HEIRRI

Higher Education Institutions
& Responsible Research and Innovation

1st HEIRRI Conference

Teaching Responsible Research and Innovation at University

CosmoCaixa Science Museum, Barcelona, Spain
Friday 18th March, 2016

www.heirri.eu

HEIRRI

Higher Education Institutions & Responsible Research and Innovation

Foreword

The Research and Innovation (R&I) system is under heavy pressure and profound transformation. While society increasingly relies on R&I to address the challenges of our time -such as climate change, global health, sustainable development, scarcity of resources, or privacy and security issues-, the R&I system itself is required to respond to social demands on greater transparency, inclusion regarding gender and minorities, ethics, and broader societal participation. In other words, there is a clear call for more democratic research and innovation to contribute to social progress and wellbeing.

Education plays a critical role in this transformation. Embedding socioeconomic and ethical principles in science education, promoting critical thinking, empowering citizens to make their own decisions on science policy, and training future scientists in sharing responsibility with all actors need to be rooted in the education system to foster and consolidate ongoing changes.

In this scenario emerges the concept of Responsible Research and Innovation (RRI), which tries to provide a holistic view of how the R&I system should respond and adapt to better align its functioning and outcomes to the needs, values, and expectations of society. **HEIRRI (Higher Education Institutions and Responsible Research and Innovation)** is a European project, funded under the Horizon 2020 programme, aimed to integrate the concept of RRI in the science and engineering degrees.

In this **1st HEIRRI Conference, Teaching Responsible Research and Innovation at University**, we welcome contributions that present practices and training resources on how different elements of RRI -including research integrity, gender equality, science governance, open access, public engagement, but also anticipation, diversity, inclusion, reflection, responsiveness, sustainability, transparency and others- are being integrated into higher education curricula and the learning outcomes to which they lead. Contributions from different countries, contexts, and disciplines -both from the humanities, and the natural and social sciences- are highly appreciated, given the multidisciplinary approach of RRI. Participants will also contribute with their inputs to the initial design of the training materials that HEIRRI will be producing in the next two years.

We hope you will enjoy the conference and find a stimulating forum to discuss and create new ways to teach and learn how responsible research and innovation should adapt to these changing times.

With best wishes,
The HEIRRI Consortium

HEIRRI

Higher Education Institutions & Responsible Research and Innovation

Final Programme - Friday 18ᵗʰ March

9:00 - 9:30 **Registration**

9:30 - 10:00 **Welcome, opening and HEIRRI overview** | Agora
> Ignasi López Verdeguer - La Caixa Foundation
> Gema Revuelta - Pompeu Fabra University

10:00 - 11:00 **Keynote Lecture** | Agora
> Integrating RRI in universities: training future students in transdisciplinary research.
> Jacqueline Broerse - VU University Amsterdam

11:00 - 11:30 **Coffee break + photo group** | Altell

11:30 - 13:00 **Parallel Sessions**

> **Panel 1** - Training on Research and Innovation for industry: needs and challenges | Alpha
> **Panel 2** - Dialoguing within university: transdisciplinarity as a key for RRI learning | Beta
> **Workshop 1** - Problem Based Learning and its relation to RRI | Tau
>> Bettina Dahl Søndergaard - Aalborg University
>> Mar Carrió - Pompeu Fabra University

13:00 - 14:15 **Lunch and poster session** | Altell

14:15 - 15:30 **Parallel Sessions**

> **Panel 3** - Adapting curricula to future researchers: RRI in postgraduate levels | Alpha
> **Panel 4** - Changing structures: the RRI paradigm within institutions | Beta
> **Workshop 2** - How can policy and practice best support embedding RRI in academic curricula: an introduction to the EnRRICH project | Tau
>> Emma McKenna - Queen's University Belfast
>> Jozefien De Marree - Vrije Universiteit Brussel

15:30 - 16:30 **Parallel Sessions**

> **Workshop 3** - Be an agent of change: co-creating transformative learning by open design | Alpha
>> Arianna Mazzeo - ELISAVA Design School
> **Lecture** - Ethics Education in Science, a concern of European Academies | Beta
>> Pere Puigdomènech - ALLEA (All European Academies)
> **Workshop 4** - Towards an inventory of RRI teaching and learning activities | Tau
>> Niels Mejlgaard - University of Aarhus

16:30 - 17:00 **Coffee break** | Altell

17:00 - 18:00 **Keynote Lecture** | Agora
> RRI and the civic university
> John Goddard - University of Newcastle

