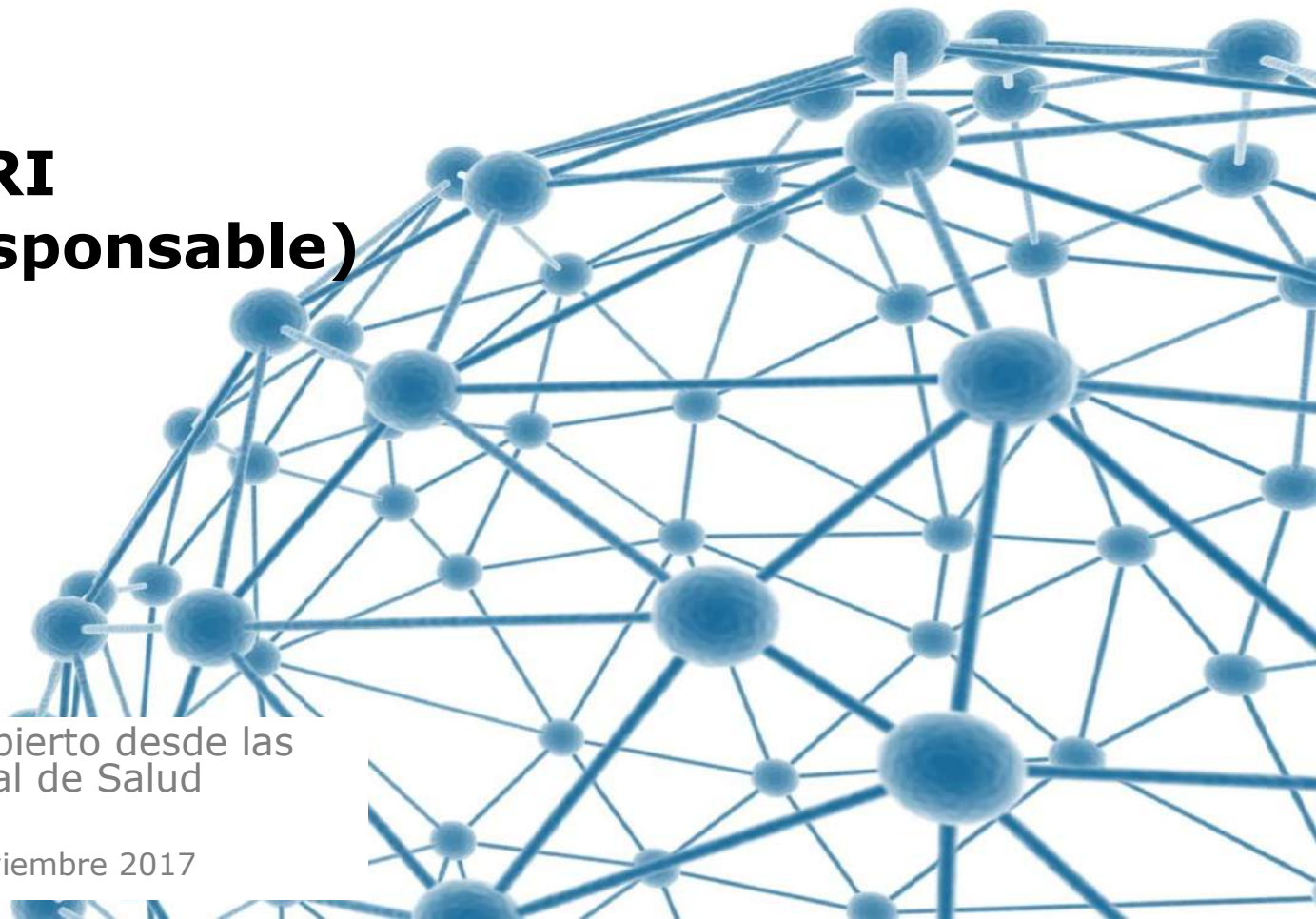
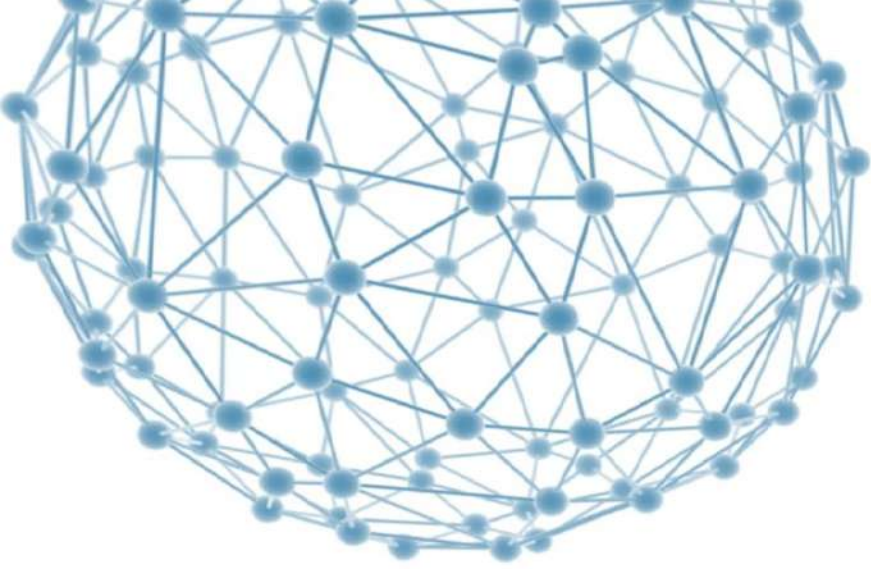




