

# THE NUCLEUS PROJECT AND THE MOBILE NUCLEI

*Bringing RRI to Life*



*This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 664932.*



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# **New Understanding of, Communication, Learning and Engagement in Universities and Scientific institutions**

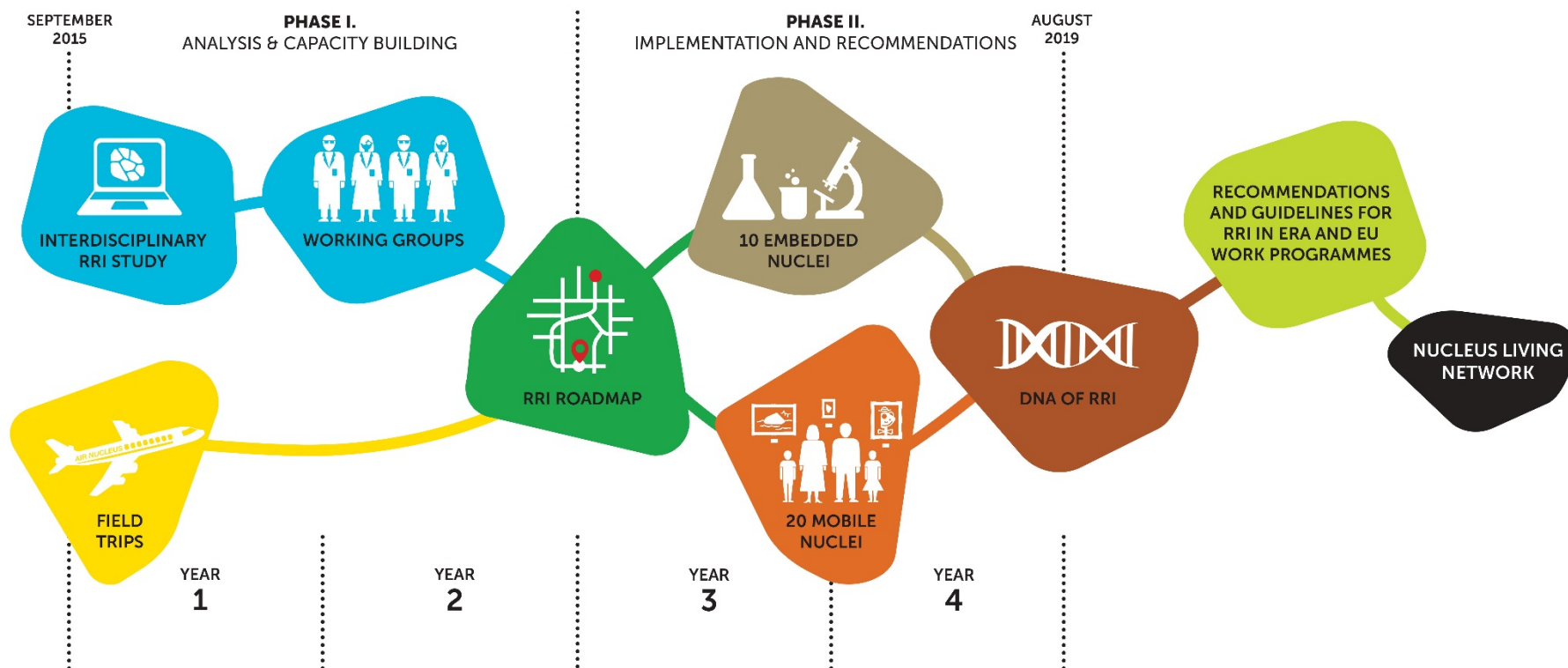


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# THE NUCLEUS PROJECT



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# 30 RRI Petri Dishes

20 *Mobile* NUCLEI Modular RRI  
approaches like workshops, trainings,



Photo: EUSEA Photographer: Reimar Ott

# OUR GOALS ARE WORK PACKAGE 5 OBJECTIVES.

We want to build **institutionalised bridges**  
between the research community and different  
stakeholders

*Photo: EUSEA Photographer: Reimar Ott*

**...catalyse ongoing debates about the role  
of research in open societies**



*Photo: EUSEA Photographer: Reimar Ott*

....develop, nurture and support **new forms of transdisciplinary research.**



Photo: EUSEA Photographer: Reimar Ott

...Stimulate co-responsibility of all actors involved in the process of research and innovation



# **And question or redefine prevailing notions about science agents and recipients**



*Photo: EUSEA Photographer: Reimar Ott*

**„If you always do what you  
always did,**

**you will always get  
what you always got.“**

**Albert Einstein**




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# WHAT IS A MOBILE NUCLEUS?

- A “Mobile Nucleus” is a co-creative activity involving multiple stakeholders
- Conducted within an event that the host normally organises.
- It can also be considered as an enlargement or a further development of an existing activity.

