scoping of the locations, collaborated closely with community organisations and recruited some 20 community researchers to identify local issues that are of concern to them. Our interactive presentation will encourage participants to share their learning when conducting community-university engagement alongside our experiences of the process, methods and learning of community-based research, particularly during Covid-19; our own research positionality; and share challenges of embedding community-university partnerships/community-based research in local spaces that aim to shift the narrative away from the researcher and the university as short term partners to long term civically engaged practitioners.</p> <p><b>(A1065) Unsung hands of the recovery: The Ragpickers of Nabeul; Meriam Belghith, Institut Pasteur de Tunis, Tunisia.</b> With Ikram Bachouche<sup>1</sup>, Houayda Farhi<sup>2</sup>, Hayet Moussa<sup>1</sup>, Saida Baccouche<sup>1</sup>, and Daoud Dhan<sup>2</sup> (1-Institute of Human Sciences Ibn Charaf, Tunis, Tunisia; 2-Ecotourism Nabeul (ETE+), Tunis, Tunisia)</p>
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Background: Raggicking is still widespread in Tunisia as it provides the poorest in society, those who live around garbage dumps and recycling areas a chance to earn a hand-to-mouth amount of money. Raggickers are daily rummaging through waste materials that often have harmful effects on their health; however these actors have no guarantees and or benefits from financial aid institutions. Despite their crucial role in saving the urban environment, these actors suffer from discrimination and segregation based on stereotypes and prejudices.

Objective: In collaboration with the Institute of Human Sciences Ibn Charaf; the aim of the project is to obtain an occupational identity card; a health access and a social entitlement card to raggickers by raising awareness of the general public about the raggickers' vital role in the protection of the environment.

Method: This study was among raggickers living around the community of Nabeul (Tunisia). Awareness regarding environmental waste and its health hazards was performed by a descriptive study conducted in the center of ecotourism association. A Total of 20 raggickers were interviewed using semi-structured schedule and an interview focus group protocol was used among the population. Data collection was carried out by using open ended questions.

Results and discussion: The raggickers are almost absent and even forgotten, they have no status in the professional space nor in society. They find in the collection of all recyclable products their refuge. The raggickers start their work day every morning between 5 and 7 o'clock in the evening by collecting the recyclable materials. The circuit of waste is not only formed by raggickers but it is a whole chain of industry where these actors are the most important intermediaries. During the collection, the raggickers are confronted with many dangers, they run sanitary risks and accidents. The most feared risks for the hands are sharp objects and chemical products.

Conclusion: Thanks to this project we gave recommendations to the local health authorities for Organizing information and education sessions for the health of raggickers. To provide free personal protective equipment. Recommendations to raggickers by raising awareness about wearing PPE (Personal Protective Equipment): from safety shoes, to respirators, to gloves, to clothing.

**(A1050) Social inclusion of youth with hearing loss. Has citizen social science a transformative power in this case?; Judit Gébert, University of Szeged, Hungary.** With Barbara Mihók – Judit Juhász – László Erdélyi – Gabriella Gálné – Daniella Krizsák – Regina Molnár – Hajnalka Rácz – István Szabó – Ákos Telek – Franciska Tóth (University of Szeged, Hungary)

We are carrying out participatory research with deaf and hard of hearing youth in Szeged, Hungary. We started our work together with the community of a school for deaf and hard of hearing children in 2018. We made qualitative, explanatory research to understand their situation. Besides theoretical findings, as a practical result, the school took part in the university's Service Learning course and accepted volunteering university students to help with everyday life at school.

In 2020, we decided to continue our participatory research with the methodology of citizen social science. Our research group – named Common Signs – consists of young (age 15-29) and senior researchers with hard of hearing, university students, and senior researchers from the University of Szeged. In our presentation, we would like to introduce the methods and challenges of the recruitment and team-building process of this diverse research group.

Our goals are the following: to explore, how hard of hearing youths evaluate their own

subjective well-being, their challenges and their resources at the beginning of their adult life. To empower hard of hearing youths towards creating an autonomous adult life. To experiment and manifest meaningful actions with connecting urban stakeholders and young people. To create and test research methods for people with different types of hearing loss.

From the literature review, we identified different drivers of social inclusion: medical, technological development; early recognition of hearing loss; systemic support for the family from the very first moment; adequate language skill development (sign language, bi-lingual education); co-learning processes with employers for increasing inclusion and widening adult education possibilities.

We developed our methodological framework based on the capability approach by Amartya Sen. We carried out a well-being exercise – suggested in the capability literature – with the group to better understand what social inclusion and well-being means for them. We made interviews with the group members and with other young people with hearing loss. We regularly reflected on our practice to ensure a safe and inclusive space for everyone in the research group and keep a research diary.

We carry out this research in the framework of the Youcount research project (Empowering Youth And Cocreating Social Innovations And Policymaking Through Youth-Focused Citizen Social Science, H2020 SwafS-27-2020 RIA project, No. 101005931).

**(A1071) Involving older adults living in rural areas in participatory research during the pandemic; Siobhan O'Sullivan, School of Applied Social Studies, University College Cork (UCC), Ireland.** With Margaret Buckley, School of Applied Social Studies UCC, Ireland; Elaine Desmond, School of Applied Social Studies UCC, Ireland

This presentation focuses on the project 'Agency and Ageing in Place in Rural Ireland' that was funded by the Irish Research Council's (IRC) New Foundations Grant. The research involved a partnership from 2020 to 2021 with Age Action, Ireland's leading advocacy organisation for older people and ageing, and aimed to hear the voices of older adults living in rural areas about ageing in place. This presentation will explore the project's community-based participatory research (CBPR) methodology, namely the process of collaboratively designing a survey with eleven Age Action members (eight females and three males, aged between 67 and 83 years) who brought their distinctive voices, experiences, knowledge, and abilities to the research.

The research funding was awarded in March 2020 at a time when Ireland had entered a national lockdown due to the Covid-19 pandemic. Because of the vulnerability of the older age population to severe illness from Covid-19 and the restrictions on movement during the national lockdowns, participatory methods that were originally planned to be face-to-face were carried out remotely. The presentation will reflect on the experience of conducting CBPR with older adults online, including the challenges and how they were overcome, such as ensuring equitable participation given limitations in rural broadband. The benefits of the methodological approach will also be explored such as the sense of recognition and empowerment the co-researchers felt in the process and the creation of friendships and an 'online community' during a very difficult and isolating time.

**(A1075) The second best way to do things. Community-based research with people living with dementia during the pandemic; Joanna Ochocka, Community Based Research Canada.** With Hsiao D'Ailly - University of Waterloo; Amanda Demmer and Judith Walton - Centre for Community Based Research

	<p>This presentation will tell the story of a remote community-based evaluation of programs designed to prevent the social isolation for people living with dementia and their caregivers. These programs offered by three Alzheimer’s societies in Ontario, Canada, and the community-based evaluation, were forced to quickly adapt to challenges imposed on them by COVID-19.</p> <p>The effect of dementia on Canadians is significant. These effects reach beyond people who are living with dementia to friends and family members who act as informal caregivers. Both those living with dementia and their caregivers are at risk of social isolation. The Alzheimer Society’s Minds in Motion and Social Recreation programs have been designed to prevent social isolation and to develop a more caring and supportive community. Originally conducted in person, these programs were forced to change to an on-line format when, coincidentally, mandated social isolation was implemented as a strategy to mitigate the virus’ spread.</p> <p>The community-based evaluation of these programs followed suit, and research was conducted remotely with community members. The purpose of the evaluation was modified to not only understand, examine, and provide outcome-based evidence to showcase program effectiveness and enhance program sustainability, but also to explore the changes due to COVID-19 (on staff, on clients, on collaboration with partners) and to make recommendations for future program planning in order to better serve people living with dementia and their care partners.</p> <p>We will present about the process of adjustment to changing realities and relationships required to accomplish the evaluation goals, findings of the before and after COVID-19 social isolation effects of in-person and on-line programming, and an exploration of the challenges in conducting community-based research virtually with those living with dementia and their caregivers. We will contribute to two areas: lessons learned from adaptations to community-based research remotely with marginalized people during the pandemic and findings about social isolation that could be applicable to both community programming and to community-based research methodology, especially when working with marginalized groups and when making adaptations because of the pandemic.</p>
Marie Loke	<p><b>Citizen Science and Politics/Action – A Workshop and a Dilemma Session</b></p> <p><b>09.00-09.45: (C1119) WORKSHOP: Citizen involvement in nature and urban planning: how to match science and policy; Karin de Boer, Science Shop, University of Groningen, Netherlands.</b> With Karin Ree, Science Shop University of Groningen, the Netherlands; Maaïke de Heij, Science LinX University of Groningen, the Netherlands; Kees Siderius, IVN Nature Education (NGO), the Netherlands.</p> <p>Design and policy towards future-proof green cities and landscapes is a challenge for co-creation as a mean to match scientific interest and citizen involvement in environmental stewardship.</p> <p>In this workshop, we will present a number of (urban) nature initiatives in cooperation between scientists, civil organizations, scholars and citizens.</p> <p>1) SUSTAIN is an international project engaging scholars and their families and schools in research projects on bird migration and water management. The overarching issue is the way landscapes can be exploited while maintaining ecological balances.</p> <p>2) CurioUs is an initiative to engage citizen scientists in the Northern Netherlands to monitor the quality of the local environment. Topics of citizen science projects are heat stress, air quality, light pollution, etc. Participation of citizens, municipalities and</p>

scientists is a way to connect to the local environment and improve its quality.

3) Evoscope is a citizen science program (in preparation) to track developments in urban biodiversity. The aim is to study the process of rapid evolution in modern cities and apply that knowledge to discuss the design of future-proof green cities with urban inhabitants, city planners, nature organizations and scientists from various disciplines. All of these stakeholder groups in three Dutch cities are actively involved. We would like to discuss the match of science and policy in these citizen science initiatives. We would like to learn from your experiences as well. Which challenges do you face, how do you explore mutual interests?

**09.45-10.30: (D0013) DILEMMA SESSION: Drinkable Rivers measurements and how to take action; Sandra de Vries, PULSAQUA and TU Delft, Netherlands.** With Athina Papatheodoulou, I.A.CO Environmental & Water Consultants Ltd; KÁLAI Katalin, Bay Zoltán Nonprofit Ltd. for Applied Research Knowledge Management Centre (BAY-TMK); Ismail Laghmiri, Li An Phoa, Drinkable Rivers

“All around the world people and all life forms belong to a river system, a watershed. In this river system, we are a family where water is our bloodline. When we will have drinkable rivers, it means that all relationships in this watershed are healthy. Drinkable Rivers could be indicator of healthy living”, shares Li An Phoa who founded the initiative Drinkable Rivers ([www.drinkablerivers.org](http://www.drinkablerivers.org)).

In collaboration with Citizen Science Platform WaterLab ([www.onderzoekwater.nl](http://www.onderzoekwater.nl)) as well as Wageningen University ETE, we started a research on water quality with local people in Europe. We invited thirty hubs across Europe to engage and mobilize their own communities to take measurements with. These hubs are all different organizations, and include a few connected individuals. A simple, low-cost and indicative measurement-kit was developed and distributed among these hubs to start monitoring water and retrieving data. Together, we have started creating an overview of water quality in Europe.

These hubs have various reasons why to join the Drinkable Rivers initiative. Among others:

- Increasing awareness of water pollution through citizen science
- Activate people to improve the water quality of their rivers
- Bring them to the river and increase the connection to the river, generate the feeling of belonging to a watershed and river family

However, this can bring several dilemmas as well, among others:

- How can we guide the hub organizations and separate citizen scientists who we involve, to understand and make sense of the resulting data derived from their measurements? Also, for them and the participants or citizen scientists to identify meaningful ways to act?
- When the measurements indicate the river to be very polluted and people feel they have no way of influencing that, are we not making them afraid of the river instead of making them love it?
- What if taking these measurements brings friction between de Hubs and the responsible (governmental) organizations and how should we advise them to go about this?

In this session we would like to bring these points to the surface, possibly give examples we have experienced within the hubs and discuss possible ways of going about this. The input and feedback received during this session will give us new perspectives and possible actions to spread among the hubs or develop for further implementation while Drinkable Rivers evolves.

1312.0007	<p><b>Three Stories on Public Engagement and Health</b>  <b>Chair: Denise Leidelmeijer, Science Shop, University of Groningen, The Netherlands.</b></p> <p><b>(D1040) A malaria elimination alliance, in circumstances where everything seems to be adverse; Irene Jimeno, Centre d'Investigation Clinique Antilles-Guyane-Inserm1424, Centre Hospitalier de Cayenne, French Guyana.</b> With Muriel Galindo, Centre d'Investigation Clinique Antilles-Guyane-Inserm1424, Centre Hospitalier de Cayenne, French Guiana; Yann Lambert, Centre d'Investigation Clinique Antilles-Guyane-Inserm1424, Centre Hospitalier de Cayenne, French Guiana; Cecile Longchamps, Centre d'Investigation Clinique Antilles-Guyane-Inserm1424, Centre Hospitalier de Cayenne, French Guiana; Laure Garancher, the Ink Link, France; Hedley Cairo, Ministry of Health Malaria Program, Suriname; Helene Hiwat, Ministry of Health Malaria Program, Suriname; Martha Suarez, Fundação Oswaldo Cruz (Fiocruz) – Rio de Janeiro, Brazil; Jane Bordalo Miller, Association for Development, Accompaniment, Animation and Cooperation (DPAC Fronteira), Brazil; José Hermenegildo Gomes, Association for Development, Accompaniment, Animation and Cooperation (DPAC Fronteira), Brazil; Stephen G.S.Vreden, Foundation for Scientific Research in Suriname (SWOS), Suriname; Alice Sanna, Centre d'Investigation Clinique Antilles-Guyane-Inserm1424, Centre Hospitalier de Cayenne, French Guiana; Maylis Douine, Centre d'Investigation Clinique Antilles-Guyane-Inserm1424, Centre Hospitalier de Cayenne, French Guiana</p> <p>French Guiana is a French entity in South America covered by Amazonian rainforest, where malaria remains an endemic health problem. The major affected are workers involved in the informal economy of gold mining. This population, mainly from Brazil, is highly mobile and transboundary, transiting across the Guiana Shield. Health interventions in about 700 mining camps in French Guiana (with an estimated 10,000 people) are impractical due to legal, administrative, geographic and security constraints. In addition, remoteness, elevated travel costs and fear of military repressive operations hinder access to medical care. Thus, fevers, presumably malarial, were handled by the population using black market drugs, posing risk of the emergence of anti-malarials resistance.</p> <p>An innovative solution was elaborated by the research team for the gold mining community in a dialogical process (Field missions, 2016). The Malakit project, community-based operational research, was designed (2017-2018) and implemented (2018-2020) together with cross-border partners from Suriname and Brazil and other international actors. The strategy is based on the distribution of self-diagnosis and self-treatment kits for malaria crises and malaria management education in border sites where gold miners circulate. This project features multi-stakeholder and transnational joint work, involving scientific and operational institutions, including health authorities and a non-governmental organization as well as field workers - trained community health workers –who are the key protagonists of the implementation stage. Field workers also participated in the project design, generation of educational and research tools, monitoring and generation of conclusions.</p> <p>Despite the constraints of a participatory approach with a non-organized group in vulnerable situations, this project succeeds in listening to their voices, in co-creating educational materials, in including representatives, and in partnerships resulting in a decrease in malaria incidence. This experience is a learning process and continuous adaptation to the context that offers lessons for the new CUREMA project, which will add to the pre-existing strategy radical treatment for Plasmodium vivax. This story</p>
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promises to bring interesting debates and reflections on synergies with various actors and the engagement of neglected populations in a highly complex context.

