

This training is provided free of charge to PhD students and/or junior postdocs as part of the PERFORM project. PERFORM is a ground-breaking research programme, funded by the European Commission under Horizon 2020 that explores the use of innovative science education methods based on performing arts with secondary school students, their teachers and early career researchers, to get them actively involved in experiencing STEM (Science, Technology, Engineering, Mathematics). www.performresearch.eu

The PERFORM project is offering PhD students and junior postdocs in science a unique opportunity to participate in a bespoke training programme covering Responsible Research and Innovation, science communication and performance. 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.

We have invited an exciting range of experts, from philosophers of science to science performers, to contribute to this training, which has 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 and questioning of established theories.

The training sessions will combine theoretical with practical approaches to encourage you to critically consider scientific practice and develop skills to communicate this thinking to secondary school students. Alongside training, you will have the opportunity to put your skills into practice by participating in PERFORM workshops in secondary schools in Barcelona as 'scientific experts' to support students in developing and performing their own scientific performances. Workshops will be led by science performers **The Big Van: Científicos Sobre Ruedas**, who for this project are sharing their expertise in 'stand-up comedy'.

PERFORM provides you with a unique opportunity to develop engagement practice about your research, share insights and reflections with experts and students from a diversity of disciplines and contexts (including performers), and improve your communication skills to non-academic audiences (in this case, young people).

PhD students and junior postdocs involved must be able to attend the training programme sessions at UAB and be willing to participate in the school workshops (participation can be confirmed during the UAB training).

To apply, fill in the following online form before October 27th:
<https://eformularis.uab.cat/web/p-sphere/perform>

You can also contact us for further information or queries: maria.heras@uab.cat

Course description and programme:

The training will take place at UAB Campus, and will consist of **5 sessions** delivered **every Thursday in November 2017**. The sessions will be delivered in English, although Catalan and Spanish will be used as support in small group activities and discussions.

Those students interested in participating in PERFORM's workshops in schools will also have one **performance training session in December** and one informative session with the schools (date to be confirmed). **PERFORM workshops** will then take place in two secondary schools in Barcelona **from end January to March 2018**. More information about the workshops in schools will be provided during the training.

Due to the practical approach of the training we expect a group of around **20 students**. **We will prioritise in the registration those interested in participating in the workshops at schools.**

PROGRAMME

<p>Thursday 2nd November</p> <p>15:00 – 17:00</p> <p><i>Delivered by Universitat Autònoma de Barcelona (UAB), Universitat Oberta de Catalunya (UOC) and The Big Van: Científicos sobre ruedas</i></p>	<p>SESSION 1: Responsible Research and Innovation: introduction to theory and practice</p> <p>In this first session, we will introduce the framework of Responsible Research and Innovation (RRI) and share practical examples of RRI in motion: <i>Why RRI and where does it come from? What are its main claims and agendas? How is it currently being put into practice?</i> On this basis, we will discuss about the values embedded in the RRI approach and how they might be embodied in research practice and in science education and engagement. We will further apply the RRI framework to critically reflect about our own research contexts: <i>How does your research and research topic connect to RRI dimensions? How could these connections be linked to young people's realities?</i></p> <p>In the second part of the session, we will share our practical experience in the PERFORM project and how we are approaching RRI. <i>The Big Van: Científicos Sobre Ruedas</i> will perform part of their scientific monologues' show to share and reflect about how PERFORM is including RRI values by applying performing arts (stand-up comedy) in science communication and education. They will also share information about the implementation of PERFORM workshops in schools, including short videos of the shows created with secondary school students last year.</p>
<p>Thursday 9th November</p> <p>15:00 – 17:00</p> <p><i>Delivered by Atelier des Jours à Venir (France)</i></p>	<p>SESSION 2: Science communication</p> <p>This second session will translate the framework of RRI into the specific conditions of science communication. We will thus discuss what a "responsible" approach to the interaction with society might be. Based on the work of Science Studies, we will argue why it is key to acknowledge that scientists are non-neutral and behave professionally as socially & politically committed citizens. We will provide practical tools to engage in a dialogue with a young public specifically about the methodologies of research and the precise set of values inherent to each</p>

discipline. We will introduce the Standpoint theory and explain how awareness of multiple subjectivities produces stronger objectivity. Participants to the training will be given a time to exercise on engaging with a young public. They will be given a time to reflect how society may contribute to strengthen objectivity in their field of research.

**Thursday 16th
November**

15:00 – 17:00

*Delivered by
University of
Bristol*

SESSION 3: Public Engagement

History and theory of public engagement

A key mechanism by which we can achieve the aims of RRI is public engagement. In order to align our research with the needs and values of society, we need to encourage them to participate in our process. In this session, we will give an introduction to public engagement. We'll look at the principles of public engagement and cover a brief history of its development.

In the second part of the session, we will work on building a plan for engaging the public in your research, with a particular focus on working with schools. Working with your research we'll look at how to develop an engaging activity focusing on the needs and interests of a school audience.

**Thursday 23rd
November**

15:00 – 17:00

*Delivered by
University of
Bristol*

SESSION 4: Ethics in context

As scientists, we have a range of ethical responsibilities, towards people involved in our research, towards fellow researchers in the scientific community, and towards the wider public and the planet with live on. In this workshop, we will work to develop a critical understanding of ethics in the context of our work as scientists, seeking answers to questions such as: *How does your discipline/scientific community approach ethics? What are our ethical responsibilities within RRI? What are the key ethical dilemmas in your discipline/research? How can we engage young people in discussions about ethics in research?*

SESSION 5: Science in society

**Thursday 30th
November**

15:00 – 17:00

*Delivered by
Universitat
Oberta de
Catalunya (UOC)
and University of
Bristol*

In the first part of this session, we will analyse some of the relationships between science and society. We will do this by discussing some of the usual misunderstandings and wrong assumptions that are usually made on this matter in media and policy contexts, from the linear model of innovation, to the neutrality of science or the vision of the sciences as a unified realm. We will draw on recent empirical studies of science and technology, mainly sociological and historical, and will illustrate our points with specific real cases and episodes of scientific practice.

In the second part of the session, we will facilitate a critical and reflective conversation about science. We need to engage citizens in critical, reflective discussions about the nature of science and the ethical and societal implications of scientific research if we are to avoid misunderstandings, disengagement, and a lack of trust in science. This

workshop explores philosophical facilitation methods that can support these kinds of critical, reflective discussions.

**Thursday 1st
December**

15:00 – 18:00

*Delivered by The
Big Van:
Científicos sobre
ruedas*

SESSION 6: Monologue creation!

How to communicate your scientific content in an attractive way

In this session, you will work with The Big Van: Científicos sobre Ruedas on improving your oral communication skills, from a narrative and scenic perspective. We will guide you to adapt your scientific oral communications to the format of short stand-up comedy monologue, as a way to share your research with young people and enhance the impact of your discourse.