# ECSA Conference // 2018

# The Citizen

Programme Booklet update May 31st 2018

June 3 – 5 Geneva Switzerland









# Welcome!

Citizen Science became a global movement with the power to improve the relationship between science, policy, and the general public. This puts a high normative onus on Citizen Science – increasing sustainability and public understanding of science. This 2<sup>nd</sup> International ECSA Conference is a great opportunity for critical reflections, joint learning, and networking for the future growth of Citizen Science. You are very welcome to contribute and discuss your ideas and insights. Have a great time!

### Headquarters of the European Citizen Science Association (ECSA)

Katrin Vohland, Dorte Riemenschneider, Maike Weisspflug, André Mascarenhas, Claudia Göbel, Gaia Agnello, Margaret Gold

# Conference Team 2018 – Foundation Science et Cité and University of Geneva

Tiina Stämpfli, Yasemin Tutav, Nicole Lachat, Matthias Ammann, Nina Scherrer; Bruno Strasser, Elisa Radosta, Patricia Silveira

### **ECSA2018 Conference Committee**

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Heiner Benking, Independent Journalist and Advisor/Scholar, Berlin (DE)

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Oliviero Spinelli, Comunità Ambiente, Rome (IT)

Bruno Strasser, University of Geneva, Geneva (CH)

Katrin Vohland, ECSA headquarters, Berlin (DE)

Maike Weisspflug, ECSA headquarters, Berlin (DE)

Margaret Gold, Project Officer - WeObserve & LandSense, London (GB) and ECSA Headquarters (DE)

# Thanks!

Many thanks for supporting the Second International ECSA Conference 2018 in Geneva! Without the help of these institutions and organizations, this conference would not happen:

Swiss State Secretariat for Education, Research and Innovation

Swiss Academies of Arts and Sciences

Swiss National Science Foundation

Swiss Federal Office for Environment

Stiftung Mercator Schweiz

Citizen Cyberlab

City of Geneva

Museum für Naturkunde Berlin

Austrian Federal Ministry of Science, Education and Economy

Austrian Center for Citizen Science

Doing it Together Science

Earthwatch Institute

Museo di Storia Naturale della Maremma

République et canton de Genève

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# The Venues

The ECSA 2018 conference takes place at different venues, the venues M, R and H are all in walking distance (2-5 minutes).

### M Maison Communale de Plainpalais; Main festival and conference venue

Foyer (registration)

Grande Salle (welcome, keynotes, speed talks)

Assemblée (dialogue sessions, poster session)

Terrace (market stands)

Rue de Carouge 52, 1205 Genève

### R Les Recyclables

Restaurant (workshops)

Rue de Carouge 53, 1205 Genève

### H Haute école de travail social (HETS)

Auditorium (talks, speed talks, digital posters) Seminar (workshops)

Rue du Pré-Jérôme 16, 1211 Genève

### B BFM

Dinner at the Bâtiment des Forces Motrices (BFM), a location with a breath-taking atmosphere.

Place des Volontaires 2, 1204 Genève

### T Teppes de Verbois

Nature reserve (Bioblitz) Chemin des Teppes-du-Biolay, 1281 Russin

<sup>\*</sup>If not mentioned differently, activities will take place at Plainpalais. Check our Website for location details.

# Keynotes

### Bruno J. Strasser (CH)

Bruno is a historian investigating the shifting relations between science and society. He leads a research team working on "<u>The Rise of the Citizen Sciences: Rethinking Science and Public Participation</u>." After much exploration, he is no longer sure there is such a thing as citizen science (despite there being conferences devoted to it). His second book, "Collecting Experiments: Making Big Data Biology", is forthcoming with Chicago University Press in 2019.

He is full professor at the University of Geneva, adjunct professor at Yale University, and member of more committees than he would like. He has been a visiting fellow at Princeton University, the Max-Planck Institute for the History of Science in Berlin, and the Ecole Normale Supérieure in Paris, and a visiting professor at the University of Manchester and Autonomous University of Barcelona. He is founder and director of an outreach laboratory, the <a href="Bioscope">Bioscope</a>, which organizes citizen science projects on biodiversity and offers critical workshops on genetics, neuroscience, and sexual health. He enjoys good food and good conversations, running and mountaineering, and thinking about how to make the world a better biking place.

Kenote title Citizen Science? Rethinking Science and Public Participation

**Date** Monday, 4<sup>th</sup> June 2018 10:00 – 10:45

Abstract see page 11

### Shannon Dosemagen (US)

Shannon is Executive Director of the Public Lab nonprofit. With over fifteen years of experience in community organizing and education, Shannon has worked with environment and public health groups addressing declining freshwater resources, coastal land loss, and building participatory monitoring programs with communities neighboring industrial facilities and impacted by the BP oil spill. She is acting Vice Chair of the [U.S. EPA] National Advisory Council on Environmental Policy and Technology, Vice Chair on the Board of Directors of the Citizen Science Association, a co-organizer for the Gathering for Open Science Hardware (GOSH), a member of the World Economic Forum Global Future Council on Environment, and serves on advisory boards, councils or working groups for the National Parks Conservation Association, the Louisiana Public Health Institute, the Louisiana Bar Association, and for the Citizen Science Association. Shannon is an Ashoka Fellow, a 2015-16 Harvard Berkman Center for Internet and Society Fellow and a current Research Affiliate, a Senior Fellow of the Environmental Leadership Program and a 2012 Loyola University Institute for Environmental Communications Fellow. Shannon can be found on Twitter at @sdosemagen.

Keynote title Collaboration in action: Community-driven projects for

environmental problem solving

Date Monday, 4<sup>th</sup> June 2018 14:00 – 15:00

Abstract see page 12

Meet Shannon at her market stand at the Public Festival on Sunday.

### Lionel Larqué (FR)

Lionel is a physicist and head of the French platform ALLISS (for a science society alliance), which aims to promote cooperation between research and higher education institutions and civil society organisations in France. He is also member of popular education since 30 years and has created the science and democracy world forum in 2000. Larqué is co-editor of the book «Les sciences, ça vous regarde», with Dominique Pestre and he has recently facilitated the evolution of the French Research and Higher Education Law in order to legitimate a new paradigm on science society dynamics, based on a non-deficit model doctrine. In 2007, he has coordinated the publication of the White Paper called «Taking the knowledge-based society seriously», presented and discussed in the French Parliament on March 27th, 2017.

Keynote title Science society continuum: From "deficit model" to social

demand on research - the reform of science in progress

**Date** Tuesday, 5<sup>th</sup> June 2018 08:30 – 09:30

Abstract see page 23

# Sunday, 3rd June 2018 – Public Festival

https://www.ecsa-conference.eu/programme/public-event

11:00 - 18:00

### **Public Citizen Science Festival**

Explore hands-on DIY activities and local projects, take part in a challenge on urban biodiversity by using your smartphone and a macro lens provided at site or contribute to a research project on biodiversity in a local nature reserve and enjoy food, drinks and music at the main venue.

Registration for conference is possible during this time.

13:00 - 18:00

### Bioblitz at Teppes de Verbois T

You can reach the venue from the station Geneva, Cornavin by train (stop Russin) (detailed information online: <a href="https://www.ecsa-conference.eu/programme/public-event">https://www.ecsa-conference.eu/programme/public-event</a>)

14:30 - 16:30

### **Story Café**

Perspectives on CS from Ecuador, Ghana and Small Island Developing States (SIDS)

Soledad Luna, Thomas Mboa and Khalissa Ikhlef

16:00 - 18:00

### **DIY – Screenprinting**

Atelier Madame will welcome you on the terrace. Pick your favourite letter and print it on your conference bag! Team up for creating your personal message. Second chance: Mon / 11:00 - 14:00.

17:30 – 18:00

### **LandSense** Innovation Challenge Ceremony

Moderation: Muki Haklay, Conference Committee (UK)

# **Market Stands**

Throughout the public festival and the whole conference, there will be numerous Market Stands encouraging you to learn more about tool kits for citizen science and to participate in interactive activities.

### **Indoor Market Stands**

From Sunday until Tuesday there will be indoor Market Stands for partners and sponsors. The following people and institutions will be present:

### **Visit SPOTTERON**

The platform for custom Citizen Science apps and interactive tools for projects. <a href="https://www.spotteron.net/">https://www.spotteron.net/</a>; Twitter: @SPOTTERON

### Schweiz forscht

The platform oft he Swiss Citizen Science network. http://www.schweiz-forscht.ch/de

### StadtWildTiere (only Sunday)

http://www.swild.ch

### Citizen Science and the UN Sustainable Development Goals (Video)

Alexandre Caldas, Chief, Country Outreach, Technology and Innovation Branch Division of Early Warning and Assessment, United Nations Environment Programme (UNEP) will outline in a video why Citizen Science is important in delivering the data and information needed to measure progress against the agreed global Sustainability Development Goals (SDG's).