**(D1017) What role can public engagement play in conversations about death and dying? A collaboration between public engagement and hospice care; Clare Wilkinson, University of the West of England, Bristol, UK.** With Alison Llewellyn (University of the West of England, Bristol, UK), Candy McCabe (University of the West of England, Bristol, UK), Lou Madel (Dorothy House Hospice, UK), James Byron (Dorothy House Hospice, UK) and Anne Wilson (PPI representative, UK).

In this conversation we will tell the story of a collaborative pilot project conducted by researchers at the University of the West of England, Bristol and Dorothy House Hospice in the UK, drawing light to an underexplored issue in public engagement, the subject of death and dying. Death and dying are challenging and emotive subject areas, as well as topics where there can be significant differences in understanding, as well as social, cultural, religious and spiritual perspectives, and are issues where there has been limited public engagement to date. And yet death and dying are topics that impact on every one of us, at some point in our life course. They also have important ramifications; understanding of the role of hospices and palliative care is often low. This can make hospice care and community support underutilised and difficult for people to map and navigate. We will highlight the stories of our community participants, who talked to us about the ways in which they have conversations, how these are triggered, and the benefits and challenges of conversing about death and dying. We will also share examples of public engagement in this area, and the considerations we are carrying forward as we collaboratively develop a citizen science project on this subject. Finally, we will reflect on our experiences of organising the project through the COVID-19 pandemic and the ways in which COVID-19 brought conversations about death and dying to the fore. We will welcome contributions to our story from conference participants, but recognising this can be a triggering subject area, we will do so with sensitivity and ensure supporting resources are available to accompany the session.

**(D0028) Fotonovelas in health communication; Carel Jansen, University of Groningen, Netherlands.** With Dr. Ruth Koops van 't Jagt, University of Groningen

In this session, we will share our story on the development and evaluation of stories on health issues that we told to people with low levels of health literacy: people who are less able to cope with illness, often have difficulty understanding information about health issues, and find it difficult to talk to healthcare professionals. Based on a systematic review of studies on the comprehensibility of health-related documents, we assumed that using fotonovelas (or photo stories) might be successful in delivering health messages. Fotonovelas are small booklets that portray a dramatic story, usually set in everyday life, using posed photographs and text bubbles/captions with simple text. After consulting healthcare professionals, interviewing members of the target group and performing role plays, we developed seven short photo strips in Dutch, Italian and German on doctor-patient conversations. For one such photo strip, entitled Two heads are better, see [www.careljansen.nl/Figure\\_1.jpg](http://www.careljansen.nl/Figure_1.jpg). Based on an American fotonovela called Sweet Temptations, we also developed a longer fotonovela in Dutch (22 pages) about diabetes, entitled Zoete verleiding. The effects we found were published in journals such as Health Communication and the International Journal of Environmental

	<p>Research and Public Health.</p> <p>Together with Carel Jansen and others, our South African colleague Burt Davis developed and studied the effects of a fotonovela in Afrikaans called Spyt kom laat (Regret fixes nothing) (24 pages) about the dangers of crystal meth. Versions in English and in isiXhosa were also distributed. A recent publication about this project can be found in the Journal of Ethnicity in Substance Abuse.</p> <p>In order to do justice to the perspective of the target group of a health communication intervention and to maximise its possible impact, intensive cooperation with the target group proved to be indispensable.</p> <p>Our evaluation studies show positive effects on the readers' knowledge about the themes of the fotonovelas. Users also preferred the fotonovelas to conventional brochures, and research in waiting rooms revealed that people were more likely to notice the fotonovelas than other information materials.</p> <p>We look forward to presenting what we did and what we found, and to discuss further possibilities to use fotonovelas as a means for distributing relevant and recognisable health information among people with low levels of health literacy.</p>
1312.0012	<p><b>FOUR RESEARCH PRESENTATIONS on SUSTAINABLE AND HEALTHY FUTURES; from participatory collectives and crowd sourcing to nature conservation and food production. Chair: Yorick Karseboom, Knowledge Center (Science Shop) for Philosophy, University of Groningen, Netherlands</b></p> <p><b>(C1038) Overcoming the Cinderella complex in the monitoring of neglected protected species: a Citizen science perspective; Silvia Gisondi, Council for Agricultural Research and Economics, Research Centre for Plant Protection and Certification (CREA-DC) Florence, Italy.</b> With Dr. Alessandro Campanaro, Council for Agricultural Research and Economics, Research Centre for Plant Protection and Certification (CREA-DC) Florence, Italy</p> <p>Citizen science has been proven as one of the best methods for developing large biological conservation studies. In fact, Citizen science, intended as the involvement of the general public in scientific research, has two key merits: it allows collecting a large amount of data, increasing awareness towards the target topic in citizen scientists. If the use of citizen science to study the distribution of large, widespread and charismatic species is a common practice, when it comes to "less charismatic" endangered species, such as certain species of insects, one of the main challenges of citizen science projects is to recruit volunteers for data collection.</p> <p>In this context, our team claims for a decennial expertise: starting from the EU Life Project "MIPP Monitoring Insects with Public Participation" (LIFE11 NAT/IT/000252) followed by EU Life Project "ESC360 – Volunteers for monitoring forest biodiversity in the Italian Natura 2000 Network" (LIFE17 ESC/IT/001) and the project InNat, our aim has always been the assessment the potential of citizen science to map the distributions of species all over Italian national territory.</p> <p>Among these projects, which will all be discussed during the presentation, InNat is currently ongoing. It involves 40 different targets to be signaled by citizen scientist, varying from habitats, plant species and animal species, all included in the EU Habitats Directive. In this context, citizen scientists are invited to send photos of the observed species, which are successively validated by experts in order to become part of our species distribution database.</p> <p>Up to date, citizens participating provided 6.940 records with 77% validation rate. These results further testify how citizen science projects are suitable for providing</p>

reliable and rapid distribution data for neglected species which are the base for any conservation program/action. Collected data allows a plethora of different research, varying from the analysis of altitudinal distribution and phenology for the highly recorded species, to sociological surveys aimed at investigating the attitudes and feelings of the public towards these species of high conservation priority.

**(C1029) A pragmatic living lab to taste a desirable territorial agrifood system; Solène Leprince, INRAE, UMR AGIR, France.** With Laurent Hazard, INRAE, UMR AGIR France. Anne Dupuy, CNRS UMR CERTOP France.

Sustainable transitions are complex, involve a multitude of actors, and the pathways to change are controversial. With respect to agricultural and food transitions, building the system to provide our future food should be rooted in desire and sharing. Eating, as an individual and intimate act of incorporating food into oneself and providing pleasure, is paradoxically a unifying act of social life. Addressing such a wicked problem (in the sense of Rittel and Webber, 1974) requires a civic commitment. It is therefore necessary to grasp the conditions of citizen engagement in changing their food practices and in redesigning their local agri-food system. The goal is not to define the society and the practices to be achieved to get there, but to test the practices reflected in a collective way via a logic of redesign. Moreover, food is not an insignificant object, since it is incorporated, i.e. it conveys nutritional, physical and symbolic dimensions. It is necessary to take it seriously in order to allow individuals to engage with their food in a pragmatic dimension, with experiences, notably sensory. We wish to propose a conceptual framework of pragmatic living-lab inspired by John Dewey's pragmatic inquiry and Kate Soper's alternative hedonism. Pragmatic inquiry, "making" spaces of community, commonality, and knowledge. Modern living-labs do not always offer users the opportunity to disrupt preconceptions and inject their vision of a desirable future into the innovation process (Engel, 2019). The normative nature of this type of space must be questioned, as well as the governance of participatory initiatives. It is therefore a proposal for creative democracy that we are trying to put in place within the Hmm Lab research project, a living lab including a collaborative and partnership research component referring to a reflexive partnership aiming at the co-production of actionable knowledge. The Hmm Lab is a living lab associating the Regional Natural Park of the Ariège Pyrenees, the group of organic farmers of Ariège, the association of popular education Biches Volantes and the research structures INRAE and CNRS, to which are added along the way those who wish to take part in the experiment: the professionals of collective catering and the educational teams of the attached schools, the inhabitants of the territory and their families, the local elected officials, the producers in conventional and organic agriculture...

**(G1011) Crowdsourcing in science: The development and validation of a scale; Regina Lenart-Gansiniec, Jagiellonian University, Poland**

For some time now, higher education institutions have been subject to a series of fundamental challenges, such as an increase in world-wide competition, a decrease in financial resources and funding, as well as a more general questioning of its broader societal role and overall mission. In the face of a high level of changeability of the environment of schools (also higher education institution), democratisation of public life, pressure from multiple stakeholders, the need for effective action, transparency, openness and professionalisation of management - higher education institutions are forced to change the way and logic of action. This puts new challenges ahead of the

higher education institutions decision-makers, which leads to the need to look for solutions that enable the achievement of the above objectives. In recent years, both theory and practice of management indicate that this is possible due to organisational changes, school organisations gaining access to unique, external intangible assets, increase in adaptability, taking pre-emptive and proactive action, transparency, accountability, openness and including the largest number of interested people in shaping and improving the strategic processes of the organisation. With the continuing increase in the use of online distributed learning environments, crowdsourcing for education is becoming more important. Crowdsourcing refers to the activity of outsourcing a task to a large, undefined “crowd”. Recently, scientists have suggested that crowdsourcing in science may pose a valuable tool to support scientific research. It is stressed in literature that crowdsourcing in science is a response to the development of the idea of openness of academic teachers to access to scientific research by all interested parties, growing interest of society in scientific research, participation in it and the need for cooperation of researchers from various, often very distant, fields. The burgeoning body of interest on crowdsourcing in science is hampered by the lack of a validated measure. We develop a measurement scale to assess crowdsourcing in science. We develop the measure of crowdsourcing in science and validate it via standard scale development protocols. Subject-matter experts examined the content validity of the measure, and we used two separate samples to assess the psychometric properties and the nomological network of the scale. We discuss how this new measure of crowdsourcing in science serves as the groundwork for further research.

**(G1049) Unraveling Configurations of Participatory Collectives: A Literature Review on Effective and Meaningful Academic and Non-Academic Knowledge Integration; Durwin Lynch, Athena Institute, Vrije Universiteit Amsterdam, Netherlands.** With Durwin Lynch, Valentina Vodopivec, Eduardo Muniz Pereira Urias, Dirk Essink, Marjolein Zweekhorst (Athena Institute, Vrije Universiteit Amsterdam, The Netherlands).

This paper addresses meaningful knowledge integration between academic and non-academic knowledge-holders, as this remains a persistent challenge due to all sorts of barriers. Approaching participation from an STS perspective, we conducted a literature review and applied a relational and coproductionist analytical framework to explore the orchestration and productive dimensions of participatory collectives. Our search in three databases yielded 31 articles. These were considered to have as a starting point an explicit recognition of the complexity of knowledge integration between academic and non-academic stakeholders, and while taking this into account, presented a novel methodology or analytical lens that enabled reflection on how effective and meaningful knowledge integration can come about.

Our results show that there is no single all-encompassing route to effective and meaningful knowledge integration. Multiple models of participation can co-exist within one participatory collective. Since various types of knowledge integration barriers can be present, various strategies - in the form of diverse tools, formats, procedures, negotiations and behaviours - can be implemented within a participatory collective to address these. Our results highlight archetypal configurations that were found in the articles. These configurations become powerful when visualised, as they trigger and stimulate reflexivity and mutual learning. Through these visualisations, gaps in knowledge flows can be discovered. Reflexivity, on the role of the researcher in particular, flexibility and 'time' seem to be two crucial aspects that can address

	<p>asymmetrical interactions and epistemological pluralism. Our analysis offers a different (constructive) way of exploring ‘valid knowledge’ dynamics and politics, and which goes beyond elements of procedural justice and normative principles, that predominantly have determined what constitutes good deliberation and participation. We aim to contribute to a more nuanced and integral interpretation of ‘effective and meaningful participation’ when addressing societal challenges. This requires appropriate experimentation with participatory research in general and transdisciplinarity in particular— an approach that takes time, provides room for contemplation, creativity and reflexivity, and that stimulates curiosity and appreciation toward the distinctiveness of non-academic knowledge and how this could substantially contribute to addressing complex societal challenges.</p>
1312.0018	<p><b>(G1082); WORKSHOP Synergies through national Science Shop networks for international networking in Living Knowledge; Norbert Steinhaus, Bonn Science Shop - Living Knowledge Network, Germany.</b> With Daniel Ludwig, University of Vechta, WissNet, German speaking network; Glen Millot, Science Citoyennes, and , Hichem Ben Hassine, Inst. Pasteur Tunis, French speaking network ; Andrea Vargiu, Univ. of Sassari, Italian network; and representatives of the Dutch/Belgian Science Shop Network</p> <p>Science Shops since decades serve as models to translate community engagement, RRI, participatory research and Open Science policies into practice. The aim is to democratise scientific research for organisations which have no financial or other resources to gain access to (scientific) knowledge. Through bridging different scientific and social knowledge, Science Shops improved the quality, acceptance and sustainability of solutions for complex societal problems and become best-practices for approaches of co-creation anticipation, reflection and deliberation in science with and for society.</p> <p>This workshop will start with 5 short input presentations of 5 minutes each on the state of the art of the international, national or regional Science Shop networks and the challenges they face when serving co-creation for innovative solutions for societal needs and the growth of public engagement with research (Norbert Steinhaus, coordinator Living Knowledge, NN Dutch Science Shop Network, Daniel Ludwig, WissNet, the German speaking Network and Glen Millot, Hichem Ben Hassine, French Speaking network, Andrea Vargiu, Italian Network).</p> <p>The input phase will be followed by a Future Scenario to pick up the specific topic of “Synergies through national Science Shop Network and the Role of the Living Knowledge Network” to address and to work on first suggestions for concrete measures. The audience will split into 4-5 groups.</p> <p>Flip charts that clearly show the questions and the process will be prepared before the session starts.</p> <p>The results will guide the future work of the LK contact point. Therefore, the contributions of the participants of the LK conference are valuable input.</p>
1312.0024	<p><b>Two Workshops on Research for Society</b></p> <p><b>09.00-09.45: (G1035) WORKSHOP: The fight for democratic procedures in research and how to redirect research questions away from economic growth; Aude Lapprand, Sciences Citoyennes, Paris, France</b></p>

Nowadays, the scientific world is far from being united and committed to ecological causes, especially since the selection of which research to fund depends largely on the guidelines decided by European elected officials on the basis of political choices. The overall goal of these policies is to improve European industrial competitiveness and to solve "societal challenges" thanks to "green growth", meaning by maintaining economic growth while protecting the environment.

