



QQI

10 YEARS

**Reflections and visions for modernization:
why doctoral education needs TECH**

Prof Bob Harris

Vice President Doctoral Education

Karolinska Institutet



How to modernize but still respect traditions?



Problem vs Challenge

Why do we talk about '*problems*' when our job is to meet the challenges and expectations of our university?

Leaderships need to think carefully about semantics

Change vs Improvement

Resistance to change – resistance to improvement?

We inherit many traditions – we create much fewer *“that’s
how we’ve always done it...”*

We base our decisions on our own past, not on the reality of
the present or future

Academic development is slower

AGE

71 MD—PhD—Assoc Prof—Prof



56 BSc—PhD—Assoc Prof—Prof



56 BSc—PhD—Assoc Prof—Prof



47 BSc—PhD—Assoc Prof—Prof



Learn what I can teach you

– the PhD apprentice approach (Humboldt)



and continue a career as a researcher

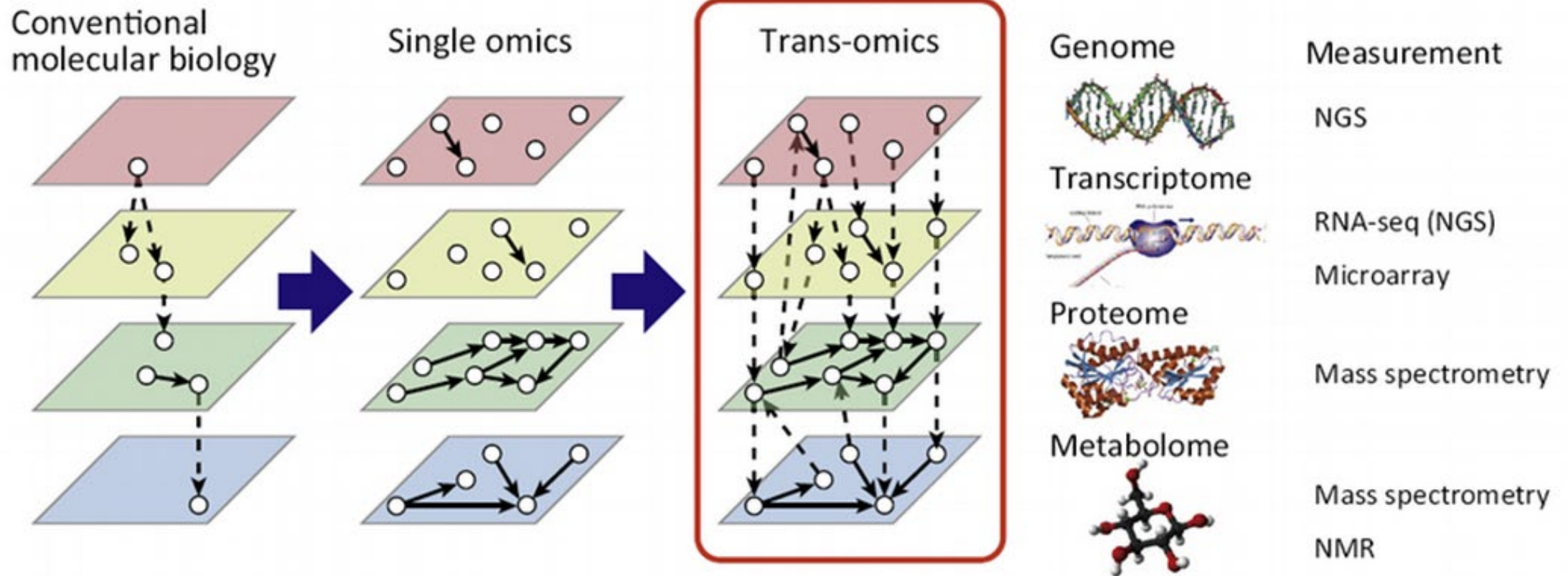
Learn what I can teach you

How up-to-date are you?