MINISTERIO
DE ECONOMÍA, INDUSTRIA
Y COMPETITIVIDAD

isci
Instituto
de Salud
Carlos III



Acceso Abierto en la RRI (Investigación e Innovación Responsable)

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Formando para formar en Acceso Abierto desde las
Bibliotecas del Sistema Nacional de Salud

Instituto de Salud Carlos III, 14, 21 y 28 de noviembre 2017

- RRI hacia la estrategia europea de las 3 Oes
- Proyecto ORION
- Recursos para RRI

- RRI hacia la estrategia europea de las 3 Oes
(Open Innovation, Open Science, Open to the World)
- Proyecto ORION
- Recursos para RRI

Ciencia excelente

Reforzar y ampliar la excelencia de la base científica de la Unión, así como a consolidar el Espacio Europeo de Investigación

Liderazgo industrial

Acercar el desarrollo de las tecnologías e innovaciones que sustentarán las empresas del mañana

Retos sociales

Estimular la masa crítica de esfuerzos de investigación e innovación necesaria para alcanzar los objetivos políticos de la Unión

Tres pilares

Ciencia
excelente

Liderazgo
industrial

Retos
sociales

H2020. Estructura



HORIZON 2020

€70.2 billion

(*budget is subject to change)

Excellent Science

European Research Council (ERC)

Marie Skłodowska-Curie Actions (MSCA)

Future Emerging Technology (FET)

European Research Infrastructure (ERI)

Industrial Leadership

Leadership in enabling and industrial technologies

Access to risk finance

Innovation in SMEs

Societal Challenges

Health, demographic change, and wellbeing → 7,742 mill de €

Food security, sustainable agriculture & forestry, marine & maritime research & inland water research

Secure, clean & efficient energy

Smart, green & integrated transport

Climate action, resource efficiency & raw materials

Inclusive, innovative & reflective societies

Secure Societies

Spreading excellence and widening participation

Science with and for society

European Institute of Innovation and Technology (EIT)

Non-nuclear direct actions of the Joint Research Centre (JRC)

Líneas de financiación en el área de Salud en el programa H2020

Objetivos Programa H2020-SC1



...to the benefit of **patients** and **citizens**

Programa de Trabajo SC1: Salud, cambio demográfico y bienestar 2018-2020

*“**Social sciences and humanities** research is incorporated, and sex differences and gender aspects are addressed where relevant”*

*“**SC1** integrates the principle of **responsible research and innovation**, including ethics, in all its activities”*

The six key policies within RRI

The European Commission has identified six key components in Research and Innovation processes that have a strong potential to take RRI into action:



ETHICS



**GENDER
EQUALITY**



GOVERNANCE



**OPEN
ACCESS**



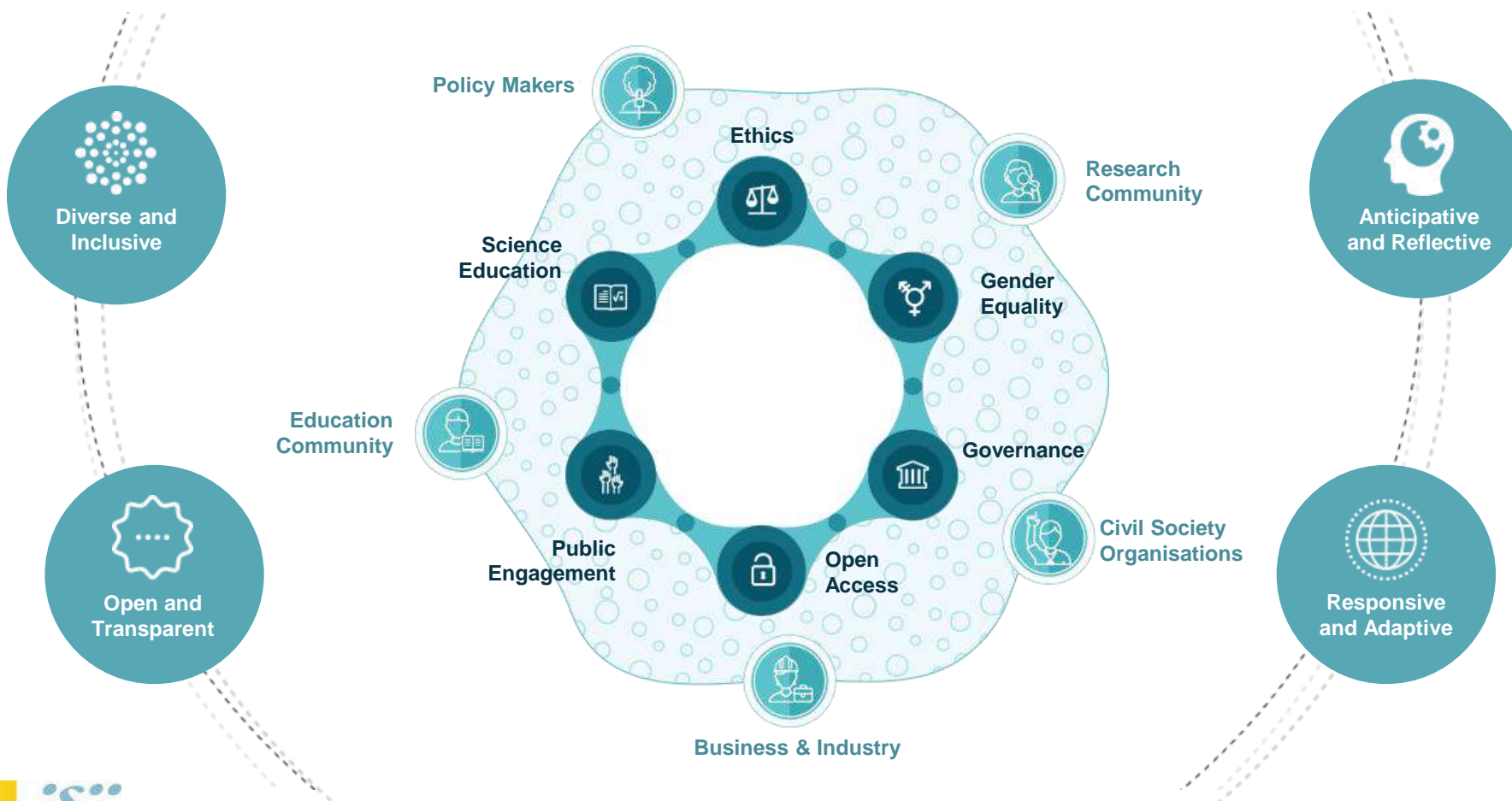
**PUBLIC
ENGAGEMENT**



**SCIENCE
EDUCATION**

RRI is about: including all actors,

and considering specific key issues and process dimensions



Definición RRI

*“Responsible Research and Innovation is a **transparent, interactive process** by which societal actors and innovators become **mutually responsive** to each other with a view to the **(ethical) acceptability, sustainability, and societal desirability** of the innovation process and its **marketable products** (in order to allow a proper embedding of scientific and technological advances in our society)”.*

Von Schomerg

*“Responsible innovation is a **collective commitment of care for the future** through responsive stewardship of science and innovation in the present”*