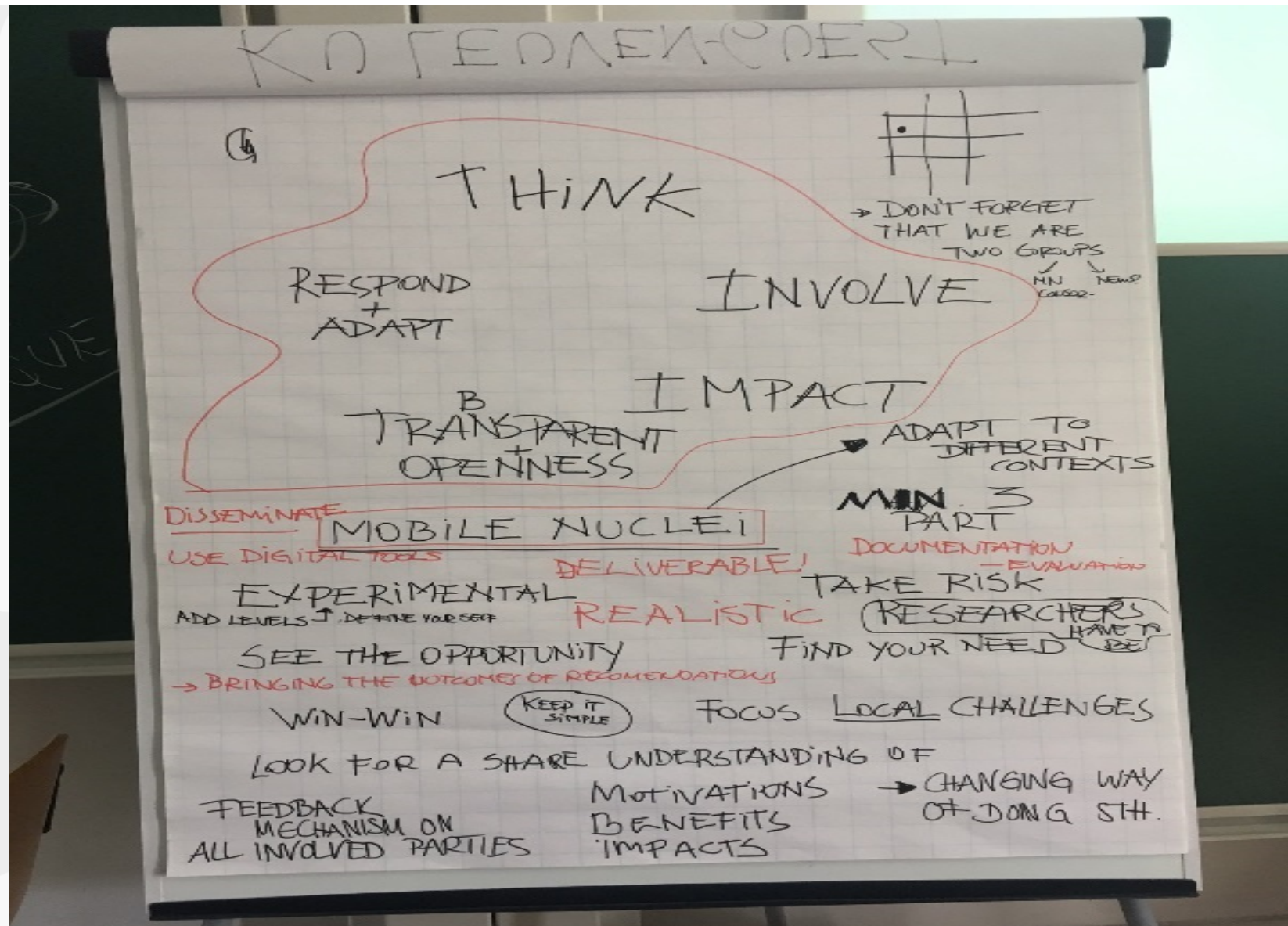


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The Mobile  
Nuclei will come  
in an array of  
formats, inviting  
different partners  
and addressing  
new audiences.  
It's about  
diversity at it's

Photo: EUSEA Photographer: Reimar Ott



What we have done so far...



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# We have gathered a community of practitioners that aims to turn into a Community of Practice

- **City of Bochum, DE**
- **City of Nottingham, UK**
- **City of Hannover, DE**
- **Blackrock Castle, IE**
- **Festival of Curiosity, IE**
- **Calmast, IE**
- **Fundació Catalá, ES**
- **Ilia State University, Tbilisi**
- **Bast, China**
- **City of Bielfeld, DE**
- **Ciencia Viva, PT**
- **Science in Public, SE**
- **Delft University, NL**
- **Psiquadro, IT**
- **IBM, IE**
- **Sanger Institute, UK**
- **Bristol Natural History Consortium UK**
- **University of Wroclaw**



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# First Workshop in Leuven



# FORMATS

- WORLD CAFÉS

- SCIENCE PARL FOR ADULTS

- CONSENSUS CONF LONTROVERSIAL

- CO-DESIGN WORKSHOP

- URBAN INNOVATION

- ACADEMIC REFLECTIONS

→ THE NEED

→ THE STAKEHOLDERS → RELEVANT

→ THE SCOPE + IMPACT

DESIGN OR/AND DECIDE YOUR FORMAT

(A)

Pick up from existing formats that is innovative for you

(B)

You create a brand new/right format

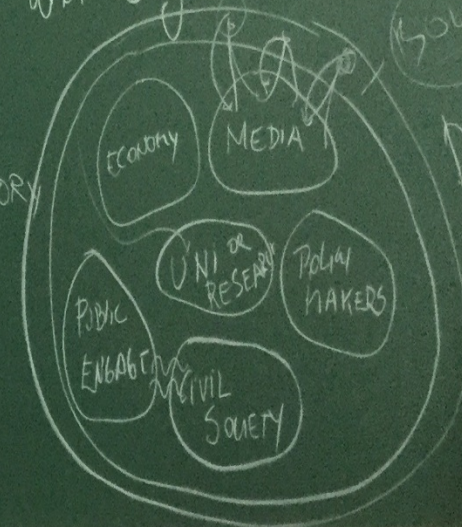
(C)

TRANSFORMAT

A NON-PARTICIPATORY INTO A PARTICIPATORY

## Questions

If you have time and resources, which format would you use? Why? What is your context?



# The „Leuven declaration“

1. Start from the needs you have, your local challenges and shared motivations
2. Researchers are essential: Think which other stakeholders could be relevant
3. Decide the scope and the impact you want to provoke
4. Take risks and experiment. See Mobile Nuclei as an opportunity to try something new
5. Keep it simple (resources are limited)
6. Think of the six cells: Media, Economy, Public Engagement, Civil Society and Policy Makers and University and try to bring the relevant ones to your need.
7. Run your Mobile Nuclei as a test bed. Repeat it when you consider it successful.
8. Save evidence and report on the outcomes and impact

Pick up form an existing format that is innovative for you

You create a brand-new format

You create a TransFormat: a non-participatory format into a participatory one



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(1) Build institutional bridges between the research community, stakeholders and general public

(2) Catalyze ongoing debates about the role of science in open societies

(3) Develop, nurture and support new forms of transdisciplinary research including RR principles in the scientific community

(4) Stimulate co-responsibility of all actors involved in the process of research and innovation

(5) Question and redefine prevailing notions of “recipients” and “agents”