18:00-18:15 **Conference closure** | Agora

Parallel panels

11:30 - 13:00

1. Training on Research and Innovation for industry: needs and challenges | Alpha
Chairs: Roger Strand (University of Bergen) and Giulia Bubbolini (Centro per l'Innovazione e lo Sviluppo Economico)

RRI in industry: The SNIFFPHONE Project
Pearson, J., Ikonen, V.,

RRI clinics, RRI Guidelines and RRI implementation plans: raising awareness of RRI for technology development
Ikonen, V., Pearson, J. Gianni, R., Yaghmaei, E

Influence of the satisfaction with an international project of marketing learning on the peceived competences in the European Higher Education Area
Argila-Irurita, A. and Arroyo-Cañada, F. J

Responsible Research and Innovation at Technical Universities – Challenges and Opportunities
Griessler, E., Altenhofer, M.

Responsible Education of Young Entrepeneurs – The Case Study of the Climate-KIC Innovative Programme 'The Journey'
Klucznik-Törö, A., Heron, K., Hancox, J.

Smart drones for journalism. Teaching students how to be creative using innovation pedagogics
Nyre, L; Gynnild, A; Guribye, F

2. Dialoguing within university: transdisciplinarity as a key for RRI Learning | Beta
Chairs: Nadja Gmelch (Associació Catalana d'Universitats Públiques) and Aude Lapprand (Fondation Sciences Citoyennes)

Multicultural Constructive Community learning course for Education in Sustainability
Segalas, J., Tejedor, G.

Responsible research and innovation applied to human rights and higher education
Bueno Doral, T., Hänninen, L. and García Castillo, N.

A Study on Visitors' Identity-related Motivations at Science Museums in China
Chu, H

Performing RRI in science education: how to measure the impact?
Heras, M, Ruiz-Mallen, I

Teaching gender equality in a classroom of Spanish as a foreign language
Delgado Alfaro, M

The "Ment Sana" Project: A proof of concept on how to empower students to enter into the RRI system
Malagrida, R., Carreras, J

Parallel panels

14:15 - 15:30

3. Adapting curricula to future researchers: foster RRI in postgraduate levels | Alpha
Chairs: Erich Griessler (Institut für Höhere Studien, Vienna) and Andrew Rawnsley (Teeside University)

Science in Action: teaching scientific integrity to early career scientists
> Martínez-Campos, M., Jiménez, E., Thompson, E., Camí, J.

"Theory of Science" – Wissenschaftstheorie – as a Way to Teach RRI
> Karlsen, J.R., Kaiser, M., Slaattelid, R., Strand, R.

Teaching reproducible research in bioinformatics
> Castelo, R.

Be SAGER, increase relevance in research through sex and gender equity
> Heidari, S, Babor, T.B., De Castro, P, Marušić, A, Tort, S, Curno M

How to become R.I.CH: a one-day interactive workshop to increase confidence in research integrity issues
> Van der Burght, S.

4. Changing structures: the RRI paradigm within institutions | Beta
Chairs: Tomas Rehacek (ECSITE) and Lena Tsipouri (University of Athens)

GenPORT: articulating RRI through Gender Equality in Science
> Müller, J., Arroyo, L.

Service Learning Programme at Universitat Rovira i Virgili: the promotion of social university respon-sibility
> Capdevila, A., Lombardi Bolaño, A.C., Ojeta Lesaca, O.

Is work climate important for RRI training? Cross sectional study of perceptions of ethical climate and pressures in different faculties at the University of Split, Croatia
> Malički, M., Katavić, V, Marković, D, Marušić, M, Marušić, A.

Integrating RRI through ethics committees at university level. From reviewing to teaching and capacity building
> De Lecuona, I.

Potential and Challenges of Implementing RRI Postgraduate Education: A Case from Japan
> Kudo, M., Hirakawa, H., Yagi, E., Kamisato, T., Tsujita, T., Watanabe, H., Yamanouchi, Y., Kobayashi, T.

Poster Session

13:00 - 14:15 | Altell

Hypatia Project: a gender sensitive framework to put in practice gender inclusiveness in STEM
Achiam, M., Holmegaar, H., Troncoso, A.

Learning Skills: how far away are businessmen and graduates
Duque L., Pujol-Jover, M., Riera-Prunera, M.C.

Female Entrepreunership in Europe and an example of the WINGS project designed for its support
Klucznik-Törö, A., Mahajan, L., Castello, V., Guerrero, J.