### **Geneva Tourist Information Office**

https://www.geneve.com

In addition, there will be an information desk:

### "Bouquet d'information"

Leaflets, information brochures and other inspirational material. Amongst others: <u>ECSA</u>, the <u>Austrian Center for Citizen Science</u>, <u>SWILD</u> and the <u>European Marine</u> Board.

### Outdoor Market Stands on Sunday

There will be several Market Stands on the terrace during the public festival on Sunday. All, conference participants as well as the local public can have a glimpse into a variety of citizen science projects and get some real hands on experiences!

### CodeMyBug - Barcoding Insects

Candice Yvon, University of Geneva/Bioscope: <a href="http://bioscope.ch/?p=532">http://bioscope.ch/?p=532</a>

### CodeMyPlant - Barcoding Plants

Candice Yvon, University of Geneva/Bioscope: http://bioscope.ch/?p=523

### MonGE - Plant communities

Louis Nussbaumer, Conservatoire et Jardin Botaniques Genève <a href="https://www.ville-ge.ch/cjb/conservation/pdf">https://www.ville-ge.ch/cjb/conservation/pdf</a> conserv/MonGE18 20.pdf <a href="http://www.socbotge.ch/">http://www.socbotge.ch/</a>

### **Liste Rouge – Monitoring natural environments**

Catherine Lambelet, Conservatoire et Jardin Botaniques Genève <a href="http://www.ville-ge.ch/cjb/conservation-activites-lpca.php">http://www.ville-ge.ch/cjb/conservation-activites-lpca.php</a>

### **Biodiversita**

*Sylvain Allombert*, Objectif Sciences International <a href="http://www.osi-biodiversita.org/">http://www.osi-biodiversita.org/</a>

### Minéo - Mineralogy

*Sylvain Allombert*, Objectif Sciences International <a href="http://www.osi-mineo.org/">http://www.osi-mineo.org/</a>

### **SYNAQUA – Aquatic environments**

Samuel Botreau, L'Institut national de la recherche agronomique

https://www6.inra.fr/synaqua/ http://www.cen-haute-savoie.org/ https://www6.dijon.inra.fr/thonon

### **FabLab**

Cristina Olivotto, Onl'fait https://onlfait.ch/fablab/

# Doing It Together Science (DITOs) – European project to support citizen science

Imane Baiz, Doing It Together Science http://togetherscience.eu/

### CosmicPi - Detect cosmic rays

Oday Darwich, CERN

# League of Nations in the Digital Age – Using digitalization and Al to analyse archives of the library of the UN

Oday Darwich, CERN

### CrowdSoil

Anne-Pia Marty, Universty of Geneva

### **Airlogger**

Emmanuel Kellner

### **Public Lab**

Shannon Dosemagen

### Outdoor Market Stands on Monday & Tuesday

Market Stands will be installed during the whole course of the conference (Monday morning until Tuesday evening) and visited by participants especially during session breaks. There is an official Market Stand session on **Monday**, **4**<sup>th</sup> **June from 13:00-14:00**.

The Market Stand area will be located on the terrace (outdoor), sheltered by a tent.

# Science and nature inside out: Explore and investigate with iSpotnature, EvolutionMegaLab, Treezilla and the OpenScience Lab

Janice Ansine, The Open University (UK)

Co-authors: Mike Dodd

### Clean air for all - how to get engaged

Sven Schade & Barbara Kieslinger, European Commission (IT/AT) Co-authors: Claudia Göbel. Aleksandra Berditchevskaia

# The Swedish Species Observation System (Artportalen): Citizen Science being used for environmental management and research.

Stephen Coulson, Swedish Species Information Centre (SE)

Co-authors: Anna Tano Graflind, Johan Nilsson

### On everyone's mind and lips - German in Austria

Barbara Heinisch, University of Vienna (AT)

### CitSci.org - a global citizen science support platform

Sarah Newman, Colorado State University - Natural Resource Ecology Laboratory (US)

Co-authors: Russell Scarpino, Greg Newman

# Project StadtWildTiere in Austria: Benefits and Constraints in the involvement of Citizen Scientists

Anouk-Lisa Taucher & Theresa Walter, SWILD – Urban Ecology & Wildlife Research, Zurich, Switzerland & Research Institute for Wildlife Ecology, Veterinary University Vienna (CH/AT)

Co-authors: Fanny Betge, Miriam Brandt, Adrian Dietrich, Sandra Gloor, Heribert Hofer, Sarah Kiefer, Sophia Kimmig, Geva Peerenboom, Theresa Walter, Richard Zink

# Monday, 4th June 2018

08:30 - 18:00

Welcome desk and conference registration

09:30 - 10:00

### Welcome to the conference!

Katrin Vohland, ECSA Vice Chair, (DE)
Thomas Zeltner, President of the Foundation Science et Cité, ECSA2018 Team, (CH)

10:00 - 10:45

### **Keynote**

Moderation: Thomas Zeltner, President of the Foundation Science et Cité (CH)

Citizen Science? Rethinking Science and Public Participation

Bruno J. Strasser (CH)

"Citizen science" has become an increasingly fashionable label for a number of participatory research activities, but also a topic of growing critical attention for historians and social scientists. In this keynote, I will focus on three questions. Where does citizen science fit within the longer history of public participation in science? Who are today's citizen scientists? And how should we understand citizen science's current promises of democratisation, education, and scientific discoveries?

10:45 – 11:00

### Let's Mainstream Citizen Science!

WeObserve: An Ecosystem of Citizen Observatories for Environmental Monitoring

Steffen Fritz (DE)

The WeObserve project aims to improve coordination between existing Citizen Observatories (COs) and related European activities, while tackling three key challenges that inhibit the mainstreaming of CS: awareness, acceptability, and sustainability.

Steffen Fritz is the Head of the Center for Earth Observation and Citizen Science at IIASA.

### 11:00 - 12:00

### **Speed Networking**

Moderation: Yasemin Tutav

11:00 - 14:00

### **DIY – Screenprinting Workshop**

Get your hands dirty with Atelier Madame on the terrace. Pick your favourite letter and make sure you get it printed on your conference bag!

12:00 - 14:00

### **Lunch Break**

13:00 - 14:00

### **Printed Posters and Market Stands**

### Printed Poster Session

Details pages 37 – 42

### Market Stands

Details pages 8 – 10

14:00 – 15:00

### **Welcome and Keynote**

Moderation: Martin Brocklehurst, Conference Committee (UK)

Collaboration in action: Community-driven projects for environmental problem solving

Shannon Dosemagen (US)

Since the 2010 BP oil spill in the Gulf of Mexico, Public Lab has facilitated collaborations between people with environmental health questions, makers, scientists, journalists and others to provide action-based, solution-oriented resources. During this talk we will explore the growing connections between making and the environment, community citizen science and how people across the world are reimagining their relationship with places they care about — from refugee camps in Lebanon to the wetlands of Louisiana.

### //Parallel Sessions

# Speed Talks Moderation

Grande Salle Monday

M

15:15 - 16:30

### Education and Learning I

Christine Marizzi, Conference Committee (US)

### Get them while they're young - Science with childre

Julie Sheard, Natural History Museum of Denmark (DK)

Presenting scientific results and lessons learned from the AntHunt – a CS project for children and families. Experiences on doing real science with young citizens in an interactive and engaging way. 300 families. 5000 ants. Lots of fun!

# LEARN CitSci: Exploring youth learning through participation in citizen science

Lucy Robinson, Natural History Museum (UK) Co-author(s): Julia Lorke

The LEARN CitSci project studies the participation of young people (5-19ys) in CS, capturing the development of knowledge, skills, roles & agency, & identifying program features that foster or hinder learning processes.

# Integrating science research in high school education

Mohamed Yakub, University of Virinesota (US)

We engaged fig. School students in ongoing research at their school litegrating them in experimental design, data colection, and analyses. Question: how best to assess this project?

# The EvoKe project: Evolutionary Knowledge for Everyone

Tania Jenkins & Héloïse D. Dufour, EvoKe project; SCNAT (CH)

Co-author(s): Xana Sa Pinto, Evangelia Mavrikaki, Olaf BinindaEmonds, Kristin Jenkins, Szymek Drobniak

EvoKE is a transdisciplinary network that fosters literacy in evolution, a science often misunderstood, yet crucial to citizens' daily lives. We invite CS programs in biology to join us!

### CS in the classroom: empowering students

Silvia Winter, University of Natural Resources and Life Sciences Vienna (AT)

CS has great potential for science education, which could be utilized in formal education at schools and universities. Aim of this session is discussing different modes of participation and learning outcomes of students.

