



UNIVERSIDADE
NOVA
DE LISBOA



Webinar

The Role of Universities in Fostering High Quality Citizen Science

**Thursday, 24 September 2020
(15:00 – 17:00 PM CEST)**

**Participation is free, but registration is compulsory
via [this link](#).**

The role of universities in fostering high quality citizen science is more and more visible. Citizen Science has clearly become a movement that involves citizens in scientific processes and knowledge, supporting research in a wide range of scientific topics. In addition, the activity of citizens interested in science can create big data useful for universities in general, and in particular by scientists and politicians. Recently, this area has grown significantly, and a large number of scientific articles created at Universities refer to Citizen Science contributions. Worldwide associations have emerged that bring in a common framework on the knowledge acquired.

Creating synergies between universities, citizens and urban actors is of utmost importance for many reasons. Universities have always played a pivotal role in shaping the city or region where they are located, still, they are often perceived as “silos”, without insufficient links to the larger community surrounding them. Recognising this, more and more higher education institutions make efforts to reach out to citizens and involve them in scientific activities. In this endeavour, researchers act as bridges between scientific and citizen communities. As a result, this involvement can largely contribute to enhance trust in scientific research and ensure effective cooperation of these actors, whose importance cannot be overemphasised in the current context of the pandemics, which has clearly demonstrated the dangers posed by the alarming spread of fake-news and skepticism in evidence-based research.

In this sense, universities of the [UNICA network of universities from the Capitals of Europe](#) (53 universities in 37 Capital cities) play a pivotal role in reinforcing relations with urban actors to strengthen research, involve citizens, and support evidence-based policy-making.

This Webinar aims to showcase different approaches to and aspects of citizen science and contribute to the discussions around challenges in urban contexts.

PRELIMINARY PROGRAMME

(as of 21 September 2020)

Welcome addresses by **Luciano Saso**, UNICA President; **Joao Mario Grilo**, Chair of UNICA "UNIVERSITY & THE CITY" WORKING GROUP; Full Professor, Communication Sciences Department, NOVA University of Lisbon and **José Moura**, Full Professor, Department of Chemistry, NOVA University of Lisbon (10')

City Science for Urban Challenges by **Caroline Nevejan**, Chief Science Officer, City of Amsterdam; Professor, University of Amsterdam (12') followed by Q&A (5')

From counting sparrows to community urban planning – lessons from Citizen Science in Warsaw by **Katarzyna Wojnar**, Assistant Professor, Centre for European Regional and Local Studies, University of Warsaw (12')

Citizen Scientists and Scientist Citizens - Merging citizen and scientific knowledge by **Lia Vasconcelos**, Professor, Department of Sciences and Environmental Engineering, NOVA University of Lisbon; Integrated Researcher, Marine and Environmental Sciences Centre (12')

Citizen science: Opening science, learning with society, sharing knowledge for democracy and sustainability by **Maria Fernanda Rollo**, Full Professor, Department of History, NOVA University of Lisbon; Researcher, Institute of Contemporary History (12')

Citizen Social Science: The example of participatory research with young people not in education, employment or training (NEET) by **Veronika Wöhrer**, Full Professor, Department of Education, University of Vienna (12')

Assessing air quality – a successful engagement in citizen science by **Francisco Ferreira**, Associate Professor, Department of Environmental Sciences and Engineering, NOVA University of Lisbon; Researcher, Center for Environmental and Sustainability Research (12')

Impacts of Informal Science Learning on Undergraduate Students & Public Perceptions of Science by **Shane Bergin**, Physicist, School of Education, University College Dublin (12')

Open Discussion chaired by Luciano Saso & José Moura (30')

