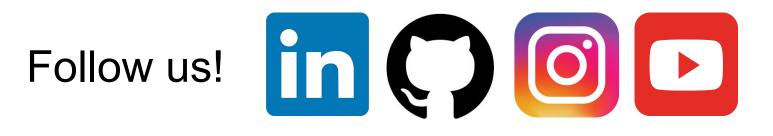
The role of citizens in innovating health

IAEA Regional Workshop on Hadron Therapy, October 18-19, 2024, Thessaloniki, Greece

Stefania Oikonomou, MA, Research collaborator Katerina Zourou, Ph.D., Managing director



Web2Leann open, social learning

Web2Learn: Innovating in citizen science for social good

- Established in 2014.
- We develop:
 - $^{\circ}\,$ e-learning services.
 - Customized software solutions to address digital education needs.
- Active in EU grants (Erasmus+, Horizon Europe, national funds).

Areas: professional training, citizen and open science, social innovation

> > 3000 end users reached

16 ongoing EU-funded projects

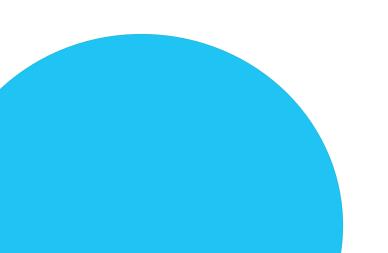
Sectors: Higher Education, VET, School Education, Adult Education

Citizen engagement in health

Ordinary citizens who participate in health research processes and programmes. Usually, their participation lies in data collection for scientific and research communities.

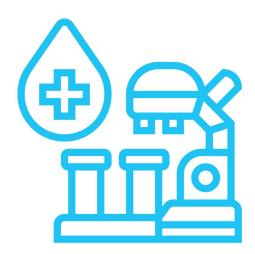
Citizens \rightarrow <u>Not exclusively patients</u>.

Multiple benefits for science and society.



Fiske A, Prainsack B, Buyx AMeeting the needs of underserved populations: setting the agenda for more inclusive citizen science of medicine. Journal of Medical Ethics 2019;45:617-622.





Similar terms and common objectives

Common objectives:

- Public engagement in health research.
- Democratisation of science.
- Advancement of research breakthroughs.

Indicative bibliography

Heyen, N. B., Gardecki, J., Eidt-Koch, D., Schlangen, M., Pauly, S., Eickmeier, O., Wagner, T., & Bratan, T. (2022). Patient Science: Citizen Science Involving Chronically III People as Co-Researchers. *Journal of Participatory Research Methods*, *3*(1). <u>https://doi.org/10.35844/001c.35634</u>

Rouleau, G., Bélisle-Pipon, J.-C., Birko, S., Karazivan, P., Fernandez, N., Bilodeau, K., Chao, Y.-S., de Pokomandy, A., Foley, V., Gagnon, B., Gontijo Guerra, S., Khanji, C., Lamoureux-Lamarche, C., Lebouché, B., Lunghi, C., Menear, M., Riverin, B. D., & Rodrigue, C. (2018). Early career researchers' perspectives and roles in patient-oriented research. *Research Involvement and Engagement*, *4*(1), 35. https://doi.org/10.1186/s40900-018-0117-z

Smith, E., Bélisle-Pipon, J.-C., & Resnik, D. (2019). Patients as Research Partners; How to Value their Perceptions, Contribution and Labor? *Citizen Science: Theory and Practice*, *4*(1). <u>https://doi.org/10.5334/cstp.184</u>

Marlett, N., Shklarov, S., Marshall, D., Santana, M. J., & Wasylak, T. (2015). Building new roles and relationships in research: A model of patient engagement research. *Quality of Life Research*, 24(5), 1057–1067. <u>https://doi.org/10.1007/s11136-014-0845-y</u>

Wright, M. T., Springett, J., & Kongats, K. (2018). What Is Participatory Health Research? In M. T. Wright & K. Kongats (Eds.), *Participatory Health Research: Voices from Around the World* (pp. 3–15). Springer International Publishing. <u>https://doi.org/10.1007/978-3-319-92177-8_1</u>



citizen engagement in health, patient-oriented research, participatory health research, patient and public involvement, personal science

Personal Health Data

"Personal Health Data (PHD) includes [..] data from consumers' encounters with the healthcare system as well as data generated when they consent to participate in clinical research. PHD may include individually identifiable (or re-identifiable) research results that investigators derive during informational research—research that uses people's data or biospecimens with or without their consent"

Evans, B. J. (2017). Power to the People: Data Citizens in the Age of Precision Medicine. *Vanderbilt Journal of Entertainment and Technology Law*, *19*(2), 243–265.





