

Science Shops & Science Cafés 2.0 the InSPIRES project

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InSPIRES



European Commission



Science shops

- Science shops constitute a modality of opening universities and research centers to questions and problems coming from the civil society.
- They fulfil the RRI (Responsible Research and Innovation) requests
- May allow early engagement of citizens in many research activities
- There are many examples of science shops in the world, especially in the Netherlands, Belgium, Denmark, UK and USA, while in the “south” they are generally missing.
- (One of the ”southernmost” science shop is that of Lyon).



Responsible research and Innovation

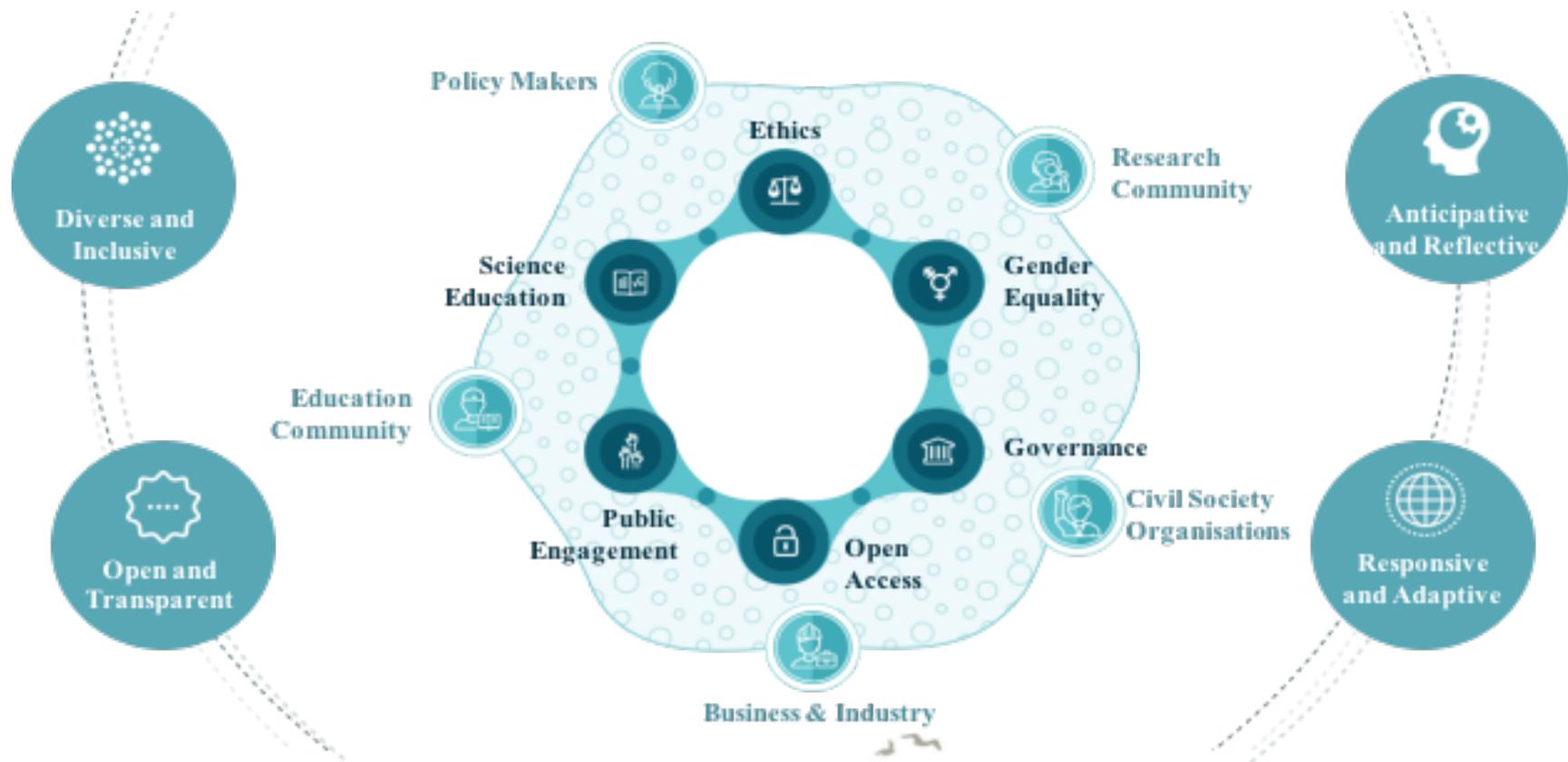
The pillars of the Responsible Research and Innovation are:

- The involvement of the public from the beginning of any process (for example, a research) and during its course.
- Science education, in the sense of addressing a problem with the scientific attitude, without taking anything for granted and avoiding the principle of authority.
- Being aware of gender issues, and avoiding the discrimination, even subtle, based on sex.
- Considering the ethical issues and anticipating the problems with it.
- Ensuring free access to knowledge and to the results of scientific researches.
- Making the entire management process (governance) transparent and accessible.