# Dialogue Session Moderation

Assemblée **M** Citiz

15:15 - 16:30

Monday

### Initiatives around the Globe

Heiner Benking, Conference Committee (DE)

# Citizen Sciences as a commitment within the universities outreach strategy

Wilhelm Bauhus, Innovation Office (AFO), Westfälische Wilhelms-Universität Münster (DE)
Co-author(s): Anne Harnack

To foster exchange and to dismantle barriers and fears of contact between the university and citizens, the University of Muenster (WWU) has made a clear commitment in its new university development plan: A commitment to CS as an integral part of the universities' transfer strategy, implemented by the Innovation Office (AFO).

# Citizen Science: Theory and Practice-Status, Plans, and Dreams

Rick Bonney, Cornell Lab of Ornithology (US)

Over its first two years, "Citizen Science: Theory and Practice" has published a variety of peer-reviewed articles by CS researchers and practitioners on several continents. Discussions in this session will brainstorm ideas for topics, formats, and new publishing approaches to keep the journal lively, interesting, and useful to the field.

### National citizen science?

Dick Kasperowski, University of Gothenburg (SE) Co-author(s): Christopher Kullenberg, Niclas Hagen

National initiatives for facilitating CS address issues for guaranteeing scientifically valid data, but they also are instantiations of the imagined epistemic subjects that will perform them. Who is the citizen constructed in national initiatives? Are there national or cultural traits?

### Roles and challenges in Citizen Science

*Greg Newman*, Colorado State University - Natural Resource Ecology Laboratory (US)

Experiences with 500 projects inform our understanding of citizen science. Given these experiences, we offer a framework to guide the spectrum of CS projects. We use this framework to discuss challenges facing participants. We conclude by discussing ways support platforms can help address challenges facing participants and designers.

# Co-designing the Citizen Science Global Partnership

Anne Browser, Woodrow Wilson International Center for Scholars (US)

Co-author(s): Martin Brocklehurst, Kris Stepenuck, Maike Weisspflug, Erin Roger, Michael Køie Poulsen, Finn Danielsen

The Citizen Science Global Partnership (CSGP) was announced as a new network-of-networks at the 3rd UN-Environment Assembly. We will discuss foundational questions around proposed goals, accountability, and governance structures. We will consider how to leverage ECSA, ACSA and CSA while engaging emerging associations and other partners.

### Wikimedia projects and citizen science

Daniel Mietchen, University of Virginia (DE)

This session provides a guided tour around the multiple ways in which Wikimedia projects and their communities interact with CS, e.g. by informing about CS in general or by running CS projects.

### Workshop

Les Recyclables **R** Monday 15:15 – 16:30

### Time for a Definition - Quality Criteria in Citizen Science

Florian Heigl, University of Natural Resources and Life Sciences, Vienna (AT)

Co-author(s): Daniel Dörler, Barbara Kieslinger, Gerit Oberraufner, David Ziegler

Funding organizations are explicitly calling for CS, hence this term is used for a multitude of (participatory) research approaches. This challenges evaluators and online-platforms all over Europe (e.g. DE, AT, CH) to determine if projects adhere to a minimum definition of CS. Österreich forscht (www.citizen-science.at) is the first to impose rigorous quality criteria on all featured projects. We invite everybody to critically reflect and improve these criteria. The discussion aims to provide a clearer understanding of the generally accepted version of CS.

Digital Posters & Speed Talks
Moderation

Tour d'Horizon I

Bálint Balázs, Conference Committee (HU)

Auditorium

H The role of participants for monitoring rainfall and

Monday 15:15 – 16:30 urban floods

Michelle Boonen, Imec-SMIT-VUB (BE) Co-author(s): Carina Veeckman

# Motivations in CS and the search of 'The Common'. The case of Ibercivis

Maite Pelacho, Ibercivis Foundation for citizen science and University of the Basque Country (UPV / EHU) (ES) Co-author(s): Jesús Clemente-Gallardo, Francisco Sanz

# Citizen science in support of innovation decision making process

Paweł Wyszomirski, Foundation DIY Fix Your City (PL)

# Portuguese scientific community perception of Citizen Science

Cristina Luis, Museu Nacional de História Natural e da Ciência (MUHNAC), Universidade de Lisboa, Lisboa, Portugal / Centro Interuniversitário de História das Ciências e da Tecnologia (CIUHCT), Faculdade de Ciências, Universidade de Lisboa, Lisboa, Portugal / Instituto Universitário de Lisboa (ISCTE-IUL), CIES-IUL, Lisboa, Portugal (PT)

Co-author(s): Cristina Palma Conceição, António Firmino da Costa, Marta C. Lourenço

### Scientific literacy: lessons from America

Hannah Grist, Scottish Association for Marine Science (UK)

What is scientific literacy? Can CS improve it? I set out on a road trip to discuss these concepts with people working on the ground. The result is this collection of interviews sharing ideas on science, education and activism.

# The News Evaluator - a social innovation for digital source criticism

Fredrik Brounéus, VA (Public & Science) (SE)

Currently, fake news is a hot topic in the public debate. The News Evaluator is a social innovation that tackles this challenge through CS. Together, teenagers and researchers explore the credibility of digital newsfeeds.

# Cammini LTER: walking and cycling with citizens across Italian ecosystems

Caterina Bergami, LTER - Italy network, Institute of Marine Sciences (ISMAR-CNR) (IT)

Co-author(s): A. Campanaro, L. Criscuolo, D. D'Alelio, E. Dattolo, A. De Lazzari, A. L'Astorina, A. Oggioni, A. Pugnetti, M. Rogora

Researchers from the LTER-Italy network realized Cammini LTER, trails connecting LTER sites, aimed at increasing ecological awareness. The experience induced critical considerations about relevant aspects of public engagement.

### Workshop

### Seminar Monday 15:15 - 16:30

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### Citizen Science Games Workshop

Pietro Michelucci, Human Computation Institute (US) Co-author(s): Claire Baert, Seth Cooper, Jacob Sherson

Project stakeholders will showcase examples of gamification, which can be a powerful tool for attracting a wide audience, engaging volunteers, and improving retention. We will explore these considerations through a series of speed talks that consider motivation, data quality, user experience, and design approach. Next, a rotating Q&A panel will draw from the plenary to consider issues raised in the first session and discuss the future of gaming in CS.

### 16:30 - 17:00

### **Coffee Break**

### 17:00 – 18:30

### //Parallel Sessions

Speed	Talks
Modera	ation

Bio, Air & Water

Margaret Gold (

M

Margaret Gold, Conference Committee (UK/DE)

Monday 17:00 - 18:30

Grande Salle

Vigie-Nature, a biodiversity monitoring scheme

Benoît Fontaine, Muséum national d'Histoire naturelle – Paris (FR)

Vigie-nature is a CS programme aiming at collecting large amounts of standardized data on plants and animals for research, while raising awareness of the general public and decision makers.

# Where Seeds Fall – creating city-wide networks of plants and people

Juanita Schlaepfer-Miller, Zurich (CH)

Nature in the city is dynamic and resistant, and citizens can increase the genetic diversity of the wild plants around them with a few simple actions. An online platform connects participants who can compare their own spontaneous garden with their neighbor's.

# The rise of citizen science as an ornithological research tool in Turkey

Esra Per, Gazi University (TR)

The first CS project began in 2004 with KusBank. Swift, stork, common bird, bird atlas, IBA, MWBC and parakeet monitoring studies were performed. Citizens contribute with their observations. They can be partners in the future.

# Citizen Science for EU policy: the case of Invasive Alien Species

Eugenio Gervasini, European Commission - Joint Research Centre Directorate, Ispra - Italy (IT) Co-author(s): Ana Cristina Cardoso, Konstantinos Tsiamis, Sven Schade, Ivan Deriu, Fabio D'Amico, Gemechis Akuma

Citizens can play an active role on data and management of alien species endangering biodiversity in Europe, contributing also via an App to JRC EASIN core task of disseminating updated information and spatial data supporting EU policy.

# Balancing citizen engagement, common methodology and adaptation to local needs

Wim Clymans, Earthwatch Institute (UK)

A systematic evaluation of the FreshWater Watch CS platform identified key platform ingredients to ensure local community empowerment while responding to societal, regulatory and scientifically relevant questions.

# How to engage and empower marine dizen scientists?

Joaquim Garrabou, Institut Me lite rani D'estudis Avançats (IMEDEA-CSIC) (ES)

Co-author(s): Elisabetta Brogno, Guillem Roca, Laura Royo, Maria Vicioso, Guilma Agell, Luis Ruiz-Orejón, Oscar Sagué Long lasting engagement is a great challenge for CS. SeaWatchers uses mainly community building, feedback and social networks to involve diverse public targets (e.g. divers, fishermen).

# Dialogue Session Moderation

Assemblée **M** Monday

17:00 - 18:30

# National and International Networks Muki Haklay, Conference Committee (UK)

# How can scientists aid citizens to ensure their contributions matter in scientific research?

Gisela Wachinger, Dialogik non-profit institute for communication and cooperation research (DE)

This workshop is meant to convene lay-experts and scientists to discuss ideas for citizen participation in biodiversity and climate change research. How to ensure the results matter in science? CS projects will be collected and discussed, under the focus of translational methods for true CS.

