

Developing evidence-based guidelines and SOPs for ensuring research integrity – the SOPs4RI project

Dr Maura Hiney

Head of International Cooperation, Evaluation and Targeted Programmes
Health Research Board Ireland

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Context

- Misconduct and QRPs cannot be ignored. Reduced quality, research waste, and declining trust must be countered
- Research Performing Organisations (RPOs) and Research Funding Organisations (RFOs) play a crucial role in promoting a strong research integrity culture and research practices that align with fundamental principles
- A need to develop, implement, and maintain policies and procedures tailored to the organisation

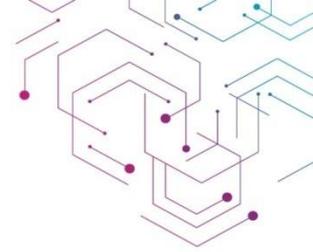


“To move the scientific enterprise towards better measures of quality, perhaps we need a collective effort by a group of leading international universities and research funders”

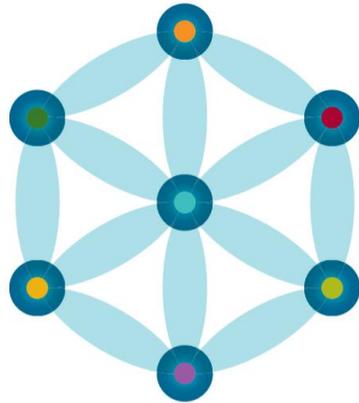
Zwart & ter Meulen 2019;
Begley, Buchan & Dirnagl 2015;
Munafò 2019;
Benedictus, Miedema & Ferguson 2016



Impacts of developing a strong culture of research integrity



SCIENCE EUROPE
SEVEN REASONS
TO CARE ABOUT INTEGRITY IN RESEARCH



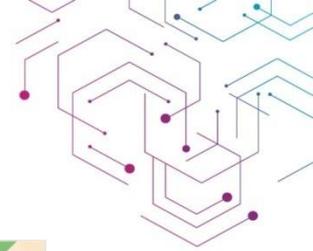
Research Integrity.....

1. safeguards the **foundations of science** and scholarship
2. maintains **public confidence** in researchers and research evidence
3. underpins continued **public investment** in research
4. protects the **reputation** and careers of researchers
5. prevents adverse impacts on **patients and the public**
6. promotes **economic advancement**
7. prevents avoidable **waste of resources**

Science Europe Working Group
on Research Integrity, 2015



2020 reports on research culture



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Towards a Research Integrity Culture at Universities: From Recommendations to Implementation