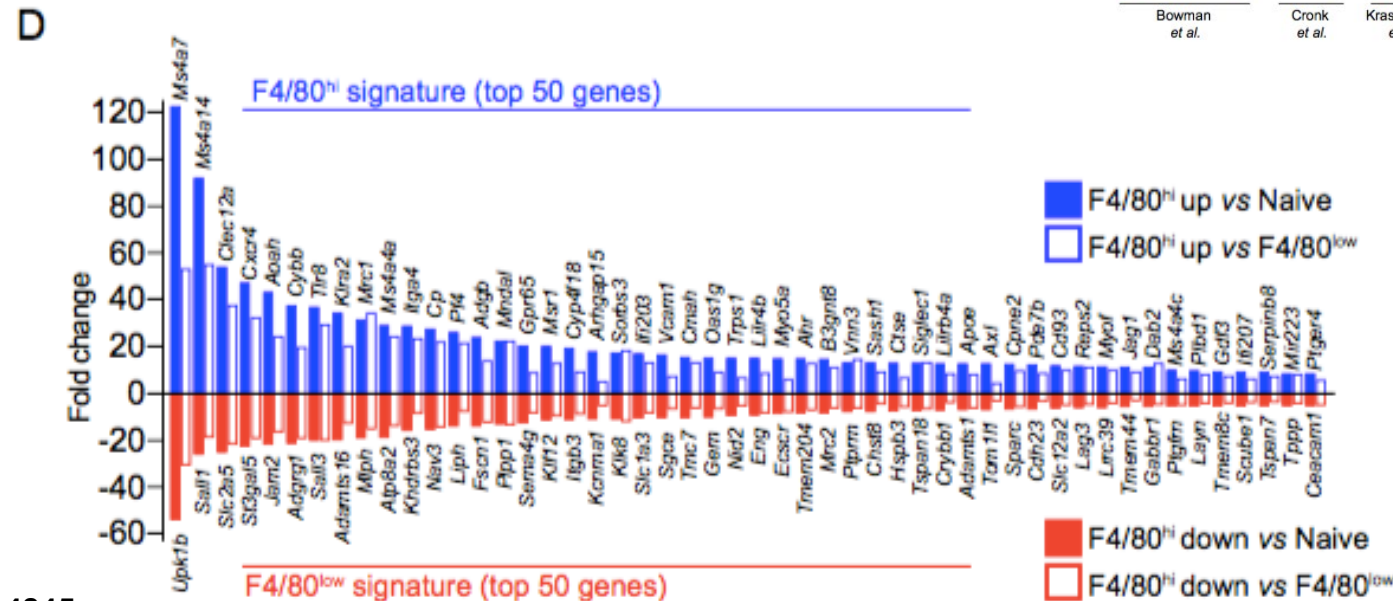
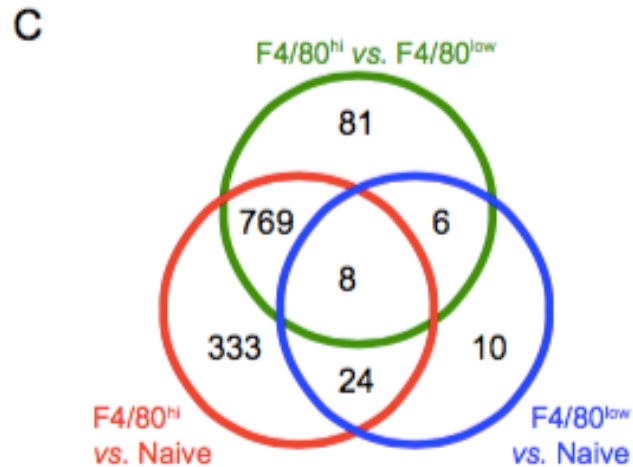
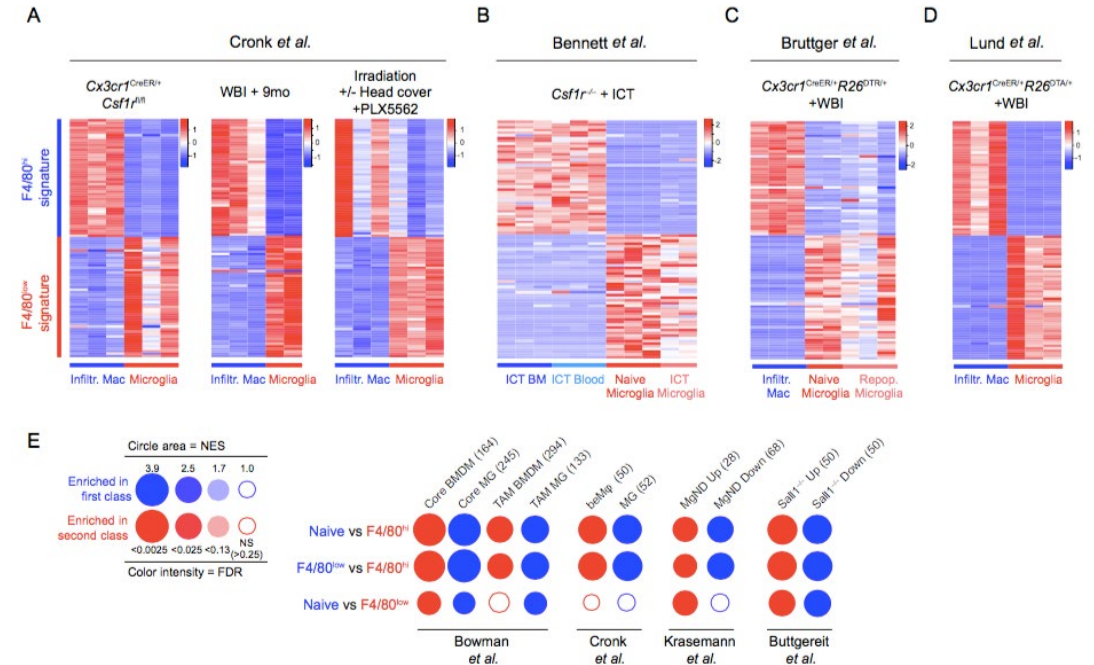
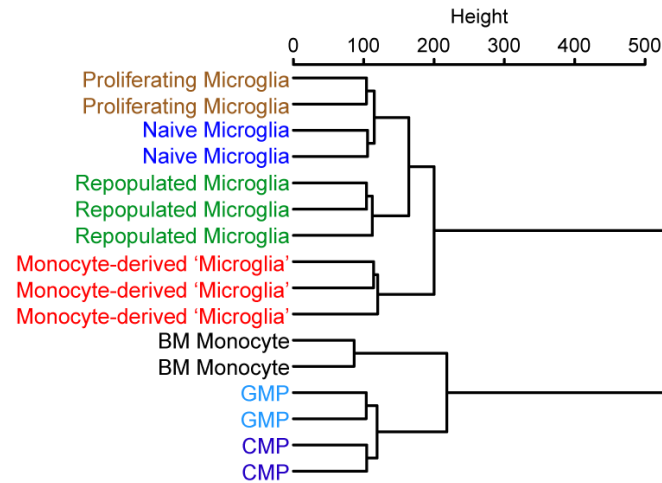
What is your knowledge of non-academic career paths?

