



TIME4CS

SUPPORTING SUSTAINABLE
INSTITUTIONAL CHANGES
TO PROMOTE CITIZEN SCIENCE IN
SCIENCE AND TECHNOLOGY

*Cambiamenti istituzionali sostenibili attuati
da UniSR grazie al progetto europeo TIME4CS
a sostegno della Citizen Science come
metodologia di ricerca innovativa*

Federica Prete
Università Vita Salute San Raffaele

GenOA week 2023 - 24 Ottobre 2023



UniSR
Università Vita-Salute
San Raffaele

The TIME4CS project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101006201



- Fondata nel 1996 a Milano
- Comprende 3 facoltà: Medicina, Psicologia e Filosofia
- Condivide il suo campus con l'IRCCS Ospedale San Raffaele (OSR)
- 100 laboratori ad alta tecnologia
- 880 studi clinici in corso
- Il San Raffaele è leader in molte aree della ricerca biomedica, come neuroscienze, oncologia, immunologia e malattie infettive ed è un'autorità mondiale nelle terapie cellulari e geniche



UniSR
Università Vita-Salute
San Raffaele



I.R.C.C.S. Ospedale
San Raffaele
Gruppo San Donato

6.000
studenti

2° Facoltà di Medicina
in Italia per n. studenti

~100 gruppi di
ricerca

Dal 7PQ



Numero totale di
progetti **ERC-LS: 20**

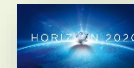
EU funding: **33,66M€**



Numero totale di
progetti **MSCA-LIF: 46**

EU funding: **9,18M€**

Horizon 2020 + Horizon Europe



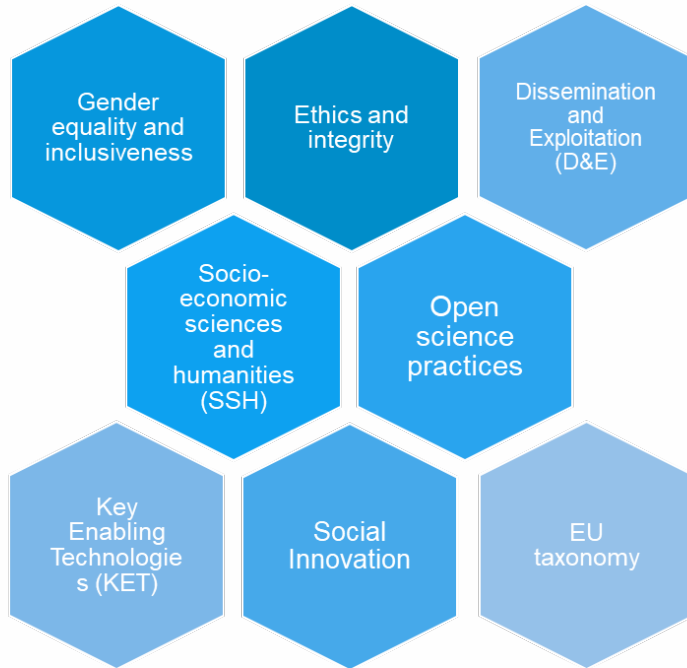
Numero totale di
Progetti: **96**



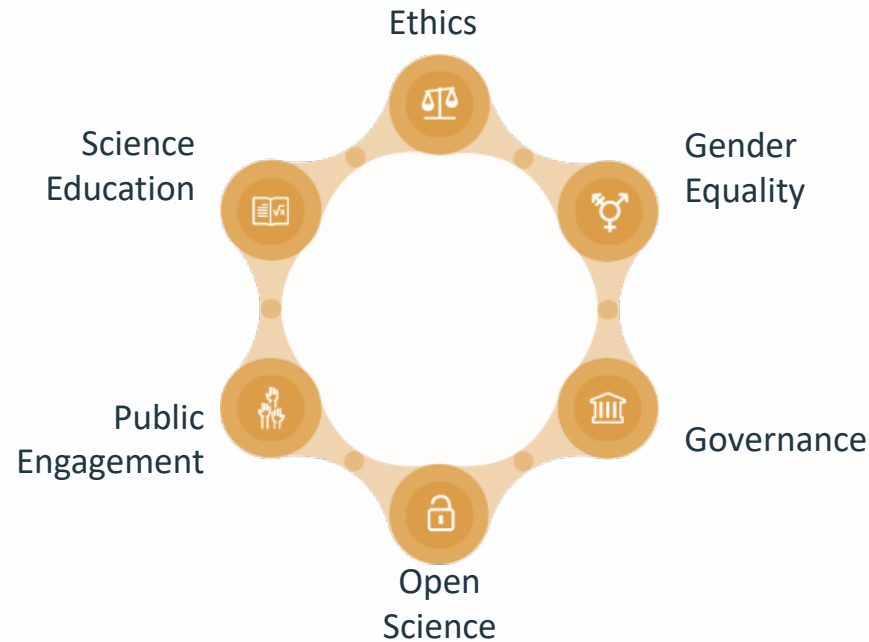
EU funding: **44,87M€**

Nel 2021 si è avviato in UniSR un importante cambiamento organizzativo, con la creazione di un'Area completamente nuova dedicata allo **Sviluppo della Ricerca** con la mission di **realizzare iniziative strategiche** a sostegno dello sviluppo delle eccellenze della ricerca UniSR e **contribuire all'internazionalizzazione e alla competitività dell'Ateneo**.