### Spanish actions on citizen science at national level

Francisco Sanz, Fundación Ibercivis (ES)

We conducted a number of activities to deliver the action plan to consolidate CS in Spain. The Observatory on Citizen Science is analyzing more than 160 entries on CS. We will overview actions of the national portal that can be linked to other initiatives in other countries.

# Österreich forscht: the Austrian CS community platform

Daniel Dörler, University of Natural Resources and LifeSciences, Vienna (AT)
Co-author(s): Andrea Sieber, Florian Heigl, Philipp

Österreich forscht (<u>www.citizen-science.at</u>) is Austria's first CS platform. It links scientists and citizens by providing a common platform for citizen science actors. We present how Österreich forscht connects citizens and scientists by offering online and offline tools and events and by ensuring scientific integrity of projects.

### Citizen Science at US EPA

Hummer

Alison Parker, Oak Ridge Institute for Science Education fellow hosted by US EPA (US)

Co-author(s): Shannon Dosemagen

An advisory council was tasked by the US EPA to provide recommendations for integrating CS into environmental protection. This session will provide an overview and discuss strategies for integrating CS into science and

policy and for increasing the usability of citizen science data for environmental decision-making.

### Bürger schaffen Wissen

David Ziegler, Museum für Naturkunde Berlin (MfN) (DE) Co-author(s): Katrin Vohland

The online platform <u>buergerschaffenwissen.de</u> aims to interactively present, network, and support CS. Since 2014, the platform has featured over 90 projects and is actively involved in the facilitation of the CS community in Germany and in providing a link of science-policy.

# Workshop contexts

Les Recyclables **R** Monday 17:00 – 18:30

# Motivations for participating in CS projects in multiple around the world

*Mariana Varese*, Wildlife Conservation Society, Lima, Peru (PE)

Co-author(s): Finn Danielsen, Michael Koie Poulsen, Humberto Berlanga, Rick Bonney

Four short and provocative presentations from Greenland Africa, Mexico, the Amazon, the US and around the world will seed a lively discussion. Using guiding questions and workgroups, participants will produce recommendations on scaling up successful local CS projects to conserve migratory

species; motivating meaningful participation of citizens in large-scale CS efforts; improving citizen involvement in CS projects in contexts of no leisure time; and harmonizing agreements, regulations and policies to foster participatory sustainable management at multiple scales.

# Speed Talks Moderation

Auditorium Monday 17:00 – 18:30 Н

# Reflection on Tools and Strategies John Harlin, Conference Committee (CH)

# **Empowering citizens to participate in scientific endeavours**

Christothea Herodotou, The Open University (UK)

A set of enabling technologies that scaffold learning, participation, and communication between citizens are presented including nQuire, Sense-it, iSpot, Situ8, and BeeWatch. Technologies aim to foster citizen-led inquiry.

### Unleashing the value of citizen contribution

Friederike Klan, German Aerospace Center (DLR) (DE) Co-author(s): Christian Hüttich, Sina Truckenbrodt, Thomas Hübner

CS generates valuable outcomes that are not restricted to data. Letting those have a true impact requires us to

unleash the value of citizen contributions. The talk highlights key challenges in addressing this point.

# Engaging students in soil research by using visualbased social media

Elena Kinz, Open Science - Lebenswissenschaften im Dialog (AT)

The presentation will introduce the young CS project TeaTime4Schools, dealing with decomposition in soil, and provide insight on how a visual-based social media strategy is used to foster involvement and engagement of pupils.

# Clean Rivers: citizen scientists in a river waste monitoring project

Anne Land-Zandstra, Leiden University (NL) Co-author(s): Hanneke Reinders

Citizen scientists are contributing to tackling the Plastic Soup by the source through yearly monitoring of river waste. Motivations, attitudes and knowledge of the participants to the first year of the project will be discussed.

# Does participation in CS projects change behaviour in garden owners?

*Karine Prince*, French National Museum of Natural History (FR)

We explored whether environmentally-friendly behaviours can emerge from participation to CS. Using the French Garden Butterfly Observatory, we found evidence that gardening practices shifted with participation.

# Social media mining and artificial intelligence to mobilize CS movements

Stefan Daume, Scitingly (SE)

Twitter conversations have been described as 'embryonic CS communities' that solve tasks corresponding to traditional CS efforts. This talk will outline ideas to mobilise such communities.

### Workshop

Seminar Monday 17:00 - 18:30 Н

### Sharing the Knowledge - Sharing the Love

Toos van Noordwijk, Earthwatch (UK)

Co-author(s): Muki Haklay, Jane Delaney, Hilary Geoghegan, Aletta Bonn, Liesbeth Gijsel, Daniel Doerler, Florian Heigl, Poppy Lakeman-Fraser, Taru Sanden CS projects should learn from each other and collaborate to improve quality and ensure that new technologies and ideas become available to all. Such knowledge sharing can be facilitated by Communities of Practice (CoPs), groups of people who regularly interact to advance their field. These networks are nested and intertwined, encouraging serendipity and cross fertilisation. In this session, we will showcase successful CoPs and invite you to get involved and experience how such networks work. We will wrap up with a discussion on what makes an effective CoP and how to make them open to all.

### 20:00 - 23:00 / Doors 19.30

### Address of Welcome & Dinner B

Moderation: Tiina Stämpfli & Yasemin Tutav, Science et Cité (CH)

Sami Kanaan, Representative of the City of Geneva

# Tuesday, 5th June 2018

08:00 - 15:00

Conference registration open

08:30 - 09:30

### **Welcome and Keynote**

Moderation: Tiina Stämpfli & Philipp Burkard, Science et Cité (CH)

Science society continuum: From "deficit model" to social demand on research – the reform of science in progress

Lionel Larqué (FR)

Among your institutional position, the science-society story you tell is very different. From a top perspective, the situation was, is and never will be satisfactory. From the ground, the situation has never been so positive and productive. Since a long time, the problems on science society issues are institutional and political ones. They are not first connected to pedagogical, «literacy», or «understanding» topics. The story we want to share with the participants is a two-decades process, both on international and French contexts about concrete science-society interactions. It enlightened the historical phases we live in, and concrete solutions to come. It tells a lot about the difficulties institutions face.

09:45 - 11:00

### //Parallel Sessions

M

Speed Talks
Moderation

Grande Salle Tuesday

09:45 - 11:00

Transformational Potential of Citizen Science Heiner Benking, Conference Committee (DE)

Analysis of citizen science trends in scientific publications

Francisco Sanz, Fundación Ibercivis (ES)

CS is gaining relevance. We have identified all the papers – more than 5.000 – with the term 'citizen science' in the title, abstract or keywords of all the publications in JRC journals.

Social local impact of Citizen Science projects. Myth or reality?

Isabelle Bonhoure, Universitat de Barcelona (ES) Co-author(s): Anna Cigarini, Josep Perelló, Julián Vicens

We critically review the social impact in a collection of citizen social science experiments. A comprehensive evaluation of the impact on different stakeholders (public institutions, municipalities and NGOs) will be detailed.

### Coffee, cameras and climate chap through the farmers eyes

Tropical Agriculture / Onno Giller, International Intil Radboud University Nijm

Climate change is a early that people experience. This project aims at giving agency to farmers by giving them an active role in a puring how climate change is impacting their communities through the use of disposable cameras.

### The role of CS in empowering rur

Lira Sagvnbekova, Mountain Sad Research Institute. University of Central Asia (K)

CS challenges scient sts to rethink their mission: is it to find solutions to rollems or sharing research questions? To think about the reliability of research data or to share ideas in the dure in uncertain and complex times?

### CS an opportunity for scientists to rethink their role in society?

Alba L'Astorina, National Research Council of Italy (IT)

CS challenges scientists to rethink their mission: is it to find solutions to problems or sharing research questions? To think about the reliability of research data or to share ideas on the future in uncertain and complex times?

### Dialogue Session Moderation

M

Social and Scientific Innovation

Claudia Appenzeller-Winterberger, Secretary General Swiss Academies of Arts and Sciences (CH)

Assemblée Tuesday

09:45 - 11:00

CS and social innovation

Marisa Ponti, University of Gothenburg, Sweden (SE) Co-author(s): Sven Schade

CS needs to be considered beyond the narrow framing of public engagement in science to redirect research agendas towards issues of concern to citizens. We intend to explore with the audience the possibilities of CS to reinforce public engagement and expand the model of CS to support policy making and promote societal relevant outcomes.

### The SDG Crowdsourcing Toolkit

Jose Luis Fernandez Marquez, Citizen Cyberlab (CH) Co-author(s): Rosy Mondardini, François Grey, Bruno J. Strasser

How can we provide a set of open and adaptable online tools to empower citizens and scientists in their research and activities on sustainable development, and an accessible source of shared and open data and projects for the Goals' targets and indicators?