What do you know about local/national/international factors?

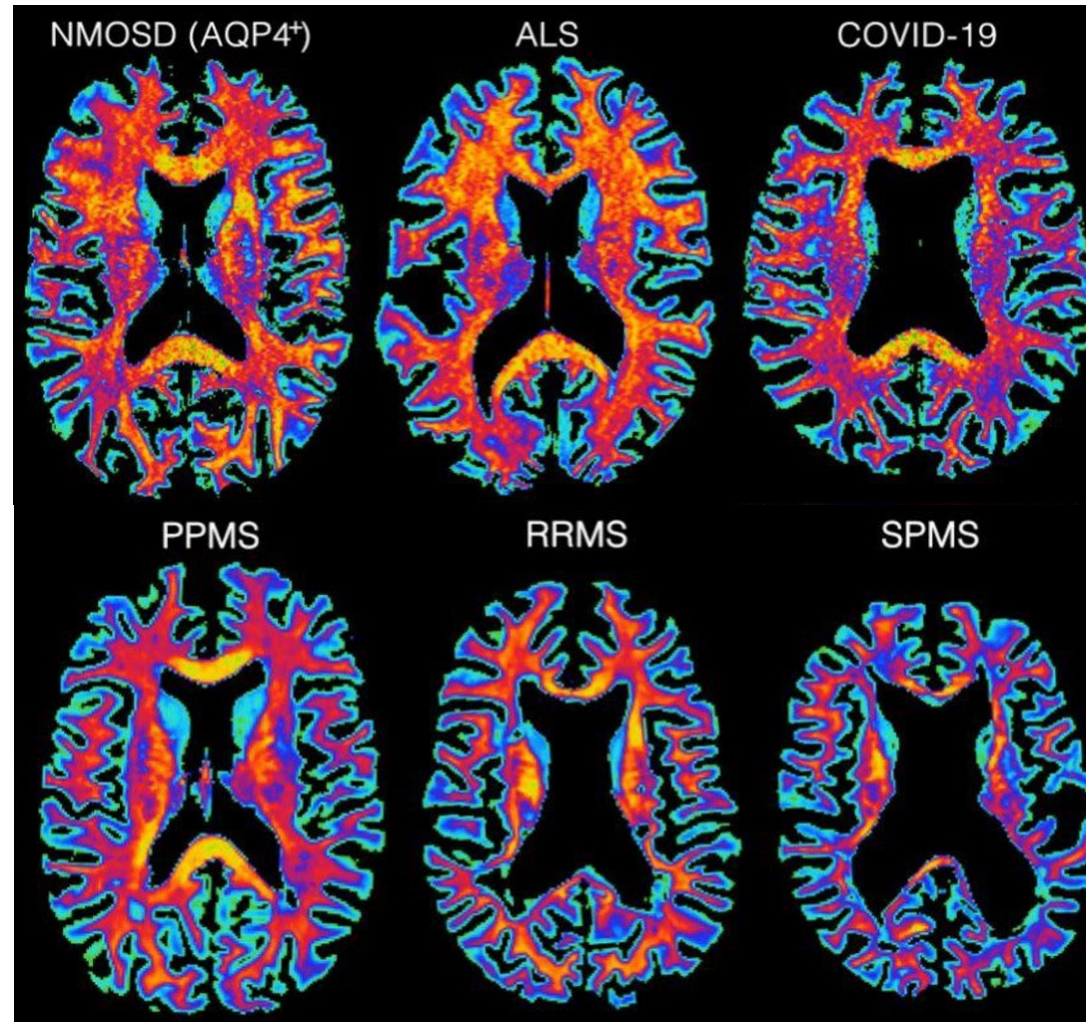
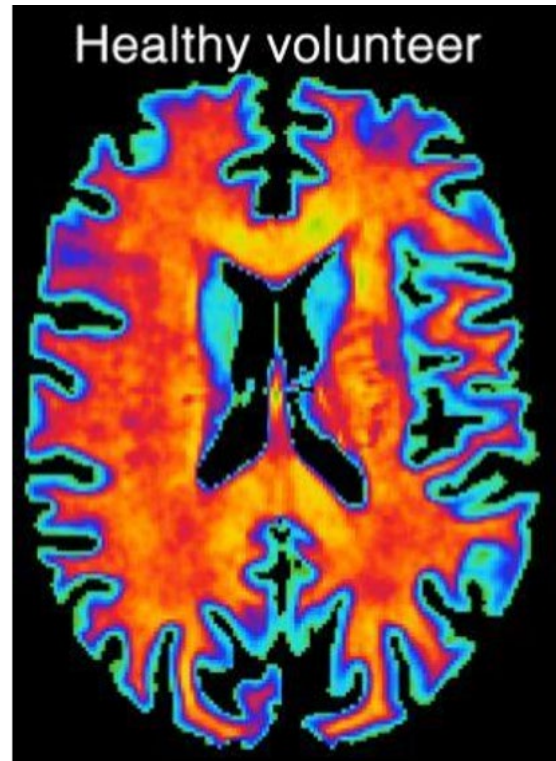
Omics technologies