Year of publication:
Jan 2020



W
wellcome

What
Researchers
Think About the
Culture They
Work In

2020

SHIFT
LEARNING

vitae
realising
the potential
of researchers

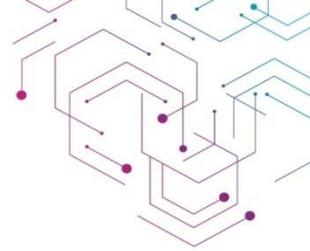
Research
integrity:
a landscape study

June 2020

UKRI UK RN IAC

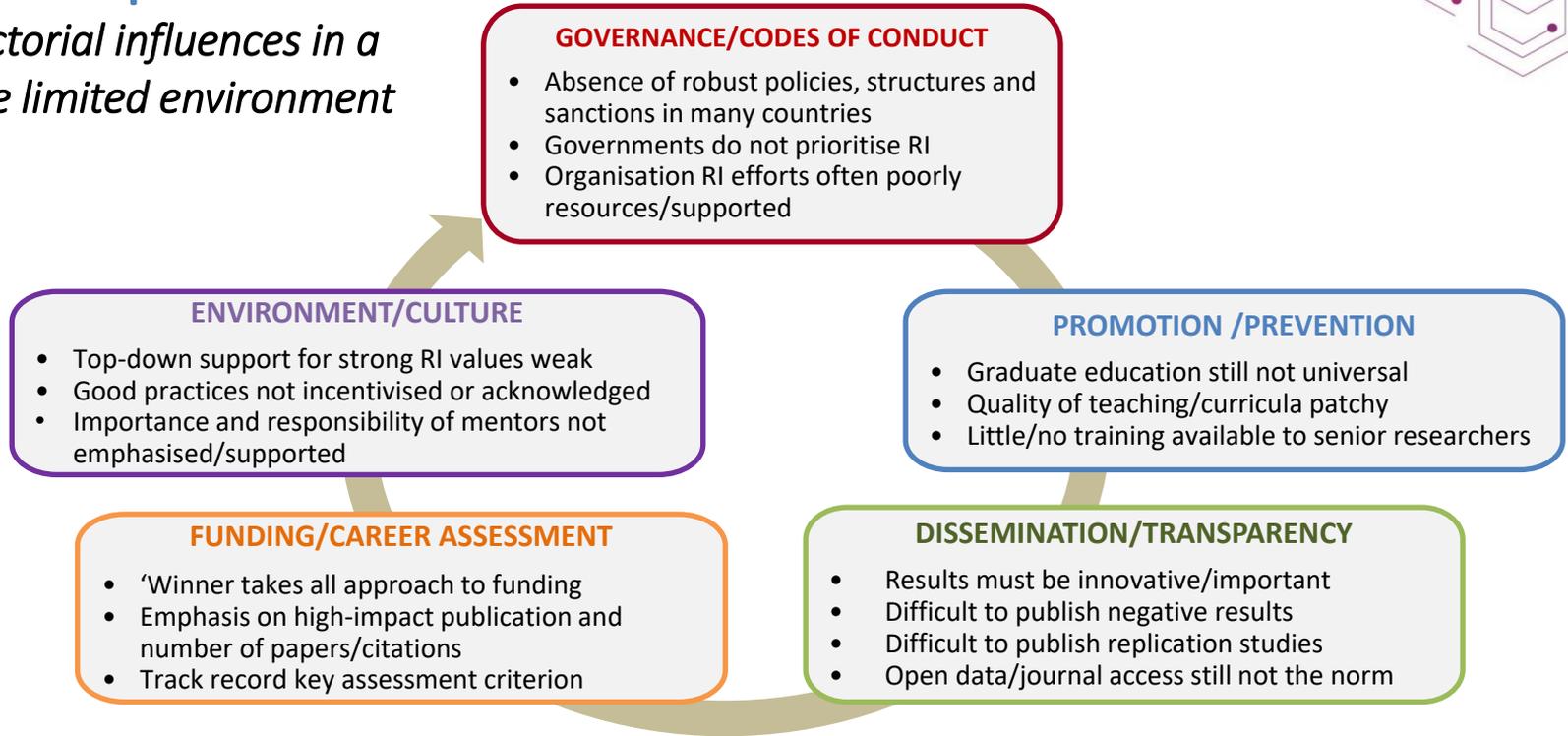


Threats to a positive research culture identified



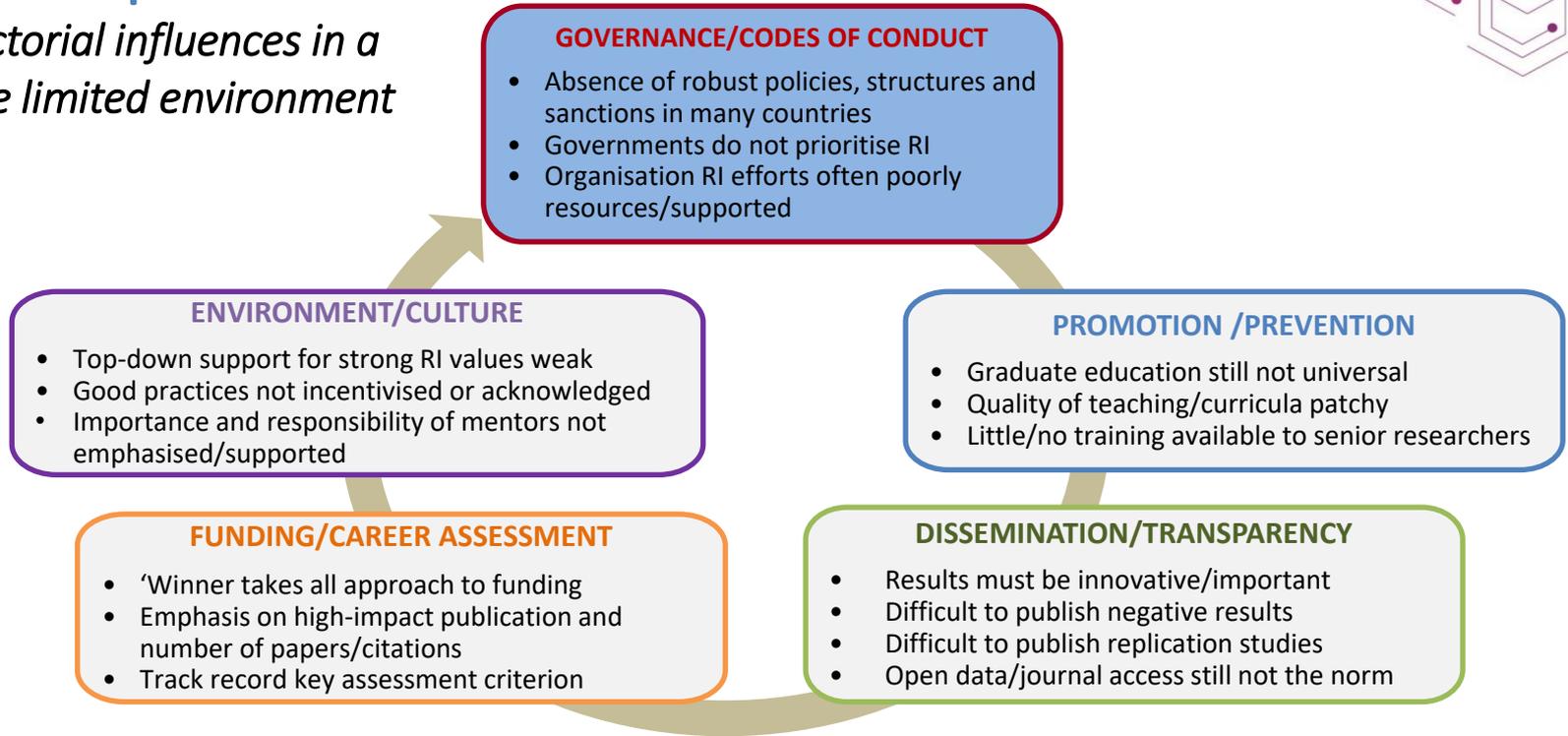
A wicked problem

Multifactorial influences in a resource limited environment

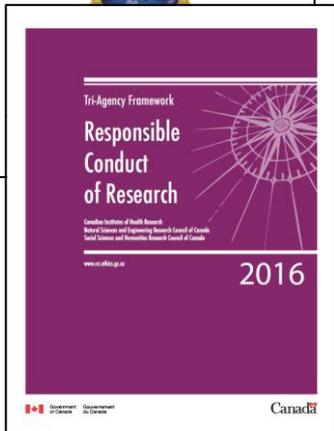
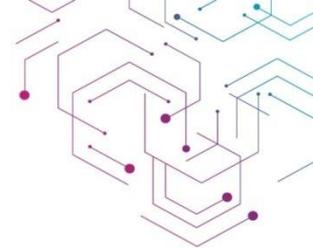


A wicked problem

Multifactorial influences in a resource limited environment



Increased Funders' awareness and expectations



Funding warning in new UK research integrity concordat

Tough sanctions on institutions that ignore research integrity rules in new concordat backed by Universities UK and research funders

October 25, 2019

By Jack Grove

Twitter: @jgro_the

UK universities risk being barred from accessing public research funding if they do not have structures in place to guard against research integrity issues.



Under a revised research integrity concordat, Universities UK and seven research funders agreed to "only fund research in England – funding will be agreed to "only if the institution has structures in place to guard against research integrity issues."