Responsible research and Innovation

Engagement of the civil society





BOUTIQUE DES SCIENCES
UNIVERSITÉ DE LYON



? BOUTIQUE DES SCIENCES ? ACTUALITÉS STAGES CHALLENGES PROJETS TUTORÉS RESSOURCES

La Boutique des sciences de l'Université de Lyon connecte le milieu de la recherche et la société civile. Elle permet aux citoyens de bénéficier de l'expertise d'une équipe scientifique pour répondre à une question en lien avec des enjeux sociétaux.

La Boutique des sciences est un dispositif mis en place par : la Direction Culture, Sciences et Société de l'Université de Lyon



STUDEREN

ONDERZOEK

INNOVATIE

DIENSTEN

UNIVERSITEIT

NEDERLANDS | ENGLISH

PORTAL FOR



WETENSCHAPSWINKEL BRUSSEL





The Science Shop offers all Ulster University students an opportunity to undertake a project with a community or voluntary group across Northern Ireland.

Community groups in need of help put forward project ideas that are then offered to all Ulster University students.

Students who engage in Science Shop activities come from a variety of disciplines including, architecture, communications, social policy, geography, business and management, law, environmental health, computing and



Society/Business > Wetenschapswinkels

Wetenschapswinkels

Wetenschapswinkels

About the Science Shops

Wat doen de Wetenschapswinkels?

Wetenschapswinkels



The principles of Science Shops

A science shop has three players: citizens, researchers and students.

- Citizens (associations) may interact through the web site or during meetings and present their problems or ask questions.
- Researchers are recruited on a voluntary basis.
- If there are “resources” (researchers) related to questions, students are asked to participate (in a course or as a stage or for their thesis work).
- The results are presented in a public event.



Some examples:

Questions generally concern health, social issues, environmental problems, media and communication, agriculture. Little is present about science, in particular physics and mathematics

- **Burnemouth University:** *Benefits of assistance dogs for children with autism and Down's syndrome*
- **Lyon:** *Les ateliers d'auto-réparation de vélo sur la métropole de Lyon*
- **Wageningen University:** *Changes to sense of taste and smell in cancer patients*
- **Ghent University:** *What are the thresholds for starting cars? How can they be overcome with the help of local authorities?*