Biographies and abstracts



Luciano Saso, President of UNICA

Prof. Luciano Saso (Faculty of Pharmacy and Medicine, Sapienza University of Rome, Italy) received his PhD in Pharmaceutical Sciences from Sapienza University in 1992. He is author of more than 220 scientific articles published in peer reviewed international journals with impact factor (SASO-L in www.pubmed.com, total impact factor > 500, H-index Google Scholar 45, Scopus 37). He coordinated several research projects in the field of pharmacology and has been referee for many national and international funding agencies and international scientific journals in the last 30 years. Prof. Saso has extensive experience in international relations and he is currently Vice-Rector for European University Networks at Sapienza University of Rome. In the last 15 years, he participated in several projects including IMS2020, EGRACONS, IMOTION, BUCUM, UZDOC, TRAIN and has been speaker and chair at many international conferences organised by UNICA and other university networks. He coordinates the Sapienza team in the European University CIVIS (www.civis.eu). Prof. Saso has been Member of the Steering Committee of UNICA for two mandates (2011-2015) and in November 2019 he has been re-elected President of UNICA for the second mandate (2019-2023).



José J. G. Moura, Chemical Engineer, PhD in Chemistry, Full Professor of Chemistry - Department of Chemistry, Faculdade de Ciências e Tecnologia, Universidade Nova de Lisboa (FCT NOVA).

The main field of research is Bioinorganic Chemistry and the role of Metals in Biology. More than 400 articles indexed in ISI Web of Knowledge, with an H-index of 60 and 30 PhD Thesis. He is also Director of FCT NOVA Campus Library, promoting Culture/Art/Scientific interfaces. Research Specialist at University of Minnesota (US) and Adjunct Professor at University of Georgia, Athens (US). Past President of Chemistry Department and past President of Scientific Council at FCT-NOVA, Portuguese Delegate to COST and INTAS, member of Scientific Panels (FCG, FCT-MCTES, NSF (US) and of several scientific editorial boards. In 2006, he was elected Member of Academy of Sciences and in 2010, elected President of the Society of Biological Inorganic Chemistry, for two years.



Joao Mario Grilo Born in Figueira da Foz, Portugal, 1958. Studies of Economics in Coimbra, Degree in Sociology at ISCTE in Lisbon, MA, PhD and Aggregation in Communication Sciences /Cinema in the NOVA Faculty of Human and Social Sciences where he is, actually, a Full Professor, teaching a Film Directing seminar and coordinating the new PhD in Artistic Studies, the PhD in Digital Media and the MA in Film/Television. He is author of several books on cinema and film studies: *The Order in Cinema* (1997), *The Lessons of Cinema* (2006), *The Cinema of Non- Illusion* (2006), *The Imagined Man* (2006), *The Book of Images* (2007), *Film & Philosophy: Mapping an Encounter* (2014). As a filmmaker he directed his first feature film, *Maria*, in 1978, followed by *The Foreigner* (1982), *The King's Trial* (1989), *The End of the World* (1993), *Saramago : Documents* (1994) , *The Eyes of Asia* (1996) , *Out of Sight* (1998), *451 Forte* (2000), *The Break* (2002), *Proof of Contact* (2004), *The Flying Carpet* (2008), *Two Women* (2010), *Your Home* (2012), and he is concluding a documentary - *VieirArpad* (2020) -, and a feature film - *Field of Blood* (2020). Still, as a film director, he represented Portugal, in the Official Selections of the Festivals of Cannes, Venice, Berlin, Locarno, Rio de Janeiro, among others.



Caroline Nevejan

Caroline Nevejan holds the chair Designing Urban Experience at the University of Amsterdam. She is the Chief Science Officer of the City of Amsterdam. More information at <http://openresearch.amsterdam> or www.nevejan.org

ABSTRACT. City Science refers to interdisciplinary and transdisciplinary character of research on urban challenges in the city. This affects the research process in every step from establishing the research agenda, to research design, choice of methodology and ways to validate. To bridge the science -policy interface, design expertise is indispensable. On the 21st of September a European report will be published on City Science for Urban Challenges, of which Nevejan is the author. This presentation will highlight insights from this report.