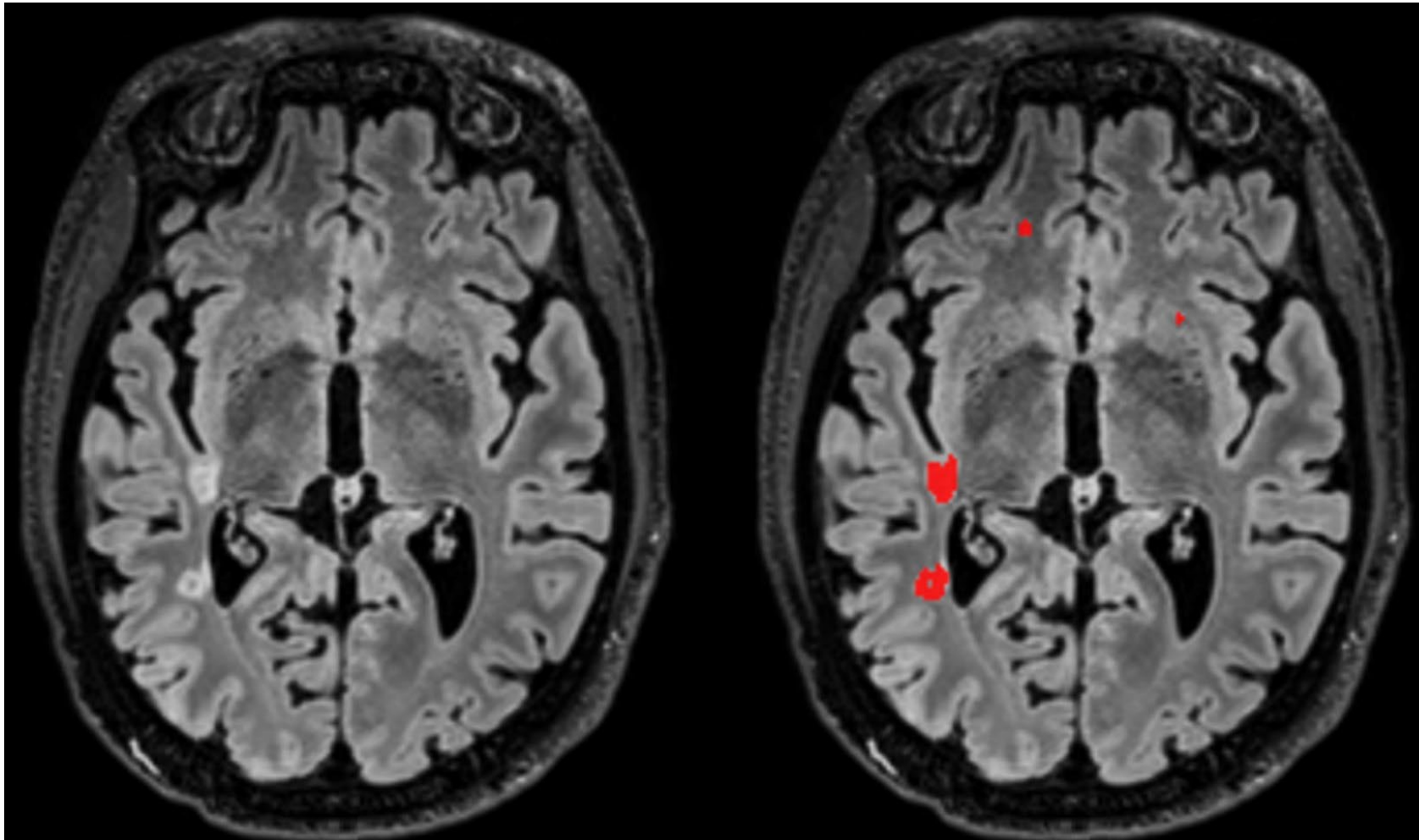
Comparative transcriptome analyses



Medical imaging technologies



Machine-learning identification of demyelination



Artificial
Intelligence

The growing issue of modernization and innovation

Given the extensive increase in technologies expected to be used by medical doctors and medical researchers, not all universities might be able to offer these due to lack of physical and human resources