## THE NUCLEUS APPROACH

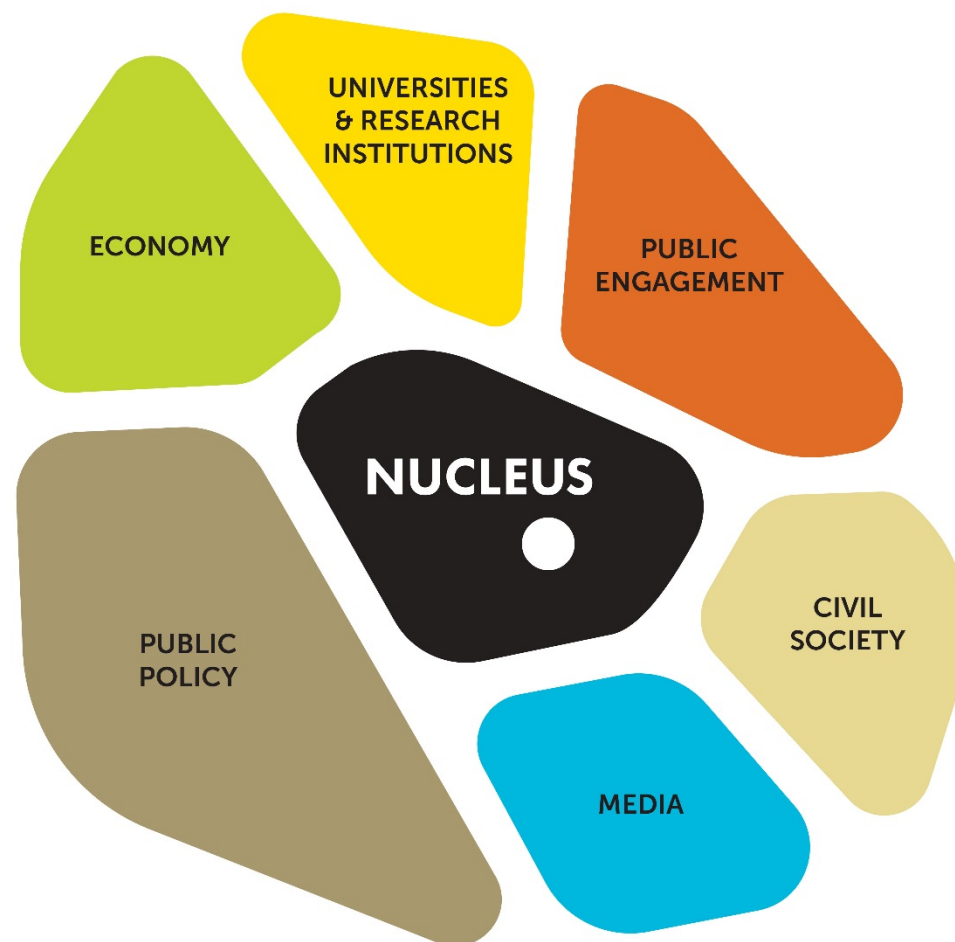
EACH ACADEMIC INSTITUTION  
IS LIKE A "CELL" - A DISTINCT  
INDIVIDUAL ORGANISM

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THE NUCLEUS IS RESPONSIBLE  
FOR THE CELL'S DEVELOPMENT  
AND GROWTH

---

A CELL CAN PERFORM LARGER  
AND MORE COMPLEX TASKS IN A  
CLUSTER WITH OTHER CELLS.



Rec. 1: Relation  
management between  
Universities and societal  
actors

Rec. 3: Language of RRI

Rec. 5: Training

Rec. 2: Incentives

Rec. 4:  
Self-assessment

Rec. 6: Local  
Knowledge



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## PRE-CONFERENCE WORKSHOP ON MOBILE NUCLEI

NAME OF THE LOCAL ORGANISATION AND RESPONSIBLE PERSON  
*City Council for University of Bath*

WHERE (TOWN, VENUE ETC.) WILL YOUR MOBILE NUCLEUS TAKE PLACE AND WHEN (DATE/TIME)? WILL IT BE PART OF A LARGER EVENT?  
*Bath and Bristol Science and/or Science Night*

WHICH OF THE PRESENTED FORMATS ARE YOU LIKELY TO CHOOSE AND ADAPT FOR YOUR MOBILE NUCLEUS?  
*Science and you / discussion formats*

WHAT IS YOUR LOCAL CONTEXT? WHAT IS THE PROBLEM? WHAT IS IT YOU WANT TO ADOPT WITH YOUR LOCAL MOBILE NUCLEUS?  
*Find a format that is adaptable for the context of universities and city council - topics, address the general public, aim to show the relevance of research to university researchers for everyone in Bath. Even those who are not directly connected to university*

WHO NEEDS TO BE INVOLVED TO SUCCESSFULLY DELIVER YOUR MOBILE NUCLEUS? WHICH CHALLENGES DO YOU SEE IN DOING SO?  
*Researchers, citizens  
Challenge: how to motivate researchers?  
find an easy language*

### Working tables Set up a purpose

Specific.  
What exactly are we going to do for whom?

*foster new perspectives on topics that are relevant for people's daily life, increase awareness of Bath as a city of science*

Measurable.  
Is it quantifiable and can we measure it?

*Count the people present, interactions via social media #...*

Time bound.

Will this objective be accomplished, all we know we are

Achievable.

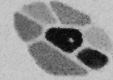
Can we get it done in the time allotted with the resources we have available?

*hopefully*

Relevant.

Will this objective have an effect on the desired goal or strategy?

And...fill in Template



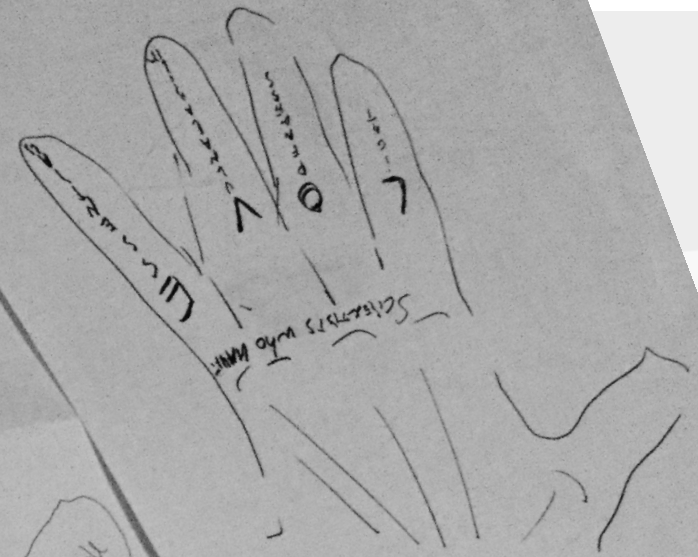
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Plenty of music  
possible city and  
including city and  
good relations  
with the city council

Appropriate people  
(Scientists)

Occasion → Festival

Team: 1-2 people



I have a lot of experience  
of science cafe.

I have a lot of experience  
of science cafe.