Temi cross-cutting



Pilastri RRI



La nostra visione



TIME4CS Il progetto TIME4CS

1.1.21 – 31.12.23 Progetto Triennale
Finanziato con Horizon 2020



Obiettivi

- sostenere e facilitare l'attuazione di **cambiamenti istituzionali sostenibili** nelle organizzazioni che svolgono attività di ricerca
- promuovere il **Public Engagement** e la **Citizen Science** nella scienza e nella tecnologia



Coordinamento
APRE
Agenzia per la Promozione
della Ricerca Europea

11 partners
in 9 stati

3 Front-Runners
4 Implementers



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Need:

avere una chiara definizione dei ruoli nel progetto → creazione di un gruppo informale di attori con competenze diverse e complementari

Actions:**PI del progetto**

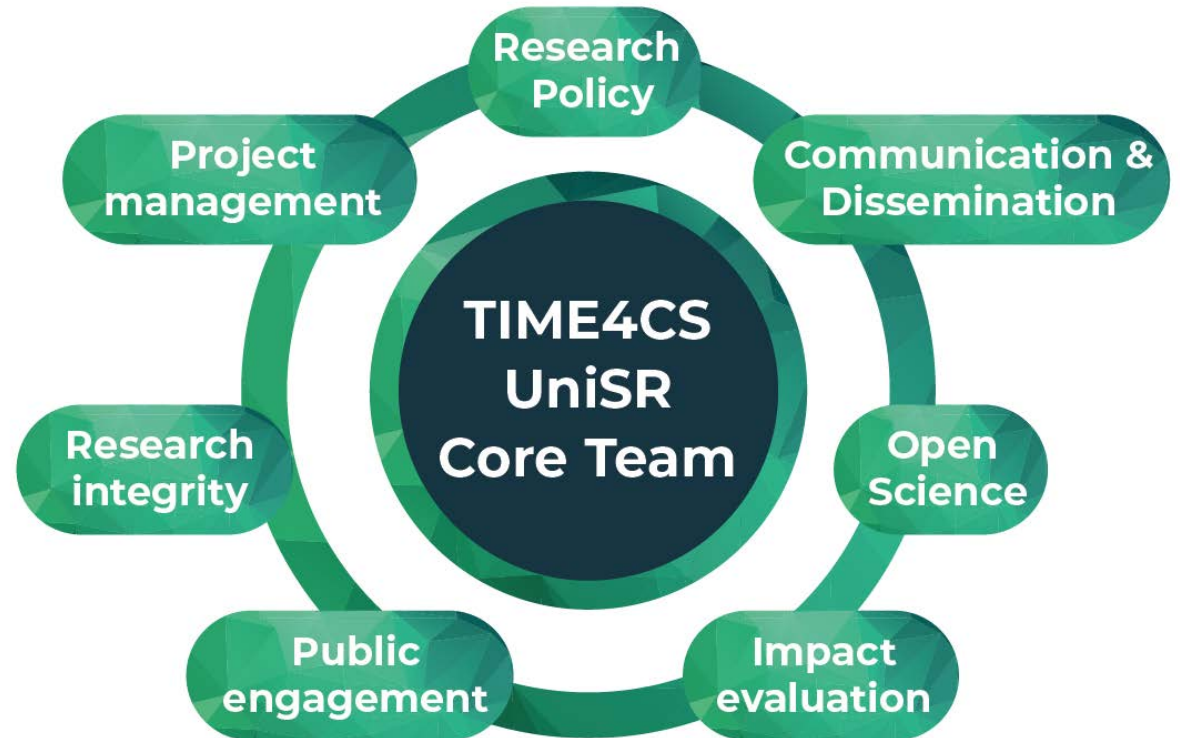
Roberto Buccione,
Direttore Area Research Development

Project management & task implementation

Ufficio EU Research Strategy&Policy +
Science Communication & Dissemination

UniSR Core team

Competenze complementari già presenti in UniSR e OSR,
contribuisce a ideazione e realizzazione delle attività di
progetto.



Questionario sul livello di consapevolezza dei ricercatori San Raffaele sulla Citizen Science

- 22/112 persone avevano già sentito parlare di CS
- Quasi nessuno era stato coinvolto in attività di CS (solo 3 come cittadino e 2 come ricercatore)
- 18/109 persone sono state coinvolte in altre attività di ricerca partecipativa
- 69/89 persone pensano che la CS possa essere utile per la loro attività di ricerca
- 78/88 pensano che la CS possa aiutare i cittadini ad avere un impatto sulla società

Potenzioli benefici della CS per i ricercatori



Ragioni per non utilizzare la CS





Promuovere la Citizen Science attraverso una comunicazione efficace e specifica per il progetto TIME4CS, tenendo conto della mancanza di conoscenza e interesse per la Citizen Science nella comunità dei ricercatori del San Raffaele

Definizione di roadmaps e grounding actions specifiche per UniSR grazie all'interazione coi partner front-runner

Intervention Areas	Grounding Actions
Research	To belong to a Citizen Science network
	To implement changes in organisational structures or functions
Education and Awareness	To set up training programmes for researchers and citizen scientists
	Set up informal opportunities for interactions with researchers
Support resources and Infrastructure	To identify an institutional contact point for CS
Policy and Assessment	To adopt evaluation criteria for researchers' evaluation that take into account CS

+ Two more GAs to be implemented after the end of the project

Research	Develop Citizen Science methodology for research activities and projects
Education and Awareness	Organise debates or public events to promote CS

Current Working Groups



Air quality



BioBlitz



Citizen science and open science



Citizen science and universities



Citizen science for health



Citizen science networks



Conference



Empowerment, inclusiveness and equity



European Citizen Science Platform



Agri-food



Learning and education in citizen science



Projects, data, tools and technology



Policy, strategy, governance and partnerships



Sharing best practice and building capacity



Storytelling and other arts



Global Mosquito Alert



Green spaces and citizen science

Integrazione di elementi di Citizen Science nell'offerta formativa di UniSR:

- Corso di Laurea magistrale in Biotechnology and Medical Biology
- Corso di Laurea magistrale in Scienze infermieristiche ed ostetriche
- Corso di dottorato di ricerca internazionale in Medicina Molecolare
- Corso di dottorato di ricerca in Filosofia
- Corso di dottorato di ricerca in Scienze Cognitive Comportamentali
- Master in Comunicazione della Scienza e della Salute

Attività di informazione per i ricercatori: Seminari “Science & Society”

UniSR Università Vita-Salute San Raffaele | **I.R.C.C.S. Ospedale San Raffaele** Gruppo San Donato

Science & Society Seminars

La Scienza della Partecipazione

Un unico sistema fra ricerca e cura: la scienza con e della persona

12 ottobre 2022
16.00 – 17.00
Aula San Raffaele

Paolo Zoratti, Scientific Director, Associazione Italiana Sclerosi Multipla
Federica Molinari, Patient Engagement Manager, Fondazione Italiana Sclerosi Multipla

Il coinvolgimento dei cittadini e dei pazienti nei processi legati alla ricerca scientifica, in particolare in campo biomedico, rappresenta un nuovo modello di Governance della scienza, più inclusivo ed equo, ed è tra gli obiettivi strategici della politica della ricerca europea e internazionale. Il Progetto Europeo MULTI-ACT offre un esempio eccellente di scienza partecipata, mettendo al centro l'esperienza di malattia del paziente – la cosiddetta *experiential knowledge* – e trasformando il paziente in un co-ricercatore.