The Horizon TERRE project was created as a reaction to this paradigm. Launched by Engineers without Borders, Citizen Sciences and the Toulouse Studies in Political Ecology, its aim is to offer and defend alternative research strategies that are no longer subject to the dogmatic imperative of economic growth at the EU level. The paradigm of "decoupling" in which Horizon Europe is embedded, which can be found for example in the notion of "sustainable development", has indeed sufficiently demonstrated its illusory character. Horizon TERRE defends a redirection of research questions.

We plead for democratic procedures for these arbitrations and we considered, in Horizon TERRE, that the civil society should participate in choosing which research themes are financed by the EU. accordingly, we have partnered representatives of student groups and committed researchers with academic experts and associations.<sup>3</sup> thematic committees have been formed (health, agriculture, energy habitat and mobility) in order to try and define alternative research programs.

Content and format: (The final method will depend on the number of participants so that the format best fits the purpose.)

- 1/ Introducing Horizon TERRE and its objectives
- 2/ Democratic procedures for research agenda setting
- 3/ Discussing the feasibility/structure/next steps of Horizon TERRE

**09.45-10.30:(G1012) WORKSHOP: Student self-organized project teaching as training for future research with, in and for society; Judith Bönisch, Technische Universität Berlin, ZEWK / kubus, Germany**

We want to discuss how and to what extent student self-organized project teaching can contribute to academic education of scientists who want to do research in, with or for civil society. Starting point of our consideration is that transdisciplinary research requires competences that elude knowledge transfer in traditional (tending to be unidirectional) teaching formats at universities but can be learned in self-organized teaching-learning contexts. This is illustrated by the example of "Projektwerkstätten" (Project Labs) at Technische Universität Berlin (TUB). Participants are invited to present own examples of student-organized courses and projects. Thus, we identify different ways to answer the initial question on transdisciplinary competence acquisition through student self-organization. Furthermore, we aim at exchange about aspects of student self-organization and the networking of conference participants engaged in the field of student-organized teaching. At the end of the workshop, we harvest results as a catalogue of competences that can be used to strengthen the significance of student-organized formats of teaching and learning at HEI of participants. We will work with impulse lectures and moderated group discussions. What are Project Labs? Since 1985, TUB students can do their own research and teaching in Project Labs. The four semester courses are independently initiated, designed and led by students. Two tutoring students are paid by TUB, participating students can get 3 to 6 credits. Project Labs are supported by a department of TUB and by science shop kubus. These interdisciplinary projects deal with issues and apply methods which are insufficiently represented in the standard teaching at TUB.

	<p>Participating students test innovative teaching, learning and research concepts. Successful elements can be subsequently transferred into official standard teaching at TUB. The overall topics of the programme are sustainability issues and activating socially useful and environmentally friendly thinking and acting. The topics chosen by the students are often linked to their realities, reach beyond the academic world, and involve social actors.</p>
1312.0025	<p><b>(D1134) WORKSHOP CoAct for Mental Health: sharing first-hand experiences of co-created Citizen Social Science research; Isabelle Bonhoure, Universitat de Barcelona, Spain.</b> With Figueras, Amanda. Co-researcher CoAct for Mental Health, Spain; Peter, Franziska; Cigarini, Anna; and Perelló, Josep (Universitat de Barcelona, Spain)</p> <p>Mental Health is an issue worldwide. In Europe, 25% of the WHO European Region inhabitants, e.g. 220 M people, are affected by mental health issues every year. Although several models to tackle this issue coexist, the important role of the mental health social support networks in the mental health recuperation processes is increasingly acknowledged. These mental health social support networks refer to the social and emotional environment of people, to their networks of relationships. People with lived experience in mental health and their families claim their importance and effectiveness as facilitators of the processes of recovery and improvement of quality of life, as a well as a preventive factor in situations of isolation and social exclusion. Nevertheless, scientific research on them is still relatively scarce.</p> <p>Since beginning of 2020, the goal of the project “CoAct for Mental Health”, part of H2020 SwafS project CoAct (Co-designing Citizen Social Science for Collective Action), is to investigate mental health social support networks by engaging persons with a self-experience in mental health and their families as in-the field competent co-researchers.</p> <p>The goal of this demonstrative session is to simulate the co-design process of the CoAct for Mental Health project. The session will be facilitated jointly by a representative of the research team and a representative of the co-researchers, 32 persons with a personal experience in mental health deeply involved in all steps of the research.</p> <p>In the project, both non-digital (a research diary) and digital (a chatbot) tools are used to place individuals with an experience of mental health and relatives at the centre of the research. During this workshop, participants will have the opportunity to use the research diary to write down and share personal experiences, if they wish. Further, they will see how your personal stories can be included in a chatbot to map social support resources and strategies worldwide. After a practical hands-on test of the digital and non-digital tools, participants will be also introduced to our current collective data interpretation methodologies.</p> <p>Finally, the session will close with a general discussion on the tools and the methodologies showcased, the challenges that we faced, most of them during the Covid pandemic in order to engage the participants in a reflection applicable to many fields of collaborative research with and for communities.</p>
1312.0030	<p><b>Two Problem Solving Workshops on Inclusion</b></p> <p><b>09.00-09.45 (A1030) Beyond the participation elite: how do we reach out to all members of society?; Marta Vallve Odena, Wageningen University and Research, Netherlands.</b> With Lèneke Pfeiffer &amp; Gerard Straver, Wageningen University &amp; Research.</p>

Our current social and political climate seems to exacerbate inequalities and allow for further polarization of groups within society. Science Shops have the potential to reduce these inequalities by facilitating access to scientific research and providing disadvantaged groups (e.g. people without access to higher education) with new knowledge and empowerment stemming from the collaboration.

The WUR Science Shop has years of experience in facilitating participatory research projects. We are a “reactive” Science Shop: we receive questions that come from civil society organizations and respond to their requests. While being an impactful and inspiring way of working, we believe it is time to become a “proactive” Science Shop. This need for a “proactive” Science Shop arises from the realization that we often engage with the “participation elite”: typically white, middle-aged, highly educated people who are active within a civil society organization. However, when becoming “proactive” we need to tread carefully: establishing more conventional participation channels that end up being used by the same people leaves us at a “participation paradox”, where more participation actually leads to more inequality. In order to truly reduce inequalities and empower all of society, we want to move beyond the participation elite and create inclusive participation channels: how can we engage with and serve the most disempowered members of our societies?

The WUR Science Shop will host an interactive workshop where we aim to share our insights and practical know-how on a) our different ways of working and reaching out to society, b) who our conventionally underserved groups are, c) the ways in which we create bridges with said groups, and c) possible new ways to create or strengthen these bridges. This is a great moment for participants to share their experiences, struggles, and methodologies, to brainstorm on new opportunities, and to gain new perspectives. All in all, we want to collectively explore new ways of working to ensure we become Science Shops that provide an accessible, inclusive service to our societies.

**09.45-10.30 (A1131) Participatory action research to implement interventions to increase uptake among vulnerable groups; Janine De Zeeuw, University Medical Center Groningen, Netherlands.** With Bert van Enter, PhD student UMCG and general practitioner

Vaccine uptake among underserved populations remains to be substantially low. For example, in the Netherlands Human Papilloma Virus (HPV) vaccine uptake in female adolescents in the national population is higher as compared to girls with a Turkish or Moroccan migration background who live in the Netherlands. To improve HPV vaccine uptake in underserved groups it is important to create responsive health systems ensuring accessible, acceptable and acceptable health for all, and especially those with specific needs. The European Project RIVER-EU will implement selected interventions using a participatory action approach to engage and involve the target groups and key stakeholders, and to foster collaboration and knowledge co-creation between academic, community and professional stakeholders. By applying this approach, our project will engage members of the underserved communities, health professionals, policy makers and researchers to ensure all perspectives and voices are included, thereby increasing ownership and empowerment among all key stakeholders.

The aim of the session is to share the specific objectives and activities planned within our project including the strategies to engage the key stakeholders and the specific methods and that have been selected. Thereafter, a general open discussion will follow with extensive interaction with the audience. Small assignments in groups will be given to reflect on highlighted topics. Thereafter to learn from participants on their

	<p>experiences and to incorporate the lessons learnt during the session in future activities a short plenary discussion will be held. Input from the assignments and discussion will be used for future activities in the project.</p>
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10.30-11.00 Coffee Break

### PARELLEL SESSIONS 8/SEMI-PLenary 3: FRIDAY 11.00-12.00

Offerhaus	<p><b>Semi Plenary Panel Session: The Ideas Fund, Chris Manion, British Science Association, UK.</b> With Lewis Hou, Director, Science Ceilidh; Una Murray and Akira Foster, Voluntary Action Shetland; Declan Thompson and Rosemary Bradley, Yellow Wood Consultancy, Northern Ireland. Chair: Henk Mulder, University of Groningen</p> <p><b>A semi-plenary on the Ideas Fund: Putting communities in the lead.</b>        The Ideas Fund is a grants programme run by the British Science Association (BSA) and funded by Wellcome, which enables the UK public to work with researchers to develop and try out ideas that address problems related to mental wellbeing. The Fund aims to reach people and communities who are often overlooked by this type of work, including young people and those in rural communities. To date, 49 projects across four areas of the UK (Hull, Oldham, North West Northern Ireland and the Highlands &amp; Islands of Scotland) have been supported, totalling £1.8m.        The Fund is trialling a different approach to supporting this work, with individuals, informal groups and charities applying for the funds and leading the projects, and researchers working in support of the community's plans. Projects are funded following a simple application process, with small grants awarded to build relationships and develop ideas, and 1:1 support being provided. Funded projects are brought together regularly to share their learning.</p> <p>In this session, we will share more information about the Fund's approach, and what we've learned since launching in January 2021, from the following panel members:</p> <p><b>Chris Manion</b> is Head of Grants at the British Science Association (BSA) and has responsibility for delivering The Ideas Fund, which is piloting a new way of supporting communities to work with researchers. The BSA's vision is of a future where science is more relevant, representative and connected to society, and The Ideas Fund plays a key role in informing this work through supporting a range of individuals and organisations. Around £1.8m in funding has been awarded so far.</p>  <p>Chris has 15 years' experience in delivering grant making programmes both in the UK and internationally, ranging from a £240m programme designing and building youth centres across England, to supporting livelihoods for disabled people in East Africa. He co-founded a 'Shift the Power' movement of UK based funders looking to work differently in international funding, and is passionate about exploring how funding practice needs to change in order to achieve long-term impact.</p>
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Since joining the BSA in November 2020, Chris has overseen the launch of the Fund and the piloting of two funding rounds, designed to help reach groups who are often overlooked by this type of work. The team are currently exploring what infrastructure needs to be supported in order to remove the barriers faced by communities and researchers who are looking to work together.

**Lewis Hou** is one of the Development Coordinators, who has been supporting groups to run their projects, including some who are working with a researcher and managing a grant for the first time, and also convening wider stakeholder networks to share learning.

Lewis is founder and director of the Science Ceilidh, an independent intermediary organisation connecting communities, education, research and culture across Scotland. He consults on equitable community engagement both nationally and internationally and is an organising member of the Anti-Racist Educator collective and the cross-Europe DiverSci Community of Practice.

He was a UK Creative Community Fellow and awarded the Public Engagement Innovator Medal with the Royal Society of Edinburgh. Currently, Lewis is an associate trainer with the National Coordinating Centre for Public Engagement and working with the British Science Association supporting groups in the Highlands and Islands of Scotland to lead public engagement and community-based research around mental wellbeing and climate change.



We'll also hear from two of the projects, about the work that they're doing, what they've gained through working with the researcher, any challenges they've come across, and where they'd like to go next with their ideas:

Yellow Wood Consultancy (Northern Ireland) and the OPEN Space project (Shetland Islands).

**Yellow Wood Consultancy** in collaboration with our community Peer Mentors, Clarendon Medical Practice and Researcher co-create programmes of support using creative and innovative approaches to community action research and improve connection and relationship to self.

**Declan Thompson** is a Yellow Wood Consultancy Peer Mentor/Researcher, and involved in the planning, design, delivery and research of our mental well-being programme. Declan has walked the path of stress and burnout, and alongside our other Peer Mentors Emma Bond and Jenny Coyle have worked closely with Yellow Wood Consultancy, Clarendon Medical Practice and Ulster University to explore what was needed to aid wellness and recovery at community level.



