Responsible R&I (RRI) is about coping with complexity

And also other perspectives of the EC

Rosina Malagrida
Responsible of the Living Lab for Health at IrsiCaixa
Co-coordinator of the Barcelona-“la Caixa” Living Lab
UIMP, Santander, Julio 2019

With the collaboration of:
1. Examples of RRI
2. Why
3. Complexity
4. Innovation ecosystems for challenges and missions
5. Conclusions
Some examples of RRI projects

Example 1: Community Advisory Board at IrsiCaixa. e.g. vaccine clinical trials: suggestions to improve protocols with e.g.
- psychological support
- logistic issues,
- communication materials & informed consent
- prevention methods during interruption of treatment
- recruitment of volunteers...
  e.g. basic research
  - legitimacy & dissemination

Example 2: Dr. Javier Martínez-Picado. Research on treatment with stem cells incorporates immunotherapies suggested in a meeting with patient advocates.

Example 3: Association of fibromyalgia co-defines, co-executes and funds research
Some examples of RRI projects

Example 4: Health promotion projects through CBPR:
Knowledge + Learning + Change

Example 5: Informed decision making, public debates & exhibitions on NTs, on research with Embrionic Stem Cells... (with OBD-UB) ...

Example 6: Educational programmes
RRI Training and reflection...

Example 7: Training & guidelines on RRI

Example 8: Reflecting on RRI...
Patient and public involvement, UK
#Why?

1. NORMATIVE
   More democratic

2. INSTRUMENTAL
   Legitimacy
   - Investment in R&I (private & public)
   - Public trust

3. SUBSTANTIVE
   Better results

SOLUTIONS 2
COMPLEX PROBLEMS

UNMET NEEDS
participation in R&I agenda setting &
in other decision making bodies

Biomedical Research:
increasing value, reducing waste

WASTE RESEARCH &
+ INNOVATION

ALIGNED
WITH VALUES
RRI...

#COMPLEX

VS

COMPLICATED
Responsible R&I (RRI)

Diverse and Inclusive
Open and Transparent
Science Education
Public Engagement
Open Access
Business & Industry
Ethics
Gender Equality
Governance
Research Community
Civil Society Organisations
Anticipative and Reflective
Responsive and Adaptive

www.rri-tolos.eu
RRI...

#PROJECT

VS

CHALLENGE
Complex socio-scientific problem: future scenario on aging

Little space for deliberating around our model of civilization, the future we want & the R&I required

Socio-scientific issues such as the use of antibiotics, vaccines, ESC, CRISP or aging...

**Video on ageing** and RRI (HeirriProject):

Impact on:

- **Food** resources
- **Economic** inequalities
- **Health** Inequalities
- **Political: Research** is private
- **Social** issues: i.e. loneliness, coping with death, values around survival
RRI...

#COMPLEXITY AT DIFFERENT LEVELS OF TRANSITIONS
MULTI-LEVEL PERSPECTIVE IN TECHNOLOGICAL TRANSITIONS
Transdisciplinary complexity

MULTI-LEVEL PERSPECTIVE IN TECHNOLOGICAL TRANSITIONS
Transdisciplinary complexity

The linear fallacy

Source: RSA Action and Research Centre. From Design Thinking to Systems Change

Living Lab for Health
Promoting Health with and for society

Barcelona-“la Caixa” Living Lab
The systemic response (for scientific & socio-scientific challenges)

Source: RSA Action and Research Centre. From Design Thinking to Systems Change
#STAKEHOLDER ANALYSIS
#COLLECTIVE STRATEGIES
How to transform the R&I system?

Inspiration from different movements...
How to define specific missions and projects? How to execute them and implement the results?
Complex socio-scientific problems
Complex problems

Mission

Shared vision

Analysis of current complexity

Identification of Windows of opportunities

TD projects

Participatory R&I Agenda Setting
Complex socio-scientific problems

Implementation of Projects

- Transdisciplinary projects
- Co-defined and co-implemented
- Different levels of engagement

Anticipation

Knowledge integration & mutual learning

Collective strategy

Systemic Evaluation
Patient and public involvement, UK

→ Innovation Ecosystems
New paradigm

#relationship between Science & Society vs within scientific community and with different stakeholders

→ Innovation Ecosystems
CHANGE
New form of problem solving

→ Innovation Ecosystems
“We have **efficacy** at individual level and **inefficacy** at system level”

René Von Schomberg, EC, Bdebate, October 2018
“Missions must include new conversations between **fundamental research**, **applied research** and **cutting-edge innovation**”, Mazzucatto, 2018.
Go to www.menti.com and use the code 30 03 09

In one word, what do you think should be the main focus to make food system transformation possible?

Rosina Malagrida @RosinaMalagrida · 20 Feb
The keys for systems transformation are education and collaboration as expressed by the audience @JPL_HDHL foodsystem FOOD2030EU #Fit4food
Living Lab for Health at IrsiCaixa
Rosina Malagrida, Head of the Lab
Hospital Germans Trias, Barcelona
rmalagrida@irsicaixa.es
http://www.irsicaixa.es/en/livinglabhealth
@RosinaMalagrida
@IrsiCaixa