Responsible Research, Innovation & Risk Assessment…*Are we there yet?*

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Implementing principles & practices of 'Responsible Research & Innovation' can help put risk assessment in context

&

putting risk assessment in context
can help to better understand and address sources of controversy


GM


SAY NO TO GMO


TRANSGÉNICOS
DESTRUCCIÓN
GREENPEACE


NO TO GMOs


식약청은 국민의 알권리를 보장하라
식약청은 국민의 선택권을 보장하라
기업의 경제 논리에 미래세대는 신음한다!
식약청은 GMO 가공식품의 표시제를 강화하라
서울환경운동연합


MON 810
Gen-Mais stoppen!
Monsanto: Klage zurück-ziehen!


SAVE

Concentration of Power & Capital

Intellectual Property in the Form of Patents

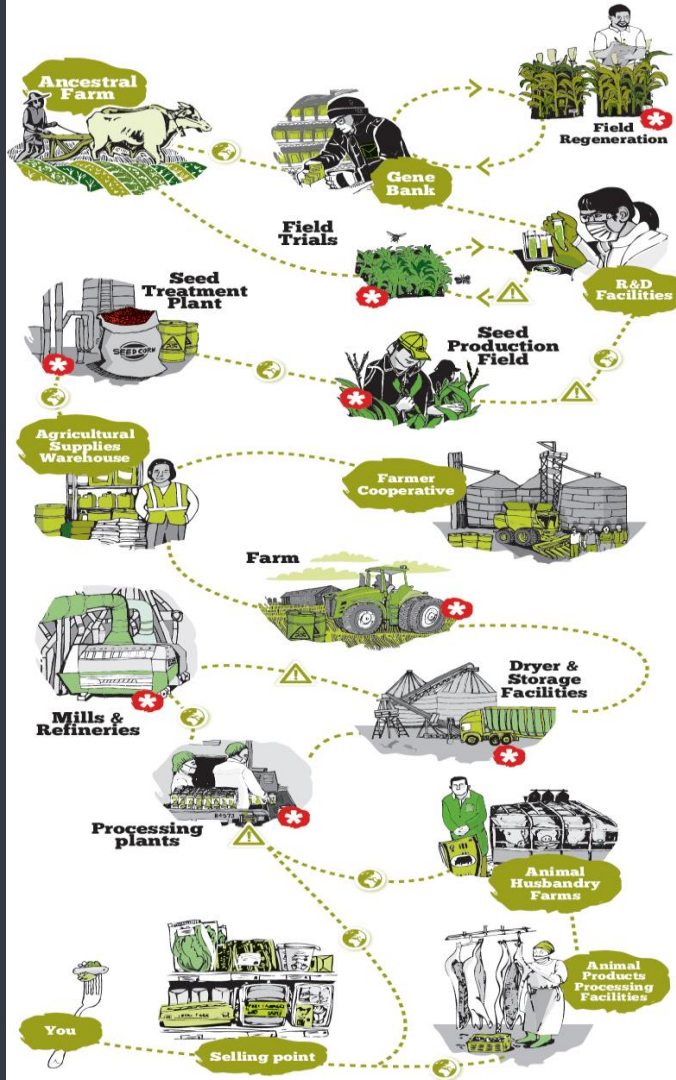
The Character of Human/Nature Relations

Divergent Visions for the Future for Agriculture

Different Paradigms of Knowledge

Competing Narratives of Development & Progress

agri/cultures PROJECT



The Social, Cultural and Economic
Context of the Innovation
&
its Historical Legacy & Memory

IS IMPORTANT

“This experiment is ecologically irrelevant, but it is what they want…”

“I want to do safety research in the public interest, but to do this I have to obtain my test materials illegally.

Is that ethical?”