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Science & Society Seminars

Which role can sex and gender play in biomedical research?

9th November
16.30
Online

In recent years the attention to sex and gender has steadily increased due to a growing focus on the topic and pressure from funding bodies and scientific journals. In this meeting we will first discuss why sex and gender should be considered in biomedical research and what could possibly go wrong in not doing so. We will look at examples from different disciplines and different types of research. Does cell sex influence experimental outcome? Do cell media impact cell growth in a sex-dependent manner? Does the sex of the researcher impact the research being conducted? Does gender really impact health outcomes?

Speaker
Sabine Curtall-Prigione, MD, PhD, MSc, Professor (Strategic Chair) of Gender in Primary and Transmural Care (Rheumatology), Professor of Sex- and Gender- sensitive Medicine (Belfast University)

Host
Cristina Ferrini, Institutional contact person for Gender Medicine, Team GEM (Gender Diversity & Inclusion in Medicine, Research and Governance), Head, Immunobiology of Neurological Diseases Lab, (IRCCS San Raffaele)

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Science & Society Seminars

Human computation, Citizen Science, and biomedical research: a powerful combination for accelerating discovery

8th November – 16.00
Online – Microsoft Teams

Speaker
Prof. Pietro Michalewicz, Executive Director Human Computation Institute, Ithaca, New York; Visiting Professor, Cornell University

Prof. Michalewicz is the PI of the *StallCatcher* project, based on an online game in which participants are asked to look at movies of real blood vessels in mouse brains and search for "stalls". Collectively, up to 10000 movies can be analyzed in 1 hour of gaming with 95% accuracy, which corresponds to what a single researcher can achieve in over 5 days in the lab. Citizen Science has become an increasingly useful tool for accelerating research and accumulating data analysis that cannot be fully automated, including in biomedical research. Prof. Michalewicz will discuss the skepticism among scientists about the quality of data that could be provided by non-experts, showing that after almost two decades the field has accumulated successful cases in which crowd-based methods have been validated against gold standard data and enabled new research findings in many scientific domains, including biomedical research. Key concepts entail considering the role of individual sensitivity and response bias, and tailoring the methods of citizen science to best suit the specific research needs on a case-by-case basis. Today citizen science is maturing as a field and approach, and creates opportunities not only for accelerating scientific advancement but also for hands-on learning about the scientific process. Prof. Michalewicz will share recent successes and the most recent initiatives in biomedical citizen science.

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Science & Society Seminars

Sounding out the potential of AI on wearables and audio for health and fitness

27th September – 16.00
UniSR – Pitagora classroom (Dibit 2 – PI)

Speaker
Cristina Mascolo, Full Professor of Mobile Systems in the Department of Computer Science and Technology, Health, Mobile Systems Research Laboratory, University of Cambridge, UK

Wearable devices are becoming pervasive in our lives, from smartwatches measuring our heart rate to in-ear sensors accompanying us in every virtual meeting. These devices are, in theory, very good proxies for human behaviour. Yet, making the inference from the raw sensor data to the behaviour of individuals remains difficult.

Prof. Mascolo will discuss the state of the art of commercial systems and highlight the open challenges that these technologies still face before they can be trusted as health measurement proxies. Examples will be drawn from her projects on audio based respiratory and cardiac health diagnostics and cardiorespiratory fitness analysis.

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Attività di informazione per i ricercatori: newsletter “Bits of Citizen Science”



01 What is Citizen Science?

Citizen Science is a term generally used to describe a wide range of activities, in which people from every walk of life participate in a scientific project in a meaningful way (beyond being subjects in a medical experiment, or participants in a social sciences study).

Science becomes Citizen Science when members of the public voluntarily help to conduct scientific research. As such, citizen science accelerates the democratization of science and the promotion of universal and equitable access to scientific data and information.

Citizen scientists may help design experiments, collect data, analyze results, and solve problems. Benefits stemming from Citizen Science not only include publication of new knowledge, but also learning opportunities, personal enjoyment, social networking, increased influence on policy-making, and enhanced feelings of responsibility and satisfaction.

Since 2021, UniSR is a partner of the European Horizon2020 project **Time4CS**, which aims at supporting sustainable institutional changes to promote Citizen Science in science and technology. The project involves 11 partners spanning 9 countries, leading to institutional changes through continuous mutual learning and exchange of knowledge and best practices.

For those of you interested in the societal impact of science and how innovative approaches, including citizen science, can add value to research practice in different fields, we are organizing a **seminar series** entitled “*Science & Society*”.

The first seminar (in Italian) will be held by Paola Zaratini, the Scientific Director of AISM and Federica Molinari, Patient Engagement Manager of FISM, on **12th October**, h 16.00, San Raffaele Room, with the title “*La Scienza della Partecipazione. Un unico sistema fra ricerca e cura: la scienza con e della persona*”.

We hope to see you there!

The **Time4CS** team
Contact us at citizenscience@unisr.it

To find out more about the project, please visit <https://www.time4cs.eu/>



03 Second “Science & Society” seminar

In the framework of the European Horizon 2020 project **Time4CS**, UniSR is organizing a seminars series called “*Science and Society*” aimed at promoting **Citizen Science** at San Raffaele.

Join us for the second seminar on **9th November**, h 16.30, **online**, with the title “*Which role can sex and gender play in biomedical research?*”. The seminar will be held in English.

Our speaker will be Dr **Sabine Oertelt-Prigione**, MD, PhD, MSc, Professor (Strategic Chair) of Gender in Primary and Transmural Care at the Radboud University Medical Center, Nijmegen (Netherlands) and Professor of Sex- and Gender-sensitive Medicine at the Bielefeld University (Germany). Her research focus lies on methods to investigate gender in medical research and on the systematic implementation of sex- and gender-sensitive research and practice.