Science and In  
Festival

Space will be may  
the University

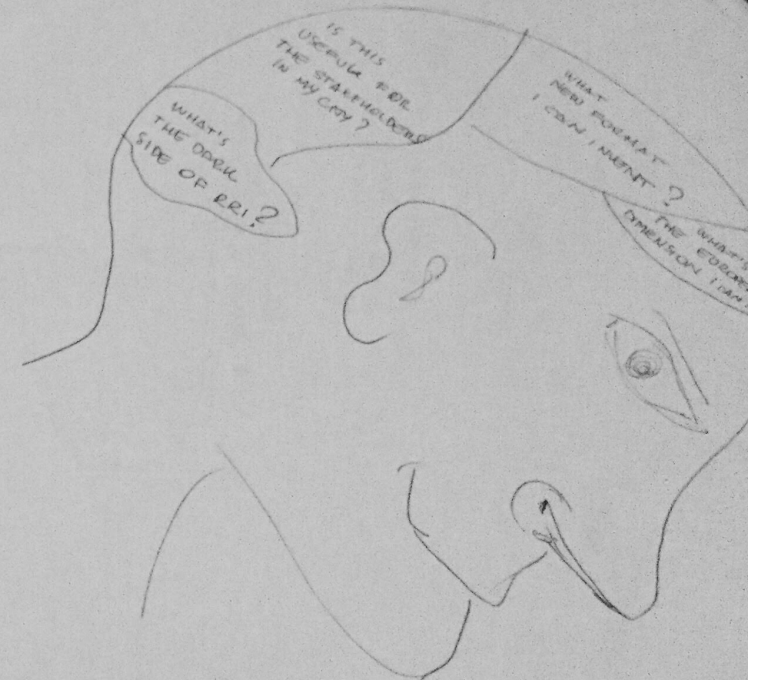
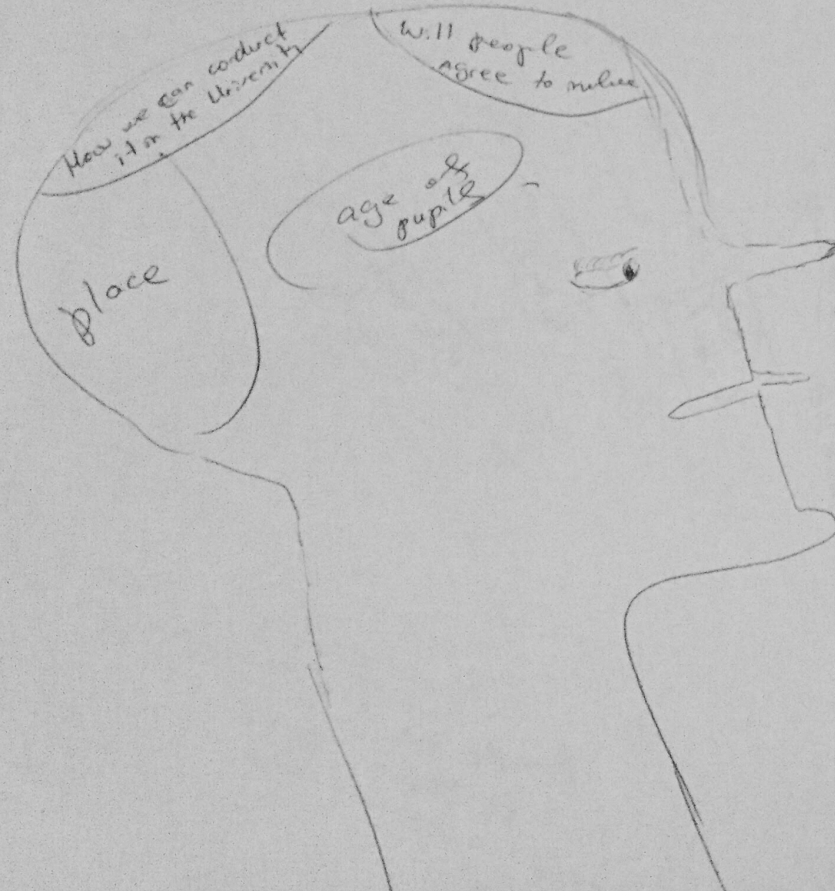
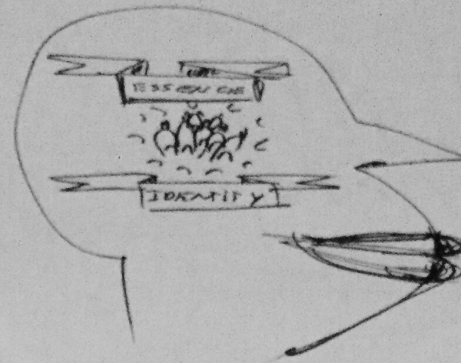
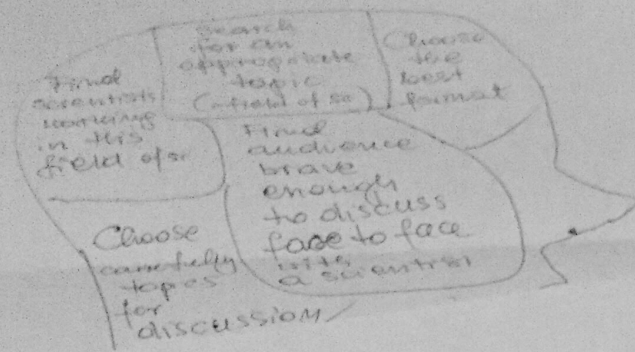
I have a motivated team

I start having a relevant  
group of young researchers

I do have experience in a diverse  
set of contexts.

I have experience in  
challenges to handle

I have patience



Name	Type
<b>1.RRI Training for researchers and scientists. Kind of “Quick start guide in RRI” or “RRI Basecamp, getting a grip of the basics” (and more)</b>	Training
<b>2.Science and you: installation to collect peoples´ connections/expectations/feelings to science.</b>	Installation
<b>3.Hackatons on real problems in cities</b>	Co-design
<b>4.RRI stakeholder workshop: open discussions for close collaborations- (Mapping and navigation sketch)</b>	Open discussion
<b>5.Pop-up Science Shop on specific issues</b>	Co-design
<b>6.Discussion formats for citizens: Fish bowl / Reverse science café</b>	Open discussion
<b>7. Design thinking experience</b>	Co-design



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# “RRI Basecamp: a quick-start RRI Training”

RRI is  
a mindset,  
not an  
activity

## 2. RESPONSIBLE RESEARCH AND INNOVATION: THE WHY, WHAT AND HOW?

The research and innovation community has major responsibilities within society, but politicians, industry representatives, and citizens can't leave the full burden on scientists' shoulders. RRI addresses the fact that the different strands of society must establish a common direction and collaborate to set research agendas that take us there. Non-scientists hold important knowledge, opinions and ideas for improving science's position in society and RRI encourages all stakeholders to work together to solve societal challenges.

RRI is a framework, which means that positive outcomes are important, but so is the journey; empowering responsible stakeholders and finding sustainable answers to big challenges are the end goals, but ensuring the processes that get you there are genuinely inclusive and transparent are equally critical.

Excitingly, RRI is still developing as a concept. Given the stress it places on widening participation in science, technology, and innovation, you may not be surprised that a broad range of perspectives are needed to help define RRI itself and build tools for this field. That's where you come in.

Science engagement organisations already actively contribute to RRI's many agendas – science education, public engagement, open access, ethics, gender, and policymaking – through collaboration with stakeholders ranging from industry representatives, to school teachers and politicians. However, by understanding the RRI approach, you will be able to consistently push your organisation's efforts even further.



