



The Art of Science Learning

RESPONSIBLE RESEARCH AND INNOVATION: HOW TO MAXIMISE THE LOCAL IMPACT OF MY RESEARCH?

*This training is provided **free of charge to PhD students and/or junior postdocs** as part of the **PERFORM project**. It is a Science With and For Society program funded by the European Union under Horizon 2020 that **explores a participatory educational process on STEM** (Science, Technology, Engineering, Mathematics) **through the use of scenic arts** with secondary school students, their teachers and early career researchers, who will get actively involved in experiencing science. www.performresearch.eu*

The need for responsible behaviours of a larger share of the academic community has received growing concerns in the last years. Accordingly, the European Union uses the concept of « **Responsible Research and Innovation** » (RRI) for its funding schemes, as an attempt to align research and innovation with societal needs and concerns. This means that all those aiming at a career in research shall be given the tools to enrich their academic scholarship with a responsible behaviour towards society. It requires to acknowledge possible ways to bridge one's own commitment as citizen with scientific endeavour. The training will have a special focus on sharing “**the human dimension of research**”. This refers to the possibility for scientists to engage with citizens, sharing practices and values that characterise scientific activity: collaborative work, creative and critical thinking, constructive dialogue, questioning of established theories. Sharing norms, values and social practices of science further allows to empower citizens, and thereby to have a significant local impact. Training future scientists to social responsibility broadens their skills for working as researchers as well as other knowledge based jobs.

Course structure and description:

The course is facilitated by an **international team of trainers** and consists of a *theoretical training*, open to all students, and a *practical training* including fieldwork through the PERFORM project for interested and selected students.

The *theoretical training* **will be opened to all interested PhD students and junior postdocs** and will take place at the UAB. It will consist of **four plenary sessions** that will take place at UAB Campus, in selected Wednesdays and Thursdays from December 2016 to January 2017.

The *practical training* will be open to students interested in being actively involved in the PERFORM project activities. **Participation in this training will be restricted to 20 PhD students**. It will consist of **four workshop sessions, most of them after the theoretical plenary sessions**, that will take place at the UAB Campus from December 2016 to January 2017. From January to March 2017 students will also **engage in an apprenticeship through their involvement in PERFORM's participatory workshops** in schools, guided by the science communicators of Big Van. Through these participatory workshops, students will share their research with secondary school girls and boys, and support them in the creation of a science-based performances following the principles of the RRI approach. The workshops will take place in a secondary school located in Terrassa or Castellbisbal and travel costs will be covered by the project.



European
Commission

Horizon 2020
European Union funding
for Research & Innovation

Programme:

TOPIC 1: Science with and for society (UAB, UOC & TBV)

Theoretical session: Wednesday 14th December, 16:00 – 18:00

Practical session: Wednesday 14th December, 18:00 – 19:00

The Responsible Research and Innovation (RRI) approach and values: RRI, why and how? RRI in science education.

The PERFORM project: How to apply performing arts (stand-up comedy) in science communication and education. Performance of *Big Van: Científicos Sobre Ruedas*. Information on the project and the apprenticeship.

TOPIC 2: Key competences for engaging with society (University of Bristol)

Theoretical session: Wednesday 11th January, 16:00 – 17:30

Practical session: Wednesday 11th January, 17:30-19:00

Engagement and participation: collaborative approaches to science communication and education, inclusiveness and constructive dialogue.

TOPIC 3: Philosophy and ethics of science (University of Bristol)

Theoretical session: Thursday 19th January, 16:00 – 17:30

Practical session: Thursday 19th January, 17:30-19:00

Philosophy of Science: can we define the scientific method? What makes good science? The problem of public trust in science.

Ethics in scientific research and communication: What is responsibility? Who are we responsible to? Funding, methods, outputs and risks.

TOPIC 4: Towards practice (Atelier des Jours à Venir)

Theoretical session: Thursday 26th January, 16:00 – 19:00

Practical session: Friday 27th January, 16:00 – 19:00

Communication skills for researchers: What is responsible communication? Setting it within the history of science communication. How to make my PhD understandable?

Practising responsible science communication: How to plan, initiate and scale up activities that communicate about the social dimension, norms and values of your local / disciplinary scientific community. Reflections on the PERFORM project and next steps.

Apprenticeship: six selected dates between January 16th and March 20th

For further information on the trainings, please contact:

Maria.heras@uab.cat (programme content)

For further information on PERFORM, visit our web:

<http://www.perform-research.eu/>

TRAINING CALENDAR

Module 1 (UAB; UOC, TBV)

14 dec
16:00 – 17:30
hrs

The RRI approach and values;
Introduction to PERFORM (includes
practical session)

14 dec
17:30 – 19:00
hrs

Practical session module 1

Module 2 (UoB)

11 jan
16:00 – 19:00
hrs

Engagement and participation
Philosophy of Science

11 jan
16:00 – 19:00
hrs

Practical session module 2

Module 3 (UoB)

19 jan
16:00 – 19:00
hrs

Ethics in scientific research and
communication

19 jan
16:00 – 19:00
hrs

Practical session module 3

Module 4 (AJA)

26 jan
16:00 – 19:00
hrs

Communication skills for
researchers
Practising responsible science
communication

27 jan
10:00- 13:00
hrs

Practical session module 4

APPRENTICESHIP

January – March

Involvement in 4 to 6*
participatory workshops of
2 hours each, in selected
high-schools

* Students presence would be
required in at least 4 workshops