Citizen engagement in health: expert groups

CITIZEN SCIENCE FOR HEALTH CONFERENCE 2023

THE FIRST INTERNATIONAL CITIZEN SCIENCE FOR HEALTH **CONFERENCE** WAS A GREAT SUCCESS!



European **Citizen Science** Association

Working Group

Citizen science for health

Health is relatively under-represented in citizen science, despite the fact that it is a very diverse and promising domain. Projects and approaches may range from applications in the domain of public health, to personal science approaches associated with the Quantified Self movement, and every shade in between. At the same time, the engagement of patients in health research has a long tradition, even though their impact on e.g. decision making on research questions, methodology, ethics, analysis and data management remain limited so far. Citizen Science has a huge potential contribute to innovative health research, as well as to society.

This Working Group believes that to unlock this potential there is a need to collaborate more intensely across borders and domains. The purpose of the Working Group is hence to increase the social and scientific impact of citizen science for health. Its main objectives are:







https://www.ecsa.ngo/working-groups/citizen-science-for-health/

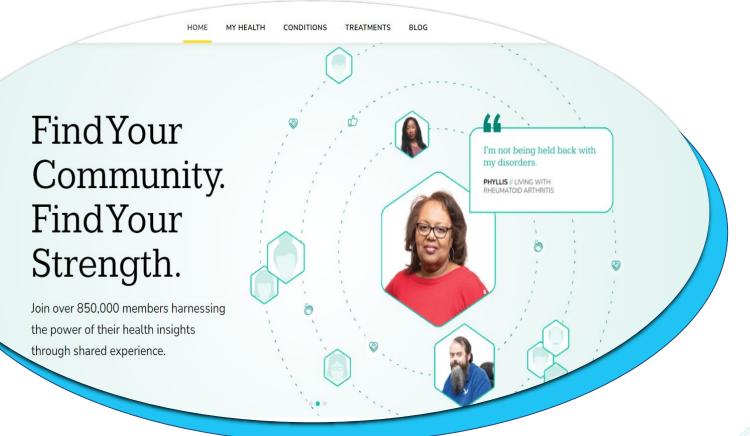
Citizens revolutionizing the way health science unfolds



PatientsLikeMe

- Leading participatory health platform (850K users).
- Personal data and shared stories by users
- Doctors-patients-researchers cooperation
- Scholar impact: 100 studies in peer-reviewed medical and scientific journals.





https://www.patientslikeme.com/

Citizen Science (for post-COVID 19)

- People with post-COVID symptoms sharing their struggles and healing journey.
- Data collected by researchers to better understand and treat post-COVID symptoms.
- Canada-based initiative open to users worldwide:

https://patientscientist.ca/

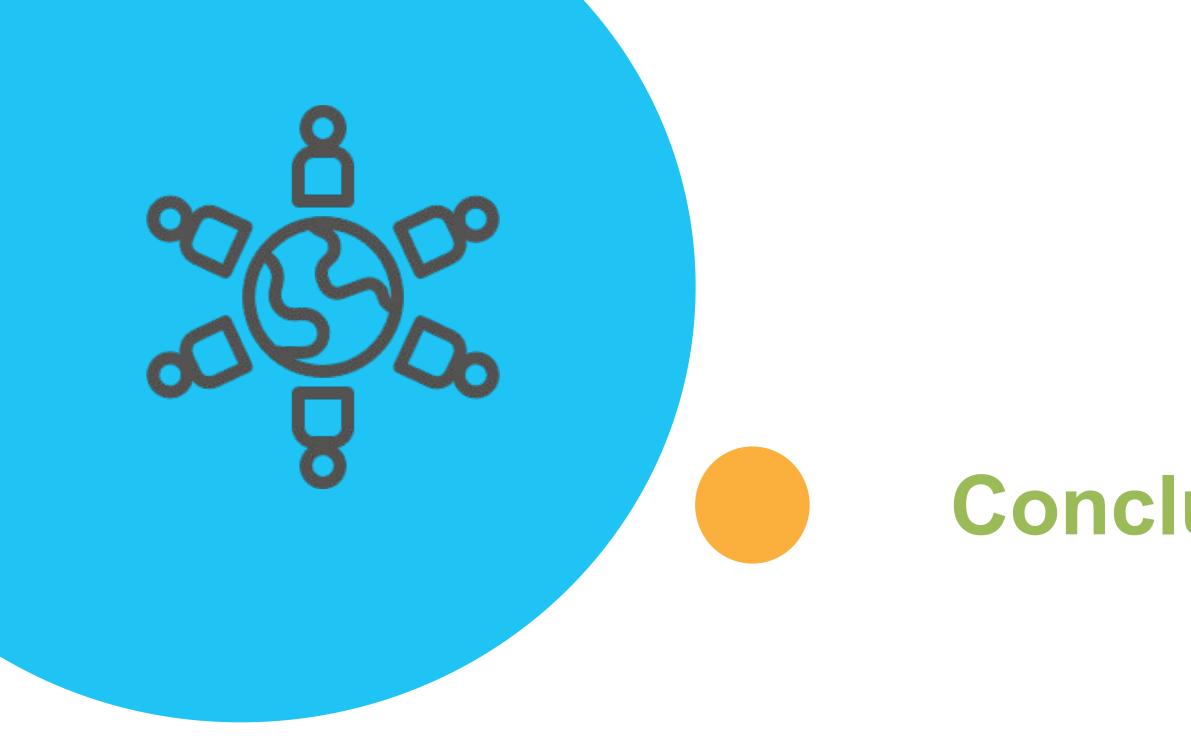




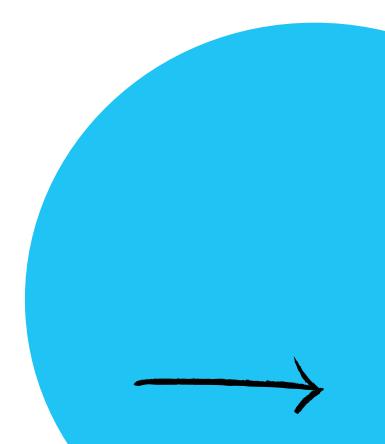
Share your journey

If you live with the burden of pain, or symptoms of long COVID, consider becoming a citizen scientist today. You can give us useful information. It will help guide health research and improve the lives of people living with similar health challenges.

I want to participate



Concluding remarks



An empowering approach in advancing health science!

- We believe in science "for the people" and "by the people"!
- An empowering pathway for both citizens and science built through public participation in health research.
- health • Citizen engagement in a) health research;
 - b) health literacy;
 - c) citizen-driven advocacy, and
 - d) interdisciplinarity in health science.





Open questions for discussion

- 1. [open] Data repercussions
- \rightarrow Data ethics and privacy concerns?
- 2. [Personal vs Collective data]
 - \rightarrow Preferences, patient history vs aggregated/massification of data.
- 3. [GDPR/open science for palliative care]
 - \rightarrow Ownership, disclosure, empowerment





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- 2. Marlett, N., Shklarov, S., Marshall, D., Santana, M. J., & Wasylak, T. (2015). Building new roles and relationships in research: A model of patient engagement research. Quality of Life Research, 24(5), 1057–1067. <u>https://doi.org/10.1007/s11136-014-0845-y</u>
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- 5. Shahid, A., Lalani, I. N., Rosgen, B. K., Sept, B. G., Longmore, S., Parsons Leigh, J., Stelfox, H. T., & Fiest, K. M. (2022). A scoping review of methods to measure and evaluate citizen engagement in health research. Research Involvement and Engagement, 8, 72. <u>https://doi.org/10.1186/s40900-022-00405-2</u>



Web2Learn Open, social learning

Thank you!

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