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# “RRI Basecamp: a quick-start RRI Training”



*Photo: RRI Tools Blog*



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***Are you comfortable with the way  
knowledge is produced? Do you fully  
understand it?***



# “Installation: Science and You”;

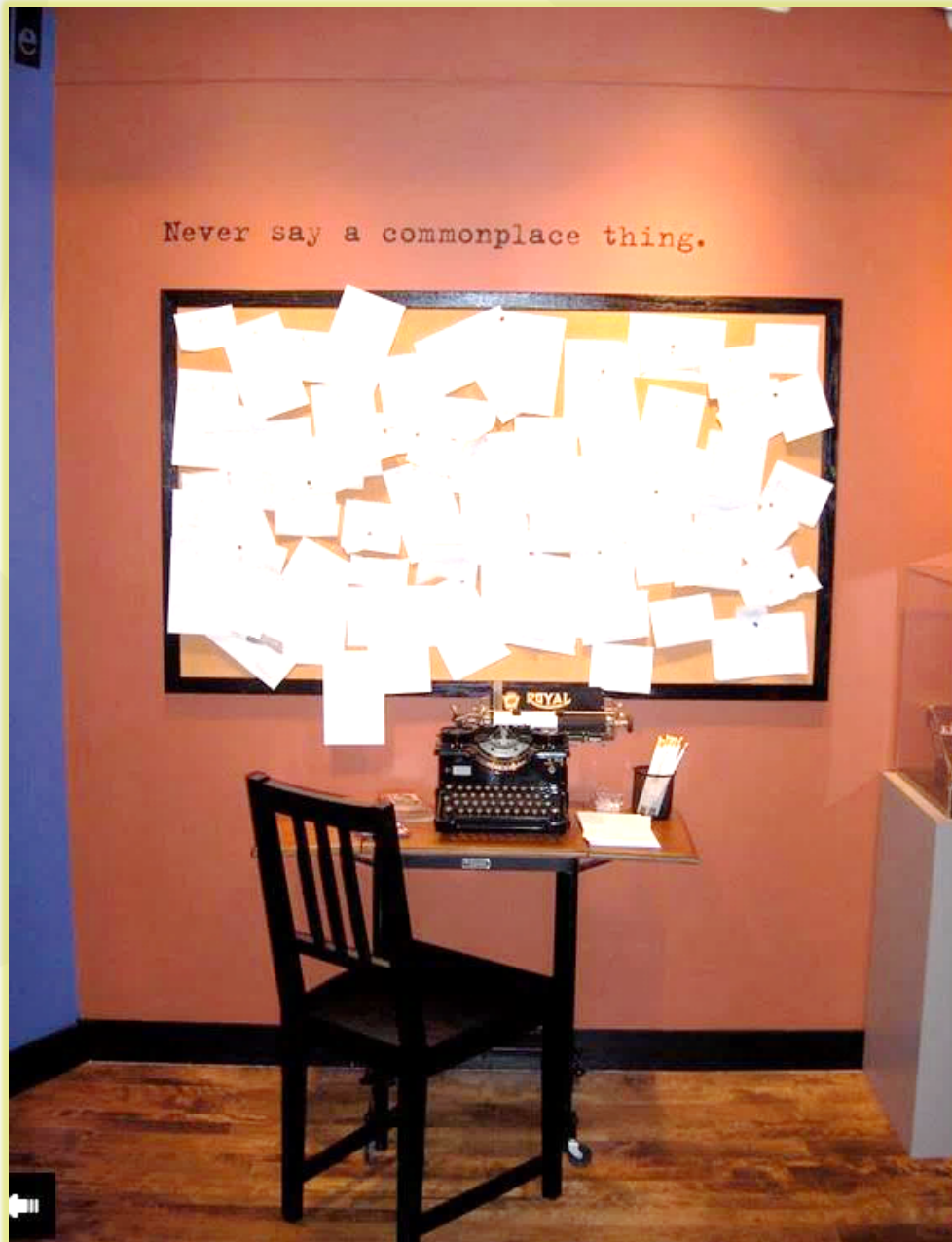


Photo: Participatory Museum



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# “Installation: Science and You”



*Photo: Participatory Museum*

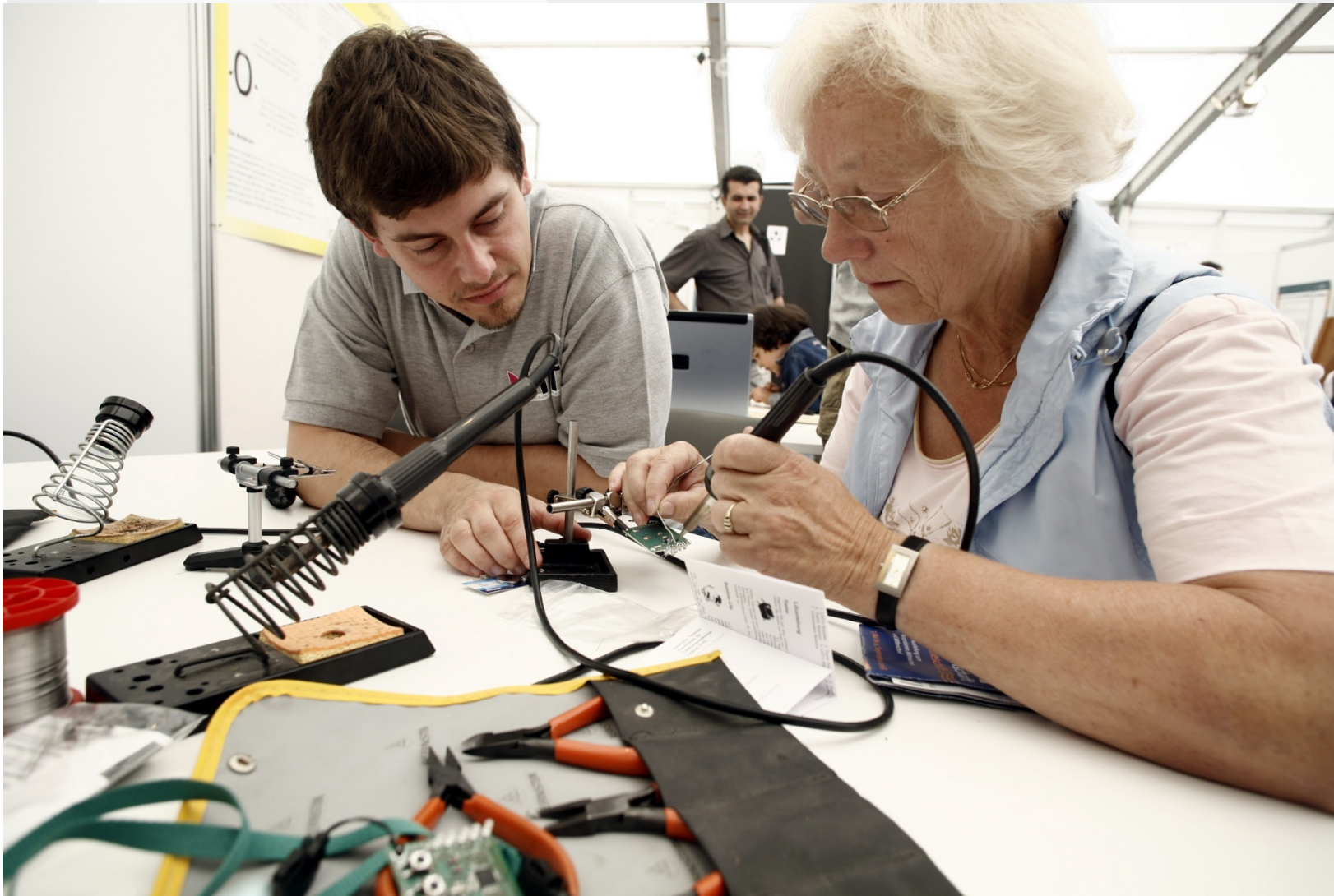


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***Do we need to change the culture  
around  
science? What needs to change?***