Same situation for humanities?

Together
Everything
Can
Happen



Digital education across borders

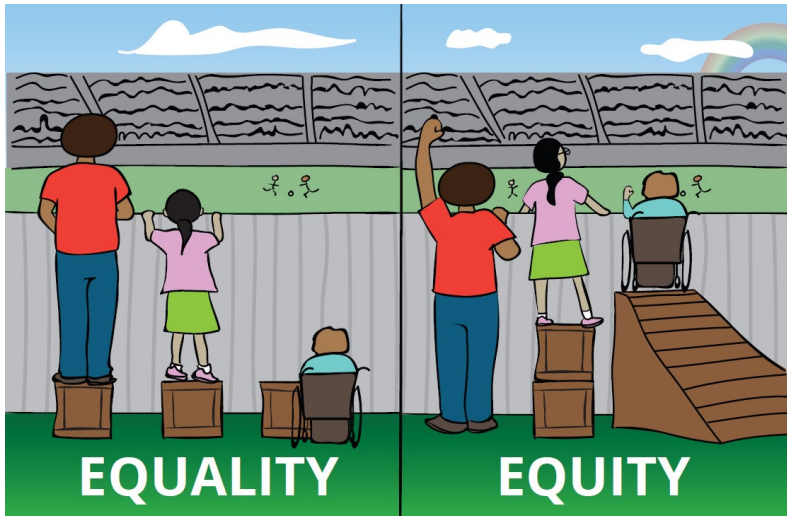
Online teaching has been accelerated during the pandemic

Teaching platform resources are expensive to develop

We need to develop **a culture of sharing**

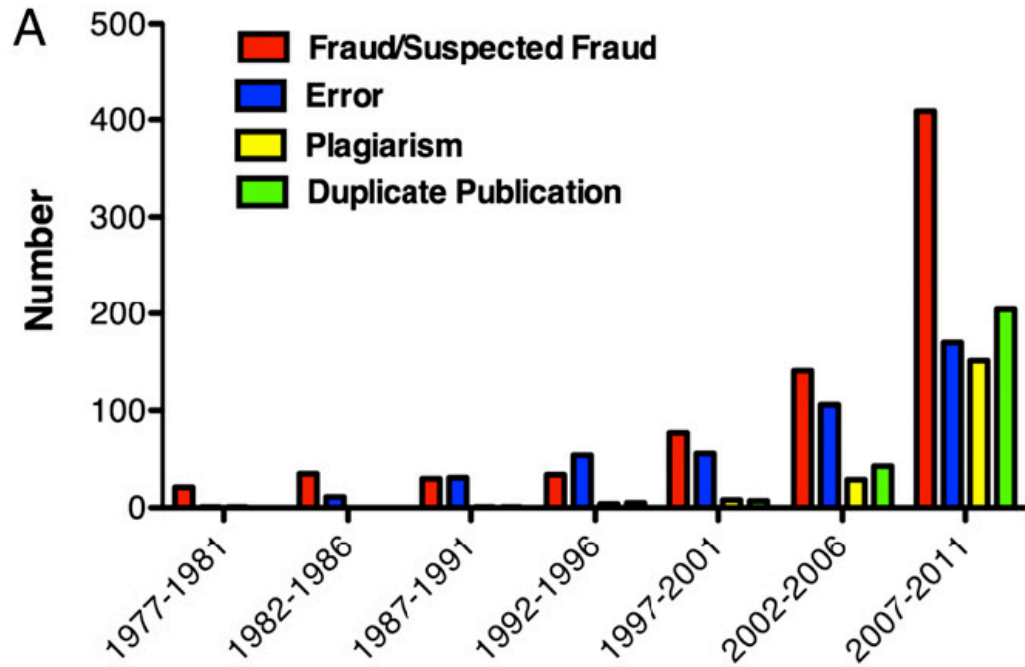
How can we best use this possibility to collaborate?

