



PERFORM toolkit for researchers to develop reflexivity, understanding of RRI values and creative approaches to public engagement



© Harriet Lee-Merriion

PERFORM brought early career researchers (ECRs) together with performers, teachers and secondary school students to develop performance-based activities that explored Responsible Research and Innovation (RRI) and the human dimension of science. During 2016-2018, PERFORM delivered two rounds of bespoke training courses in Bristol, Paris and Barcelona to enable ECRs to develop the relevant cross disciplinary skills to support this activity. These included: communication and engagement skills, team working and a more holistic and interdisciplinary understanding of research including RRI values. This user-friendly toolkit presents key topics covered in the training courses in the form of written guides and short films. It is freely accessible online as a resource for higher education institutions responsible for training ECRs, or for ECRs to use independently as a framework for informal professional development training.

PERFORM training for early career researchers

This toolkit shares key learning from the two rounds of bespoke training for early career researchers (ECRs) that took place in Spain, France and the UK as part of the Horizon 2020 PERFORM project between 2016 and 2018.

The training was led by the University of Bristol in the UK, Atelier des Jours à Venir in France, and Universitat Autònoma de Barcelona and Universitat Oberta de Catalunya in Spain. In total, 84 early career researchers took part in this training.



Researchers at a science busking training in the UK



Researchers at a training session in Spain

The overall aim of the training was to provide appropriate tools to early career researchers that would allow them to develop cross disciplinary skills such as communication and engagement skills, team working, a more holistic and interdisciplinary understanding of research including Responsible Research and Innovation (RRI) values and social inclusion. Responsible Research and Innovation is an approach that anticipates and assesses potential implications and societal expectations with regard to research and innovation, with the aim to foster the design of inclusive and sustainable research and innovation¹.

To help develop an improved understanding of RRI, the training aimed to enable ECRs to address these key questions:

- How is my research embedded in social practices, norms and values of the scientific community?
- What are my responsibilities towards society?
- How does my reflexivity on the issues above translate in the way I communicate about science?

The courses across the three countries all included aspects of training on: social aspects of science and reflexivity on research practice, performance skills, communication skills, working with teenagers, working with schools, gender equality issues, and ethics.

1. EC Horizon 2020: Responsible Research and Innovation

Aim of the toolkit

The aim of this resource is to support ECRs in their reflective thinking around RRI values and processes and introduce them to some creative performance methods for public engagement, inspired by the PERFORM project. This toolkit has been designed as a user-friendly starting point for professional development on these topics.

There are many other excellent and extensive resources for supporting RRI training, for example those on [RRI tools: https://www.rri-tools.eu/](https://www.rri-tools.eu/). This toolkit does not intend to replicate these resources.

Who is the toolkit is for?

This resource is designed for higher education institutions responsible for training ECRs, or for ECRs to use independently as a framework for informal professional development training.

The PERFORM project brought together interdisciplinary groups of ECRs - and a variety of perspectives - which enabled rich discussion. This toolkit is relevant to ECRs from all scientific disciplines and is designed to be able to be used by an interdisciplinary cohort.

Toolkit contents

Written sections

The written sections are designed so that they can be used in a standalone session, to inform a short discussion or to implement a standalone training session. Users can also select a number of sections to form a training course, with each section forming one session.

There are seven sections:

- Research Ethics and Integrity
- Reliability of Scientific Knowledge
- Wellbeing at Work
- Values in Science
- Reflexivity in Research
- Responsible Research and Innovation
- Performance Approaches for Exploring Responsible Research and Innovation

Films

Integrated into some of the written sections are links to corresponding short films. Four films focus on key topics: Research Reproducibility, Reflexivity in Research, Responsible Research and Innovation, and Creative Approaches to Public Engagement. The films feature speakers who contributed to the PERFORM ECR training in Spain, France and the UK. The films end with reflective questions, which serve as a starting point for discussion. They can be used alongside the written guides, or as a standalone resource.

How to use

Each toolkit section features at least one discussion-based activity, which is designed to support ECRs to collectively reflect on the content presented in the readings and/or films.

You may want to consider organising the discussion in different ways, for example:

- Presentation and general discussion of the references
- Small group discussions, followed by general discussion about the topics
- Individual reflection and writing of answers on post-its, which are then displayed on a board, so that answers remain anonymous.

Some of these discussions may raise sensitive or controversial issues. The Seeds for Change collective provides useful general guidance on how to effectively facilitate discussions of this kind. You can find their tools here: <https://www.seedsforchange.org.uk/tools>



© Harriet Lee-Merrion

This toolkit was produced by PERFORM partners the University of Bristol (Martha Crean & Ellie Hart) and Atelier des Jours à Venir (Livio Riboli-Sasco & Claire Ribault).

The design and content was informed by written evaluations of each round of ECR training and reflection sessions with ECR participants. The following PERFORM partners contributed to the development of ECR training or toolkit: Universitat Autònoma de Barcelona, Universitat Oberta de Catalunya, University of Warwick, the Big Van Theory, TRACES, and Science Made Simple.

Guidance and consultation during the development of the toolkit was also provided by an external group of experts in the areas covered by the toolkit. We would like to thank the following people for contributing to the development of this toolkit:

Eduard Aibar, Christine Aicardi, Mireia Bes, Daniel Erice, Claire Grierson, Vivienne Kuh, Bojan Markicevic, Marcus Munafò, Richard Owen, Mario Pansera, Michael Reinsborough, Birgit Whitman.

Illustrations by Harriet Lee-Merrion c/o Heart, heartagency.com. Media production by New Leaf, newleafvideo.com
Graphic design by WD, wdgraphics.com



Creative Commons BY PERFORM.

Under a CC BY license, you are free to:

- Share — copy and redistribute the material in any medium or format
- Adapt — remix, transform, and build upon the material for any purpose, even commercially.

Under the following terms:

- Attribution — You must give appropriate credit, provide a link to the license, and indicate if changes were made. You may do so in any reasonable manner, but not in any way that suggests the licensor endorses you or your use.
- No additional restrictions — You may not apply legal terms or technological measures that legally restrict others from doing anything the license permits.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 665826.