Dr. Oertelt-Prigione will address how in recent years the attention to sex and gender has steadily increased due to a growing focus on the topic and pressure from funding bodies and scientific journals. In this meeting she will first discuss why sex and gender should be considered in biomedical research and what could possibly go wrong in not doing so. She will show us some examples from different disciplines and different types of research: if cell sex influences the experimental outcome, if the cell media can impact cell growth in a sex-dependent manner, if the sex of the researcher impacts the research being conducted, or if gender really impacts health outcomes.

Ensuring gender equality in both the research process and research content is one of the pillars of the Responsible Research and Innovation (RRI) approach, aimed at guaranteeing that the innovation proposed by a research project meets the needs of our society and also that the research procedures are conducted in a responsible manner.

Please find attached the flyer of the event.

We hope to see you online:
[Microsoft Teams](#)
[Click here to join the meeting](#)

Meeting ID: 382 849 453 806
Passcode: qqXdwk
[Download Teams](#) | [Join on the web](#)

The **Time4CS** team
Contact us at citizenscience@unisr.it

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#05 The ERC supports Citizen Science as a groundbreaking research approach

The **European Research Council** (ERC) is strongly supporting Citizen Science as a means to further push the frontiers of knowledge, with a view to investing in Citizen Science projects over the coming years.

The ERC’s Scientific Council Vice-President **Eveline Crone** recently published an **article** in the ERC magazine underlying some **crucial aspects**:

- Citizen Science is an underexploited but **valid research method**, that involves people as an integral part of the scientific process, not merely in outreach activities or other initiatives connecting science to society.
- The idea that all **knowledge** is restricted to research institutions/universities is reductive and exclusive, and fails to recognize that much utilizable knowledge is available beyond the confines of academia.
- Citizen Science requires from researchers a certain degree of **humbleness**, stepping back and being **open** to learning from others.
- Every research method has its **advantages** and **disadvantages**: in a lab all the conditions are controlled allowing causal conclusions; however, in the real world we can reach out to communities that possibly would not come to the lab. The strength of Citizen Science is in the combination of methods where the disadvantages of one method can be compensated by the advantages of another one.

In the ERC magazine you can also find a **perspective** from the Executive Director of the European Citizen Science Association and the head of the German Citizen Science Platform.

To underline the commitment of the ERC and the European Union, the ERC dedicated its **annual event** to the promotion of Citizen Science last December 7th. You can access the recordings of the **morning** and **afternoon** sessions.

The **TIME4CS** team
Contact us at citizenscience@unisr.it

To find out more about the project, please visit <https://www.time4cs.eu/>

Attività di informazione per i ricercatori: Condivisione delle iniziative di TIME4CS sui social UniSR

Uni San Raffaele @MyUniSR · 2 dic 2022

#savethedate On December 6th join the #TIME4CS online interactive workshop: an overview on the roadmaps and possible Grounding Actions that can be carried out to promote the adoption of #CitizenScience as research methodology.
Register here: hubs.ly/Q01tRFjd0

RESEARCH
Embedding CS in RPOs

Università Vita-Salute San Raffaele
36.505 follower
2 giorni ·

Our Project & Research Manager **Elena Angela Maffia** will be one of the speakers for the upcoming #TIME4CS webinar.
More info below [i](#)

[Vedi traduzione](#)

TIME4CS
321 follower
3 giorni ·

Introducing our excellent speakers for the upcoming "#CitizenScience in the dialogue between #science & #society" webinar:

- ♦ Simona Cerrato - Community & Communications Manager at ECSA - European Citizen Science Association
- ♦ Elena Maffia - Project & Research Manager, Libera Università Vita-Salute San Raffaele

Join us on the 27th of April, from 2:30 pm CEST <https://lnkd.in/ecCmwHci>

[Vedi traduzione](#)

27th April 2023
14.30 - 16.00 CET
online event

Simona Cerrato
ECSA - ECS

Elena Maffia
UniSR - TIME4CS

EDUCATION & AWARENESS

Citizen science in the dialogue between science and society



Sustainable institutional change in action: An Implementer's perspective - UniSR

Engaging society to better science and promote health.

How TIME4CS will help Vita-Salute San Raffaele University foster Citizen Science Open Science practices

Vita-Salute San Raffaele University is a prestigious Italian private, not-for-profit university hosting more than 5,000 students and comprises the faculties of Medicine, Technology and Philosophy.

The university integrates its scientific activities with research conducted by IRCCS Ospedale San Raffaele, a leading private research hospital in Italy performing cutting-edge translational research aiming at advancing the knowledge on human diseases and novel therapies. A shared campus hosts all teaching and research activities in a large state-of-the-art infrastructure complex.

Both institutions have a strong commitment to open science, research integrity and public engagement due to the ever-increasing social, economic and environmental implication of research, engaging citizens in the scientific process is therefore of great importance. Citizen Science is an excellent framework to co-create knowledge and share both results and tools with the society at large.

San Raffaele researchers have little experience in the field, but have already been involved in interdisciplinary research projects – mostly regarding nutrition and health education – that depended on citizen participation, although not as active, independent actors in the scientific process.

Citizen Science as a framework for open science and societal engagement:

UniSR recognises citizen science as a powerful instrument for the advancement of science for several strategic reasons:

- it helps integrate information technologies and smart devices in the development of research programs and in healthcare;
- it confers the potential to conduct research on a larger scale, while reducing costs;
- it addresses key ethical concerns in biomedical research, leveraging on empowerment and democratization processes;
- it provides a unique framework for public engagement and science education.

By promoting Citizen Science approaches within the institution, UniSR hopes to advance its overall responsible research and innovation agenda.

However, it is acknowledged that citizen science projects must overcome key technical and ethical challenges to succeed, especially so in the complex field of healthcare and biomedicine. To overcome these challenges and fully unlock the potential of citizen science, we need to provide the appropriate societal and institutional context. This is the primary goal of the grounding actions we will implement within the TIME4CS project soon.

Our grounding actions:

The planned grounding actions comprise all major intervention areas, from research to education and awareness, support resources and infrastructures to policy and assessment.

The education and awareness one is probably the most strategic, given the limited experience we have as an institution in citizen science activities. In this regard, we plan to join a major CS network (the European Citizen Science Association), to access expertise in the field – resources, events and workshops – as well as new opportunities for scientific collaboration. We also plan to set up a Working Group with researchers already interested in the topic and launch information initiatives for researchers and training programs directed at university students.