### The Open Seventeen challenge

Rosy Mondardini, Citizen Science Center Zurich (CH) Co-author(s): Jose Luis Fernandez Marquez, François Grey, Bruno J. Strasser

O17 is a prize-based, online and interactive coaching programme, that invites teams from all over the world to respond to SDGs related challenges using crowdsourcing and open data. How can we scale O17 and empower citizens globally?

### The United Labs for the Global Goals

François Grey, Citizen Cyberlab (CH) Co-author(s): Rosy Mondardini, Jose Luis Fernandez Marquez, Bruno J. Strasser

How can a global network of academic labs and maker spaces make a difference to the SDGs, by enabling student teams to address problems with crowdsourcing, open data and ubiquitous and easy-to-use low-cost technologies?

# How to go beyond the collection of data in citizen science projects?

Sylvie Blangy, CEFE CNRS (FR) Co-author(s): Pierre Bonnet, Valentin Lhoste, Alexis Joly, Pascal Monestiez, Philppe Feldmann, Jennifer Carré, Céline Arnal, Isabelle Chuine, Anaïs Chapot

Over the last decade, citizen science has experienced an unprecedented expansion into a large number of disciplines, due to increased public participation, the development of a variety of digital applications, and the creation of new and innovative interactions between science and society. In the fields of biodiversity and the environment, the role o

# Swipe right for Open Science: How to create the perfect match for Citizen Science?

Luiza Bengtsson, Max Delbrück Center for Molecular Medicine in the Helmoltz Association (MDC) (DE) Co-author(s):, Maike Weisspflug, Emma Harris

Which characteristics of the Open Science movement can be improved or expanded on to make it the perfect partner for the CS movement and an ally for a common cause? In this session we invite all interested parties to discuss and debate what Open Science can offer CS.

### Workshop

Empowerment, inclusiveness & equity in community-based research and CS

Les Recyclables **R**Tuesday
09:45 – 11:00

Claudia Göbel, ECSA, Alborg University (DE) Co-author(s): Michael Søgaard Jørgensen

What empowers people and matters of concern in social change? Who has what roles in research and advocacy? How can co-creation, inclusiveness and equity become part of cooperation between scientists and civil society? This workshop stimulates exchange between practitioners from community-based research as done in Science Shops and CS on the topic of empowerment in its many facets, among them inclusiveness and equity. Our aim is to identify joint questions for future collaboration, e.g. in an ECSA working group.

# Speed Talks Moderation

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Different Perspectives

Dana Mahr; Conference Committee (CH)

### Auditorium Tuesday

Managing emotions in long term citizen science projects

09:45 - 11:00

Marine Gabillet, IRSTEA (FR)
Co-author(s): Isabelle Arpin

Drawing on an ongoing empirical study of two long term environmental CS projects, we will address the following

environmental CS projects, we will address the following questions: what emotions does the long term perspective generate? How do the managers and volunteers manage these emotions?

# Citizen Scientists' contributions to the RNA design problem

Fernando Portela, Citizen Scientist (CH)

Since the launch of the platform in 2011, Eterna participants gradually went on from just contributing to publications, to taking direct charge of important roles in the staff, and to being lead authors of a peer-reviewed paper.

# Example of hesitation among CS: Is it a neotropical issue?

Eduardo Alexandrino, University of Sao Paulo, Brazil (BR) Co-author(s): Katia M.P.M.B. Ferraz, Cagan H. Sekercioglu, Hilton Thadeu Z. do Couto

When a project based on volunteers intends to work in regions where CS is not well established, birders may not be committed if their task demands beyond the trivial (e.g. search for banded birds in secondary forest patches)

# Barcelona CS Office: the public administration perspective

Diana Escobar, Barcelona City Council (ES) Co-author(s): Josep Perelló, Elisabetta Broglio

Barcelona CS Office is an initiative led by the municipality with a self-governance structure that acts as a community of practice of CitSci projects and promotes collective actions adapted to local societal needs.

# Building and maintaining iSpot's citizen science community

Mike Dodd, Open University (UK) Co-author(s): Janice Ansine

organiser perspectives

www.iSpotnature.org, a co-created CS initiative, engages and empowers through interest in wildlife, helping participants ID species and learn. We will share opportunities, challenges and successes of maintaining enthusiasm and the blended engagement approaches used to reach them.

### Workshop

Seminar Tuesday

09:45 - 11:00

H

Andrea Sforzi & Gaia Agnello, Maremma Natural History Museum & ECSA (IT/DE)

Evaluating BioBlitzes: an overview of participant and

Co-author(s): Lila Higgins, Lucy Robinson

Popularity of BioBlitzes is growing rapidly and innovative adaptations of the traditional format are emerging, such as grassroots BioBlitzes and the City Nature Challenge - a multi-day BioBlitz where over 60 cities across the globe compete to observe the most species using mobile apps. Evaluating events, both from the participants' and organisers' perspectives is crucial in order to ensure that potential outcomes are maximised for the benefit of society and biodiversity. This session aims to discuss methodologies used for evalulating BioBlitzes bringing case studies from across the globe.

11:00 - 11:30

**Coffee Break** 

### //Parallel Sessions

# Speed Talks Moderation

Grande Salle

M

11:30 - 13:00

Tuesday

### Citizen Engagement

Susanne Hecker, Conference Committee (DE)

# Citizens in knowledge generation: the value of diversity

Stijn Brouwer, KWR Watercycle Research Institute (NL) Co-author(s): Laurens Hessels

Based on five unique CS projects in the domain of water research, we explore the effect of a generic vs. alternative invitation strategy on the profile and motivation of volunteers, and the impact on scientific literacy.

### Strangers, stewards and newcomers in CS

Nina James, University of South Australia (AUS)

Based on research on identity and participation in CS in Australia, this presentation will focus on different characteristics of people engaged in different types of CS.

### Embedded assessment of skills in CS

Cathlyn Stylinski, University of Maryland Center for Environmental Science (US)

Although critical for science literacy and integrity, our study reveals direct measures of skill proficiency uncommon in CS, while highlighting embedded assessment's potential as an authentic unobstrusive approach.

### Engaging older citizen scientists in the digital era

Kate Lewthwaite, Woodland Trust (UK)

Nature's Calendar collects a record of changing seasonal signs such as tree leafing dates. Many of our volunteers are aged over 60 and struggled to make the switch to our new website. We will describe these barriers and how we overcame them.

### What motivates families to do citizen science?

Karsten Elmose Vad, The Natural History Museum of Denmark, University of Copenhagen (DK)

The CS project 'The Ant Hunt' successfully engages families in collecting data and ants for research. The

evaluation has clearly shown what motivates the participants - and what does not.

# Motivations and perceived benefits predict citizen scientists' level of engagement

Gaia Agnello, ECSA (DE)

We propose a framework to understand the factors influencing citizens' engagement and projects achievements looking at motivations, perceived benefits, effort invested and degree to which participants act as advocates.

# Dialogue Session Moderation

Assembléé **M** Tuesday

11:30 - 13:00

# Data, Quality and Open Science John Harlin, Conference Committee (CH)

# Simplifying citizen science methods for data collection

Jaume Piera, Institute of Marine Sciences (ES)
Co-author(s): Bernat Claramunt, Anne Bowser, Luigi
Ceccaroni

In this contribution we demonstrate that quantity could be more important than accuracy: simplified methods may produce better results to characterize patterns than those based on professional research. Simple protocols lower barriers for data collection, empowering a wider community to participate in monitoring environmental data.

# Food cultures: co-creation and evaluation of a thesaurus as a cultural infrastructure

Thomas Palfinger, Austrian Centre for Digital Humanities, Austrian Academy of Sciences (AT) Co-author(s): Alexander Schatek (Citizen Scientist), Rainer Zoubek, Jose Luis Preza Diaz, Amelie Dorn, Eveline Wandl-Vogt

Digital tools have increasingly enabled interconnection and opening of various resources across different media. exploreAT! cooperates with the Topothek, a citizen driven digital infrastructure to make use of this potential. First results of this cooperation are presented and discussed.

# Reliability of citizen science data: the example of Phenoclim

Colin Van Reeth, Research Centre on Alpine Ecosystems - CREA Mont-Blanc (FR)

Co-author(s): Marjorie Bison, Christophe Randin, Anne Delestrade, Nigel Gilles Yoccoz

CREA Mont-Blanc has collected data since 2004 with ist CS program Phénoclim (plant phenology in the context of

climate change). Is it possible to make rigorous analyses with CS programs involving a wide range of participants (pupils, private individuals, professionals)?

# Interactive social features in citizen science projects

Philipp J. Hummer, Spotteron (AT)

CS is based on user interaction. To immerse participants in projects, CS needs to be interactive, mobile and also about communication. Philipp from the CS app platform SPOTTERON explores possibilities and benefits of interactive social features in CitSci tools.