EDI – Equity, Diversity & Inclusivity



*How can we incorporate these throughout our cultures –
in the classroom, in careers and in organizational leaderships?*

Rigor, Reproducibility & Responsibility



Fang et al. Proc Natl Acad Sci U S A. 2012 109: 17028

With the increasing use and need for collaboration, how can responsibility be shared?

Sustainable practices in healthcare, research & education



Carbon emissions
In healthcare



Collaborative initiatives that work



orpheus

ORPHEUS/AMSE
Best Practices document

Collaborative initiatives that work


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Living Values in Higher Education Institutions

PROSPECTUS





Click to zoom

The Magna Charta Observatory, working with senior experts and very different universities in nine countries, has developed and piloted [guidelines](#) and resources ([Living Values Tool Box](#)) to enable universities across the world to define, achieve engagement with and live effectively in accordance with their values.

The [guidelines](#) and resources ([Living Values Tool Box](#)) on this site are freely available for universities to use. Evidence and successful practice from the experience of the pilot universities is included to provide support and challenge. MCO Ambassadors can assist individual universities for a fee. Regional workshops are planned.

Feedback is welcomed to engage MCU signatory and other universities in this work.

 [Print](#)
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Highlights

- [Living Values Prospectus](#)
Read the Living Values Prospectus
- [Guidelines for universities](#)
Read the Living Values Guidelines for universities
- [Living Values Tool Box](#)
Access the "Living Values Tool Box" area

[Contacts](#)

Collaborative initiatives that work



 **JOHNS HOPKINS**
BLOOMBERG SCHOOL
of PUBLIC HEALTH

Protecting Health, Saving Lives—*Millions at a Time*

W. Harry Feinstone Department of Molecular Microbiology and Immunology

ABOUT US

DIVERSITY, EQUITY & INCLUSION

DEGREE PROGRAMS

Doctor of Philosophy (PhD)

Master of Science (ScM)

Master of Health Science (MHS)

POSTDOCTORAL TRAINING

RESEARCH AREAS

CORE FACILITIES

FACULTY

Home > Departments > W. Harry Feinstone Department of Molecular Microbiology and Immunology > Academics and Degree Programs > R3 PhD Program > R3 Initiative - foundations

R³ Program Courses

[R³ISE HOME](#)

Come join us! We are a community of enthusiasts for critical thinking across the science disciplines and feel committed to living the "3R's" of open science practice in our research: **R**igor, **R**eproducibility & **R**esponsibility.

Our courses are open for all students across the health & life sciences, technology & engineering disciplines at Johns Hopkins!

[Click here for a list of R³ courses!](#)

Collaborative initiatives that maybe work?



