

**UNIMIB**  
**A.A. 2024/2025 - 38° - 39° - 40°cycles of Doctoral courses**  
**HANDS ON Responsible Research & Innovation \_ RRI**

*Premise*

**Responsible Research and Innovation** is the European breakthrough scientific Paradigm that aims at producing science and innovation in partnership with/responding to society. In fact, it is methodological framework, an approach that

- ◇ anticipates and assesses **potential implications, impact and societal expectations** with the aim to foster the **design of inclusive and sustainable research and innovation**,
- ◇ and implies that all the **societal actors** (researchers, citizens, policy makers, business, third sector organisations, etc.) **work together during the whole research and innovation process** to better align both the process and its outcomes with the values, needs and expectations of society.

Responsible innovation means taking care of the future through collective stewardship of science and innovation in the present. The four dimensions of responsible innovation are Anticipation, Reflexivity, Inclusion, Responsiveness

**RRI is about: including all actors,  
and considering specific key issues and process dimensions**



**Social justice & Inclusion**

Avoid unfair exclusion of particular groups from either participation in research and/or access to benefits arising from research

**Sustainability**

Enable research programmes and RRI initiatives to contribute to sustainable growth according to EU 2020 strategy

tackling huge challenges such as the “Seven Grand Challenges” identified by the European Commission



It is crucial to frame and tailor the RRI approach according to the different research stages of

- ideation and development,
- implementation and management,
- finalization, impact assessment and sharing of results,

**aiming at integrating it to the whole scientific process.**

### **Our Proposal**

Consistently, our proposal is to provide one day per year of "Hands on RRI" to accompany and support doctoral students from the first to the third year, during all phases of their research, including the final stages of impact assessment and sharing results.

**For first-year doctoral students**, the "Hands on RRI" interactive course on “(CO) DESIGNING RESPONSIBLE RESEARCH. INTEGRITY, ETHICS & REPRODUCIBILITY will

- have the same format for all Ph.D. students, although brought back to the specifics of disciplinary fields, and research project;
- engage **100 participants** for each edition;
- foresee 3 editions involving doctoral students from macro-multidisciplinary areas.

**For the second-year doctoral students**, the “Hands on RRI” interactive course on “**DEVELOPING RESPONSIBLE RESEARCH**” will have 2 formats:

- a common half a day format on “MONITORING RRI ACTIVITIES AND THEIR IMPACTS WITH INDICATORS FOR PROCESSES, INTERMEDIATE OUTCOMES AND PERCEPTIONS”
- a half-day seminar on **Open challenges for responsible research** that each doctoral student can choose from the following 3 options:
  - Participatory research, citizen science in practice**
  - Artificial Intelligence in research (for a good practice)**
  - Next-generation (integrated-digitalized data-omics based) research**

**For the third-year doctoral students**, the “Hands on RRI” interactive course on “**ASSESSING and SHARING RESPONSIBLE RESEARCH**”

- A half a day on-line seminar involving students from the 3 macro-multidisciplinary areas identified on
  - From data to results. Open Access and sharing**
  - Strategy and models to returning results to participants, communities and society, and sharing benefits**
- Autonomous self- RRI evaluation of the whole research process

**2<sup>nd</sup> PhD Year**  
**DEVELOPING RESPONSIBLE RESEARCH.**

**The program**

**1<sup>st</sup> half-a-day cross-workshop October  
10, 2025 - Sironi room (U4 - 8)**

HUMAN & LIFE SCIENCES

MONITORING RRI ACTIVITIES AND THEIR IMPACTS WITH INDICATORS FOR PROCESSES, INTERMEDIATE OUTCOMES AND PERCEPTIONS			
Time	Main Session <i>(RRI dimensions &amp; concepts)</i>	Contents	Trainers per edition
9:00 – 10:15 Interactive plenary (& POST-IT session)	The RRI indicators <i>Process and perception indicators for the 8 RRI dimensions (from multi-actor engagement to open access)</i>		S. Casati (CNR-BBMRI)
10:15– 11:30 Interactive plenary (& POST-IT session)	<i>FAIRfication and sample-data characterization and digitalization</i>		M. Pallocca (CNR IEOMI BBMRI)
11:30 – 11.45 Break			
11:45– 12:45 Practical session –working groups  12:45 – 13:00 Output sharing	Hands on on-going PhD projects to assess and (eventually) revise the research process within a RRI indicators framework.		S. Casati & M. Pallocca