# “Hackathons”



*Photo: Wissenschaft im Dialog*



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***How can researchers and communities can  
improve the mobility in our cities?***

***Hack your university!***



# “Fishbowls

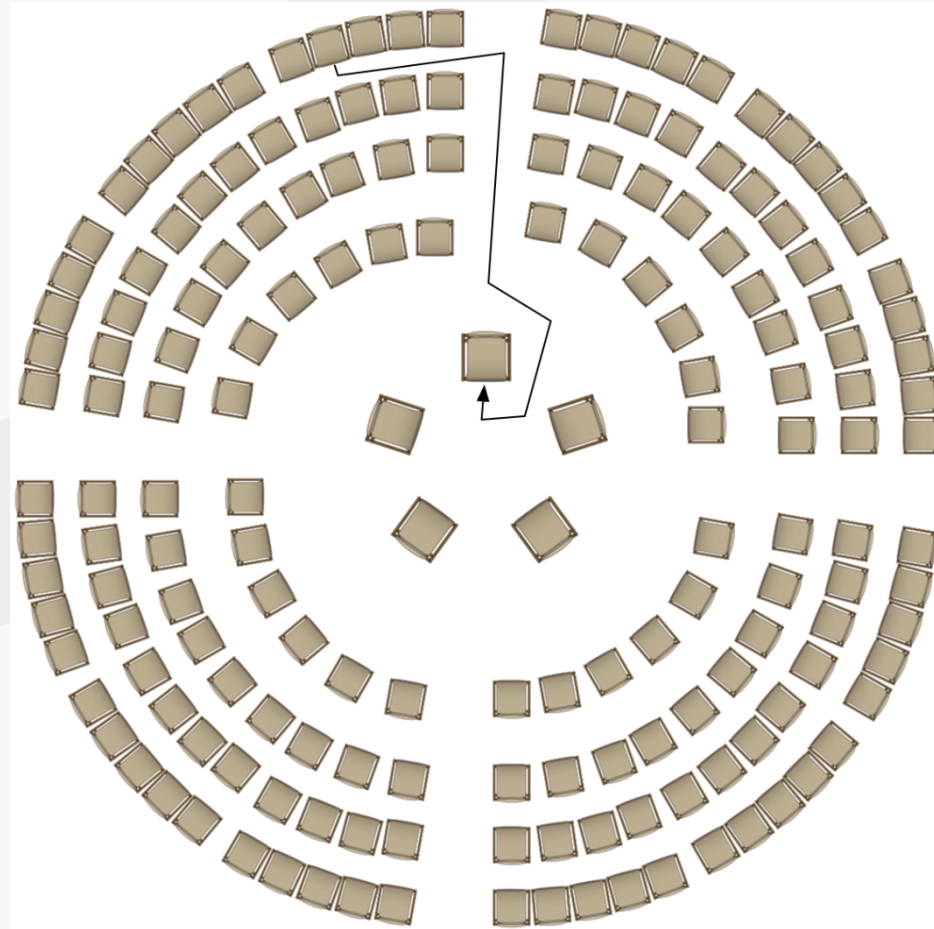


*Photo: Wissenschaft im Dialog*



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# “Fishbowls discussions”



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CENTRUM NAUKI  
KOPERNIK



# Reverse science café and science cafés

## Odwrócona Kawiarnia Naukowa (test)

Czemu odwrócona? Zamieniamy role: tym razem to eksperci będą pytać Cię o zdanie. Temat: rodzicielstwo i nowoczesne technologie w medycynie. Będzie to pierwsze takie, prototypowe wydarzenie w Koperniku - potrzebujemy Twojego udziału i wskazówek.

6 grudnia, 14:00 – 17.00. Zgłoszenia: [kawiarnia@kopernik.org.pl](mailto:kawiarnia@kopernik.org.pl)

