STARBIOS2 EXPERIENCE AND A FOUR-LEVEL MAINSTREAMING OF RESPONSIBLE RESEARCH

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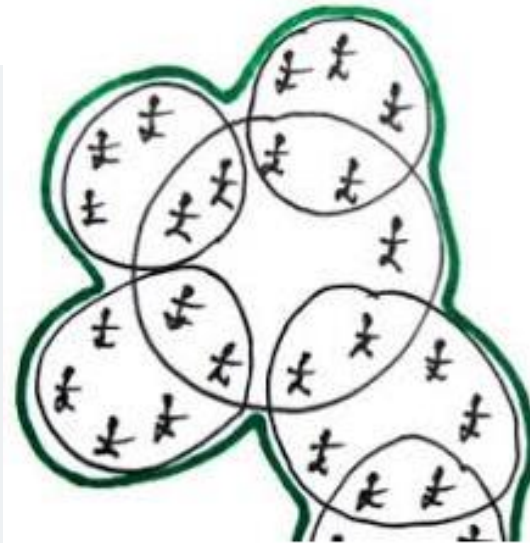# Science is a part of society and co-evolves with it

… but science-society relationships are deeply changing

… and biosciences are at the core of these transformations

New governance challenges !

…which RRI, or similar approaches, can contribute to face

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- This is all the more true in this period of emergency related to COVID-19

- … and will probably also be true in a later period

A growth in the importance of approaches related to responsible, open, etc. research

...To re-establish and harmonize the relationship between scientific and technological research and the rest of society

Examples

- In Europe, e.g. Strategies and approaches like Smart Specialization, Open Innovation, Open Science, RRI, and those related to specific social aspects of science (such as ethics or gender)

- The US NSF "Broader Impacts",

- The Daejon Declaration on Science, technology, and Innovation Policies for the Global and Digital Age

- The "Science, Technology and Innovation Strategy for Africa - STISA-2024"

- And other initiatives inspired by UN Sustainable Development Goals.

- Many policies and experiences: this process of elaboration and experimentation is going on, in search of increasingly relevant and effective solutions.

- Encouraging the mainstreaming of the most convincing solutions and to root them more deeply and sustainably, even in biosciences

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on RRI mainstreaming

Acting on several fronts at the same time

A quadruple contextualization

- Organizational contextualization

- Disciplinary or sectoral contextualization

- Geopolitical and cultural contextualization

- Historical contextualization

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1. Organizational contextualization

- Embedment of RRI within research organizations

- Makes sense if useful for better R&I and profession

- Beyond the "business as usual" and not automatic

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Organizational contextualization: some issues at stake for governance

How RRI can "influence"

- vision of research contents

- aspects of the organisational structure

- concrete steps to take for implementing an RRI strategy or model (see STARBIOS2 Guidelines)

2. Disciplinary or sectoral contextualization

Adapting RRI approach to a specific discipline or to an entire "sector" in a broad sense

Disciplinary or sectoral contextualization: some issues at stake for governance

- Potential impacts of the new biological research and innovation waves, and related open ethical issues

- Multidisciplinary approach

- Full exploitation of potentials of data sharing

- Introduction of gender (and other RRI) variables in biological research

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3. Geopolitical and cultural contextualization

To identify forms of adaptation, or reshaping, of RRI in the various geopolitical and cultural contexts

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Geopolitical and cultural contextualization: some issues at stake for governance

- The features of the national research systems, intellectual property, regulations, etc.

- The economic structure of the countries

- The role of local philosophies and cultures

- The use of traditional knowledge in research and innovation

- and related patent and intellectual property rights issues

4. Historical contextualization

The ability of science to respond to the challenges that the current events poses from time to time (e.g., the COVID-19) and to prevent them as much as possible

Historical contextualization: some issues at stake for governance

- Public trust in science and scientists
- The link between research results and decision-making
- The exchange and evaluation of information and knowledge
- The allocation of research funds
- The mobilization of the different generations and categories of researchers
- The channels and methods of communication

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Supporting actors for mainstreaning

Various types of **actors** can play a major role in these four levels of mainstreaming of responsible research.

National, European and International **policies** are called to support the contextualization of RRI and the actors involved in it

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It is a reflection that must continue,

with constant attention

to science / society dynamisms

Thank you!

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