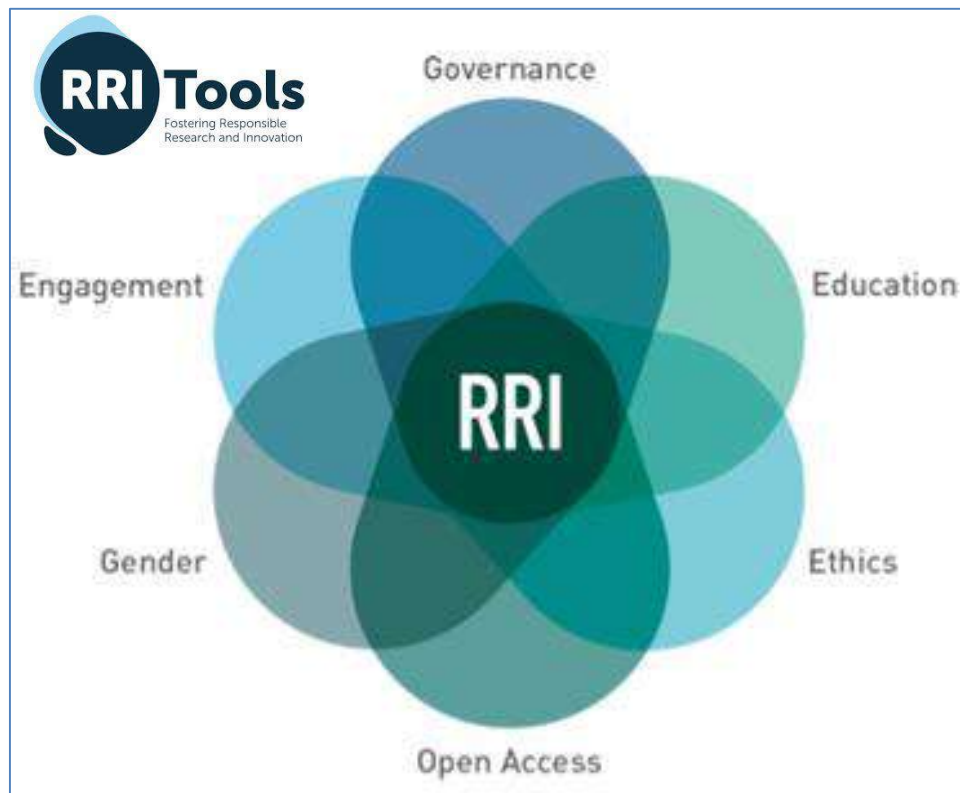
Qwen er at.

RRI

Estrategia de 3 Oes

Integridad

onal de Salud



Modelo de Acuerdo de Subvención (Model Grant Agreement)

- **El Art. 29.3: Acceso abierto a los datos de investigación**, fue modificado por una opción específica para proyectos **relacionados con salud**, al objetivo de proporcionar acceso a determinados datos, **en caso de emergencias de salud pública**
- **El Art. 34: Ética e integridad de la investigación**, se adoptaron algunas modificaciones para introducir un mayor alineamiento con el **Código Europeo para la Integridad de la Investigación**

Modelo de Acuerdo de Subvención

ALLEA
ALL European
Academies

H2020 Model Grant Agreements: H2020 General MGA — Multi: v5.0 –18.10.2017

In addition, the beneficiaries must respect the fundamental principle of research integrity — as set out in the European Code of Conduct for Research Integrity⁵¹.

This implies compliance with the following fundamental principles:

- **reliability** in ensuring the quality of research reflected in the design, the methodology, the analysis and the use of resources;
- **honesty** in developing, undertaking, reviewing, reporting and communicating research in a transparent, fair and unbiased way;
- **respect** for colleagues, research participants, society, ecosystems, cultural heritage and the environment;
- **accountability** for the research from idea to publication, for its management and organisation, for training, supervision and mentoring, and for its wider impacts

**The European
Code of Conduct for
Research Integrity**
REVISED EDITION

RRI en el Reto Social 1 (SC1)

- Mecanismos moleculares en co-morbilidad,
- Terapias combinadas,
- Microbioma,
- Medicina regenerativa,
- Enfermedades infecciosas,
- Enfermedades crónicas,
- Exposoma,
- Disruptores endocrinos,
- Salud mental,
- Cuidados paliativos,
- *Big data* en salud, innovación digital en salud,

- Investigación 'in silico',
- Sistemas de almacenamiento de datos salud en la nube,
- Atención integrada,
- Protección de datos y ciberseguridad,
- Historia electrónica, estandarización e interoperabilidad de datos y sistemas en salud,
- Soluciones digitales y robótica como apoyo en el envejecimiento