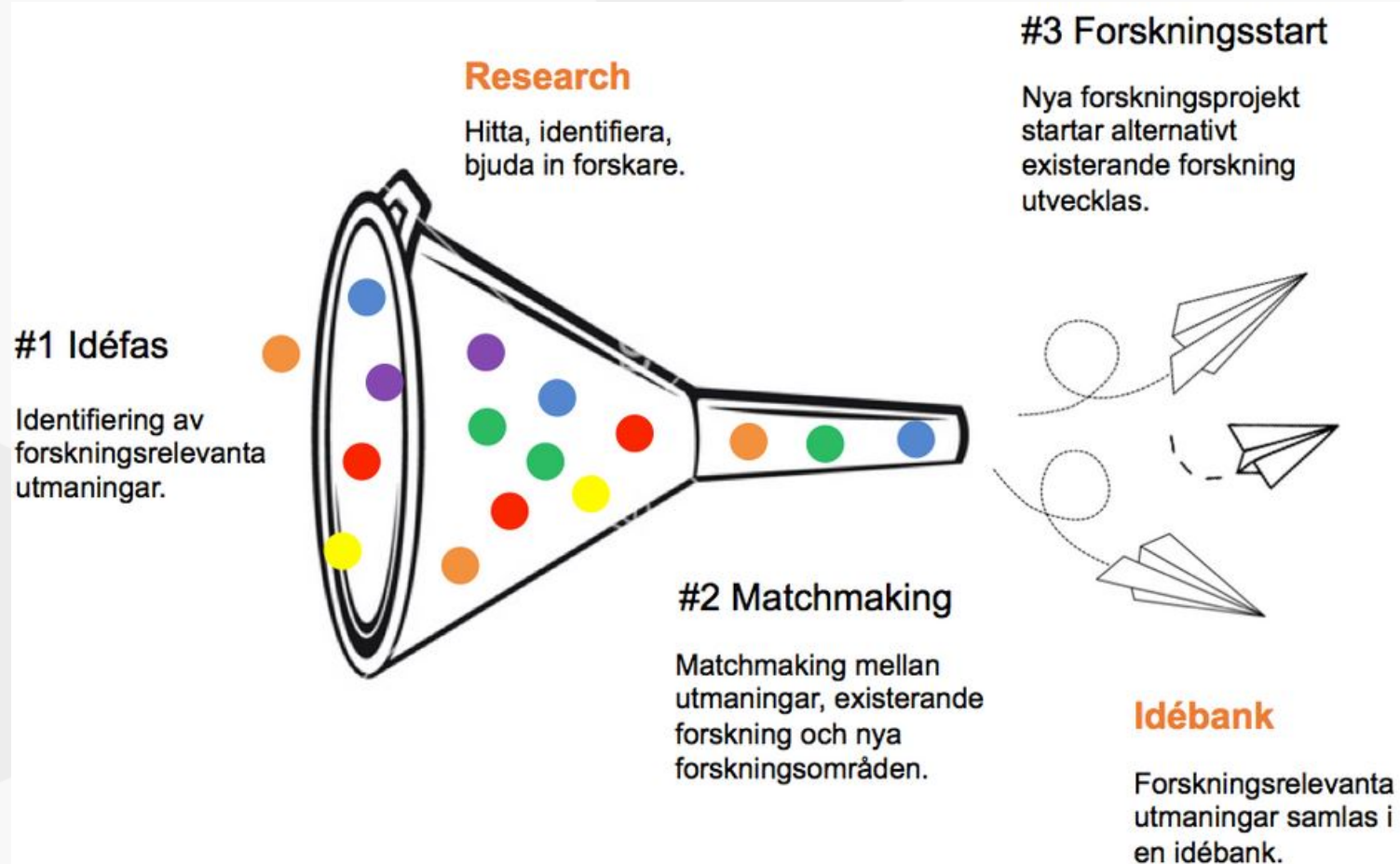


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***How can we negotiate the extent to which  
technology becomes embedded in our  
bodies?***



# “Pop-up science shop”



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# “Pop-up science shop”



***Whose needs are we addressing in the way research is currently conducted ?***  
***What do we need to change to make it more inclusive?***



# “A Design Thinking experience”

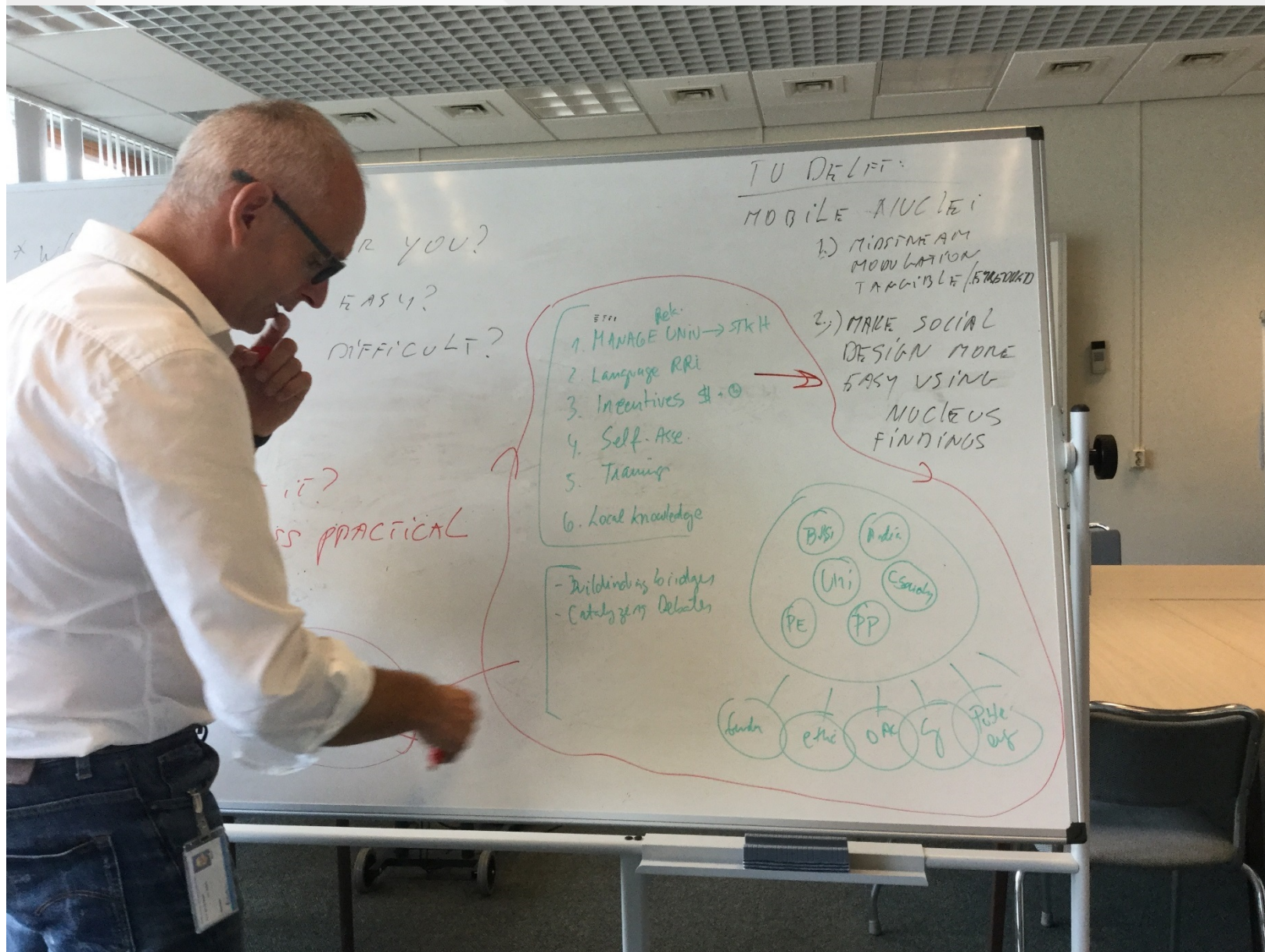


Photo: EUSEA



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# “A Design Thinking experience”