The Social, Economic, Legal & Political
Context of Regulatory Science
&
its Associated Ethical Aspects

IS IMPORTANT

Responsible Research & Innovation - RRI

EC Keys of RRI

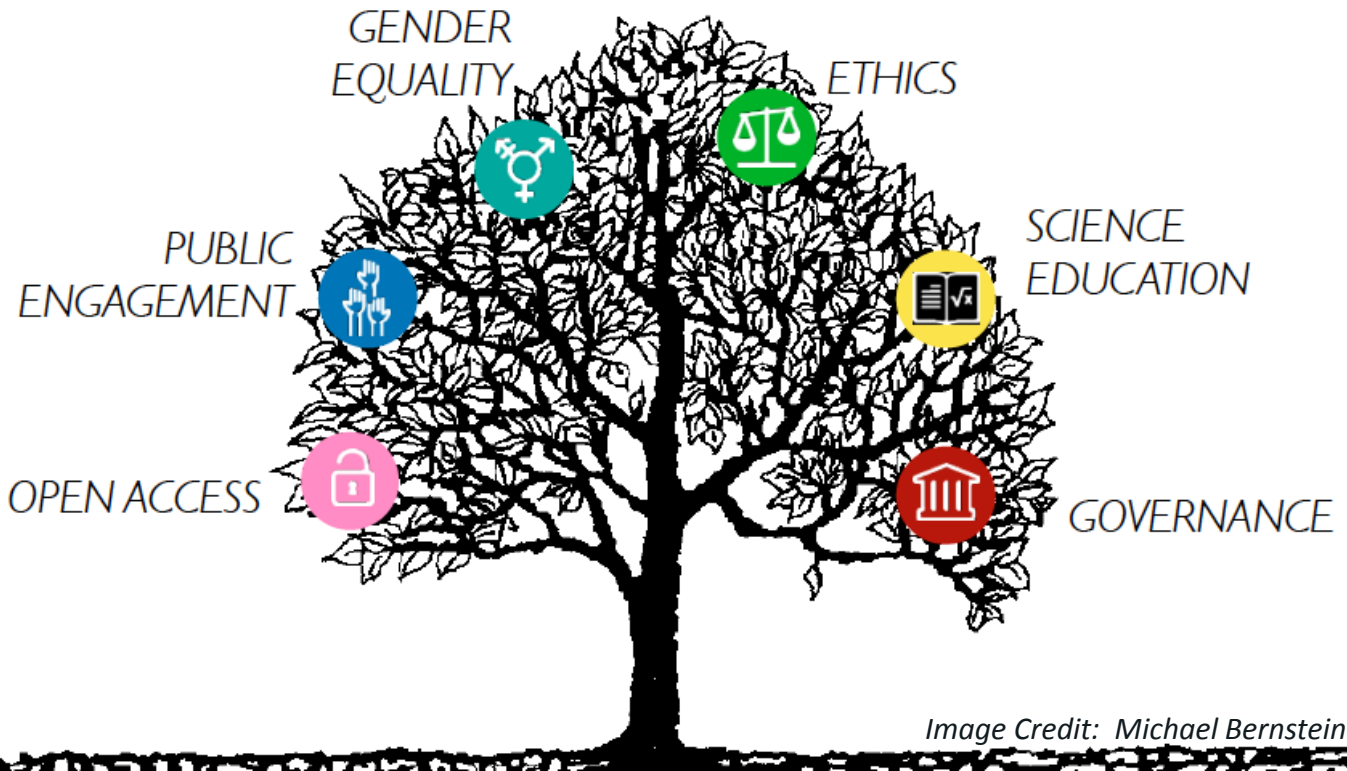


Image Credit: Michael Bernstein

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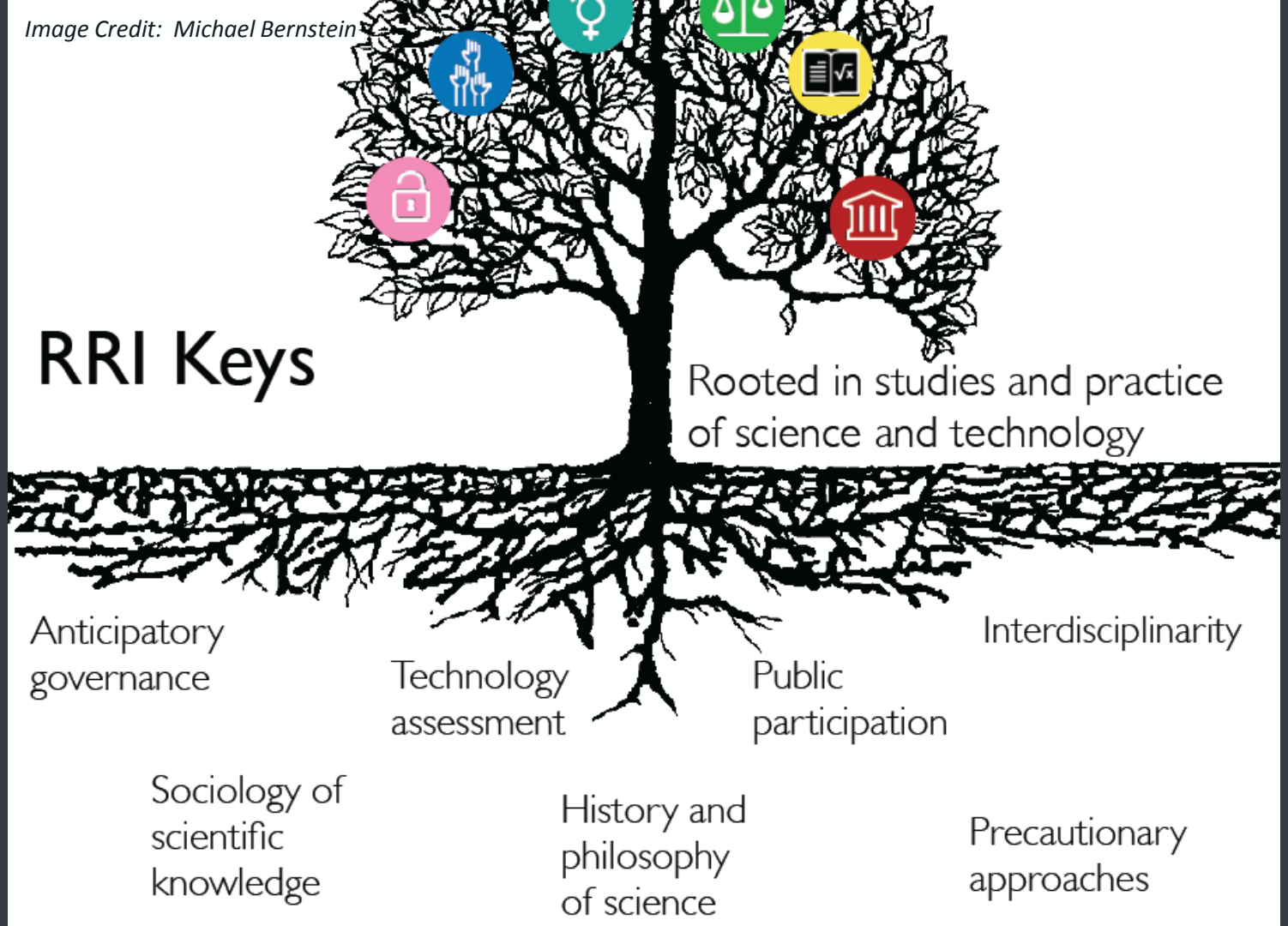