RRI en el Reto Social 1: Ejemplo

SC1-BHC-23-2018: Novel patient-centred approaches for survivorship, palliation and/or end-of-life care
(Nuevos enfoques centrados en el paciente para supervivencia, paliación y/o atención al final de la vida)

Scope: Proposals should demonstrate, the effectiveness and cost-effectiveness of new, improved or specifically adapted pharmacological and/or non-pharmacological interventions to either relieve symptoms (e.g. pain) and suffering caused by life-threatening non-communicable diseases (including disabilities), or serious late and long-term side effects of disease treatments in patients and survivors, or symptoms that occur at the end of life. Randomised clinical trials or observational studies of new or improved patient and/or family centred⁹⁴ interventions, targeting children⁹⁵ and/or adults, should be considered for this topic. Proposals should give a sound feasibility assessment justified by available publications or preliminary results.

Proposals should prove the feasibility of integrating the proposed interventions in current pain management, palliative and/or end-of-life and/or survivorship care regimes and healthcare systems across Europe while taking into account the complex human aspects which are necessarily managed by such regimes and systems.

The proposals should address sex, gender, age and socio-economic factors in health and any other factors (e.g. ethical, familial, cultural considerations, including personal beliefs and religious perspectives, etc.) that could affect health equity.

- RRI hacia la estrategia europea de las 3 Oes
- Proyecto ORION
- Recursos para RRI y para RRI en Salud

ORION: Open Responsible research and Innovation to further Otstanding knowledge



[🏠](#) [NOTICIAS Y EVENTOS](#) [PROYECTOS Y RESULTADOS](#) [REVISTAS DE RESEARCH*EU](#)

ORION, a new European initiative to open up science to society

Contributed by: [Centre for Genomic Regulation \(CRG\)](#)

ORION is a new collaborative European project to explore ways in which research and funding organizations in life sciences and biomedicine can open up the way they fund, organize and do research. The Centre for Genomic Regulation in Barcelona, Spain, coordinates this project and is one of the nine partners in the project. ORION kicks off in Barcelona this week.

Open science is a core strategy of the European Commission that involves widening participation and collaboration as well as sharing research processes and outcomes to improve research and innovation. All European Union members recognise the benefits of open science, but the transition to "openness" is challenging.

Interesting challenges

The ORION project will help research and funding organizations to understand existing challenges in Open Science and implement institutional, cultural, and behavioral changes in how they carry out and manage research.

"New models of working require novel cooperative approaches that engage lots of different actors, such as researchers, funders, publishers, patient organisations, citizens, students, teachers, or companies," explains Michela Bertero, coordinator of the ORION project and responsible for International and Scientific Affairs at the Centre for Genomic Regulation in Barcelona, Spain.