Declan has 30 years' professional experience in peer-led programmes in Youth Social Services, and since joining Yellow Wood Consultancy programme has developed deeper interests in coaching/mentoring, and exploring alternative therapies such as Reiki, Reflexology and Visual Relaxation techniques as creative ways to explore the inner self.

**Rosemary Bradley** is a Yellow Wood Consultancy Director/Facilitator. Rosemary has a background in Psychological therapies and has worked across many Health and Social Care settings over the last 18 years supporting people to improve physical, emotional, and mental well-being. Rosemary also applies her training in Emotional Freedom Techniques (EFT) to demonstrate alternative resources to improving well-being.



The **OPEN Space** research team has developed an innovative approach to empower young people in community action research. Sharing skills and experiences to design and carry out research with young people, engaging with service providers and presenting the findings at strategic and other levels to influence change and improvements.



**Akira Foster** is one of the OPEN Peer Researchers, Voluntary Action Shetland and is responsible for the design and delivery of the OPEN Space Project. Akira has over 8 years experience as an OPEN peer educator, with expertise in designing and delivering peer education workshops in all high schools in Shetland.

Akira has been involved in developing the OPEN Space Project since 2018, including the application to the Ideas Fund. Akira and her colleague Shannon have been working closely with the professional researchers and Da Cafe youth committee to design and carry out youth-led community action research. Gathering evidence of need for a space for

young people in Shetland.

**Una Murray** is the OPEN project coordinator, Voluntary Action Shetland and is responsible for supporting the research team made up of Da Café Youth Committee, Peer Researchers and Professional Researchers. Una has been working with young people for over 30 years and founded the OPEN project in 2011, with expertise in peer education methodology.

Finally, we'll discuss the BSA's longer term vision for this work – how can we influence others and support these approaches to be embedded in wider practice? What needs to be done or funded differently to enable this? What can we learn for future collaborations in research with and for society and our work in the Living Knowledge Network?



The Ideas Fund representatives will discuss these issues under the guidance of **Henk Mulder**, University of Groningen. Henk joined the Science Shop at the Chemistry Department in 1989 and is the current chairperson of the Science Shops of Groningen University. He is also a lecturer, and Programme Director of the Master Science Education and Communication. Henk has a long experience in research with and for civil society organizations and the co-creation of knowledge. His interests

	<p>are public engagement in research, dialogues, science (communication) policies and European/international networking for citizen engagement in all phases of the (responsible) research and innovation process, including agenda-setting. He led the EU funded project “PERARES” and was partner in “Engage2020”, and is on various Advisory Panels. He has degrees in Chemistry and Energy and Environmental Sciences.</p>
<p>Marie Loke cancelled</p>	<p><del><b>11.00-11.45: (C0045) SKILLS WORKSHOP Community, Indigenous and Green Mapping: Visualizing changing communities and supporting Indigenous resurgence with UN 2030 Goals + Community/Green Maps; Maeve Lydon, Living Lab – University of Victoria, Canada.</b></del> With Wendy Brawer – Green Map System – USA Crystal Tremblay, UVIC, Canada</p> <p><del>At this arts-for-change workshop, participants will learn about the community and green map movement from the West Coast of Canada and Indigenous perspective to the global level including the United Nations 2030 Goals (the Sustainable Development Goals – SDGs) and the Green Map movement based in New York ( www.greenmap.org). The workshop opens with an interactive mapping exercise followed by community mapping presenters ( Maeve Lydon, and WSANEC Indigenous community members from Canada ) and Wendy Brawer – Green Map lead from New York ( joining remotely) sharing how community and green mapping has also been used to support decolonization and community building and how the global Green Map movement has created and shared a unique visual language matched to the SDGs. Participants will learn basic community and green mapping approach and methods and explore new ways to utilize Green Map’s adaptable tools for outreach, research, mapping, digital communications and placemakers as a way to localize the SDGs and make them a collaborative lens for community wellbeing. Participants will learn about resources they can use and tool sets which can be applied to a diversity of local challenges ranging from poor land use and overheating to social innovation, buying local and the renaturing of the commons. Re-acquainting people with their own local environment through community mapping and the Green Map system was presented at the 2014 and 2018 Living Knowledge conferences in Copenhagen and Budapest, alongside our longtime partners at the University of Victoria and the Common Ground Community Mapping Network. This presentation offers a new update and many inspiring stories of how mapping can indeed re-present and transform power relations, decolonize and support personal and community histories, reconnect people to place and to the global movement for sustainability, justice and creativity.</del></p>
<p>1312.0012 (departure); returning to Offerhaus</p>	<p><b>(G1204) WALKING WORKSHOP Walking interviews as a method to pave the way for reciprocal CERL partnerships; Brecht van der Schueren, Vrije Universiteit Brussel, Belgium</b></p> <p>The Vrije Universiteit Brussel is pioneering with so-called sustainable transition labs: learning networks of students, researchers, teaching staff and local community members who seek to tackle local, urban challenges together in an impactful and sustainable way. Authentic CERL partnerships require carefully maintaining reciprocity and equality however, especially when fragilized urban communities are involved. They are challenging to initiate and perpetuate, often resulting in misunderstandings or tensions between the different actors that take part in them. To navigate these challenges in the exploratory stages of CERL-partnerships, we have experimented with walking methodologies. Interviewing on foot is on the rise in qualitative social</p>

	<p>research. It is said to have the potential 1) to explore the manifold ways in which people connect to themselves, local spaces and communities 2) to map out existing social ecosystems and 3) to build rapport between researchers and participants. Considered associative and inclusive, they are praised for carrying a potential of institutional and methodological innovation. Reflecting on 8 walking interviews through Brussels, it is argued that the walking interview can be a fruitful methodology to handle the different tasks that need to be simultaneously tackled in the first stage of establishing CERL-partnerships: 1) mapping networks of actors and organisations 2) exploring divergent subjective understandings of the neighbourhood 3) validating experiential knowledge and finding ways to connect it to academic knowledge 4) building interpersonal relationships and trust 5) being reflexive about positionality &amp; power imbalances 6) and eventually finding a niche where the university could engage itself in the future. To be fruitful however, both CERL-projects as well as walking methods need to be well thought-through and carefully catered to each unique encounter. If not, they risk to be ineffective or even conflicting and harmful. In this session we will go on a walk ourselves and together explore the practical and technical requirements of walking interviews. We will also discuss the ontological and epistemological underpinnings (and blind-spots) of these methods in a CERL context. Lastly, we will try to actively relate this methodology to your own (educational/research) context and exchange how walking could be fruitful for the individual projects of each of the participants.</p>
1312.0018	<p><b>11.00-11.45:(G1122) WORKSHOP How can science shops deal with conspiracy theories?; Karin de Boer, Science Shop, University of Groningen, Netherlands.</b> With Marc Pauly, Karin Ree, Science Shops, University of Groningen, the Netherlands Lemke Kraan, master Science Education and Communication, University of Groningen, the Netherlands</p> <p>The Groningen Science Shops sometimes get questions that can be linked to conspiracy theories, the consumption of fake news or scientific misconceptions, such as the risks of 5G, vaccination and chemtrails.</p> <p>How can we deal with these questions? Should we limit our opposition to scientific evidence? Should we study the origins and lines of reasoning of the theories? Should we perhaps initiate a dialogue to create some mutual understanding and avoid the increasing polarization to mainstream science?</p> <p>This issue was investigated in three groups of students in projects on science communication.</p> <p>Group 1 has developed factsheets for questions regarding some conspiracy theories, tailored to discuss their line of reasoning.</p> <p>Group 2 has dealt with setting up a dialogue with conspiracy thinkers. Is such a dialogue desirable, what are the goals and how should it be structured? Theories on the psychology of conspiracy thinking and dialogue formats in science communication have been brought together.</p> <p>The third subproject addresses the use of controversial movies like Cowsspiracy in involving students in discussing science and conspiracy theories. Can these movies be used to reflect on conspiracy thinking, critical thinking and science?</p> <p>In the workshop we will present the results of these projects and reflect on ways to deal with questions rooted in conspiracy theories. We are open to hear your experiences and ideas on potential strategies.</p>

CLOSING PLENARY: FRIDAY 12.00-12.30

Offerhaus	Looking back at the conference and forward: what have we learned and what should happen next?
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Packed Lunch

**SITE VISITS and SOCIAL PROGRAMME: FRIDAY from 13.30**

Please REGISTER at the RECEPTION DESK for these events (not required for Keti Koti).

1312.0012	<p><b>13.30-15.00 Vist CurioUs/Forum. 10 min walk (max 15 persons)</b>  <b>Please REGISTER at the RECEPTION DESK</b></p> <p><b>CURIOUS to CURIOUS?</b>                  Everyone can be a scientist and do research in his or her own living environment. That is the message of CurioUs?, an initiative of two knowledge institutes and the biggest cultural organisation in the city of Groningen.                  In 2020, with the help of Google Community Grants, we started the citizen science project 'CurioUs?': <a href="https://forum.nl/nl/curious">https://forum.nl/nl/curious</a>. Since then, CurioUs connects themes like climate, biodiversity and public health to local or regional, current affairs. It informs concerned, inquisitive citizens and inspires them to contribute to scientific research. CurioUs shows a broad audience (young and old, higher and lower income and education) the power of (digital) technology and citizen science, helps to gain insight in the quality of their own living environment and provides knowledge and tools to improve that environment in a sustainable manner.</p> <p>CurioUs consists of three parts: a device library, citizen science actions and public events.</p> <div data-bbox="354 1337 721 1823" data-label="Image">  </div> <p>The device library - called 'meet-o-theek' - is located in the Smartlab of Forum Groningen. It is the first device library in the Netherlands. Its collection expands constantly, based on wishes of the public and scientists. The public can borrow devices - from particulate matter meter and heat camera to wild camera and telescope - for free.</p> <p>Furthermore, we organize two large scale citizen science actions per year. The citizen science actions will be framed by public events, like mini lectures with well-known, committed scientists and lecturers. CurioUs also organizes walk-ins and workshops in the Smartlab to inform visitors about citizen science and to help them build their own measuring devices.</p> <p>With this tour you will visit the device library in the Smartlab in Forum Groningen, with coordinator Maaïke de Heij.</p>
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1312.0024	<p><b>13.30-15.00 Visit WIJS (transport will be arranged)(max 20 persons)</b>  <b>Please REGISTER at the RECEPTION DESK</b></p> <p>Would you like to experience how students and other residents of Groningen connect with each other, so that they can learn from each other? Join the WIJS Groningen journey!</p> <p>WIJS means neighbourhood involvement by students in Groningen (<i>WIJK Inzet door Jongeren en Studenten</i>). We are a collaboration between the municipality of Groningen, the welfare organisation (WIJ Groningen) and different educational institutes, including the University of Groningen, Alfa and Noorderpoort vocational educational institutes, and the Hanze University of Applied Sciences.</p> <p>The most important goals of WIJS are:</p> <ol style="list-style-type: none"> <li>1. Allowing students to gain practical experience (learning in and from practice)</li> <li>2. Contribute to the development of the city, the neighbourhoods and their inhabitants</li> <li>3. Empowering residents of Groningen by offering additional resources</li> <li>4. Make students involved citizens (of Groningen)</li> <li>5. Promote reciprocal learning (students/ residents/ teachers/ professionals learn from each other)</li> </ol> <p>This afternoon, we will take you to De Ruimte, one of the home bases of WIJS, located in the Paddepoel shopping mall. Students of WIJS will guide you through a short 'WIJS journey'. You will get a real assignment from the neighbourhood and together as a group you will discuss and solve the problem using a quick version of the method of design thinking.</p> <p>WIJS address: "De Ruimte", Winkelcentrum Paddepoel, Dierenriemstraat 106A, Groningen</p>
University Museum (3 minute walk)	<p><b>From 13.30 Guided Tour of "Time Will Tell" (max 25 persons) and free access to all other exhibitions</b>  <b>Please REGISTER at the RECEPTION DESK</b></p> <p><b>TOUR THROUGH 'TIME WILL TELL' – Tour Starts at 13.30, but you are free to enter the museum before and after to see the other exhibitions as well.</b></p> <p>Why do dull lectures last so long, but the holidays seem to fly by so quickly? <b>Prof. Hedderik van Rijn</b> will guide you through our new exhibition 'TIME WILL TELL' which gives the answer on this question. Take part in actual scientific research and find out how you experience time by doing the experiments yourself. Van Rijn will talk about the experiments and he will elaborate on the science communication aspect: how can the public contribute to science and how can they use all the data of the experiments?</p>

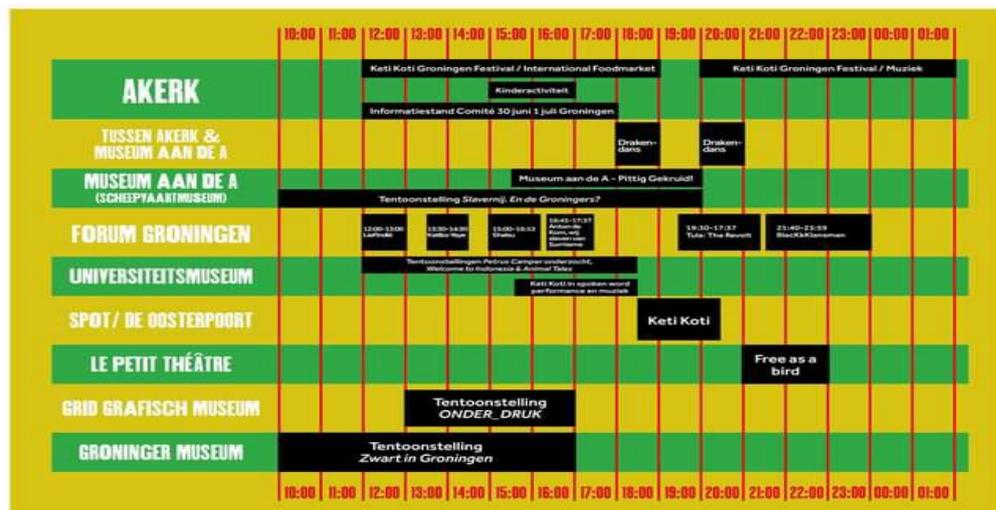


	 <p><b>THE LABORATORY OF GERARD HEYMANS</b>          We will also go back in time to the special laboratory of the Groningen psychologist Gerard Heymans (1867-1930). He was the first psychologist in the Netherlands to use test subjects for scientific research. His experiments and instruments on, for instance, time perception, caused major breakthroughs in the field of psychology.</p> <p><b>YOU CAN VISIT THE OTHER EXHIBITIONS</b>          After the guided tour, you can also visit the other exhibitions. Masterminds takes you through the history of science, featuring ground-breaking research and major scientific discoveries at the University of Groningen. From the story of its founding, via the first electric car and the first female student Aletta Jacobs, to the contemporary research of Nobel prize winner Ben Feringa and his nano car.          In the 'Anatomy Room' around 50 anatomical preparations are on display, as well as some skeletons and wax preparations. Some of the anatomical preparations are from the eighteenth century collections.          Lastly, you can visit the 'Aletta Jacobsroom'. Aletta Jacobs was the first female student at our University and she played an important role in women rights.</p>
<p>1312.0013</p>	<p><b>13.30-15.00 Living Knowledge Soccer Match – 10 min walk (no maximum number of participants) Please do REGISTER at the RECEPTION DESK</b></p>  <p>FC Groningen has known some great players: Arjen Robben, Luis Suarez, and... maybe you! You can have a sporty end to your conference week in the traditional living knowledge soccer match in the Noorderplantsoen.</p> <p>We will take care of a ball and some vests, as you show off your skills!</p> <p>Your coaches: Andrea Vargiu (UNISS, Italy) and Vincent Hazelhoff, Science Shops Groningen</p>
<p>Groningen-Diverse City Center Locations</p>	<p><b>Keti Koti Festival – Emancipation Day</b></p> <p>Keti Koti (means: broken chains) celebrates the abolition of slavery, and is mostly celebrated by communities from Surinam and African countries. Between 12:00 and 20:00 you can visit the festivities in the Akerk for free, to enjoy the colourful fashion show, listen to a variety of musicians, and have some nice</p> 

Indonesian or Surinam snacks as you do.  
Of course, you can visit the Bittersweet heritage exposition as well.  
<https://akerk.nl/event/keti-koti-festival>. You can buy advance tickets for their evening programme as well (10 Euro).