We hope that these actions will inspire a first group of interested researchers to join the CS working group, while the implementation of the next grounding actions – regarding the area of policy and assessment and support resources and infrastructures – will provide tools and know-how to the community at large. Indeed, UniSR is undergoing a structural transformation including the implementation of a new Area for Research Development. Within this Area we plan to set up a contact point for Citizen Science, in the open science team. Furthermore, we plan to include the use of CS approaches in the evaluation criteria for researchers.

By providing institutional change to support Citizen Science activities, the TIME4CS Grounding Actions will, hopefully, trigger a virtuous circle and lead to the first UniSR Citizen Science research projects.

Author: Guadri Nicolò



It's time for researchers to meet Citizen Science! An Implementer's perspective - UniSR

Since its inception, Vita-Salute San Raffaele University (UniSR) has been characterized by a strong integration between biomedical research and socio-psychological and philosophical research, with the idea that improving the human condition must include all three of these aspects. Furthermore, UniSR shares its campus with IRCCS Ospedale San Raffaele (OSR) forming an overall structure with more than 100 laboratories and 1,200 researchers. In such an environment where students, researchers, physicians, and patients are so closely linked, the TIME4CS project aims to define and implement institutional changes that can lead to a more and more effective engagement of patients and citizens in general in research and innovation activities.

The main goal of the TIME4CS project of UniSR is to actively engage researchers, by introducing them to the concept of Citizen Science and how it can become a powerful approach to enhance their research and increase societal appreciation. A few San Raffaele researchers have already been involved in research projects trying to obtain participation, however, in those projects, citizens did not play a direct role in the scientific process. Instead, Citizen Science should cover a range of different levels of participation from raising public knowledge about science, encouraging citizens to participate in the scientific process by observing, gathering and processing data, right up to setting scientific agendas and co-designing and implementing science-related policies[1]. Thanks to TIME4CS, scientists are given the opportunity to meet professional experience in Citizen Science projects (see some examples below), therefore learning from concrete examples about the economic, democratic, scientific, ethical, and moral values that Citizen Science has to offer. Just to name one positive effect, citizens are an inexhaustible source of something scientists crave most... data!

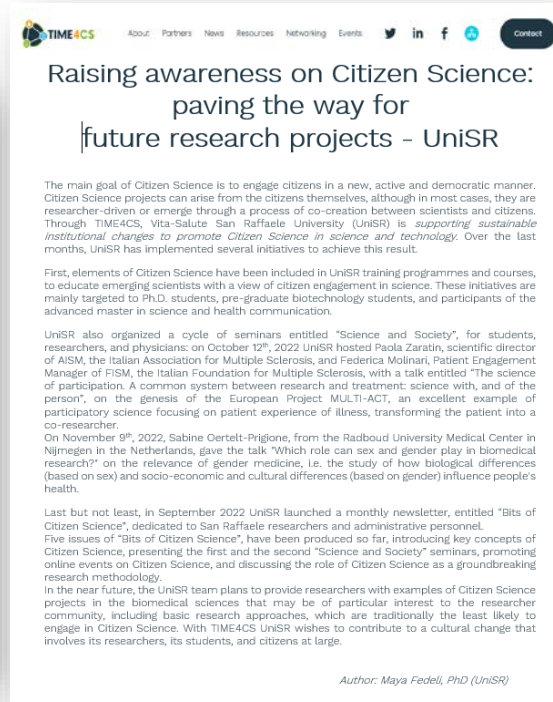
As a first step in making researcher awareness elements of Citizen Science have been integrated into a few UniSR courses for medical medicine and biology/sciences PhD students, pre-graduate biotechnology students, and participants in an advanced master's in science and health communication.

Furthermore, UniSR is organizing a cycle of seminars entitled "Science and Society", which aims to highlight significant issues emerging from the complex relationship between scientific research and society, foster national and international aspects will be involved that offering our researchers many opportunities for discussion and boost for thought. The audience will be provided with concepts, methodologies, practical examples and concrete evidence. The seminars are mainly intended for researchers and students, but attendance will be open to people outside the UniSR community as well.

We are also actively implementing institutional changes, including the establishment of a core team and reference point for researchers, wishing to engage them in Citizen Science activities and to include such activities in the criteria for research evaluation for promotions and appointments.

Our aim is that Citizen Science and other forms of citizen participation will become more widespread, thus effectively and more broadly engaging patients, their families, and citizens in scientific research.

Author: Maya Fedeli, PhD (UniSR)



Raising awareness on Citizen Science: paving the way for future research projects - UniSR

The main goal of Citizen Science is to engage citizens in a new, active and democratic manner. Citizen Science projects can arise from the citizens themselves, although in most cases, they are researcher-driven or emerge through a process of co-creation between scientists and citizens. Through TIME4CS, Vita-Salute San Raffaele University (UniSR) is supporting sustainable institutional changes to promote Citizen Science in science and technology. Over the last months, UniSR has implemented several initiatives to achieve this result.

First, elements of Citizen Science have been included in UniSR training programmes and courses, to educate emerging scientists with a view of citizen engagement in science. These initiatives are mainly targeted to PhD students, pre-graduate biotechnology students, and participants of the advanced master in science and health communication.

UniSR also organized a cycle of seminars entitled "Science and Society", for students, researchers, and physicians; on October 12th, 2022 UniSR hosted Paola Zarin, scientific director of AISM, the Italian Association for Multiple Sclerosis, and Federica Molinari, Patient Engagement Manager of FISM, the Italian Foundation for Multiple Sclerosis, with a talk entitled "The science of participation. A common system between research and treatment: science with, and of the person", on the genesis of the European Project MULTI-ACT, an excellent example of participatory science focusing on patient experience of illness, transforming the patient into a co-researcher.

On November 9th, 2022, Sabine Oertelt-Prigione, from the Radboud University Medical Center in Nijmegen in the Netherlands, gave the talk "Which role can sex and gender play in biomedical research?" on the relevance of gender medicine, i.e. the study of how biological differences (based on sex) and socio-economic and cultural differences (based on gender) influence people's health.