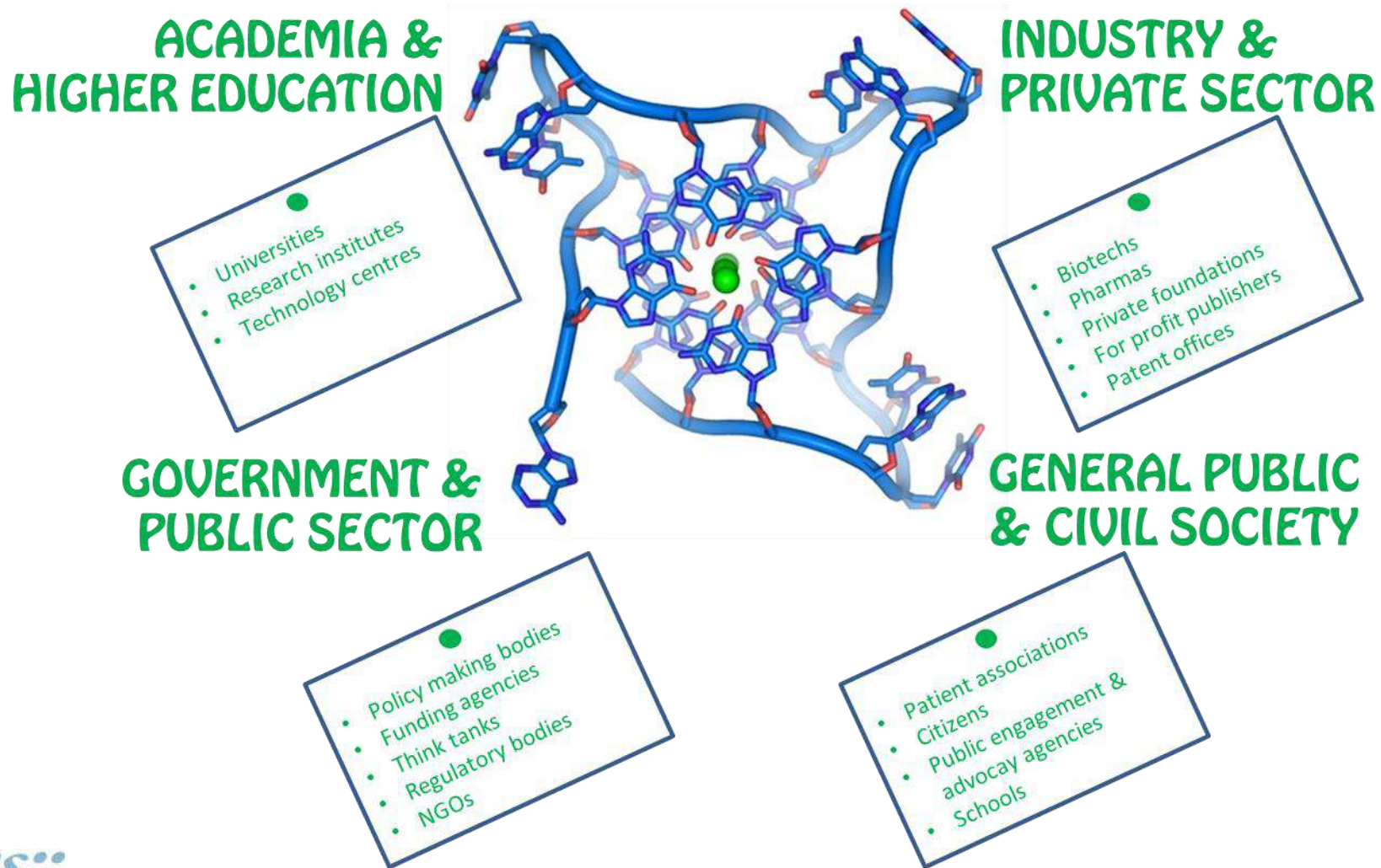
El proyecto ORION se centra en promover **cambios institucionales, culturales** y de **comportamiento** basados en la evidencia científica, en las **agencias financiadoras** y en las **entidades ejecutoras de I+D+i**, dirigidas a los investigadores, personal de gestión y altos responsables en las mismas.

La **visión a largo plazo** es "**integrar**" los principios de Ciencia, Investigación e Innovación Responsable (RRI) en las políticas, prácticas y procesos de estas organizaciones, con **objeto de mejorar el proceso de investigación e innovación**.