Responsible Research & Innovation - RRI

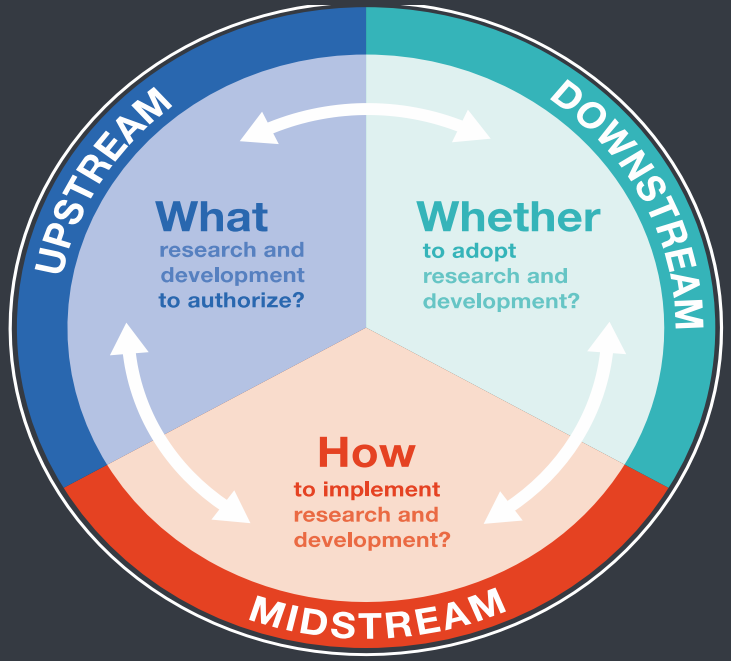
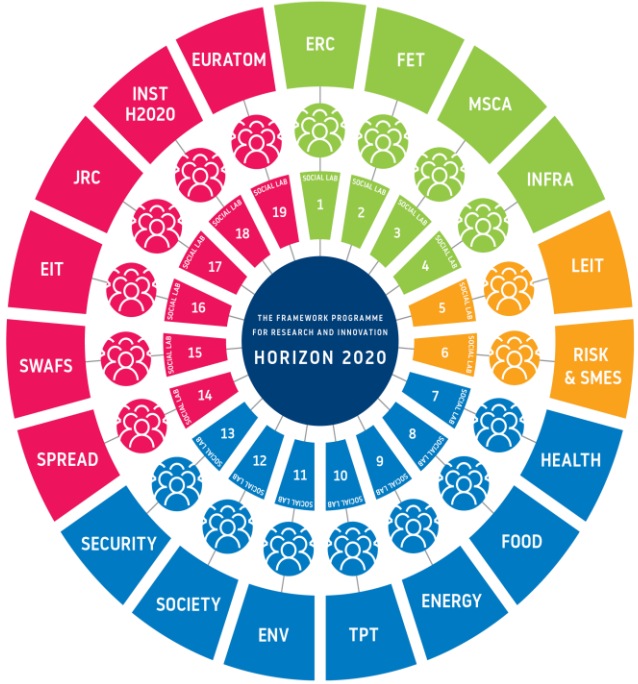


Image From: Schuurbiers, D & Fisher, E. (2009)
Lab-scale Intervention *EMBO Reports* 10(5): 424-427



EXCELLENT SCIENCE

SOCIAL LAB 1
European Research Council
SOCIAL LAB 2
Future and Emerging Technologies
SOCIAL LAB 3
Marie Skłodowska Curie Actions
SOCIAL LAB 4
Research Infrastructures, including e-Infrastructures

INDUSTRIAL LEADERSHIP

SOCIAL LAB 5
Leadership in Enabling Industrial Technologies
SOCIAL LAB 6
Access to Risk Finance & Innovation in SMEs

SOCIETAL CHALLENGES

SOCIAL LAB 7
Health, Demographic Change and Wellbeing
SOCIAL LAB 8
Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy
SOCIAL LAB 9
Secure, Clean and Efficient Energy
SOCIAL LAB 10
Smart, Green and Intergrated Transport
SOCIAL LAB 11
Climate Action, Environment, Resource Efficiency and Raw Materials
SOCIAL LAB 12
Europe in a changing world - Inclusive, innovative and reflective societies
SOCIAL LAB 13
Secure societies – Protecting freedom and security of Europe and its citizens

DIVERSITY OF APPROACHES

SOCIAL LAB 14
Spreading Excellence and Widening Participation
SOCIAL LAB 15
Science with and for Society
SOCIAL LAB 16
European Institute of Innovation and Technology
SOCIAL LAB 17
Non-Nuclear direct actions of the JRC
SOCIAL LAB 18
Instruments of H2020
SOCIAL LAB 19
EURATOM

NEW HORRIZON

Public Engagement:

In setting protection goals & endpoints, in defining guidelines, in handling uncertainties...

Open Access:

To test materials, to safety science, to dossiers, to the process of risk assessment...

Gender Equality

In science, in expert panels, in conferences, in the types of questions & issues considered...