Last but not least, in September 2022 UniSR launched a monthly newsletter, entitled "Bits of Citizen Science", dedicated to San Raffaele researchers and administrative personnel. Five issues of "Bits of Citizen Science", have been produced so far, introducing key concepts of Citizen Science, presenting the first and the second "Science and Society" seminars, promoting online events on Citizen Science, and discussing the role of Citizen Science as a groundbreaking research methodology.

In the near future, the UniSR team plans to provide researchers with examples of Citizen Science projects in the biomedical sciences that may be of particular interest to the researcher community, including basic research approaches, which are traditionally the least likely to engage in Citizen Science. With TIME4CS UniSR wishes to contribute to a cultural change that involves its researchers, its students, and citizens at large.

Author: Maya Fedeli, PhD (UniSR)



Huge success of the mentoring visit at Vita-Salute San Raffaele University: a step forward on the path to embedding Citizen Science in UniSR research

The TIME4CS project is based on the continuous exchange of knowledge between Front-Runner institutions, IRCCS, with comprehensive expertise in Citizen Science, and implementer institutions such as UniSR, which are in the early stages of the implementation of institutional changes to support Citizen Science.

On the 8th and 9th of May, UniSR hosted Front-Runner partners Aarhus University, University College London, and Citizen Science Centre Zurich, plus European Science Foundation and ARIE - Agorà per la Promozione della Ricerca Europea.

Prof Gianvita Martino, scientific director of San Raffaele Hospital and University research and third mission pro-rector, welcomed our partners together with UniSR CEO and San Raffaele Hospital research director Dr Anna Flavia Dranici Enobiti. Prof Martino showed the strength of UniSR's integrated approach by sharing the campus with the hospital.

The UniSR TIME4CS Core Team brought the Front-Runners up to speed on the advancement of the Grounding Actions designed to embed Citizen Science in our institution. Among the many initiatives discussed, were a survey to better understand researcher awareness of Citizen Science, joining the European Citizen Science Association (ECSA), several communication activities (newsletter, social media, seminars), the formalization of an Open Science team within an area devoted to Responsible Research and Innovation, training activities for research support officers and for students, the creation of a contact point for Citizen Science and the construction of a dedicated internal page with a repository of papers and resources on Citizen Science.

During the 2-day visit, Front-runners offered three different workshops on Citizen Science, tailored for university professors with a focus on education, researchers of both San Raffaele University and hospital, and for research support officers. Our aim is to achieve a welcoming research environment in which Citizen Science projects can be successfully created and fostered.

The main goal of the workshop on education was to teach professors how to drive students to "think like a participant", recognizing that Citizen Science exists in multiple flavours and leading students to think about their own Citizen Science projects.

The workshop for researchers highlighted how Citizen Science exists on a spectrum of levels of citizen participation, and that ultimately, Citizen Science is a bona fide research methodology that can be adapted to the researcher's needs. Several examples of running Citizen Science projects were presented to stimulate interest in researchers. Scientists then learned in groups to brainstorm on possible Citizen Science projects, such as crowdsourcing of research goals and gamification of iterative parts of lab procedures. The workshop was a veritable success: many potential ideas that deserve further exploration emerged. Interested researchers and the Citizen Science Core Team will definitely meet again soon!

Research support officers participated in the third workshop and became familiar with the principles of Citizen Science. This will enable them to manage research projects that already present with Citizen Science characteristics or those that would benefit from the addition of a participatory component, also in terms of increasing chances for winning funding.

Last but not least, Front-runners and the UniSR Core Team (after two full days and a lovely tour & dinner downtown together) enjoyed a train-the-trainers session, during which the Core Team focused on the training activities on Citizen Science it will implement in the future for our research community. We learned how to perform stakeholder analysis, how to map the characteristics of the target audience, and how to apply the Logic Model to outline training activity impacts.

We are thrilled about what's coming for UniSR and Citizen Science: the mentoring visit has helped accelerate the ongoing change in our research community and in our institution.

Author: Maya Fedeli, PhD (UniSR)

TIME4CS

Attività di informazione per i ricercatori: Podcast

Podcast per ResBios

“Engaging research with Citizen Science”



Abbiamo creato un indirizzo e-mail (citizenscience@univr.it): il "contatto" diretto per ogni comunicazione relativa alla CS e condivisa da tutto il core team:

- citizenscience@univr.it viene utilizzato per inviare la newsletter mensile *Bits of Citizen Science*;
- abbiamo sensibilizzato tutti gli uffici coinvolti nel processo di supporto ai ricercatori sull'esistenza e sul supporto offerto dal punto di contatto sulla CS.



Confluence Spazi ▾

- Organizzazione
- Personale docente
- Personale amministrativo
- Reclutamento docenti
- Ricerca
 - Servizi di supporto
 - Strumenti
 - Informazioni e altre risorse
 - Calendario Attività Dottorati di
 - Citizen Science**
 - Integrità della Ricerca
 - Scienza Aperta
- Didattica
- Diversità ed inclusione
- Generali
- Utility
- Contatti e Sedi

Strumenti dello spazio ⚙️

Citizen Science

Creato da Marco Soriano, ultima modifica ieri alle 3:29 PM

La Citizen Science è la partecipazione volontaria di scienziati impegnati:

- definizione dei programmi e delle politiche di ricerca
- raccolta, elaborazione e analisi dei dati
- valutazione dei risultati della ricerca

Per informazioni, richieste di supporto o consulenza si

Risorse utili

- Bibliografia
 - Principi di Citizen Science
 - Citizen Science e ricerca
 - Citizen Science e istruzione
- Form interattivo per la valutazione della fattibilità di un progetto

Clicca [qui](#) per accedere al form (in lingua inglese)

UniSR è partner del progetto europeo [TIME4CS](#), volto a promuovere la Citizen Science.