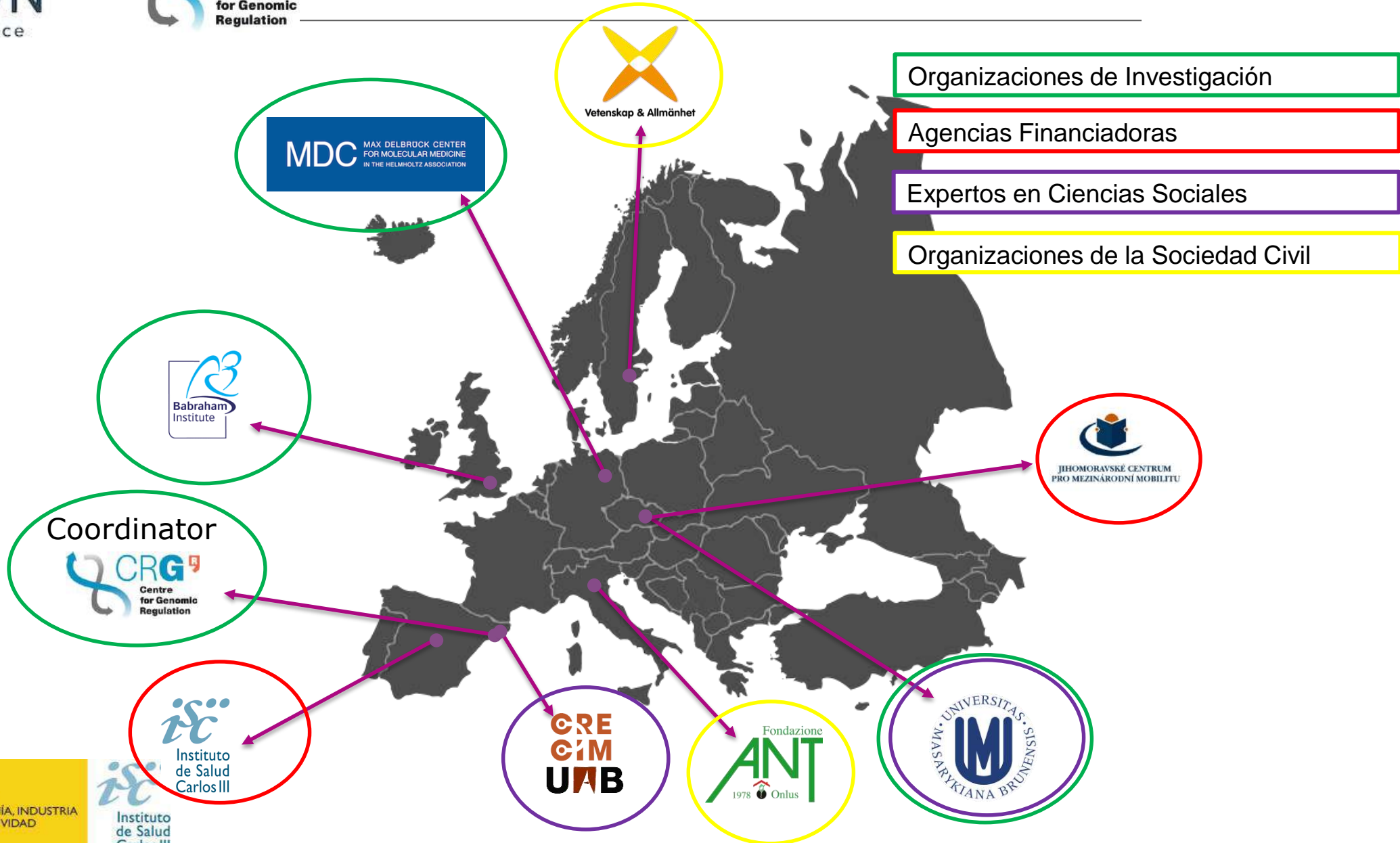
- *Kick off 1st May 2017*
- *4 year project*
- *€3,2 million*



Procesos de CO-CREATION con los diferentes sectores (Cuádruple Hélice)



9 Socios



- RRI hacia la estrategia europea de las 3 Oes
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Recursos



Comisión Europea (políticas, documentos):

- **[Responsible research & innovation:](https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation)**

<https://ec.europa.eu/programmes/horizon2020/en/h2020-section/responsible-research-innovation>

Responsible research & innovation

Article | Newsroom

Responsible research and innovation is an approach that anticipates and assesses potential implications and societal expectations with regard to research and innovation, with the aim to foster the design of inclusive and sustainable research and innovation.



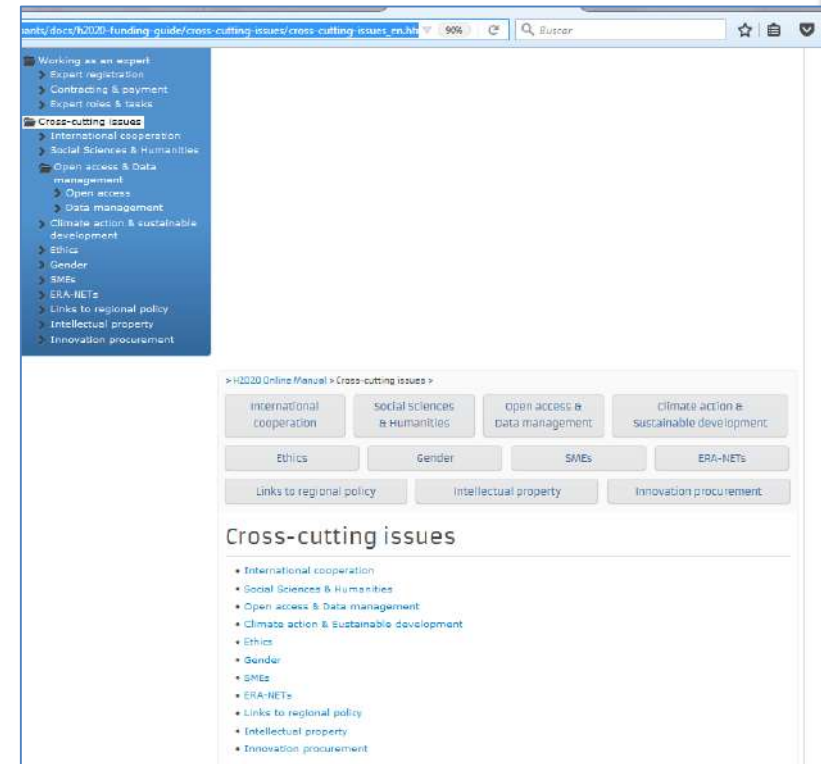
Responsible Research and Innovation (RRI) implies that societal actors (researchers, citizens, policy makers, business, third sector organisations, etc.) work together during the whole research and innovation process in order to better align both the process and its outcomes with the values, needs and expectations of society.