Lia Vasconcelos

Lia Vasconcelos holds a position in NOVA University of Lisbon/researcher, MARE - Marine and Environmental Sciences Centre, focus her work on innovative decision-making processes, namely in developing methodologies for engaging multi-stakeholders in participatory processes aiming new forms of governance and collaborative public policy. Editor/author of several publications (e.g., *Mediação Ambiental da lei à Prática*, 2020; *Sustainability in the 21st century – The Power of Dialogue*, 2015; *An Ocean of People: Citizen scientists and Scientist citizens*, 2013), has coordinated national and international projects, particularly the participative component, and received several awards: Prize

of Iconic Women Creating a Better World For ALL - Associations that Work 2019, Responsible Research Innovation 2015, Significant Participatory Practices, Prize of Collaborative Research 2013-2014 and Communication Award 2013.

ABSTRACT. In uncertain and complex context citizen science is key for society. It constitutes a value added for co-managing valuable natural resources and contributes to changes in attitudes and behaviors promoting society transformation. Social Labs (SL), carefully designed and professionally facilitated, promoting genuine dialogue proved to be a successful tool to bring together citizen and scientific knowledges to shape new strategies and policies. In these more active forms of participation, a set of critical factors must be addressed to assure the success of these processes: (1) Besides involving citizens and make the process more open and wider, agenda building must be done beyond the technical and political arenas to address the interests of wider groups; (2) Knowledge in these processes must go beyond the technical scientific knowledge, and be prepared to encompass other types of knowledges brought by wider audiences; (3) While transversalizing the process politicians, scientists and technicians must learn to work in different ways producing drafts that are adjusted along the process and not just submitted to public scrutiny when they are technically finalized and can hardly be reformulated. These and other critical factors that prevent genuine engagement of citizens will be analyzed, as well as how to overcome them to create spaces for democratizing decision making based on experience of what works and avoid pitfalls, making the most of citizen science.



Maria Fernanda Rollo

Full Professor at the History Department of the Faculty of Social Sciences and Humanities (FCSH) NOVA University of Lisbon. Coordinator of the Ph.D. program in History. Coordinator of the post-graduation course Management and Policy in Science and Technology. Researcher at the Institute of Contemporary History. Coordinator of the Research Group Economy, Society and Innovation. Coordinator of Centro República (2011-). Secretary of State of Science, Technology and Higher Education (2015-2018). President of

the Institute of Contemporary History (2011-2015). Design and coordination of the ROSSIO infrastructure (2011-2015) Portuguese Roadmap of Research Infra-structures 2014-2020. National Coordinator in the DARIAH-ERIC (2015). National commissioner for the Centenary celebrations of the Portuguese Republic (2008-2011).

ABSTRACT. Citizen Science represents an important pillar in the process of building, acquiring and sharing knowledge. The approach and attention that the scientific and, above all, academic community, and policy makers, among other actors, increasingly grant to it means in some way that the trust, transparency and relevance of science increase when carried out in relation to society and above all, they perceive the ability to stimulate involvement as a way of bringing communities together, creating environments conducive to social, scientific, economic and cultural innovation. The challenges posed by Citizen Science are multiple, and the impact that they can / should have for the formative and methodological renewal in the teaching and research plan should be highlighted, introducing new methods and new learning based on a model of collaboration, co-creation and multidirectional knowledge translation. Citizen Science is also the means to promote the convergence between Science and Society and the appropriation of science/knowledge by society, being in itself a vehicle for the dissemination of the purposes of 17 SDG and a catalyser for its direct

engagement, by creating contexts for proximity and stimulating its appropriation by citizens and institutions, besides the dialogue with public policies.



Katarzyna Wojnar

Katarzyna Wojnar is an assistant professor at the Centre for European Regional and Local Studies EUROREG, University of Warsaw. PhD in geography and regional science (2015), former coordinator of the ESPON Polish Contact Point (2007-15), she specialises in researching urban creativity and cultural policies and is actively involved in the implementing the "third mission" of the university. She participated in a number of national and international research projects on urban development (Horizon2020, ESPON) and is a member of several advisory bodies including the National Chamber of Commerce, Urban Cultural Policy Expert Board and the UNICA Group for University and City. Assistant Professor, Centre for European Regional and Local Studies, University of Warsaw.