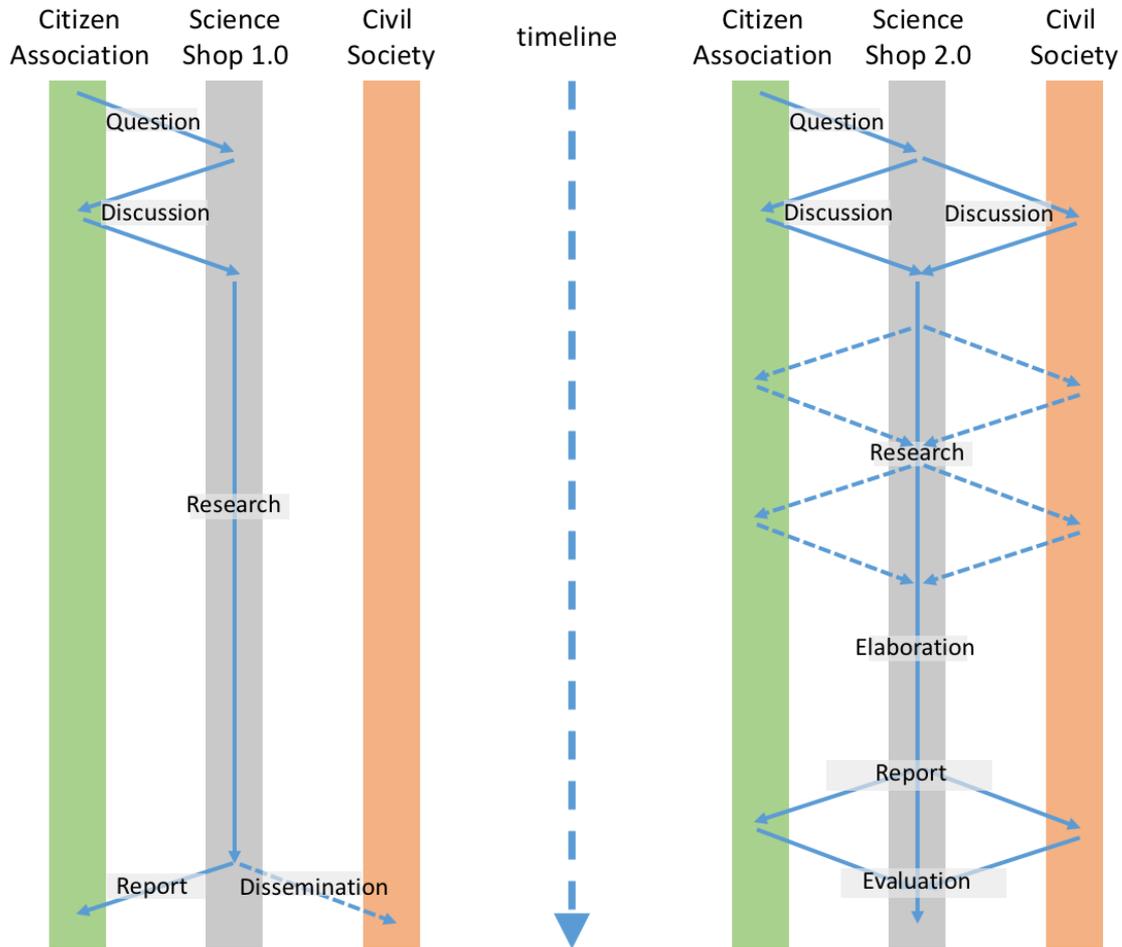


Science Shop 2.0

- In traditional science shop, there are little interactions among students-researchers and citizens, after the question phase.
- The communication phase is not quite developed (it is hard to find news about projects in the web).
- We would like to develop a more participative models, based on public discussions (science cafés), continuous web interactions (forums, discussions, streaming, distant participation, social networks) and, when possible, direct participation of citizens (citizen science).
- Participation will be promoted in all phases, especially at beginning while setting up the problem.



Science shop 1.0 and 2.0



The InSPIRES Project

ISGlobal **Barcelona**
Institute for
Global Health

**Ingenious Science shops to promote
Participatory Innovation, Research
and Equity in Science**

environment
research
science
society
essrg



IrsiCaixa
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AMSTERDAM**



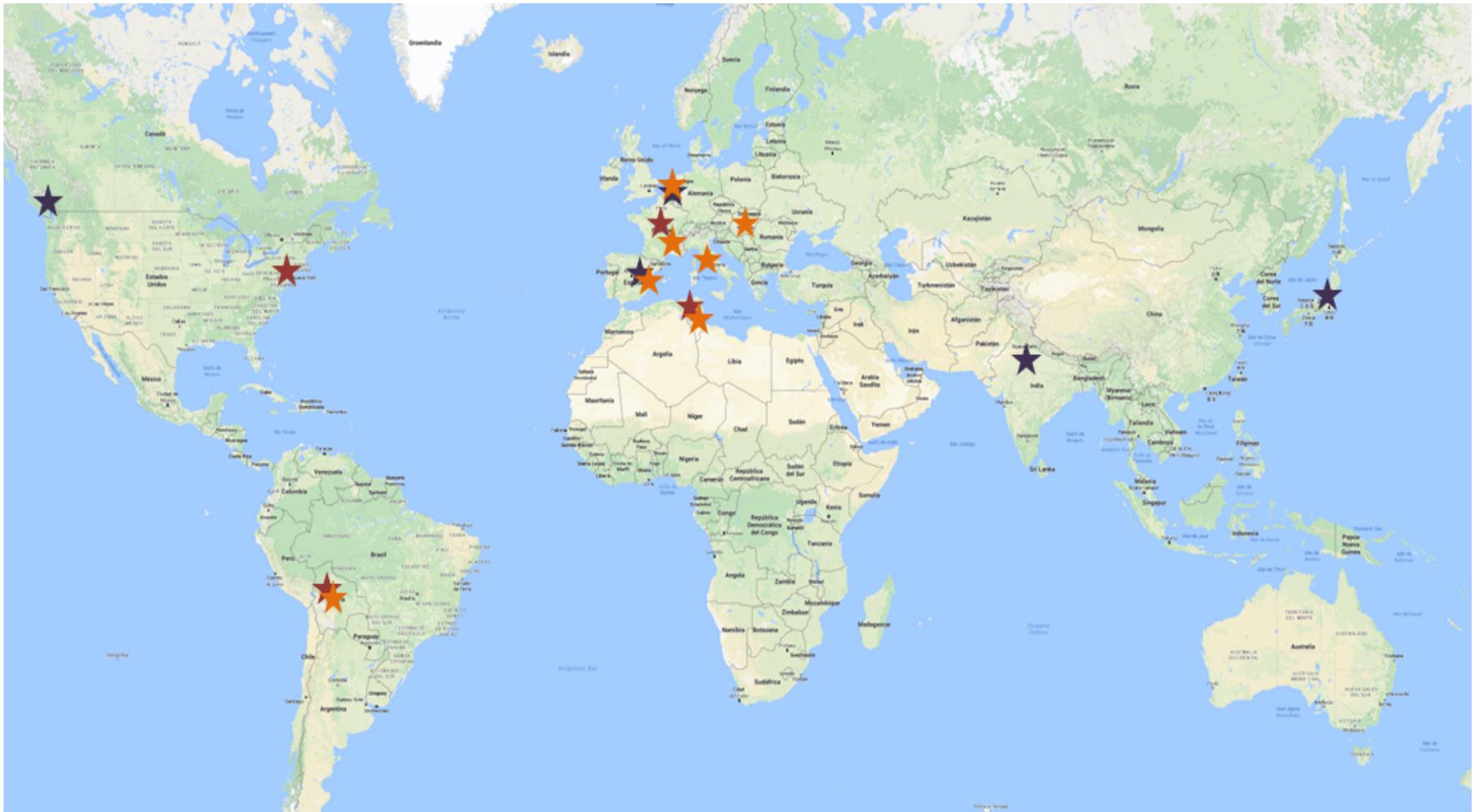
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The Florence science shop