Incorporating Service Learning in Business and Economics Education
Setó-Pamies, D., Bové-Sans, M.A.

Studio-based teaching-learning tool as a RRI methodology within the design of water bottles
Soares, T., Seco, P.

Enhancing Responsible Research and Innovation through curricula in Higher Education
Tassone, V., Eppink, H.

Sparks project: how to effectively communicate RRI to citizens
Troncoso, A., Zolotonosa, M.

Walking the city: social interactions in learning through the urban environment
Aquilué, I., Gomes, R., Roca, E.

Introducing research ethics and bioethics into biosciences curricula at the Universidad Autónoma de Madrid
Borgonez, E., Carrascosa, J.M.

Experiencing of learning Catalan pronunciation learning the new website Catalan Pronunciation Guides: from self-learning to peer-learning
Carrera-Sabaté, J.

Learning engineering without avoiding the "what for" question
Basart, J.M., Farrus, M., Florensa, A., Mariño, J.B, Nadeu, C., Serra, M.

Open Science by Default: a FOSTER approach
Melero, R., Grigorov, I.

Workshops

1. Problem Based Learning and its relation to RRI | Tau

Bettina Dahl Søndergaard - Aalborg University | Mar Carrió - Pompeu Fabra University

This workshop will introduce the participants to the concept of Project and Problem Based Learning (PBL). A PBL curriculum is generally characterized by students working in teams with problem analysis and problem solving in both disciplinary and inter-disciplinary projects with the learning being self-directed and student centred and supervisors acting as facilitators. There are different models of PBL in higher education and PBL is used in both science, engineering, medicine, the social sciences, and the humanities. The workshop will also include how PBL may relate to the concept of Responsible Research and Innovation (RRI). The workshop will consist of a mix of presentations and participant activities.

2. How can policy and practice best support embedding RRI in academic curricula: An introduction to the EnRRICH project | Tau

Emma McKenna - Queen's University Belfast | Jozefien De Marree - Vrije Universiteit Brussel

The Enhancing Responsible Research and Innovation through Curricula in Higher Education (EnRRICH) project is a 'sister' project to HEIRRI, funded under the same EC call. EnRRICH will also gather examples of good practices at an operational level (particularly in the field of Science Shop type working). In addition, it will gather and share examples of where and how policy has enabled or supported good RRI practices to take place within academic curricula. This workshop offers a brief introduction to EnRRICH, however its main purpose is to create an opportunity to discuss how policy can encourage, support and reward people for doing RRI through academic curricula. It is aimed at people who have an interest in student community engagement through the curriculum in both practice-based and policy contexts. The focus is on how and where universities, communities, regions and countries have enabled academics and students to engage with local communities on research issues. How and where is (or isn't) this kind of work supported at a policy level in your own context? And: what kinds of policy interventions might be necessary to create space for RRI practitioners and to reward people who are doing this work?

Workshops

15:30 - 16:30

Ethics Education in Science, a concern of European Academies | Lecture | Alpha
Pere Puigdomènech - ALLEA (All European Academies)

Trust in scientific enterprise and in the conduct of scientific research is fundamental for fuitful interacction within the scientific community as well as between it and society at large. At the present time, perhaps more than ever, researchers need to be able to take decissions based on a solid legal, ethical and scientific under-standing of the subject matter and its potential implications for science and society. Ethics education in science should cover both internal and external research ethics, both canons of good research practice and ethical aspects of the relations between science and society. ALLEA argues in this statement that societies need to set aside or create resources (time, human resources, knowledge, banks, etc.), so as to ensure that all research is conducted by individuals who have the necessary literacy in ethics.

3. Be an agent of change: co-creating transformative learning by open design | Beta
Arianna Mazzeo - ELISAVA Design School

The project is implemented in Barcelona, Spain, in different districts of the city; in particular the partnership with ELISAVA Design School is now beginning in the San Pere–La Ribera–Santa Caterina area, in the neigh-bourhood of the city centre, full of contradictions and old stories. The project runs a mobile workshop using mobile phones as artefacts to create relationship between seniors, young people and the public space of the city. The mobile platform is Radar, a network of prevention and community action in which the co-design and participation of neighbours, shop-owners, students, volunteers and professionals from institutions are involved in problem-solving. The workshop consists of different phases (ideate, observe, test, prototype, iterate, learn) which result in new mobile services and products co-created based on seniors' needs, especially the needs of women and migrants. 'Inclusion by mobile' is a counterweight against loneliness, social isolation and exclusion.