All other activities of the *Bittersweet Inheritance* Programme can be found here:  
<https://bitterzoeterfgoed.nl/en/>

Please note: spoken word and movies may be in Dutch. Expositions usually also have English information. We expect many activities to be free, but are not 100% sure.



Museum aan de A, Brugstraat 26 / Kleine der Aa: Free entry 10.00-20.00hr  
<https://museumaandea.nl/> (Exposition on slavery and activities)

Between A-Kerk and Museum aan de A: Dragon Dance (18.00 and 20.00hr)

Forum Groningen-Cinema: Various Movies (free, but reservation required):  
<https://forum.nl/nl/bitterzoet-erfgoed?date=01-07-2022#scrollEventView>

University Museum: exhibitions Welcome to Indonesia, Petrus Camper Revisited and Animal Tales, various activities from 15.30-18.30

SPOT/De Oosterpoort, Trompsingel 27: Spoken Word & Music, from 18.30 (free, but ticket required) <https://www.spotgroningen.nl/programma/keti-koti/>

Le Petit Theatre, Kolendrift 19, 21.00 hrs "Free as a bird", ticket 24.95 Euro  
<https://www.petittheatre.nl/product/6513715/keti-koti-free-as-a-bird>

GRID Graphic Museum, Sint Jansstraat 2: *Under Pressure/In Print*, Exposition  
[https://www.gridgroningen.nl/exposities/onder\\_druk/](https://www.gridgroningen.nl/exposities/onder_druk/)

Groninger Museum, Museumeland 1, 10.00-17.00, Exposition *Black in Groningen*,  
<https://www.groningermuseum.nl/en/art/exhibitions/bitterzoet-erfgoed-zwart-in-groningen>

1312 Rooms	The rooms are available for open space sessions or network meetings; please make your reservation at the reception desk; until 16.00 hours.
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## Social Programme - Tuesday-Sunday: Free access to the University Museum

(12.00-17.00) Your conference badge will give you free access to the University Museum during the whole week. On Friday afternoon, however, you can even enjoy a guided tour by the scientist involved in the exhibition “Time Will Tell”, as part of our “site visits”. The museum is just a few minutes walk from the conference locations.

## POSTERS (THURSDAY 13.30-15.00)

**(A1003) Improving Social-Artistic Curricula, Floor Mijland, Utrecht University/LKCA, the Netherlands**

Due to societal changes, the profession of artists and social workers have changed too. In the arts, art projects no longer centre around a modernist conception of 'art'. More often, they are aimed at bringing people (and things) together and make a positive change in the world. In social work, professionals are asked to be more flexible and empathic, viewing their clients and their environment more holistically, working with concepts such as 'positive health'. Several of the positive health goals can be achieved through art participation, whilst simultaneously allowing artists to fundamentally engage their practice with and for a community. In order to prepare and introduce students from both domains to their future profession, several higher educational institutions in the Netherlands have engaged in mutually beneficial social-artistic collaborations, bringing together students and professionals in the reality of the workplace. So far, these projects have proven to be highly successful, as can be read in *The Changing Power of Social-Artistic Collaboration* (in Dutch: 'De Veranderkracht van Sociaal-Artistiek Samenwerken') by cultural advisory organisation Cultuur Oost. However, actually bringing these parties together, creating an equal partnership, achieving both social and artistic goals, as well as creating professional learning experiences have proven to be difficult tasks, demanding constant coordination between everyone involved. Learning from the practice-based experiences of several members of the Social-Artistic Students and Practices Network (SASP-network) of the National Centre of Expertise for Cultural Education and Amateur Art (in Dutch: 'Landelijk Kennisinstituut Cultuureducatie en Amateurkunst', LKCA), my research project was aimed at designing a dialogical tool to support the development of social-artistic education. The poster presented at the 9th Living Knowledge Conference will be the prototype version of the dialogical tool for 'Social-Artistic Collaboration in Higher Education'.

**(A1020) Participatory Research creates New Synergies for a Sustainable Society – Structure and Lessons Learned in the German SOWILA Project; Annalena Weist, Catholic University of Applied Sciences Northrhine-Westphalia (Cologne), Germany.** With - Prof. Dr. Werner Schönig (Catholic University of Applied Sciences North Rhine-Westphalia, Cologne, Germany); Prof. Dr. Benjamin Benz (Protestant University of Applied Sciences Rhineland-Westphalia-Lippe, Bochum, Germany); - Prof. Dr. Kerstin Walther (Protestant University of Applied Sciences Rhineland-Westphalia-Lippe, Bochum, Germany)

Science shops, i.e. institutions of participatory research in which enquiries from civil society are collected and processed in teaching research projects at universities are not new but have been widespread since the 1970s. However, there has not yet been a corresponding project in the German-speaking world with reference to social work. This gap is closed by the Social Science Shop ('Sozialwissenschaftsladen' = SOWILA) which is a co-working project of the Protestant University of Applied Sciences Rhineland-Westphalia-Lippe (Bochum) and the Catholic University of Applied Sciences North Rhine-Westphalia (Cologne) since 2018. SOWILA works as a pilot project within the Transfer Network Social Innovation (S-Inn) financed by the federal German Administration. Within the project research enquiries on the topic of social exclusion and social participation are taken up, transformed into a scientific research question in a participatory process, then implemented within the framework of either a teaching research project or a BA/MA thesis and finally the results are presented and discussed with the enquirers before being published. How can homeless people

establish a sustainable and effective lobby? What will help institutions to provide adequate care for traumatized refugees? How can youth with learning difficulties benefit from vocational training programs? What factors can strengthen the civic participation in socio-economically weak neighbourhoods? How can the health of people with disabilities be promoted? These are selected research questions already addressed in SOWILA's participatory research. The main goal of our work is thereby to incorporate research towards sustainable social change, inclusion and an equitable society. After five years of project runtime our contribution presents both the concept and the method of the social science shop and some central experiences – the opportunities for creating new synergies by involving students and collaborating stakeholders from society but also the challenges that has been faced and overcome. The latter is done on the basis of extensive evaluation results of qualitative and quantitative accompanying research carried out in the project and compared with experiences from other science shops.

**(A1031) Expansive Learning Opportunities in Third Spaces: Exploring Challenges and Possibilities for developing an OpenLab; Brecht Van der Schueren, Vrije Universiteit Brussel, Belgium.** With Linde Moriau (VUB, Belgium), Julie Bertone (VUB, Belgium), Lien Mostmans (VUB, Belgium), Etienne Toffin (ULB, Belgium), Gregoire Wallenborn (ULB, Belgium), Simon De Muynck (ULB, Belgium) Floor Keersmaekers (VUB, Belgium)

With this poster presentation, we aim to explore challenges and possibilities for developing a citizen-science and community engaged interface building on collaborative pedagogies and participatory research initiatives. We draw on the experiences gained in preparation of the OpenLab – Brussels Centre for participatory Research & Learning. With this platform, two Brussels-based universities, VUB and ULB, wish to provide in a science-society interface where people who want to work around urban transition challenges can meet, get inspired and find support for initiating projects together. A space that fosters critical dialogues and encounters, collaborative learning and knowledge (co)creation, following an experimental, reflexive and transformative approach. The Open Lab is situated at the USquare-site, a former military complex that is currently reconversed in a bi-university campus with the ambition of making this neighborhood a sustainability-oriented and welcoming area, reflective of its' superdiverse metropolitan surroundings. The overarching goal is to provide in an environment that brings together diverse (urban) actors, forms of knowledge, lived experiences and expertise in transformative learning processes, activating the third pillar of our universities in a coordinated, integrative and impactful manner. Building on expansive learning theories, we consider the Open Lab as a 'Third Space', spanning complex tensions fields that can serve as catalysts for individual and collective learning. However, without careful design and support, learning and transformation can be impeded. Through this poster-dialogue we wish to share our experiences, learn from similar initiatives and harvest critical input.

**(A1072) Dancing philosophy workshop: building knowledge through dance, philosophy and digital humanities collaboration; Stefania Ferrando, UPHF (Université Polytechnique Hauts-de-France)/COESO Project, France.** With Clarisse Bardiot (Université de Rennes2, France); Cosetta Graffione (Cadmium Comagnie – France)

How can work on the body and space, through choreographic language, help to build a research community? How to document the creation process of an art and science collaboration? These are the challenges we explore with participants during an art-based workshop.

The dancing philosophy workshop is based on a collaborative research project between philosophy, dance and digital humanities. While there are lots of collaborations between art and the hard sciences, the humanities usually take art as an object to be analysed. The aim here is to contribute to

an artistic project through intensive collaboration between a dancer-choreographer and a philosopher; to document its creation process via Laban notation and digital humanities. The collaboration aims to produce a more inclusive research, open to social groups often excluded from philosophical knowledge, and able to support the humanities in their reflection on the body. The research is developed in the framework of a project funded by the European Commission: COESO, whose mission is to enable strong growth of citizen science projects in the social sciences and humanities and to support participatory research through a service-first approach.

Via dance and philosophy collaboration, the workshop focuses on the elaboration of tools to work on conflict situations. The participants get first-hand experience of what is at stake in the dance-philosophy collaboration. We also introduce the app we are developing to document this creation process. Link to photos: <https://dansophie.hypotheses.org/> and video: <https://vimeo.com/639139578>

**(A1085) Community Science Capacity: Conceptual Development for Building Assessments; Bruce Lewenstein, Cornell University, USA.** With Noah Weeth Feinstein, University of Wisconsin-Madison, USA

The 2016 U.S. National Academies of Sciences, Engineering and Medicine report Science Literacy: Concepts, Contexts, and Consequences introduced the idea of community science literacy (CSL), saying that communities "can achieve levels of sophistication in science literacy that transcend the knowledge or skills of any individual in the community," and that collective literacy occurs when "resources are distributed and organized in such a way that the varying abilities of community members work in concert to contribute to their overall well-being" (Snow et al., 2016). But little is yet known about how best to conceptualize, assess, or enhance community science literacy.

As the first stage to developing better assessment tools, we reviewed a range of relevant literatures: "Community capitals framework" (Flora & Flora 2008); "Science capital" (Archer et al. 2015); "Social infrastructure" (Klinenberg 2018); "Community network achievements" (Frey et al. 2006); "Transactive memory" (Wegner 1987); "Collective mind" (Weick & Roberts 1993); "Collective learning" (Borun et al. 1996; Crowley & Jacobs 2002); as well as other more general literatures on social movements, STEM ecosystems, and health literacy.

From these literatures, we propose revising the concept of "community science literacy" to the more comprehensive "Community Science Capacity": "Community Science Capacity is the collective capacity of a community to incorporate and usefully reconstruct scientific knowledge and processes in addressing community issues." This definition provides a rich framework with the potential to facilitate understanding, measurement, and enhancement of critical elements, processes, and outcomes of Community Science Capacity.

**(A1105) In search of a better live: seeing the past, present and future through the eyes of undocumented migrants, Esther Sulkers, the Netherlands.** With Vera Verhage (coordinator of the Science Shop of Medicine and Public Health UMCG and two students).

Most studies on migrants focus on involuntary migrants (refugees) and their integration into their new country of residence. There is only limited information on voluntary migrants coming from so-called "safe countries" and stereotyped framing keeps the general public from looking beyond terms such as economic migrants/refugees or "fortune seekers". Little is known about the reasons that drive people to leave their country, the aspirations (pre-migration dream) they arrive with and their search for the realization of their dream.

This study, which focuses on young migrants from safe countries who haven't been granted with asylum, is based on the premise that the search for a good life is universal. All over the world people (including us) strive for the best possible life. For some this means leaving their home country in

hopes of a better life elsewhere. Yet, life in a new country can be more difficult than imagined, especially when the lack of documentation limits opportunities. Research shows that the original dream with which undocumented migrants come, often remains unfulfilled. But what happens next? How are dreams, related goals and aspirations adjusted and what does this mean for one's sense of wellbeing?

With the use of the method 'photovoice' we give voice to people who are seldom heard. Photovoice is a participatory visual research methodology that puts cameras into the participants' hands to help them to document, reflect upon, and communicate issues of concern. Photovoice offers an alternative form of communication for participants facing communication barriers.