- The Florence science shop just opened
- We presented the science shop to researchers, asking them to fill a database about their expertise and their availability.
- We work in close contact with the science café association
- First projects:
 - Urban gardening
 - Diabetic patients
 - Traffic and pollution
 - Perception of science and scientists
 - Popularization of science

The Florence science shop



Communication/interaction aspects:

- Web site
- Facebook/twitter
- Forums and focus groups
- Science cafés with streaming, distant participation, recording and podcasting
- Radio transmission (RadioMoka) with air and web streaming and podcasting

Science cafés and Science Shops

In the InSPIRES project we are aiming at using Science Cafés (with distant participation) as a tools for gathering questions, discussing problems and evaluating results.

The first Florence Science Shop project just started: urban gardening

<http://www.caffescienza.it/programma-2017-2018/orti-urbani>



Science Shop and Citizen Science

Citizen Science is a research strategy based on participatory methods and aimed at shortening the gap between citizens and research, actively involving citizens in studies issues of public interest.

In our study, custom-made user-friendly, mobile and low-cost sensing devices for monitoring air quality in urban areas have been used to provide opportunities to overcome limitations of fixed environmental monitoring stations and monitoring pollution in a multiple dimension of space and time.



Science Shop and Citizen Science

The diabetic investigation promises to be a very special case of citizen science

- Normal advises to diabetics are to have a healthy lifestyle, caring food and making exercise. But what are the effective consequences of the many different types of activities? Is there an individual variable response?
- They ask to become “expert patients”, offering themselves as a long-term subjects for longitudinal assessments
- One of the many possible subtasks of the project is that of using distributed monitoring and databases
- Is it possible to extend this approach to other cases (like cognitive impairing of elder people



Science shops and Science

We aim at enlarging the topics of science shops, including popularization of science, continuous education outside classrooms, public role of science and scientists.

- We want to promote a more “scientific” approach to problems and promote their knowledge.
- In Florence we plan to use Science cafés as a “laboratory” for favouring collective investigations about topics in science and technology.
- One of our first projects is about the perception of the role of science and scientists
- The science shop approach to popularization of science implies a “citizen-driven” selection of topics



Related approaches: answers to “simple” questions

#ChiediloaUnifi

CURARE L'AMBIENTE SALUTE
VIAGGIO E EVOLUZIONE DELLA CONOSCENZA UNIFIMAGAZINE
CONTATTACI

Benvenuto

Hai domande sulla ricerca a cui non sai dare una risposta? Questo blog può aiutarti a trovarle. L'Università di Firenze ha aperto questo spazio per permettere a tutti i

Come fa il sale a sciogliere il ghiaccio sulle strade? Fa alzare la

CONTINUA A LEGGERE

Quali sono le farine da evitare e quelle da consigliare?

A cosa servono i vaccini?

Risponde Paolo Bonanni, Professore

Simple questions can be directly answered by researchers.

An example is the “#ChiediloaUnifi” service

Another is the “Guichet du savoir” of the public libraries in Lyon

Bibliothèque municipale de Lyon

Le Guichet du Savoir

une question? en 72h max

une réponse!

Poser une question
Des bibliothécaires vous répondent en 72h maximum.
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Chercher une réponse
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Quelles questions ?
Qui répond ?
Dans quel délai ? [tout savoir](#)

Le Guichet du Savoir a répondu à 66000 questions

récentes **top 10** actualités insolites en cours

Les 10 dernières ... et toutes les autres !