### Validation and Use of Citizen Science Environmental Data

Carolynne Hultquist, The Pennsylvania State University (US)

Citizen-led movements collecting environmental data may contribute information during hazards. Varying standards for crowdsourced data can cause potentially valuable sources of environmental information to be overlooked. Efforts made to validate CS may add credibility to CS so that they are trusted as data sources.

# Linking projects to cooperatively maximize engagement and learning

Caren Cooper, North Carolina State University & North Carolina Museum of Natural Sciences (US)

Manage projects better by learning from hands-on lessons for early adoption of free tools for: deploying an invisible API for authorized tracking of opt-in volunteers, a visible snippet for communicating transparency around tracking, reducing barriers with single-sign-on (SSO) options, and a customizable widget Project Finder for your website.

### Workshop

Les Recyclables **R**Tuesday
11:30 - 13:00

### Translating research on participants into practice

Rachel Pateman, Stockholm Environment Institute (UK) Co-author(s): Tom August, Sarah West, Alison Dyke

We will bring together CS practitioners, participants, and researchers of CS, to understand how results of research into characteristics of CS participants, their motivations, and behaviours can be used within projects. In this interactive workshop we will briefly present the results of our research and then explore with attendees how the results of this research can be used to design projects to generate better scientific outcomes and more satisfied participants.

### Talks Moderation

**Observatories** Margaret Gold, Conference Committee (UK/DE)

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Auditorium Tuesday

11:30 - 13:00

Levering the social innovation potential of citizen observatories

*Uta Wehn*, IHE Delft Institute for Water Education (NL) Co-author(s): Joan Masó

In order to achieve their desired societal outcomes, citizen observatories rely on the careful combination of social processes and technological tools, involving citizens at every step of the way.

### The role of citizen observatories and crowdsourcing community in GEOSS

Bente Bye, BLB (NO)

Co-author(s): Steffen Fritz, Joan Masó, Lea Shanley, Krystal Wilson

Citizen science's role in augmenting Earth observation data. A transatlantic perspective on standards and best practices for citizen-observed data management incl. integration with established EO data.

### Engaging and empowering different types of participants in Citizen Science

Gitte Kragh, Earthwatch Institute Europe (UK) Co-author(s): Helen Spiers

In this talk we discuss a variety of routes for diverse audiences, including teachers, their students, corporate employees and the general public, to engage with authentic research through both onsite and online CS.

### Workshop

Building and nurturing infrastructure for change-making and innovation in CS

Н Seminar Tuesday 11:30 - 13:00

Cindy Regalado, University College London (UK) Co-author(s): Erinma Ochu. Artemis Skarlatidou. Aleksandra Berditchevskaia

This 2-part workshop begins with sharing two techniques that enable social innovators to systematically and reflectively track their journeys: how to build capacity to identify, document and evaluate project purpose, resources, major decisions and track implications to create learning principles. We then form groups to discuss techniques; people share their own and, employing one of the techniques presented, map ways these can be used in their own contexts. We end with recaps and next steps.

### 13:00 - 14:30

### **Lunch Break**

### 13:45 - 14:15

### Lunchtime activity

### Walking Exercise: Participatory Modeling

Gisela Wachinger, Dialogik non-profit institute for communication and cooperation research (DE)

Participatory modeling is an approach used to involve citizens in all steps of a modeling process. The challenge lies in an understanding of modeling methods (citizens' side) and an openness to including knowledge from citizens (experts' side). The walking experiment opens the minds of all participants to unexpected processes in system models. The facilitator intends to verbalize short instructions as the group walks in an open space. The group creates a modeling system and reflects it afterwards.

### 14:30 - 16:00

### //Parallel Sessions

# Speed Talks Moderation

Grande Salle Tuesday M

14:30 - 16:00

Tour d'Horizon II

Philipp Burkard, Director of the Foundation Science et Cité (CH)

# How to best communicate with citizen hydrologists?

Barbara Strobl, University of Zurich (CH)

Speaking in an easily comprehensible language to nonprofessionals is a difficult task. This speed talk is about lessons learned within the CrowdWater project, some of which potentially can be applied to similar citizen projects.

### Using linked open data for capacity-building in CS

Cornelia Veja, The German Institute for International Educational Research (DE)

Co-author(s): Julian Hocker, Christoph Schindler, Stefanie Kollmann

The project 'Interlinking Pictura' bridges CS with linked open data and semantic wiki technologies by offering the online edition of the multilingual illustrated book for children (1790-1830) by F. J. Bertuch.

# A mixed-methods examination of motivations and barriers across six CS projects

Tina Phillips, Cornell University (US)

This speed talk will share results from a mixed-methods comparative case study examining intrinsic and extrinsic motivations and barriers for participation, across six different environmentally-based CS projects.

# Open data in practice: A guide to (re-) licensing data from CS projects

Kyle Copas, GBIF Secretariat (DK)

Uncertainties around licensing and intellectual property lead some to defer these issues as too technical or complex, but informed choices are better made late than never. Learn best practices for ensuring your project has the widest possible impact.

# Global perspective through local action: Citizen Science teachers and students

Sarah Staunton-Lamb, Earthwatch (UK)

To achieve the SDGs, individuals need to connect to and value nature, believing they have agency to make change happen. Explore how Earthwatch's programmes connect children and curriculum to the natural world through CS.

# Dialogue Session Moderation

Assemblée **V**Tuesday

14:30 - 16:00

### Education and Learning II

Chloë Sheik-Kadi, Project Leader at Animuse (CH)

### Integrating citizen science into doctoral education

Birte Lembke Ibold, University of Zurich (CH)

Takeaways from the LERU Summer School "Citizen Science – nexus between research and public engagement" at the University of Zurich. The focus is on our Hack Day: 44 PhD candidates developed 7 CS projects within 24 hours. How did the doctoral researchers experience the learning and development process?

### Play to understand scientific methods

Laure Turcati, Sorbonne University (FR)

"Hypopothèse" is a board game dedicated to CS linked with research projects. It helps in ca. 30 minutes with players from 8 years old to understand scientific process

and CS functioning. A perfect first step for future citizen scientists.

### Involving volunteers in biodiversity monitoring

Anne Dozières, Muséum national d'histoire naturelle de Paris (FR)

Co-author(s): Benoit Fontaine, Grégoire Lois, Laure Turcati

Participatory biodiversity monitoring at a nationwide scale implies adapting schemes to various types of publics, from skilled naturalists to young pupils or farmers, with carefully designed aims, protocols and feed-back types.

# Do you want to co-design a Citizen Science experiment for Social Change?

Julian Vicens, Universitat de Barcelona and Universitat Rovira i Virgili (ES)

Co-author(s): Anna Cigarini, Isabelle Bonhoure, Josep Perelló

The activity consists of a practical demo on how the social concerns of a group of citizen scientists can be transformed into a concrete Citizen Social Science experiment able to produce a tangible social impact. A number of collective experiments hosted in tablets and situated in public spaces offers interactive situations through social dilemmas.

### Who ate my caterpillars?

Michèle Kaennel Dobbertin, Federal Institute for Forest, Snow and Landscape Research WSL (CH) Co-author(s): Bastien Castagneyrol

Scientists want to know why caterpillar damage in trees is higher in warm regions, and thus if climate warming may increase the risk of tree defoliation. Children from 14 European countries helped them by placing fake leafeating caterpillars in trees and taking photos of marks left by predators.

# Training teachers to use citizen science with theirv students

John Harlin, Alpine Institute at the Leysin American School (CH)

Co-author(s): Laure Kloetzer

How can teachers use CS more effectively inside and outside their classrooms? Teachers have to know which CS projects will be effective in teaching their curriculum while engaging their students with enthusiasm for science.

Learn from ECSA's recent workshop on training for teachers and share your ideas for what's needed.

### Workshop

Les Recyclables **R**Tuesday
14:30 – 16:00

### Storytelling as a tool for communicating Citizen Science

Katja Machill, Wissenschaft im Dialog (DE) Co-author(s): Florence Mühlenbein

For a good story you need passionate characters to identify with, a challenge, and a clear plot. In this workshop the participants learn the basics of storytelling as a tool for communicating CS projects. Together - and based on everyone's experience - we identify the main aspects of a good story and have a look on best-practice CS projects. Finally, the participants pitch their own story about their own (or any other) CS project in 2-3 minutes. They are invited to record the pitches with smart phones and share them with the conference via social media.

# Talks Moderation

Auditorium
Tuesday
14:30 - 16:00

Н

### Social Innovation

Muki Haklay, Conference Committee (UK)

# Working Together: Citizen Science and Research Libraries

Tiberius Ignat, Scientific Knowledge Services (DE) Co-author(s): Paul Ayris

This talk looks at the role of research libraries in CS. We will see how CS supported by research libraries can strengthen the Open Science transition, for a better society.