This research allows professionals involved in migrant care to better support these migrants with either the realization of their dream and related goals (e.g.; by directing them to opportunities for goal pursuit) or to help them adjust unattainable dreams and goals. Knowledge about the dreams and goals of this group could also be used by policymakers to better inform future migrants about the possibility of achieving their migration dream in the Netherlands.

The results of the photovoice project will be presented during an exhibition in which the photos of the participants will be presented. The research participants will be invited to be present at the exhibition and to tell more about their photos. In this project we collaborated with several partners e.g: the Science shop of Medicine and Public health, department of Sociology in Groningen, and Foundation Inlia.

**(A1109) In search of a better life; Vera Verhage, Science shop Medicine and Public Health Groningen, Netherlands.** With two master students Sociology, University of Groningen

This project, which focuses on migrants from safe countries (e.g. from West-Africa, Brazil), is based on the premise that the search for a good life is universal. All over the world people (including us) strive for the best possible life. For some this means leaving their home country in hopes of a better life elsewhere. Relationships with others may facilitate or hinder the migrant process. But who are these others (family, friends, former migrants, organizations and members from the host country)? What are their roles and in which phases of the migration process are they involved? Furthermore, what is the impact of different social networks on migrant behavior and mental health?

The purpose of this project is to get a better understanding of the lives of these people and their social networks. Such knowledge can help identify and shape better policy solutions and interventions to better support these people.

In February 2022, two master students Sociology will start with their Masterthesis project and they will address the following research questions:

- Are decisions to migrate motivated by others?
- What kind of assistance do voluntary migrants face during different phases of the migration process (pre-migration, during transit, post migration) and from whom?
- What is the impact of different social networks on migrant behavior and mental health? Is that influence positive or negative?
- What are migrants' social needs in order to live a "good life" in the Netherlands?

The results of this research may allow professionals involved in migrant care to better support these migrants with either the realization of their dream and related goals (e.g.; by directing them to opportunities for goal pursuit) or to help them adjust unattainable dreams and goals. Knowledge about the dreams and goals of this group could also be used by policymakers to better inform (via media channels and diplomatic contacts) future migrants about the possibility of achieving their migration dream in the Netherlands.

Data will be collected by the means of interviews and the main results will be presented on a poster.

**(A1132) Forging the Future of Age-Friendly Cities, Silvia Urrea, Tecnalía, Spain,** with Susie McAleer, 21c Consultancy Ltd (applying for the URBANAGE Project), United Kingdom

People are living longer lives. In the next decade, 1 billion individuals across the globe will be 65 years or older. At the same time, the proportion of the world's population living in cities will drastically increase. As people age, inequalities in the physical environment arise making it harder for older adults to move about and socialise freely. It's clear that to sustain happy and healthy populations Public Sector everywhere need to urgently plan for longer urban-based lives.

In an age-friendly city, policies, services, and structures related to the physical and social environment are designed to support and enable people to "age actively", meaning to live in security, enjoy good health and continue to participate in society. Yet in reality many older adults feel disengaged with policy processes and can feel lonely and under-valued as a member of society. As a result, services that are thought to be inclusive often fall short. For example, the benefit of accessible buses can be lost by poorly situated bus-stops with lack of seating, no shade and/or high kerbs.

The H2020 research and innovation project, URBANAGE, disrupts the status quo by recognising the untapped potential in bringing together the end-users (older citizens and civil servants) and empower them with the use of disruptive technologies to support evidence-based decision making in the field of urban planning. Its decision-support Ecosystem brings together complex big data sources from across the city and uses digital twin, big data and predictive algorithm technologies to model, experiment and explore proactive interventions for aging well in cities. Empowered by this visual technology traditionally disenfranchised older people can more easily interact and work with urban planners to co-create adaptive, age-friendly cities.

For the Living Knowledge poster session, URBANAGE would like to draw upon the experience of its partners in Helsinki, Flanders and Santander and showcase/discuss important lessons learned in engaging older adults, and adapting technology, for co-creating solutions that help everyone grow older gracefully in urban environments.

**(B0021) Implementing a community lab to include children and young adults in a discourse process to transform towards a biobased economy; Björn Huwe, Science Shop Potsdam, Germany**

With the recent green new deal the European Union aims to establish a framework to transform the European societies towards more sustainability. A biobased economy (bioeconomy) will be one major part of it, yet the societal resonances were reluctant to this approach. The research project DiReBio funded by the German Ministry of Education and Research is investigating in formats to design a communal discourse for a sustainable bioeconomy in the federal state of Brandenburg. Here the Science Shop Potsdam, in a consortium with the University of Potsdam and the bioeconomy research institut ATB, has the task to represent civil society but mainly the focus to include children and young adults into a communal discourse for a bioeconomy. In the heart of this work, a biology lab called biopunk.kitchen was implemented into an existing community center based in Potsdam. The special equipped kitchen was designed mobile to move when needed and explain fundamental concepts of a bioeconomy from circular economy and a multiple use of resources to genetic engineering and artificial intelligence. We will report from our experiences from implementing the community lab and the realization of workshop formats together with the consortial partners.

**(B1057) The human factor: what you can achieve with more time; Anne Laybourne, UCL, UK.** With Joanna Socha, UCL, UK

The Community Research Initiative is a science shop/service learning initiative at UCL for master's students to connect, co-design, and partner with voluntary sector organisations during their dissertation. During 18-19 and 19-20, the science shop was developed and delivered by a part-time member of staff (2.5 days/week). Following fixed-term external funding, this increased to full time, as well as 2 days/week administrative support. This colourful poster presentation focuses on the achievements made possible in 18 months of increased 'human factor' including: systems and process; community relationships; and institutional coverage. The case will be strongly made for university-based science shops and service learning initiatives to be properly resourced, given the specialist skills required.

**(B1103) Teaching Philosophy "Outside the Walls": a practical approach to philosophical education; Yorick Karseboom, University of Groningen, the Netherlands**

A poster presentation of the results of our try-out year of the new module of practical philosophical education. The Knowledge Centre Philosophy (science shop of the philosophy faculty of the RUG) has started a collaboration with the teachers of the module "Buiten de Muren" (Outside the Walls) in which students tackle philosophical questions or problems from a source outside the academia. Students are challenged to create a creative product which applies their philosophical knowledge in a way that is beneficial to society in a broad sense. To provide the students with relevant subjects and questions the KCF has actively sought connections with local organisations and businesses. The idea is to discuss the development and maintenance of these connections with colleagues on the basis of the poster.

**(B1125) Reefnet; Desiree Jones, Living Lab, Canada.** With Maeve Lydon, Lyndsey Joseph. University of Victoria (Living Lab)

My presentation is going to be based on the traditional practice of the SXOLE, which is Traditional Reefnet fishing for peoples of the salish straits and has been a practice that has been around for hundreds of years. It was more than just a way to feed our families and communities, it was also a way that we governed our people, policies, and spirituality. By reconnecting to parts of our culture that was once (and still very much is) a huge part of our identity it can be healing for our communities to reconnect to our history. There can be many ways to engage youth and future generations in part of revitalizing traditional knowledge and practices. By engaging with this it has been known to benefit the overall health of our communities mentally, emotionally, physically, and spiritually. The research that I have done for this project thus far consists of the importance of the reefnet in the perspective of WSANEC people, which is where I'm from.

**(B1127) "How students can make a history museum attractive to young adults"; Eline Huizing, Science shop Language, Culture and Communication – University of Groningen, Netherlands.** With Vincent Hazelhoff, Science Shop Language, Culture and Communication and Students from the master History and Heritage Consultancy.

The new Historical Museum in Groningen is now in its transition phase and wants to be the main museum that focuses on regional history. Additionally, it aims to be a place where history is being made. They want to attract more youth and young adults by creating interactive experiences and creating spaces where young adults want to come together. The idea for the new History Museum is to make different rooms with each a different theme that discusses a part of history. The museum would like to know how to make history attractive to people from the age of 16 to 30 and how this target group will respond to the different thematic rooms. To help them with this goal, they contacted the Science Shop Language, Culture and Communication from the University of Groningen. The Science Shop connected this project to students from history since this was the best fit for the

project. Students from the master History and Heritage Consultancy are supporting the museum in achieving that goal by creating one specific room that is attractive to youth and young adults. By conducting research, the students will try to figure out what exactly attracts youth and young adults to the Historical Museum, therefore the students will try to engage with this specific group. Young adults and youth are in this case the focus group and the specific room that the students focus on will be a pilot for the other rooms in the museum. The students will start this project at the beginning of February this year and will be finished in July. After five months, the two students will deliver a project or exhibition plan to the museum, which the museum can then implement.

This project shows the problem of a cultural institution and how the Science Shop can connect this to academic education. This project is interesting since it will benefit the students and the museum both. The students will have more experience after this project and have had the chance to be a part of the new Historical Museum by creating one thematic room. After the transformation of the museum, the students can really see their contribution. The museum will have more knowledge about what attracts youth to this museum and can build on that with the other thematic rooms and the museum overall. The museum can also use this information in the future if they have new plans or other projects. Here is the chance for our international guests to get a glimpse of the local history and see what is going on in the city of Groningen.

**(B1146) School performance and the impact of school time models on learning outcomes in primary education; Denise Leidelmeijer, University of Groningen, Netherlands.** With Laura van Beek, University of Groningen, Netherlands

The research concerns a literature review, which focuses on the question of what advantages and disadvantages the new school time model of Primary School X has and how this school can take full advantage of the chosen school time model to achieve the best possible learning outcomes. The literature review revealed that schools can make a choice for a new school time model as a result of different perspectives: organizational, pedagogical and didactic perspective. The factors that influence students' school performance are, amongst others; executive functions, motivation and social-emotional development, but also attention, concentration and biorhythm. Where possible, a link has made between these factors and the choice for a certain timetable. This research has a larger impact than intended; the results of this research turned out to be very useful for other relevant educational stakeholders as well. In my poster presentation I will highlight the whole impact of my research.

**(B1152) Towards Employability, Education and Entrepreneurship: Co-creating changed mindsets through playful project-based learning in South African primary schools; Merna Meyer, North-West University, South Africa.** With Dr Ewie Erasmus, Ms Linda Hesse and Dr Martha Matashu (North-West University).

South Africa has suffered persistently high levels of unemployment for many years. Since 1997, South Africa became part of the top ten countries globally with the lowest employment rate (<http://www.statssa.gov.za>). Young people are particularly at risk of not finding work which is attributed to i) poor educational outcomes, ii) lack of coordinated further education system, and iii) persistent individual and household barriers. Considering what the researchers know about the role education plays in unemployment and its impact on wages, a significant portion of youths will join the ranks of low-income earners in the future and thus perpetuating the cycle of poverty and inequality. To address the above concerns, we need to introduce a radical change in the education system. Mandated by the Department of Basic Education (DBE) our aim is to develop effective educational training with teachers and revise teaching strategies to change mindsets and improve

skills whereby school children can flourish, reach their potential and see a future for themselves as employable life-long learners. We align with the LEGO foundation (2017) and Ecubed ideals (entrepreneurship, employability and education) using playful project-based learning to transform current practices. Play constitutes of active, collaborative, experiential, guided and discovery pedagogies which can positively affect student learning across social contexts. Teaching in contexts and incubating the real world in school settings can ignite entrepreneurship and contribute to sustainable living. In collaboration with the teachers, we research how playful project-based learning guide the teaching of school children to attain a mindset of self-efficacy and develop entrepreneurial life skills. We thus want to create learning experiences for primary school children that are meaningful, actively engaging, iterative, socially interactive, and joyful. In the spirit of Ubuntu, we follow a PALAR cyclic process, to co-create and capacitate school children. The findings are shared with the DBE and will escalate to other schools introducing more effective educational strategies. The adopted program is aimed to be implemented in South African schools by 2030. The poster presentation summarises the different cycles and the effectiveness of community-based research in various contexts. The QR codes and video links will give a live view of the interactive engagement between the participants during the PALAR process.

**(C0018) Living Lab ReconciliAction: Weaving Science and Indigenous Knowledge for EcoCultural Restoration; Maeve Lydon, Living Lab- UVic/Community Project, Canada.** With Lyndsey Joseph – Living Lab Researcher, UVic Student, Songhees First Nation; Desiree Jones – Living Lab Researcher, UVic Student, PAUQUACHIN First Nation; Jessica Joseph, Living Lab Arts and Community Engagement Coordinator, Songhees First Nation; Darcy Mathews, Archaeologist-Ethnobotanist, UVic Professor of Environmental Studies

The Living Lab Project connects eco-cultural restoration, science and indigenous knowledge on Canada's west coast and on the traditional territories of the WSANEC and Lekwungen indigenous peoples where the University of Victoria is located. The Living Lab project is relevant and timely in Canada and globally as it attempts to transform science education and the traditional western scientific paradigm to connect climate action, cultural and biodiversity in schools and on campus through community driven research and place-based experiential learning. Indigenous peoples in the territories of what was named 'Canada' by Europeans in 1867 have lived sustainably on the lands and waters since time immemorial. As a logical by-product of genocidal policies and practices by the colonial governments, churches and schools their intimate and profound scientific knowledge of and reverence for nature and creation has not been incorporated into mainstream education and research systems. Indigenous children and youth are also greatly under-represented in science education in schools and on campuses and therefore impeded from becoming teachers and scientists. To address this tragic fact and to respond to the Call for Action by the Truth and Reconciliation Commission in Canada - [http://trc.ca/assets/pdf/Calls\\_to\\_Action\\_English2.pdf](http://trc.ca/assets/pdf/Calls_to_Action_English2.pdf) the Living Lab Project was created focused on Restoration, Capacity Building, Education and the development of a Community of Practice. At the University of Victoria faculty from Education, Biology, Geography, Environmental Studies and Child and Youth Care have partnered with local government, NGOs, the local WSANEC and Lekwungen Indigenous nations and local schools to support indigenous/community-identified ecocultural restoration projects and to create place based learning and curriculum. The students, esp Indigenous students, can also get credit for participating in these projects. This interactive poster - visual presentation by Living Lab- WSANEC and UVic-community members features #1 - The revitalization of valuable-disappearing indigenous scientific / elders knowledge woven into current education and planning systems; #2. UVic and academia's role in being a national –global innovator in indigenous led and based eco-cultural restoration, science, land-marine based curriculum and intellectual property rights; #3. The creation of a sustainable eco-

cultural restoration and monitoring program, driven by the sustainable land use and educational priorities of regional First Nations.