Ethics

Feminist Care Ethics

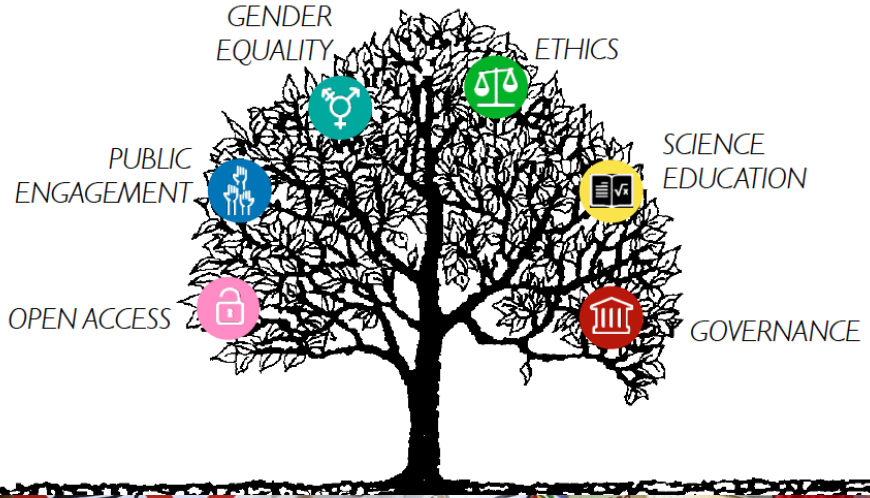
in the Governance of Biotechnology

Table 1 Guiding Questions to Advance a Politics of Care in Biotechnology Governance

Relations	*How may social and ecological relationships shift if this technology is introduced?* *How have interconnections within socio-ecological communities been considered in the development of this technology?* *Can the development, introduction or use of this technology create significant ruptures in social or ecological relationships?*
Context	*What are the important particularities of this context (e.g. what is the unique history, ecology and culture of this place, what specific actors or groups will be affected by the technology)?* *How may the impacts and those affected differ across the different contexts of use?* *Are the particularities of different contexts of introduction (e.g. the different ecologies, economies, cultures and people) being adequately accounted for in the assessment process?*
Dependence	*Where are there relations of dependence (e.g. people dependent on each other, on companies, on infrastructure, on ecological processes etc.), and how may these change due to the technology?* *What is the nature of the relations of dependence in play (e.g. are they experienced as nurturing and empowering or extractive and destructive for those involved)?* *Does the development and use of this technology exacerbate dependencies?*
Power	*How does the development, deployment and use of this technology affect the distribution of power and control (e.g. are any actors/groups favored or granted more power over others, how will the technology affect the level of control the impacted actors have over their own future)?* *Who are the most vulnerable actors (both human and non-human) and what measures are in place to prevent abuses towards them?* *Will this technology lead to a concentration of power?*
Affect	*Does the development, introduction or use of this technology evoke strong emotions among those impacted by the technology?* *How is affect appearing and being handled in the scientific/technological development, in the public debate, and in the assessment process?* *Is the role of affect being granted a legitimate role in decision-making processes or are the affective dimensions of this technological change being downplayed?*
Narratives	*What are the narratives being told by those promoting and those contesting this technology?* *What worldviews, values, assumptions and beliefs are being expressed in these different stories?* *What alternative visions, strategies and technologies do the different stories reveal as available and important for the assessment process?* *Are certain narratives being suppressed, dismissed or excluded?*

Wickson, F., Preston, C., Binimelis, R., Herrero, A. Hartley, S., Wynberg, R., and Wynne, B. (2017). "Addressing socio-economic and ethical considerations in biotechnology governance: The potential of a new politics of care" *Food Ethics* 1(2): 193-199.

EC Keys of RRI



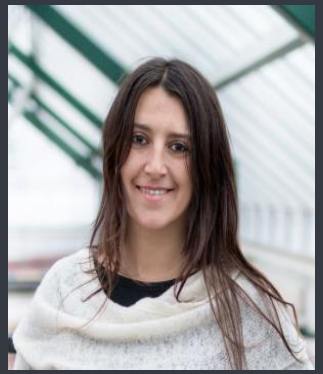
RRI: Are We There Yet?

No…it is a really long journey requiring deep cultural change, but…

Working to implement the principles & practices of
'Responsible Research & Innovation'
can help put risk assessment in context

And doing this will help us to better understand and address sources of controversy

Thank You



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This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 741402