### Innovation in and with Citizen Science

Susanne Hecker, Helmholtz Centre for Environmental Research UFZ/ German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig (DE) Co-author(s): Muki Haklay, Anne Bowser, Zen Makuch, Johannes Vogel, Aletta Bonn

This talk presents the expertise of 121 international authors that will be published as an open access book by UCL Press London in October 2018. We show the innovative potential of citizen science to open science, society and policy.

### Workshop

Seminar Tuesday 14:30 - 16:00



Peter Brenton, Atlas of Living Australia, CSIRO (AU) Co-author(s): Anne Bowser, Luigi Ceccaroni, Jaume Piera, Joan Masó

The global CS community is developing a data and metadata standard for CS which comprises three data models. These data models structure information about projects (project data model, PDM), datasets (dataset data model, DDM), and observations (observation data model, ODM). While the PDM is well advanced and already supports sharing of project metadata, the DDM and ODM are less advanced. This workshop will advance work on the ODM.

### 16:15 - 17:15

### Résumé & Farewell followed by aperitif

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Claudia Appenzeller-Winterberger, Secretary General Swiss Academies of Arts and Science (CH)

17:00 - 17:20

Registration for European Citizen Science Association (ECSA) General Assembly

17:20 - 20:45

### **ECSA General Assembly**

More Infos here.

18:00 - 22:00

### **Citizen Science (Games) Networking Event (pre-registered)**

Meet other Citizen Scientists and talk about Gaming projects at the Restaurant "Les Philosophes" (Rue Prevost-Martin 5)

18.30 - 20.00

Guided City Tour Geneva (pre-registered)

# **Posters**

More than 60 posters from all over the world show the huge diversity of citizen science projects. They will be displayed on Monday, 4<sup>th</sup> June from 8:30 until 14:00 at the Assemblée. Meet the people behind the posters during the poster session from 13:00 - 14:00, they happily answer your questions!

The posters are listed here in alphabetical order of the main authors:

# Massive Online Open Citizen Science: Use of MOOCs to scale rigorous Citizen Science and its impact

Raquel Ajates Gonzalez, GROW Observatory, University of Dundee (UK)

Co-authors: Andrew Cobley

More information: <a href="http://discovery.dundee.ac.uk/portal/en/research/massive-online-">http://discovery.dundee.ac.uk/portal/en/research/massive-online-</a>

open-citizen-science(aeaa34bf-afb5-4df8-8a8f-5ebcace1ef57).html

### Citizen Science and learning through iSpotnature.org

Janice Ansine, The Open University (UK) Co-authors: Mike Dodd, Yoseph Araya

### **Co-creating the International Odour Observatory**

Rosa Arias, Ibercivis Foundation (ES)

Co-authors: Nora Salas Seoane, M. Balestrini, L. Errandonea, L. Francis, M. Alonso,

J. Uribe

### Studies on a very cold Italian disappearance case

Carlo Artemi (IT)

### Citizen science in the EFSA framework: Potentials, benefits and risks

Federica Barrucci, European Food Safety Authority (IT)

Co-authors: Daniela Tomcikova

# More than the sum of its parts: Supporting citizens to be involved in social innovation

Hannah Biggs, Scottish Collaboration for Public Health Research and Policy (SCPHRP), University of Edinburgh (UK)

Co-authors: Ruth Jepson, Greig Inglis, John MacAteer, Laura Tirman, Kathleen Morrison

### Citizens should shape the future of neurotechnology

Jo Bowler, Wyss Center for Bio and Neuroengineering (CH)

### "WTimpact" - The Impact of Citizen Science as a Knowledge Transfer Tool

Miriam Brandt, Leibniz Institute for Zoo and Wildlife Research (DE) Co-authors: Anke Schumann, Stephanie Kramer-Schad, Sylvia Ortmann, Milena Stillfried, Tanja Straka, Christian Voigt

### Amazo'N'oil: Citizen Science to study oil extraction impacts in the Amazon

Mar Cartró-Sabaté, Institute of Environmental Science and Technology (ICTA) - Autonomous University of Barcelona (UAB) (ES)

Co-authors: Pedro Mayor Aparicio, Victoria Reyes-Garcia, Antoni Rosell-Melé, Martí Orta-Martínez

### Natusfera. A GBIF friendly Citizen Science Platform

Felipe Castilla, GBIF Spain-Royal Botanic Garden (CSIC) (ES)

Co-authors: Cristina Villaverde

# Searching for innovative ways to consolidate existing cooperation inside and outside school

Mahault Currat, AutreSens (CH)

Co-authors: Nicolas Pahud, Marie-Pierre Chevron

### **Empowering the Mental Health Community: A practical example**

Anna Cigarini, Universitat de Barcelona: Departament de Física de la Materia

Condensada & Institute of Complex Systems (UBICS) (ES)

Co-authors: Julian Vicens, Jordi Duch, Angel Sánchez, Josep Perelló

# How has Citizen Science become so important for the management of Swedish nature?

Stephen Coulson, Swedish Species Information Centre (SE)

Co-authors: Anna Tano Graflind, Johan Nilsson

### DoeDat, the crowdsourcing platform of the Botanic Garden Meise

Sofie De Smedt, Botanic Garden Meise (BE)

Co-authors: Ann Bogaerts, Nuno Veríssimo-Pereira, Quentin Groom, Henry

Engledow

### CoCreST: digital stories about sustainability in the city

Maria Daskolia, National and Kapodistrian University of Athens (GR)

Co-author(s): Chronis Kynigos

# What should we give back to our participants? A literature review on citizen scientists' preferences for accessibility of scientific output.

Anne Land-Zandstra, Leiden University (NL)

Co-authors: Marjolein de Vries, Ionica Smeets

# Markedly heightened entomological knowledge in citizen scientists participating to the photographic survey of flower visitors (France)

Nicolas Deguines, Muséum national d'histoire naturelle (Paris, France) (FR)

### One year of freshwater quality monitoring in Italy

Francesco Di Grazia, Department of Biological, Geological and Environmental

Sciences (BiGeA), University of Bologna (IT)

Co-authors: Bruna Gumiero, Stefano Fabbri

### Effectively promoting researcher's involvement in public engagement

Héloïse Dufour, Cercle FSER (FR)

### Designing scaffolding for inclusive citizen science practice

Yaela Golumbic, Technion (IL) Co-authors: Maria Aristeidou

# Research topics on everyone's mind and lips - possible research questions of citizens (about German in Austria)

Barbara Heinisch, University of Vienna (AT) Co-authors: Esther Topitz, Melanie Seltmann

More information: iam.dioe.at/en

### Collaboration between citizen science projects

Barbara Heinisch, University of Vienna (AT)

### **Crowdfunding Citizen Science**

Luc Henry, Science Booster (CH) Co-authors: Mirko Bischofberger

### The Psychology of a Good Citizen Science Project

Katrin Hille, Science Center (DE)

Co-authors: Agnes Bauer

### A new trend in media collaboration

Thomas Kaarsted, University Library of Southern Denmark (DK)

Co-authors: Anne Kathrine Overgaard

### Project StadtWildTiere Berlin - Citizen Science for all needs

Sarah Kiefer, Leibniz Institute for Zoo and Wildlife Research, BIBS - Bridging in Biodiversity Research (DE)

Co-authors: Sophia Kimmig, Heribert Hofer, Miriam Brandt

# PLANKTONID - Combining in situ Imaging, Deep Learning and Citizen Science for Global Plankton Research

Rainer Kiko, GEOMAR Helmholtz Centre for Ocean Research Kiel (DE) Co-authors: Svenja Christiansen, Simon-Martin Schröder, Frauke Blunck, Reinhard

Koch. Lars Stemmann

### Citizen Science Stories from in and around the classroom

Gina Maskell, European Citizen Science Association (DE)

# Participatory monitoring in Tuscany (Italy): raising awareness on night sky quality to empower citizens

Luciano Massetti, National Research Council - Institute of Biometeteorology (IT) Co-authors: Andrea Giacomelli, Elena Maggi

# "Not just a volunteer": Citizen empowerment through volunteer water quality monitoring.

Jaime McCauley, Coastal Carolina University (US)

Co-authors: Krystina Millar

# Implementation of CS in formal teacher education using the example of a biodiversity project in school gardens

Victoria Miczajka-Russmann, University of Leipzig (DE)

Co-authors: Elisabeth Jannasch

### Citizen science and open science would benefit from closer interaction

Daniel Mietchen, Data Science Institute, University of Virginia (US)

More information: <a href="https://github.com/Daniel-Mietchen/events/blob/master/ECSA-2018-Citizen-science-and-Open-science.md">https://github.com/Daniel-Mietchen/events/blob/master/ECSA-2018-Citizen-science-and-Open-science.md</a>