**(C1009) Cork City Parks - Quality & Condition Survey - Community Research; Michael O'Sullivan, University College Cork, Ireland**

As our city population is projected to rise substantially in the next decade it is clear that we must protect, enhance and develop our urban green infrastructure as part of making Cork a truly 'liveable' city. Key stakeholders will include a wide range of community groups. There is an increased interest in public green spaces and their potential as areas for natural play, activities, discovery, learning, observation, relaxation, and as outdoor community hubs for all ages. There have been many focused studies on the importance of urban spaces for long term health and well-being. The area of Cork City has been extended to 187km<sup>2</sup> and has 44 listed parks and playgrounds on Cork City Council's Parks webpage.

As a first phase of action during one of the lockdown periods between March/May 2021 an independent 'call-out' was made on Twitter to ascertain the quality and condition of the existing spaces. 31 people volunteered and returned surveys under the following headings: Accessibility, Ancillary Accommodation, Landscape Features, Management, Education, Play Value, Safety & Security, Cleaning & Maintenance.

**(C1076) Co-creating and co-designing a serious game about bioeconomy with citizens and all quadruple helix stakeholders; Tabea Waltenberg, Wissenschaftsladen Bonn - Bonn Science Shop, Germany. With Norbert Steinhaus, Bonn Science Shop, Germany, Lena Werthmann, Nurogames, Germany.**

The poster will introduce the co-design process of a serious game about bioeconomy with citizens and all quadruple helix stakeholders.

The 3-years project 'Allthings.bioPRO – Game changer for the bio-based economy' is run by 12 partners in six European countries and is funded by the Bio Based Industries Joint Undertaking under Horizon 2020 and coordinated by FNR (Agency for Renewable Resources), supported by Bonn Science Shop for the engagement activities and Nurogames for the game development.

Allthingsbio.PRO applies a comprehensive participatory approach to engage citizens and all quadruple helix stakeholders in six European countries in the co-creation and co-design of a serious online game as innovative tool to raise awareness, support learning and gather citizen generated input and data to provide direct input into the agenda of the bio-based industry. The project focuses on four themes (missions) closely related to everyday life of citizens: food packaging, fashion and textiles, kids and schools, and jobs and careers.

The poster will present the co-design process of the serious game which ran in two rounds each of virtual co-creation and co-design workshops where participants provided input to and gave feedback on different stages and versions of the game development. They co-designed the game narrative, game mechanics and the game world, shaped characters and described mission related content together with the game developer. The goal was to ensure the inclusion of opinions, needs and ideas of citizens and users throughout the whole game development process to make the game meaningful for them.

The poster presentation's objective is to share an example of a co-design approach and exchange about opportunities, challenges and consequences for research and development. As such the poster will give insights into the workshops, show the workshop results and their implementation into the overall game development. Additionally, key learnings will be shared. The poster will use a mix of visuals (drawings, mood boards, mockups, photos, graphics) and text (short quotes from

interviews with participants' reflections). The co-design process is pitched by the project partners responsible for engagement and game development

**(C1114) The sustainable local alternative to fast fashion; Jan-Philipp Bussmann, Science Shop Language, Culture, Communication, University of Groningen, the Netherlands.** With Kate Lehane (RUG-Student, Ireland); Ornella Berta Huayapa (RUG-Student); Marcus Dugan (RUG-Student); Felix van Driem (Branchevereniging Modeambachten, Netherlands)

Local tailors that focus on handcrafted clothing production can't compete with the global fast-fashion industry in price and promoting their products. However, their sustainable small-scale production offers a much needed alternative to the polluting fast-fashion industry. How can local tailors benefit from the growing consumer desire to shop sustainably? In this project from the Science Shop Language, Culture and Communication from the University of Groningen three international students researched this issue. The initiative came from local tailors within the branch association BMA in the Northern Netherlands. The aim of the collaborative project was to develop a strategy to improve the salience of the tailor's network.

The students worked together in a diverse team within the practical assignment of the Career minor. In this minor they develop skills to collaborate and communicate and discover how theoretical and practical knowledge can enhance each other. The collaboration between the students and the members of BMA really created synergy. In focus groups they worked on analysing the current organisation's mission statement and structure to find areas for improvement. The students also developed a marketing strategy to enhance the market position of the organisation against the big players. The students' research helped the BMA to become aware of their strengths and possible choices in strategy, so they can improve their visibility and position in the sustainable clothing production in the Dutch market.

Through the presentation of this impactful project we like to inform and inspire others to take on global issues on a local scale. We hope to discuss our experiences with international colleagues who are interested in this theme and who can broaden the perspective, for example from the global south. As this is an example of how a local question is connected to a global problem, there is a great potential. Internationally connected small Science Shop projects could find local solutions for worldwide injustice and pollution, that seems too big to handle. Like in this case, the negative impacts of the fast-fashion industry.

**(C1117) EvoScope; Karin de Boer, Science Shop, University of Groningen, Netherlands.** With Karin Ree, Science Shop, University of Groningen, Netherlands

Cities are expanding everywhere, offering challenges (traffic, pollution) but also opportunities (habitat, food, shelter) to wild animals and plants to rapid evolution of species in the urban ecosystem. In our EvoScope project, we propose that urban evolution is a fruitful framework for co-creating research, bringing together scientists, urban planners, NGOs, policy makers and the general public to (a) study the process of rapid evolution in the Anthropocene and (b) apply that knowledge to organizations, and urban inhabitants. We will study a tractable set of animal and plant species in several Dutch cities and surroundings. We use citizen-science and other scientific approaches to test if and how these species evolve in response to novel substrates, artificial light, and fragmentation. Simultaneously, we will investigate how citizens' involvement in our project impacts their science literacy and willingness to act, ultimately aiming to create future-proof, green cities.

**(C1149) Looking beyond the dykes; Karin de Boer, Science Shop, University of Groningen, Netherlands.** With Marjanne van der Bijl, Master Science Education and Communication, University of Groningen, the Netherlands; Karin Ree, Science Shop, University of Groningen, the Netherlands;

Eveline de Smalen, Rachel Carson Center for Environment and Society,  
Ludwig-Maximilians-Universität München, Germany (Currently working at World Heritage Centre  
Wadden Sea)

Looking beyond the dykes: a wider perspective for the World Heritage Centre Wadden Sea: The Wadden Sea is an Unesco natural world heritage area. The new World Heritage Centre Wadden Sea (WHC) aims to be both a visitor center and a place for research and living labs. Science Education and Communication student Marjanne van der Bijl examined the potential collaboration between the WHC and the University of Groningen through an interdisciplinary perspective, one that looks further than just nature and biology. In fact, the socio-cultural aspects of the area have had a major impact on the history, development and current state of the Wadden Sea. Marjanne contacted researchers from fields of knowledge that are not necessarily obvious and found broad interest for a wider perspective, both on the area and on public engagement.

**(D0041) Identify sleep disorder due to Industrial Noise Pollution; Louis Dingemans, Louis Computer Systems, Belgium**

The 2018 WHO Noise Guidelines for the EU Region [1] report that environmental noise is an important public health issue, featuring among the top environmental risks to health. It has negative impacts on human health and well-being and is a growing concern among both the general public and policy-makers in Europe.

The main purpose of these guidelines is to provide recommendations for protecting human health from exposure to environmental noise originating from various sources: The report tries to clarify the exposure-response relationship between exposure to environmental noise (reported as various indicators) and the proportion of people with a validated measure of health outcome.

The report topic on Wind turbines noise could not recommend any health impact preventive measures, due to the low evidence quality of the reviewed night-time exposure to WT noise studies. To eliminate all WHO reported noise health impact studies weaknesses, I have developed a new robust industrial noise pollution measurement framework and together with an objective health biometrics measurement framework. To resolve the lack of number of people assessed, I have decided to involve the Citizen Science community in this project.

The first real-live measurement test was performed not in a WT environment, but in a complex noise environment consisted of a mix of different noise pollution sources (High Tension Voltage transformer, Industrial paint shop, Cogeneration or combined heat and power (CHP) units). I have noticed very high impact on the people living nearby these noise pollution sources. The health complaints from these people are completely ignored and the current government noise standard are not taking into account the impact of low frequency & infrasound to the health of citizen living nearby these noise sources.

Citizen Science participation: We are also developing an affordable portable noise-dose monitor. So that the citizen scientists can record their noise pollution exposure (7days 24H). The data will be sent via cloud application to a central HUB so that we can produce all the necessary data quality controls and produce the acoustic analysis reports. Noise & Health impact meta Databases will be available to the science community to perform the appropriated large scale Epidemiologic studies.

**(D1058) Study of Hepatitis A markers among school children in Tunisian rural areas; Asma Ferchichi, Institut Pasteur de Tunis - "Science Together" Science Shop, Tunisia.** With Siwar NSIBI<sup>1</sup>, Hssine KARIM GLAIED<sup>2</sup>, Dorra REZIG<sup>1</sup>. 1 Laboratoire de Virologie Clinique - Institut Pasteur de Tunis. 2 Association Scout Without Borders - Sousse.

Hepatitis A Virus (HAV) is responsible for the most common form of acute infectious hepatitis worldwide and one of the leading causes of food-borne infections according to the World Health Organization. In Tunisia, Hepatitis A remains a frequent infection despite the progressive improvement of the socio-economic level and hygiene conditions which caused a gradual decline in the age of first infection. Recently, an increase of HAV infection cases has been noted and periodic micro- epidemics have been recorded. In this new epidemiological context, the Ministry of Health introduced, in 2018, a first dose of HAV vaccine among 6 years old school children. This work is a sero-epidemiological study aiming to explore the HAV immune status of school children in rural areas with precarious health conditions.

This Science Shop project is implemented in partnership with the Scout Without Borders CSO, Institut Pasteur de Tunis SS "Science together" and the Laboratory of Clinical Virology at the Institut Pasteur de Tunis.

Our study involved 258 children aged between 6 and 15 years, enrolled in three schools located in rural areas, of EL KalâaKebira - Sousse: villages of El Boura, El Gabou and EL Salaânia. The methodology of this project was performed through three steps: first, an ethical file was submitted for approval to the Biomedical Ethics Committee of the IPT; then, second and third, awareness and sampling days were conducted to screen IgM and IgG anti-HAV antibodies on collected serums using ELISA serological tests.

The results showed that the majority of children immunized against HAV belong to the 7-8 year aged group who benefited from the vaccination campaigns in 2018 and 2019; this reflects the successful introduction of the HAV vaccine in schools. Nevertheless, our results showed that older generations (4th, 5th and 6th grade), who did not benefit from the vaccination during the first school year, have lower immunization rates, exposing them to severe symptomatic acute infections. Our results also reported some "poor responders" to the HAV vaccine, which could be explained by a genetic predisposition and/or the need for a booster dose.

This study clearly confirms the epidemiological transition of hepatitis A that our country is experiencing; it represents a first evaluation of the impact of HAV vaccination, recently introduced in the vaccination calendar, in the school environment, for 6 year old children.

**(D1118) Noise against Noise: help for low-frequency sound complainants; Karin de Boer, University of Groningen, the Netherlands.** With Frits van den Berg, Karin Ree, Science Shop University of Groningen, the Netherlands

Low frequency noise can disturb people's sleep for years. The origin is often unknown, leading to powerlessness and stress. 'Masking' the LF noise with neutral random noise is an option. Since 2007 the Science Shop Groningen has distributed free CD's and/or digital files with masking noise. In 2018 we started a retrospective survey in a group of about 100 Dutch applicants of the CD. A majority indicated that their sleep has improved by playing the CD, even on the longer term, while other measures were less effective. We would like to inspire you and share the survey, as to include participants in other regions. Just contact us!

**(D1123) A collaborative research project between Cancer Focus Northern Ireland and Biomedical Sciences at Queen's University Belfast to discern current public opinions on skin cancer and UV awareness in Northern Ireland; Maelíosa Theresa, Mc Crudden, QUB, Northern Ireland.** With Daniel Crummey, Centre for Biomedical Sciences Education, Queen's University Belfast, Northern Ireland; Samantha Taylor, Centre for Biomedical Sciences Education, Queen's University Belfast, Northern Ireland; Eileen Martin, Science Shop, Queen's University Belfast, Northern Ireland; Marbeth Ferguson, Cancer Focus Northern Ireland

Skin cancer is one of the most common cancers in Northern Ireland (NI) with ultraviolet radiation (UVR) having been identified as the main carcinogen in the pathogenesis of skin cancers. The charitable organisation, Cancer Focus Northern Ireland (CFNI), has provided care and support services for cancer patients and their families, as well as offering a range of cancer prevention programmes in NI, over the course of the past 50 years. They are pioneering UV awareness in NI by means of campaigns aimed at raising awareness of the deleterious impact of UVR, reinforcing the need for the use of adequate sun protection and diminishing pro-tanning stigma. The current research project, conceived in collaboration with CFNI and the Queen's University Belfast (QUB) Science Shop, was designed and carried out by a final year BSc. Biomedical Sciences student in QUB. It involved the creation and dissemination of an online survey populated with questions aimed at providing an up-to-date representation of public opinions on topics including UV awareness, sun protection and tanning in NI. The survey was disseminated to a cross-section of the NI population using online tools including QUB student email lists, weekly QUB staff bulletins, and CFNI social media platforms.

Reflecting on the results, the sample population (n=270) frequently chose scenarios described as "cool/cold", "overcast/cloudy" as lower risk for high UV levels. Sun Protection Factor (SPF) was found to be the most common sun protection (86.3%) used while the correct usage (i.e. sufficiently frequent reapplication) of sunscreen was found to be poor (21.5%) amongst respondents. Younger respondents (<30 years) were more likely to correctly answer UV index-related questions, while older populations (>30 years) were more likely to correctly use sun protection. Suntans were viewed as "attractive" (49.7%) or making one look "healthier" (61.5%). Finally, approximately 83% of those surveyed indicated that they would support a total ban on commercial sunbeds in NI.

In conclusion, this project elucidated key areas of public misunderstanding regarding UV awareness. It revealed habits of poor sunscreen reapplication, suggesting a tendency towards prolonged sun exposure with insufficient sun protection and provided evidence of a continuing pro-tanning stigma in NI. A further collaborative research project between CFNI and QUB Science Shop, elucidating motivations behind the use of sunbeds, is currently being undertaken.