4 Towards an inventory of RRI teaching and learning activities | Tau
Niels Mejlgaard - University of Aarhus

HEIRRI is currently reviewing the field of RRI teaching and learning. The intention is to harvest good examples and practices, and to capture these in a publicly accessible database. During this workshop, panel chairs will discuss how the results of the conference can feed into the development of the database.

Guidelines for authors

Instructions for Presentations

There will be strictly **7 minutes** per presentation. Presenters are requested to respect this time to ensure that other presenters have their fair share of time and sufficient wrap-up and discussion time. All contributions will be presented one after the other and, once finished, two co-chairs will wrap up the session and facilitate a discussion with the audience.

Presentations are expected to be in standard format (PDF, PPT, PTTX or OPD), running on a standard Widows 7 computer with the latest office software (MS Office 2010, OpenOffice 4.1 or Acrobat Reader X). If authors need to use a different format (videos not uploaded to online platforms, 3D viewers, etc.) it might be possible on request by contacting in advance with the conference organization. Presentations and/or other material ought to be sent to the organization by **March 14ᵗʰ.**

Instructions for Posters

Posters should be printed in vertical layout in A0 format (120cm high, 90 cm wide). Poster presenters are expected to print the poster at their convenience and bring it to the conference. **It will be not possible to print posters at the conference venue**. Posters will be presented during lunchtime, so presentations take place in a friendly environment. Authors might provide A4 or letter printouts of the poster to interested visitors. A poster must state at least: the title of the contribution, authors, institutions, and the e-mail of the corresponding author.

Considerations for all attendees

HEIRRI Conference has no registration fee but requires previous registration. **No in-site registration will be available**. Access to CosmoCaixa Museum will only be permitted after registration. Identifying badges might be required by CosmoCaixa staff.

Lunch and coffee breaks will be covered by "La Caixa" Foundation.

#HEIRRIconf **will be the hashtag to be used during the conference in Twitter**

Venue and Accommodation

The 1st HEIRRI Conference will take place at **CosmoCaixa Barcelona** (Carrer d' Isaac Newton, 26. Barcelona Ph. +34 93 212 60 50). Arriving to CosmoCaixa from the airport by **taxi** takes 30 minutes and around 25€. The closest public transport stop is FGC Railway Station **Avinguda Tibidabo**, a 10 minutes walk from the venue. The organizing committee has arranged discounts in several hotels nearby CosmoCaixa Museum, which are shown in the lines below. Please, bear in mind that, on arrival, a **local tourist tax** of approximately 0.70€/ night will be charged in the reception of your hotel.

Click here to find a map of the area indicating the location of venue, hotels and public transport.

Hotel Catalonia Barcelona 505 4*

Single Room 95€
Twin Room 105€
Breakfast Included
Booking at congresos.incentivos@hoteles-catalonia. es, indicating "HEIRRI" as reference

Hotel Catalonia Park Putxet 4*

Single Room 90€
Twin Room 100€
Breakfast Included
Booking at congresos.incentivos@hoteles-catalonia. es, indicating "HEIRRI" as reference

Hotel Eurostar Anglí 4*

Single Room 95€
Twin Room 105€
Breakfast Included
VAT not included
Booking at jrecepcion@eurostarsangli.com, indicating "HEIRRI" as reference

Hotel Catalonia Park Güell 3*

Single Room 85€
Twin Room 95€
Breakfast Included
Booking at congresos.incentivos@hoteles-catalonia. es, indicating "HEIRRI" as reference

Hotel Catalonia Mikado 3*

Single Room 85€
Twin Room 95€
Breakfast Included
Booking at congresos.incentivos@hoteles-catalonia. es, indicating "HEIRRI" as reference

Hotel Silken Sant Gervasi 3*

Single Room 88€
Breakfast Included
Booking at stgervasi.booking@hoteles-silken.com, indicating "HEIRRI" as reference

Aparthotel Bertran 3*

Single Room without breakfast 50€
Single Room with breakfast 59€
Twin Room without breakfast 57€
Twin Room with 2 breakfast 75€
Triple Room without breakfast 67€
Triple Room with 3 breakfast 94%
Booking at info@hotelbertran.com, indicating "HEIRRI" as reference

Hotel Bonanova Suite 3*

Both single and twin room 75€
Courtesy breakfast included
Booking at directoracomercial@premiumsuitehotels. com, indicating "HEIRRI" as reference