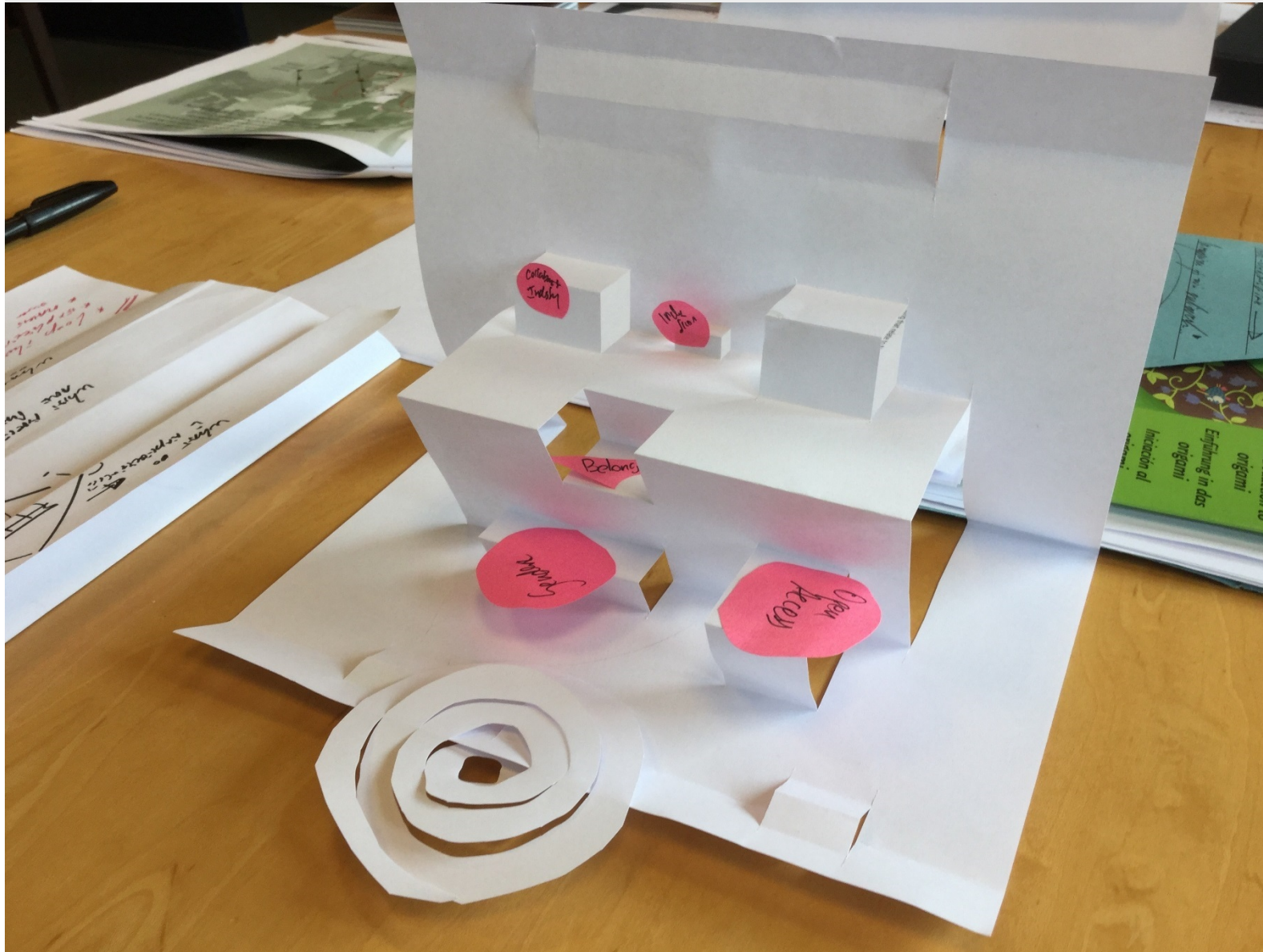


Photo: EUSEA

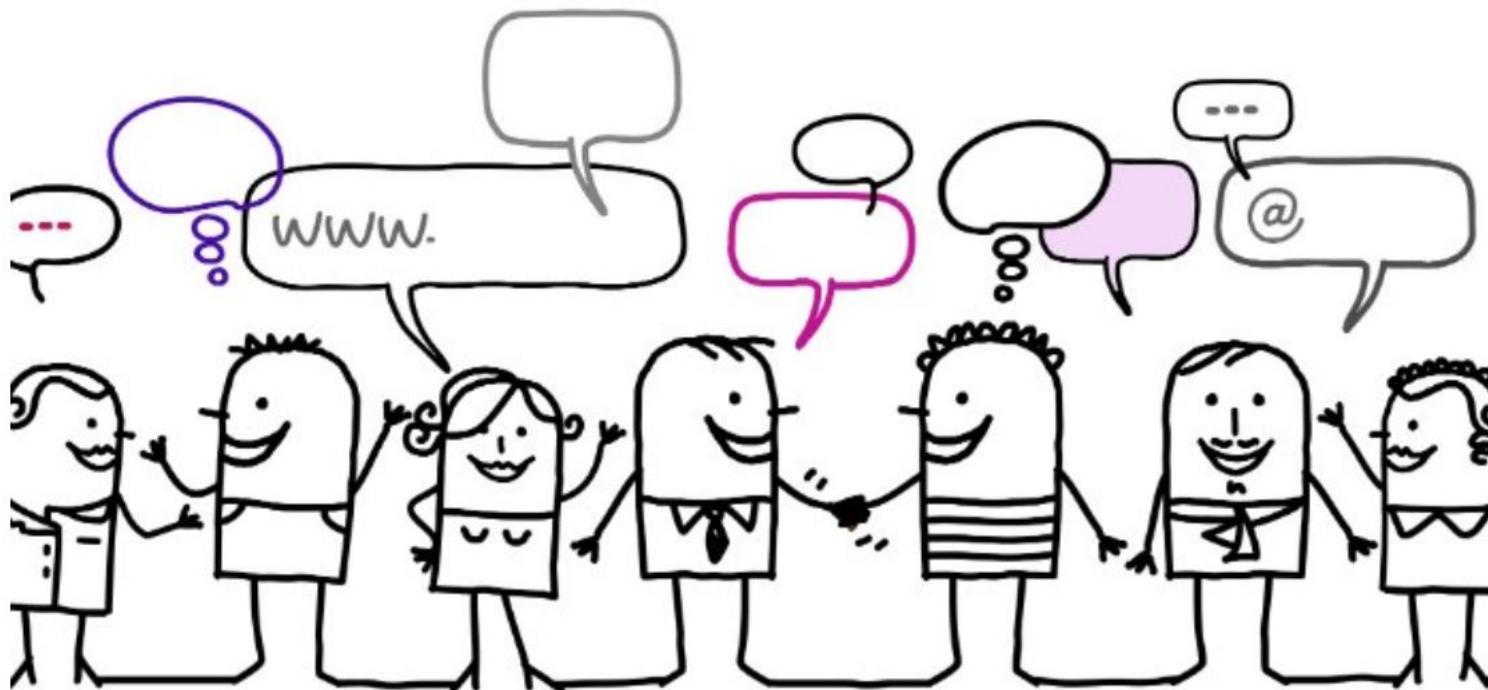


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***Open-mindedness and receptiveness to change: this means that the actors and institutions involved in research and innovation are engaged in a continuous process to reflect on their role and practice, to learn from feedback, and to change accordingly.***



# “RRI Stakeholders workshop”



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***What collaborations are we missing in order to improve the results we achieve with our projects?***



Raise the “engagement literacy” of researchers, e.g., by organizing lectures or workshops about different forms of engagement and their implications.

Bring them together with scientists for an exchange of their views on a research topic.

Social scientists and philosophers might be a good source for assessing problems of social compatibility or social resistance.

Identify stakeholders or lay people with different interests regarding a certain research project.



Photo: EUSEA Photographer: Reimar Ott



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**The Mobile Nuclei will  
start to run from  
November 2017 onwards.**



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# Shift happens



Share your  
impressions, thoughts...!