In practice, RRI is implemented as a package that includes multi-actor and public engagement in research and innovation, enabling easier access to scientific results, the take up of gender and ethics in the research and innovation content and process, and formal and informal science education.

Implementing RRI in Horizon 2020

- **Online Manual:**

http://ec.europa.eu/research/participants/docs/h2020-funding-guide/cross-cutting-issues/cross-cutting-issues_en.htm



Working as an expert

- Expert registration
- Contracting & payment
- Expert roles & tasks
- Cross-cutting issues**
 - International cooperation
 - Social Sciences & Humanities
 - Open access & Data management
 - Open access
 - Data management
 - Climate action & sustainable development
 - Ethics
 - Gender
 - SMEs
 - ERA-NETs
 - Links to regional policy
 - Intellectual property
 - Innovation procurement

> H2020 Online Manual > Cross-cutting issues >

International cooperation | Social sciences & Humanities | Open access & data management | Climate action & sustainable development

Ethics | Gender | SMEs | ERA-NETs

Links to regional policy | Intellectual property | Innovation procurement

Cross-cutting issues

- International cooperation
- Social Sciences & Humanities
- Open access & Data management
- Climate action & Sustainable development
- Ethics
- Gender
- SMEs
- ERA-NETs
- Links to regional policy
- Intellectual property
- Innovation procurement

H2020. Estructura



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Industrial Leadership

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Innovation in SMEs

Societal Challenges

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Climate action, resource efficiency & raw materials

Inclusive, innovative & reflective societies

Secure Societies

Spreading excellence and widening participation

Science with and for society

European Institute of Innovation and Technology (EIT)

Non-nuclear direct actions of the Joint Research Centre (JRC)

Recursos

- **Programa H2020. Ciencia con y para la Sociedad (Science With And For Society , SWAFS)**

https://ec.europa.eu/programmes/horizon2020/sites/horizon2020/files/h2020-swafs-2018-2020_prepublication_2.pdf

Call - Science with and for Society

- science education
- methods for teaching **ethics** and **research integrity**
- research integrity standard operating procedures: Research Integrity Promotion Plans
- re-use of research **data** generated by publically funded research projects
- **Grounding RRI practices** in research and innovation funding and performing organisations
- Science4Refugees
- EURAXESS network
- Research innovation needs & **skills training** in PhD programmes
- Stepping up support to **Gender Equality**
- Analysing gender gaps and biases in the allocation of grants
- award/certification system for gender equality in research organisations
- ...



EU PROYECTOS

- **RRI Tools** (Recolección resultados proyectos de RRI , herramientas, recomendaciones): <https://www.rri-tools.eu/>
- **Engage2020** (public engagement) <http://engage2020.eu/>
- **ORION** (co-creation experiments) www.orion-openscience.eu

Recursos



TOOLS

Use manuals, guidelines, and 'how tos' to implement RRI.



INSPIRING PRACTICES

Find inspiration in RRI success stories across Europe.



PROJECTS

Get to know other projects on RRI and find potential partners.



LIBRARY

Learn of RRI from articles, reports, cross-analyses, and more.

The six key policies within RRI



ETHICS



**GENDER
EQUALITY**



GOVERNANCE



**OPEN
ACCESS**



**PUBLIC
ENGAGEMENT**



**SCIENCE
EDUCATION**