Quality Management System

Quality Assurance



Infrastructure

Processes

Trained people

Culture

Quality Control



Internal evaluations

External evaluations

Result metrics

Questionnaires/interviews

THE Ranking List 2022

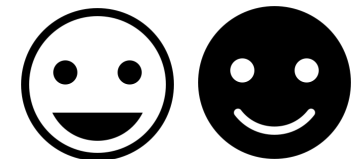
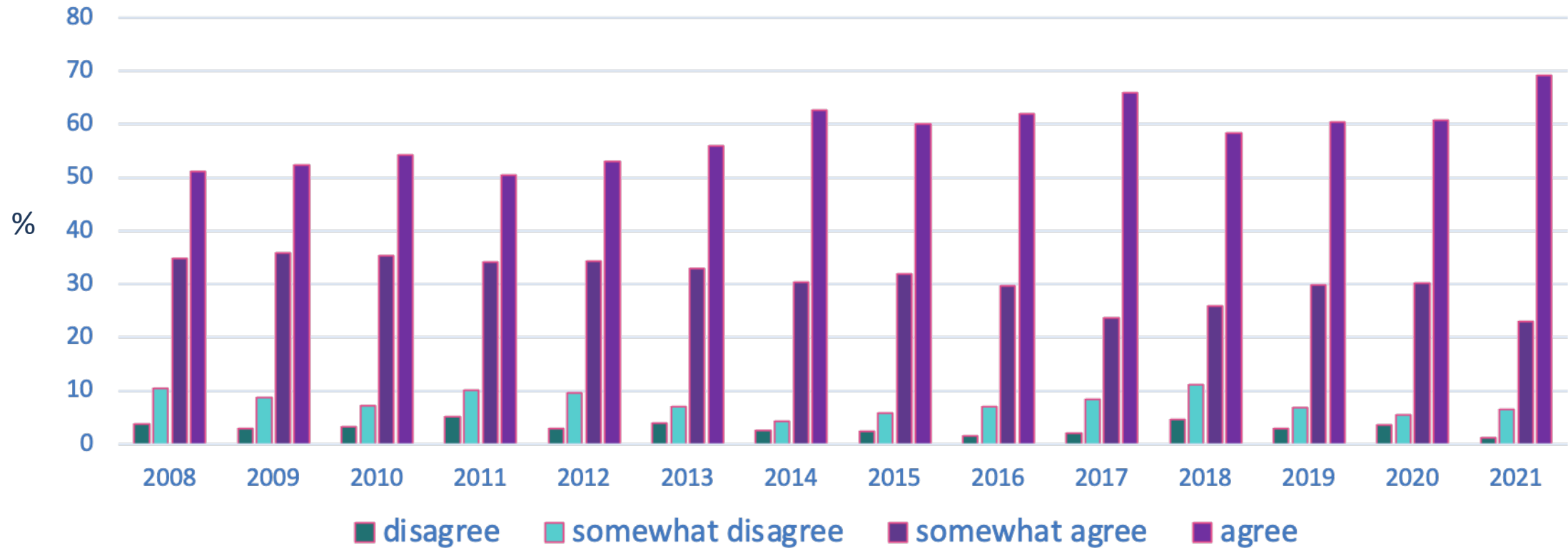
| | | | |
|---------|------|---|---------|
| =161 | =146 | Trinity College Dublin | Ireland |
| 201-250 | | RCSI University of Medicine and Health Sciences | Ireland |
| 201-250 | | University College Dublin | Ireland |
| 251-300 | | University College Cork | Ireland |
| 351-400 | | University of Galway/Ollscoil na Gaillimhe | Ireland |
| 501-600 | | Dublin City University | Ireland |

| | | | |
|---------|--|-----------------------------------|--------|
| 251-300 | | Chalmers University of Technology | Sweden |
|---------|--|-----------------------------------|--------|

| | | | |
|---------|--|--|--------------------|
| 301-350 | | Peter the Great St Petersburg Polytechnic University | Russian Federation |
|---------|--|--|--------------------|

KI Exit Poll

Overall, I am satisfied with my doctoral education at KI



Quality Management System

Quality Assurance



Infrastructure

Processes

Trained people

Culture

Quality Control



Internal evaluations

External evaluations

Result metrics

Questionnaires/interviews

My visions for the future

Respect history and traditions, but modernize and innovate

Capacity-build so that hierarchy in universities is reduced

Improve cultures for research and education



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