ABSTRACT. Citizen Science is one of important elements of civic engagement and emancipation. This phenomenon is especially interesting in an post-socialist metropolis, like Warsaw, where the old and passive mentality is clashing with new and active approaches to science based on civic engagement, while the social, class-based and mental polarisation takes place in the background. This presentation explores Citizen Science experiences from Warsaw, their implementation capacity, political engagement as well as governance-related factors from a critical perspective in a context of a polarised society.



Veronika Wöhrer

Veronika Wöhrer is a full professor at the Department of Education at the University of Vienna (Austria). Previously that she was professor at the Department of Educational Research and Teacher Education at the University of Graz, PostDoc Researcher at the Department of Sociology at the University of Vienna and at the Department of Sociology at the University of Freiburg (Germany) as well as senior researcher at Science Communications Research in Vienna. She has directed several participatory research projects with children and young people and published on this topic. Her research interests are sociology of education, intersectionality, gender studies, qualitative research, and participatory action research.

ABSTRACT. In this presentation I will refer to the concept of citizen social science and describe participatory research projects that my team and I conducted with young people in Vienna. Our current research is done in the course of the research project "Co- designing Citizen Social Science for Collective Action (CoAct)", funded by the European Commission (Call: H2020-SwafS-2018-19 / Topic: SwafS-15-2018-2019). In this project we do participatory research projects with NEET youth about the challenges they face when trying to find education or employment. Similar to the premises of 'child-led research' (Kellett 2005), we support the young people in finding research questions, gathering data, analyzing data and disseminating their results. We, furthermore, bring them together

with educators and policy makers. Accordingly, one of our goals is to foster dialogue between different stakeholders in the field of youth unemployment.



Francisco Ferreira

Francisco Ferreira is an Associate Professor with the Department of Environmental Sciences and Engineering of the Faculty of Science and Technology (FCT) of the NOVA University of Lisbon (FCT- NOVA) and a researcher in CENSE – Center for Environmental and Sustainability Research. He holds a degree in Environmental Engineering from FCT NOVA, a master's degree from Virginia Tech, USA and a PhD from NOVA University of Lisbon. He has been developing work in the areas of air pollution, climate change, and sustainable development. He is also the President of the national environmental non-governmental organisation ZERO – Association for the Sustainability of the Earth System.

ABSTRACT. According to the World Health Organization, approximately seven million premature deaths annually are attributable to household and ambient air pollution, both indoor and outdoor. The official air quality monitoring networks provide data that are very precise and accurate on the pollutant concentration's assessment. However, their coverage and representation are extremely limited. People are increasingly aware of the influence of air quality on their health. Cheap samplers and sensor monitoring devices are becoming available, enabling individuals to actively participate through citizen science in initiatives that provide a considerable added value, from awareness to action. Several projects from universities, non-governmental organizations, companies, and others are currently excellent case-studies that will be presented to show advantages and disadvantages of a growing engagement in citizen science activities.



Shane Bergin

Shane Bergin is a physicist working at UCD's School of Education. Shane is interested in informal science education: he has created various projects such as Quavers to Quadratics (exploring the overlaps of science with music) and City of Physics (sparking conversations about physics by placing physics-related art in various places around the city). Shane regularly chats about science on the radio, appearing on RTE's Today programme and Newstalk's Futureproof. Shane's teaching sees him work with students who wish to become science and mathematics teachers for which he received a 2019 UCD Teaching Excellence Award.

ABSTRACT. My career in science has been somewhat non-traditional. While I enjoyed a day at the bench as much as the next physicist, the path of least resistance tended towards 'outreach', public engagement and education. Nevertheless, I very much consider myself a physicist and would, I hope, be seen as one too. This identity has been shaped primarily through informal physics education projects I have participated in and/or created. In this talk, I will explore how informal learning opportunities offer opportunities that may be otherwise missing in formal education, citing projects I have created as case-studies. Linked to this, I will talk about broader public perceptions of science and how 'outreach' models might build trust in science.