# Citizen Science at secondary schools: A comparative evaluation by students, teachers and scientists

Isabelle Bonhoure, Universitat de Barcelona (ES)

Co-authors: Salva Ferré, Toni Pou, Núria Ferran-Ferrer, Josep Perelló

# What's in it for me? Participant outcomes of biodiversity citizen science projects

Maria Peter, Kiel Science Outreach Campus (KiSOC) (DE)

Co-authors: Tim Diekötter, Kerstin Kremer

More information: http://www.kisoc.de/en/research-projects

# Citizen science, motivation and empowerment: lessons learned from Project Noah, a nature observation platform

Danièle Pralong, Project Noah/Networked Organisms (CH)

Co-authors: Yasser Ansari

More information: www.projectnoah.org

# World's first citizen science trophy puts science on par with sports at schools

Egle Marija Ramanauskaite, Human Computation Institute (LT)

# Getting Citizen Science into Schools: How can we convince teachers to participate?

Claire Ramjan, University of Stirling (UK)

# Citizen Science- Education Dialogue - from Learning about Science to doing Science

Anett Richter, Helmholtz Centre for Environmental Research (UFZ)/ German Centre for Integrative Biodiversity Research (iDiv) (DE)

Co-authors: Mandy Singer-Brodowski, Aletta Bonn, Susanne Hecker

### Establishing a national citizen science association

Joseph Roche, Trinity College Dublin and Science Gallery Dublin (IE)

Co-authors: Nicola Davis

### **Etopia-Unizar, Citizen Science Laboratories**

Francisco Sanz, Universidad de Zaragoza (ES)

Co-authors: Fermin Serrano, Cristina Hernandez, Beatriz Gavete

### Introducing the cyclic value chain of Citizen Science for policy

Sven Schade, European Commission (IT)

### A Century of Marine Citizen Science

Jack Sewell, The Marine Biological Association of the United Kingdom (UK)

Co-authors: Anna Luff, Jon Parr

### **Crab Watch**

Jack Sewell, The Marine Biological Association of the United Kingdom (UK)

### Students Discover: ANTS - Connecting Science and Education

Daniela Magdalena Sorger, North Carolina Museum of Natural Sciences (US)

### Why do we need (hydrological) data?

Barbara Strobl, University of Zurich (CH)

### Massively Multiplayer Online Science

Attila Szantner (CH)

### **Prototyping and Taking Action for Our Future**

Györgyi Bela, ESSRG – xHealth Ltd. (HU)

# Projects StadtWildTiere & Wilde Nachbarn – Monitoring urban and suburban wildlife with Citizen Science in three central European countries

Anouk-Lisa Taucher, SWILD – Urban Ecology & Wildlife Research, Zurich (CH) Co-authors: Fanny Betge, Miriam Brandt, Adrian Dietrich, Sandra Gloor, Heribert Hofer, Sarah Kiefer, Sophia Kimmig, Geva Peerenboom, Theresa Walter, Richard Zink

# Participatory research with citizens in a research forum. Practical considerations, challenges and obstacles

Stefan Thomas, University of Applied Science (DE)

# Web-based lab: A digital environment to progress from citizen data engineer to citizen scientist

Jeroen van der Brugge, Naturalis Biodiversity Center (NL)

# Comparison of marine debris data collected by researchers and citizen scientists: Is citizen science data worth the effort?

Tonya van der Velde, CSIRO Oceans and Atmosphere (AU)

### Natural Patterns: Micro-tasks in the wild to scientific empowerment.

Julian Vicens, Universitat de Barcelona and Universitat Rovira i Virgili (ES)

# ,Forschungsfall Nachtigall' (Nightingale Research Case) – a citizen science project on the biology and cultural history of nightingales

Silke Voigt-Heucke, Museum für Naturkunde Berlin (MfN) (DE)

Co-authors: Sarah Darwin

# It's thrush time. Tracking birds activities and use it as indicator of noise pollution in big cities: A Global Network

Sandro von Matter, Citizen Scientist (BR)

# Do we get "better" data at national scale if we enhance feedback locally? A trial with ornitho.de using interactive maps

Johannes Wahl, Federation of German Avifaunists (Dachverband Deutscher Avifaunisten e.V.) (DE)

Co-authors: Sebastian Geidel, Tom Hoyer, Christopher König, Julia Moritz, Stephan Schwan, Jana Moser

# Fox observations in the city of Vienna: Impact of land use and socioeconomics of citizen scientists

*Theresa Walter*, Research Institute for Wildlife Ecology, Veterinary University Vienna (AT)

Co-authors: Richard Zink, Gregor Laaha, Florian Heigl, Johann G. Zaller

# Designing a Reward System for Citizen Participation by Means of Blockchain Technology

Eveline Wandl-Vogt, Austrian Academy of Sciences & Austrian Centre for Digital Humanities (AT)

Co-authors: Daniel McDonald

# Towards active participation in ageing science: Involving seniors in the analysis and interpretation of their own data

Sarah Weschke, University of Rostock (DE)

Co-authors: Judith Henf, Katharina Brüggen, Esther Lau, Stefan Teipel

### We need You! Join the WeObserve Communities of Practice!

Uta When, IHE Delft Institute for Water Education (NL)

Co-authors: Joan Masó, Ellen Pfeiffer

### Crowdsourcing the Ocean, a new citizen research model

Chloé Yao, Astrolabe Expeditions (FR)

# CodeMyPlant: When High schools rally Scientists to barcode the Flora of Geneva

Candice Yvon, University of Geneva (CH)

Co-authors: Yamama Naciri

# Collaborative citizen science with marginalized groups: The case of unaccompanied minor refugees

*Ingmar Zalewski*, University of Applied Science Potsdam (DE)

### Alto Loa Sense: School Scientific-Environmental Research Kit

Nicolás Zanetta, Versus Sole Consulting (CL)

Co-authors: Javiera Machuca

# Citizen scientists empowering conservation: Monitoring nest boxes in the Ural owl (Strix uralensis) reintroduction project in Austria

Richard Zink, Research Institute for Wildlife Ecology, University of Veterinary

Science, Vienna (AT)

Co-authors: Theresa Walter, I. Kohl, C. Leditznig

# **Formats**

### Workshop

In this interactive format, participants are encouraged to work on a specific idea with the aim of producing a result at the end of the session.

For a limited number of participants (max. 50 persons in total)

Different levels – from beginners to experts

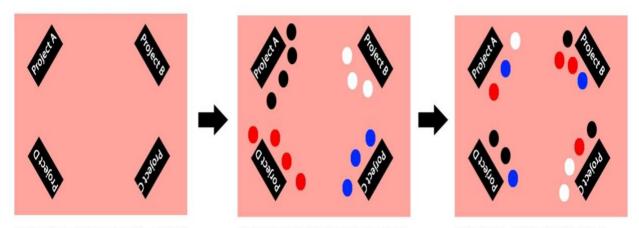
Time slots: 75 or 90 minutes

### Dialogue

A dialogue session consists of a set of different projects. Based on a 2 min. presentation (pitch) by each project presenter, participants choose the project they are most interested in and gather around the corresponding table. After approximately 15 min. of dialogue, participants change tables and projects.

### Visualization of a Dialogue Session

For a limited number of participants (approximately 10 persons in total per table and round à 15 minutes, several rounds)



Each project will be assigned to a table in the room. Except for a powerpoint presentation (no projectors available!), all tools and means are allowed to present your project. After a short pitch in the plenum, visitors choose a project. At the tables, the goal is to establish a vivid dialogue on the project (e.g. experiences, learnings, methods or current challenges) with focus on the visitor's questions and interests.

After approx. 20 minutes the visitors change tables and projects. This procedure is repeated several times. The visitor might not have the time and interest to visit every project.

### Time slots: 75 or 90 minutes

### Speed talk

A brief talk by presenters is followed by a brief discussion with participants. time: 6 minutes of presenting key points, 6 minutes of discussion

### Talk

Classical (extended) talk ending with a Q&A session. time: either 20 minutes presentation, 8 minutes discussion or 30 minutes presentation, 15 minutes discussion depending on session.

### Poster presentation

### **Printed posters**

Posters of printed format will be displayed on **Monday 4<sup>th</sup> June**, from morning through to lunch break. To meet the people behind the posters, visit the official **poster session** from **13:00 to 14:00**.

### **Digital posters**

Digital poster presentations are part of the mixed-format session "Tour d'Horizon I" on **Monday 4**<sup>th</sup> **June** from **15:15 to 16:30**. Note that the content of the posters is not the same as in the printed poster session.

Time: 5 minutes presentation, 3 minutes discussion

### Market Stands

Market Stands can be visited over the whole course of the conference (Monday morning through to Tuesday evening) and especially during the official **Market Stand session** on **Monday**, **4**<sup>th</sup> **June from 13:00-14:00**. Come and meet the people behind the Market Stands!