- Bits of Citizen Science (newsletter)
- Articoli UniSR sul sito [TIME4CS](#)

Risorse utili

- Bibliografia
 - Principi di Citizen Science
 - ECSA (European Citizen Science Association). (2015). [Ten principles of citizen science](#). Principi chiave alla base delle buone pratiche in Citizen Science, sviluppate da un gruppo di lavoro della European Citizen Science Association.
 - Directorate-General for Research and Innovation - European Commission. (2020). [Citizen Science - Elevating research and innovation through societal engagement](#). Pubblicazione schematica della Commissione Europea che dà una definizione esaustiva della Citizen Science.
 - Wehn, U., Göbel, C., Bowser, A., Hepburn, L., & Haklay, M. (2020). [Global Citizen Science perspectives on Open Science](#). Citizen Science & Open Science Community of Practice to the UNESCO Recommendation on Open Science. Raccomandazioni Unesco per l'introduzione e la valorizzazione della Citizen Science inclusa nel concetto di Open Science.
 - Pocock, M. J. O., Chapman, D. S., Sheppard, L. J., & Roy, H. E. (2014). [Choosing and using citizen science](#); Centre for Ecology & Hydrology, 28. Una guida fondamentale nel campo della Citizen Science, analizza le caratteristiche richieste dai progetti di Citizen Science per risultare efficaci, con anche un quadro decisionale basato su scelte dicotomiche.
 - Tweddle, J. C., Robinson, L. D., Pocock, M. J. O., & Roy, H. E. (2012). [Guide to citizen science: developing, implementing and evaluating citizen science to study biodiversity and the environment in the UK](#); in Natural History Museum and NERC Centre for Ecology & Hydrology for UK-EOF. Una guida pratica per la creazione di progetti di Citizen Science per lo studio della biodiversità, ma da cui si possono trarre importanti lezioni trasferibili in altri ambiti di interesse.
 - Ceccaroni, L., Woods, S. M., Sprinks, J., Wilson, S., Faustman, E. M., Bonn, A., Greshake Tzovaras, B., Subirats, L., & Kimura, A. H. (2021). [Citizen Science, Health, and Environmental Justice](#); in The Science of Citizen Science (pp. 219–239). Springer International Publishing. Rassegna dello stato dell'arte dei progetti di Citizen Science esistenti e disamina di come la Citizen Science, la salute e la giustizia ambientale si influenzino reciprocamente, sia positivamente che negativamente, e discussione delle sfide specifiche legate a progetti di questo tipo.
 - Citizen science (2010). Nature Neuroscience, 13(10), 1151–1151. Editoriale di Nature Neuroscience. Per aumentare il sostegno pubblico è fondamentale che le persone si interessino alla scienza: la Citizen Science può aiutare ad aprire sia le tasche dei finanziatori che le menti.
 - Crone, E. (2022). [Knowledge is everywhere](#); ERC Magazine. Articolo per l'ERC magazine della vicepresidente dell'ERC. La Citizen Science è una metodologia di ricerca. Ogni metodo di ricerca presenta vantaggi e svantaggi: in un laboratorio di ricerca tutte le condizioni sono controllate e ciò consente di trarre conclusioni causali; nel mondo reale, possiamo raggiungere comunità che probabilmente non verrebbero in laboratorio. La forza sta nella combinazione di metodi diversi, dove gli svantaggi di un metodo possono essere compensati dai vantaggi di un altro.

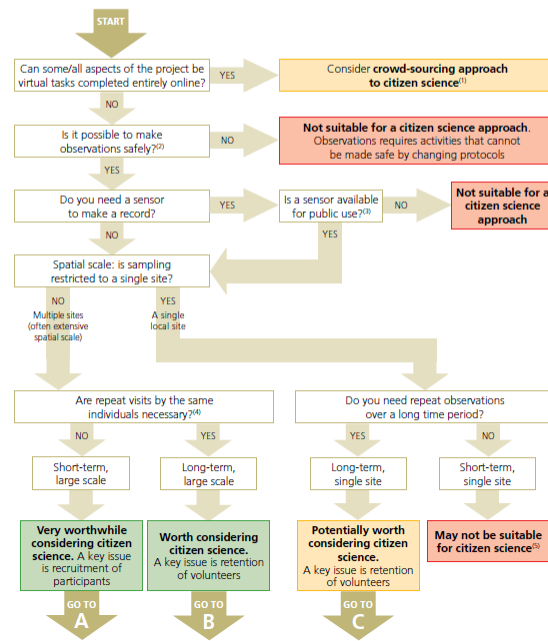
The decision framework for citizen science, Pocock, M.J.O., et al (2014)

The decision framework for citizen science

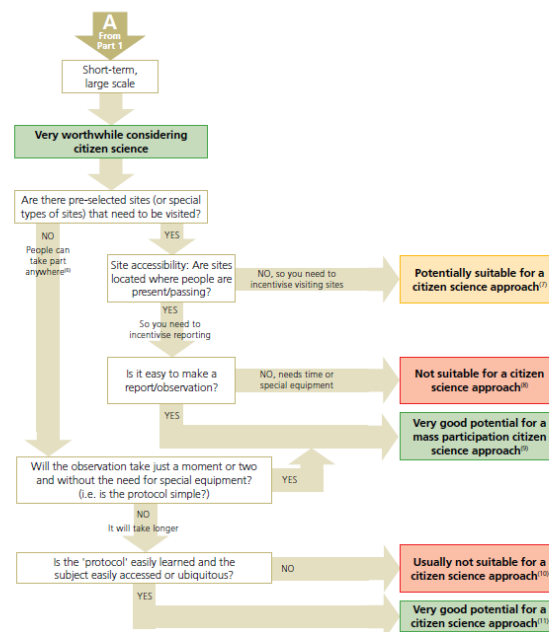
The decision framework for citizen science