**(G0016) Socially Engaged Universities (SEU-Erasmus+ project); Lindsey Anderson, University of Exeter, United Kingdom.** With Katja Rusinovic, The Hague University of Applied Sciences (THUAS), Netherlands; Alexis Dewaele, Courtney Marsh and Noel Klima, University of Ghent, Belgium; Philipp Pohlenz, Tim Fluegge and Alex Chmelka University of Magdeburg, Germany; Eleonora Ferraresi, Marianna Guareschi, Emanuele Castelli, University of Parma, Italy; Mary Griffith, Clotilde Lechuga, Inmaculada Santos Diaz, University of Malaga, Spain

**Context:** As higher education faces increasing pressure from political, economic, social and environmental agendas, there is increased public interest in the impact of universities on their regions, and there are growing calls for universities to be more socially relevant and responsible by addressing the needs of local communities.

**Objectives:** Socially Engaged Universities (SEU) and Communities and Students Together (CaST) were Erasmus+ funded projects which aimed to share experience and know-how of the relationship between European Universities and their societies. SEU explored the concept of Community University Partnerships to understand how universities can respond to local community needs and perform or broker research with and for communities, in a demand-driven way. The aim of CaST was to advance our knowledge and understanding of what constitutes a successful and sustainable Engaged Learning programme and to incorporate successful elements in a series of new sustainable programmes in each partner university.

**Methods:** Both projects undertook a similar methodology. In each case we conducted a state of the art review, aiming to identify the processes, structures and governance which best nurture successful

partnerships or programmes as well as the facilitating and hindering factors which influence the collaboration process. We then explored successful examples of Community University Partnerships (SEU) or Engaged Learning initiatives (CaST) in each partner institution, trying to understand what works and why, and measuring the impact of the projects, using interviews, documentation and observations. The findings from these early outputs informed the co-design of a community-led partnership or an Engaged Learning initiative in each partner institution. Finally, the lessons learned from each project have been incorporated into a series of accessible resources within two Toolkits which will help universities and communities co-design collaborative projects or Engaged Learning initiatives which address local societal challenges.

Results and impact: These projects have enriched our understanding of the ways universities can become more embedded in, and responsive to, the needs of their society. Lessons learned will enhance the relevance and impact of engaged research into societal issues such as health and wellbeing & sustainability.

**(G0044) The Seven Kingdoms of Wester Hailes: Developing Researchers in Place; Dawn Smith, Edinburgh Napier University, Scotland, UK**

This poster will showcase the Seven Kingdoms project which has taken place in Edinburgh from 2019. The Seven Kingdoms is a place-based partnership project between Edinburgh Napier University in Scotland and communities in Wester Hailes, an area in the South West of the city. The project has focused on the seven distinct hyper-localised neighbourhoods which make up Wester Hailes (which is one of Scotland's most economically deprived areas).

This project is based on a partnership with community partners and activists, involving local people in the co-design of the project and its delivery. It also aligns with the Scottish Parliament's Planning Act (2019) which encourages communities to produce their own Local Place Plan, increasing local participation with local issues.

The poster will show how the project developed, creating an innovative approach to investigate and establish means of ensuring our four guiding principles for community research: Participatory (conducted with, rather than for, the community); Polyvocal (inclusive and seeking to be an output for all); Performative (communicating our findings through creative practice); and Placemaking (seeking to discover and disseminate how meaning is attached to place).

It will show how the project, which was intended to be entirely face-to-face with interactive elements, navigated the challenges of successive lockdowns in Scotland, building on the strong networks established across the community.

The collaborative approach of this project, in which all participants are both 'researchers' and 'community', showcases the synergy between research with communities. We look forward to sharing our experience with conference participants and learning from their experience.

**(G1002) STEP CHANGE, a three-year journey to explore the potential of Citizen Science; Amalia Verzola, EUSEA, Europe**

The project STEP CHANGE, funded by H2020 and launched in March, is implementing five Citizen Science Initiatives (CSIs) in the fields of health, energy and environment. The CSIs will tackle the issues of wildlife conservation in Slovenia, non-alcoholic fatty liver disease in the UK, energy communities in Germany, infectious disease outbreak preparedness in Italy, and off-grid renewable energy in agriculture in Uganda. The project will bring novelty in citizen science research while contributing to broader science aspects. The overall objective of STEP CHANGE is in fact to explore the potential of citizen science and to formulate recommendations and instruments for better

cementing this approach within R&I institutions as well as changing researchers' mindsets on its value. The project, which aims to make science more socially robust, inclusive, and democratic, will ensure that research institutes make the most of what citizen science has to offer, whilst also identifying, analysing, and limiting the associated risks.

Our presentation will include main features of the project, and provide an overview of the multifaceted methodology STEP CHANGE makes use of to foster alignment of CSIs with local contexts, nurture mutual learning, and encourage self-reflection through the means of participatory evaluation exercises. Hence, the presentation will provide details about the CSIs but also about the horizontal activities of the project (scoping exercise, mutual learning and training activities, participatory evaluation, stocktaking process), which have been designed to increase the relevance, inclusiveness and sustainability of the initiatives. In this respect, we will also focus on the three levels of participation of the CSIs (core team members, citizen scientists and stakeholders), to explain what the mechanisms put in place to boost the level of engagement are.

The presenter, Communications Officer for the Consortium, will engage in exchanges with LKC participants to disseminate project's first results and inform about project's methodology, but also to develop potential synergies with interested peers.

**(G1051) Designing a "collaboratory" to enhance participatory research in the social sciences and the humanities; Alessia Smaniotto, École des hautes études en sciences sociales (EHESS, France) and OpenEdition Centre, France.** With Kelly Achenbach, Max Weber Stiftung, Germany

"COESO" (COllaborative Engagement on SOcietal issues) is a 3 year (Jan 2021- Dec 2023) research project supporting and then working together with 10 participatory research "pilot" projects that involve the social sciences and humanities and civil society engaged stakeholders as artists, NGO members, journalists and lay citizens. COESO is a twofold research project: it provides the framework for carrying out this field research—and the framework for studying and understanding them— with the aim to develop a European digital platform for participatory research in the humanities and social sciences, which we envision as a "collaboratory".

The pilots involve diverse disciplines and employ innovative methodologies to engage with local communities (e.g. inhabitants of city quarters) and communities of practice (e.g. investigative journalists) around Europe to tackle pressing societal issues such as sustainable cities, migration, justice, the fight against organized crime, and gender equality. Together, COESO and our 10 pilot projects are identifying obstacles that hinder citizen science in SSH and developing solutions to overcome them. We are also sharing experiences and lessons learned through a mutual learning exercises series.

COESO's digital platform project is a co-design endeavor with 18 partners from 6 European countries, including research units, SMEs, associations, and public and private foundations. Together we are building this "collaboratory," which will help its users find new partners, engage in collaborative work in a digital environment, and facilitate their search for funding targeted towards participatory research in the SSH.

By the end of the project, our goal is to have increased the visibility of citizen science in SSH disciplines, to have showcased how SSH contributes to citizen science, and to have expanded access to funding for SSH citizen science projects. June 2022 marks the midpoint of our project, and we would like to share what we have learned about researcher-citizen collaboration, the obstacles we have identified and the steps we are taking to overcome them.

We will be glad to condense all the work done in a 2-minutes pitch with a clear-catchy visual, and expand it again in 60 minutes with any interested participant wandering in the poster session.

**(G1060) Student Volunteering in Higher Education; Adel Coleman,**

**University College Cork, Ireland.** With Ruth Lynam Dublin City University; Lorraine Tansey National University Of Ireland Galway; Simone Cameron-Coen Trinity College Dublin; Anita Conway TU Dublin; Claire Flannery Student Volunteering, TU Dublin; Theresa O’Leary UCD; Niamh Byrne UCD in the Community; Gabriella Hanrahan University of Limerick; Ian Russell, Maynooth University; Jennifer Fitzpatrick Limerick Institute Of Technology

Student volunteering, a part of community-based learning, is a leading aspect of Irish higher education institutions’ (HEIs) civic role and a driver of Ireland’s agenda to create an island of inclusion and engagement. The current COVID-19 health crisis has shone a light on the hands-on approach of our third-level student volunteers, addressing real-world problems through volunteering. During the height of the pandemic, thousands of Irish higher education (HE) students were at the frontline, applying their skills as volunteer paramedics, supporting vulnerable older people, carrying out peer to-peer mentorship, online school support programmes and homework clubs, keeping the most vulnerable members of our society in school and enabling them to transition to further and higher education. Their volunteer activities have had a profound impact on supporting local communities. Evidence suggests that the potential for student volunteering expansion across all HEIs is greater than at any other time in the history of HE student volunteering.

This poster presentation will:

\*Highlight the findings and recommendations of the recently published *The Value and Impact of Higher Education Student Volunteering in Ireland* (compiled by the Irish University Association Campus Engage Volunteering Working Group).

\*Highlight a series of recommendations for all stakeholders to contemplate about how HEI’s, students and voluntary organisations best work together to meet future demand and maintain a quality student volunteer experience for all. National data from the Irish Student Engagement Survey (StudentSurvey.ie) provides empirical evidence that the potential and demand for student volunteering infrastructures is strong across Irish campuses.

\*Introduce StudentVolunteer.ie and reflects on the benefits of the first-ever student volunteering online platform [www.StudentVolunteer.ie](http://www.StudentVolunteer.ie). The site is a free interactive online platform for higher education (HE) students, HEIs and community organisations. This management system tracks, records, and reports on HE student volunteering and learning through reflection. Students can apply and record their volunteer hours and volunteer experience and HEI administrators can record and report on their student’s volunteering. It is a bespoke, state-of-the-platform, the first of its kind for student volunteering anywhere in the world.

**(G1070) How does a Citizen Science App work– do you know? Philipp Hummer, SPOTTERON Citizen Science App Platform, Austria**

We all use digital Apps all the time, each day, every hour, every minute of our life. But when asking the question „How does the technology behind an App work?“ many cannot answer – even those coordinating Citizen Science App projects or Public Engagement initiatives.

In this poster, Philipp Hummer from SPOTTERON Citizen Science ([www.spotteron.net](http://www.spotteron.net)) answers this question with an overview of the processes of an example App on the platform. The technology behind a modern Citizen Science or Public Engagement App involves a complex ICT infrastructure to ensure performance, safe data transfers, and user privacy. Various services and software packages handle different tasks and data processing, enabling the public to contribute observations via mobile devices. We follow the path of a user’s submission in a Citizen Science App from the photograph and data inputs to processing, storage, and the data administration by a project’s team. Integrated community features and communication tools complete the process of forming a living environment

for buzzing communities and social interaction.

We all use user-driven Apps every day on our smartphones. Getting an insight into the involved processes behind it will support our better understanding of essential aspects of digital tools and Citizen Science Apps and the underlying technologies in practice.

**(G1200) SCISO (Science with Society) - Video tutorials on science ethics and science communication; Lisa Herzog, University of Groningen, the Netherlands**

SCISO - Video tutorials on science ethics and science communication is a project by the Global Young Academy (GYA) and the German National Institute for Science Communication (NaWik), funded by the VW Foundation.

Scientists around the world are confronted with threats to public trust in science on issues ranging from public health measures to climate change. As members of the Global Young Academy, we believe that young scientists have a particular responsibility to contribute to closing the perceived gap between science and society. However, as scientists dedicated to their fields, they often lack the tools, the conceptual framework, and the encouragement to consider such questions and engage in communication activities.

Our project "SCISO" aims to address this: it provides easily accessible content, in the form of freely available video tutorials, that enable scientists to reflect about the role of science in society, and to communicate with broader audiences. It provides insights not only about the practical tools of science communication, but also about underlying issues, e.g. perspectives on scientific integrity. Our target audience is early career researchers around the world who want to contribute to a trustworthy and trustful relationship between science and society.

For this project, we have paired up with the German National Institute for Science Communication (NaWik). Building on research in science ethics, sociology of science and science communication, we have produced video clips that contain both theoretical content and practical, hands-on tips for getting started in science communication. The films cover topics such as how to interact with lay people, taking responsibility for one's research, or opening up the "black box" of science. We will also present "best practices" of select researchers regarding various forms of outreach and communication, for example in policy advice.

## Videos of 9<sup>th</sup> Living Knowledge Conference June 29<sup>th</sup> – July 1<sup>st</sup>

### DAY 1 – Wednesday June 29th 2022

09:00-10:00

[Opening and welcome](#) – Henk Mulder, Norbert Steinhaus, Saskia Visser and the local Science Shop team, together with Esther Jansen (Undisturbed foundation) and Wieke Steenbruggen (student)

10:00-11:00

[Synergies in Public Engagement and Co-Creation](#). With Kate Morris (Campus Engage Ireland) and Rowinda Appelman (City Deal Kennis Maken). Chair: Henk Mulder.

11:30-12:30

Session: [The INSPIRES legacy](#): an EU-funded international project to support (new) Science Shops. Chair: Leonardo de la Torre-Ávila, IS-Global, Barcelona.

### DAY 2 – Thursday June 30th 2022

09:00-10:30

[A critical reflection on research with and for society in a world of contested expertise](#). Panel discussion with Rajesh Tandon (PRIA), Lisa Herzog (University of Groningen), Claudia Göbel (Institute for Higher Education Research Halle-Wittenberg). Chair: Nick Nieuwenhuijsen (Groningen Council member 2019-2022).

Introduction by: Yorick Karseboom (Knowledge Centre Philosophy)

11:00-12:30

[Celebrating Living Indigenous Knowledge and Healing Relationships](#) Panel: Sharing the Living Knowledge Lab Community-Campus-Indigenous Partnership from Coast Salish Homelands/ West Coast of Canada. Chair: Maeve Lydon (Living Lab – University of Victoria, Canada)

### DAY 3 – July 1st 2022

#### Streaming session

09:00-10:30

[Diverse participatory inclusion in research](#): Five research presentations. Chair: Reka Matolay (Science Shop Corvinus University, Budapest, Hungary)

10:30-11:30

[The Ideas Fund](#), Semi-plenary session with Chris Manion (British Science Association, UK) and others. Chair: Henk Mulder.

11:30-12:00

[Closing session – Looking back at the conference and forward: what have we learned and what should happen next?](#)