The decision framework for citizen science

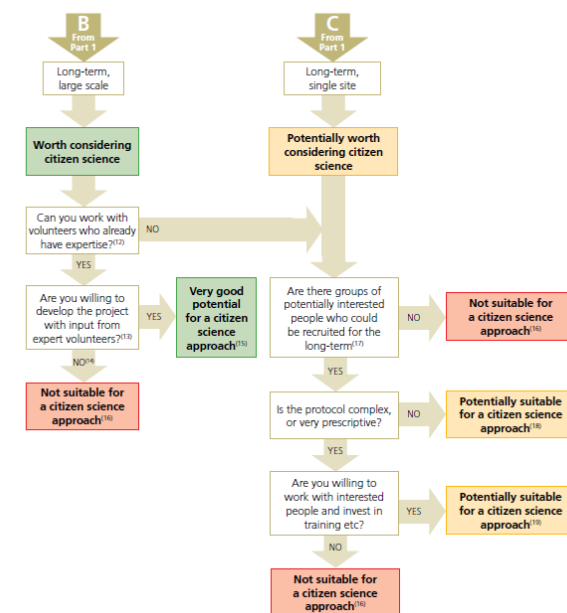
Part 1 of the decision framework



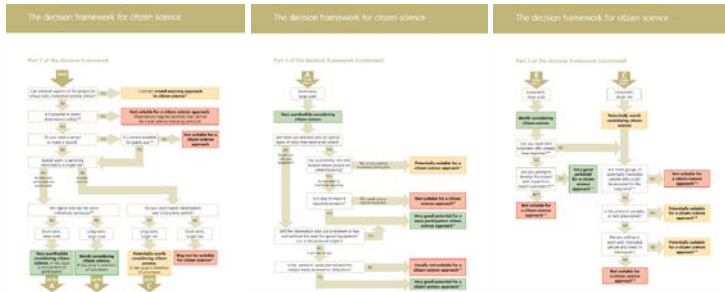
Part 2 of the decision framework (continued)



Part 2 of the decision framework (continued)



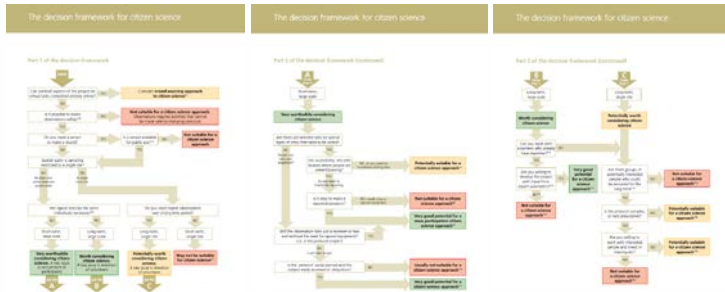
Creazione di un contact point per la Citizen Science: Questionario interattivo sulla fattibilità di un progetto di CS



**Is Citizen Science
the right approach
for your research project?**

This questionnaire will help you to understand whether your project is suitable for a Citizen Science approach and which type of Citizen Science would be best for you



Creazione di un contact point per la Citizen Science: Questionario interattivo sulla fattibilità di un progetto di CS



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

1

Can some/all aspects of the project be virtual tasks completed entirely online?  

Yes

No

2

Is it possible to make observations safely?  



Safely does not mean risk free. Risk can be reduced with appropriate training but risk assessment is always needed for citizen science projects.

Yes

No





3

Do you need a sensor to make a record?  

Yes

No

4


Spatial scale: is sampling restricted to a single site?  

Yes, a single local site

No, multiple sites (often extensive spatial scale)




9

Very good potential for a mass participation Citizen Science approach 

Mass participation projects can be ideal in gaining a 'snap-shot' overview of the state of something. Its success can rely on being featured in the mass media; alternatively it can take advantage of breaking stories in the news, in which case rapid response is necessary. You need to think clearly about the prompt for involvement (why would someone take part?), and whether sample sizes will be sufficient.

Asking people to record something too infrequently is not ideal because they may forget the prompt to report it (unless it is very memorable). Asking people to record something too frequently is not ideal because there are too many prompts to record, hence it becomes too overwhelming and reduces motivation to submit reports. Making these observations more structured is an alternative, but this comes under the sections regarding 'longterm' surveillance.



L'integrazione della Citizen Science nella realtà di UniSR ha reso necessari l'avvio di cambiamenti istituzionali e la creazione di un contesto adeguato. La presenza **dell'Area Research Development**, e la sua continua azione, contribuiscono in modo significativo alla realizzazione di un **contesto ricettivo, fertile e aperto al cambiamento**.

Dall' esperienza UniSR

1. Analizzare e capire il contesto e i bisogni dell'organizzazione, aiutando gli attori chiave a comprendere gli scenari futuri:

Come si inserisce il progetto nel nostro Ateneo?

Può essere una leva per il cambiamento istituzionale?

Quali scenari si potrebbero verificare dopo?

2. Identificare ownership e responsabilità per il progetto, dal project management, alla gestione amministrativa, fino alla implementazione delle Tasks:

- Owner del progetto è Area RD/Ufficio EUSP con consolidata esperienza nella gestione dei progetti europei e conoscenza della ricerca europea. Il PI è il Direttore di una Area amministrativa di UniSR;
- Molte novità da affrontare, inerenti il tema della Citizen Science, ma anche la gestione amministrativa!

Il nostro obiettivo è superare i limiti operativi e le resistenze, anche culturali, degli uffici amministrativi.

- Team di project mgt dedicato al progetto: il nostro impegno sul progetto è considerato una attività core dell'Area Research Development. Il team di mgt è responsabile per l'implementazione e il completamento di Task e Deliverables, il monitoraggio e la pianificazione delle risorse, etc.

3. Identificare e coinvolgere gli stakeholders interni, a tutti i livelli:

La Governance endorsement già in fase di application, che poi si è tradotta in ampi margini di libertà operativa;

Gli Uffici di supporto coinvolti con l'obiettivo di valorizzare le competenze già presenti all'interno dell'Ateneo e dell'Ospedale e renderli attori chiave nel supporto ai ricercatori per identificare e sviluppare progetti di Citizen Science;

La comunità scientifica e accademica SR è stata coinvolta in una fase più matura del progetto, quando anche le competenze del core team si sono consolidate;

Gli studenti gli scienziati di domani

Punto di svolta: presentare la CS come metodologia di ricerca (**Iniziativa ERC: annual event + intervista alla vice Presidente dell'ERC**) e non come forma di public engagement!

4. Progettare attività di comunicazione efficaci e su misura, per coinvolgere gli stakeholders e affrontare in modo adeguato i temi cross-cutting:

Contesto SR: la comunicazione istituzionale di UniSR e OSR è molto strutturata e definita, con target predefiniti (studenti/pazienti), spesso poco flessibile e adattabile alle necessità di un progetto europeo.



 www.time4cs.eu

 time4cs@apre.it

#TIME4CS



Thank you for your attention !

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*Head, EU Research Strategy&Policy Office
Area Research Development*

Università Vita-Salute San Raffaele



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