Why we need to reimagine how we do research



Jeremy Farrar
Director
Wellcome

The emphasis on excellence in the research system is stifling diverse thinking and positive behaviours. As a community we can rethink our approach to research culture to achieve excellence in all we do.



About ZonMw

Research and results

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EN Research and results Fundamental research Fostering Responsible Research Practices



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About

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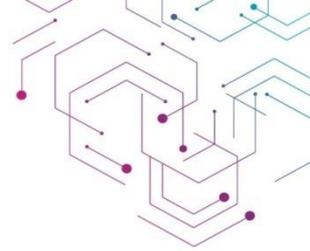
EN News and funding News Largest study ever on research integrity launches...

News

Largest study ever on research integrity launches, aimed at all researchers in the Netherlands

Research by and for researchers to determine how to improve the validity of results and trustworthiness of science





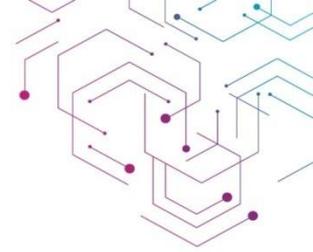
EC motivation for a revised European Code of Conduct for Research Integrity (2017)

- Provide a framework for self regulation by researchers and their institutions
- Be a usable and accessible Code that can continue to have widespread penetration into national and local codes
- Have clear and unambiguous language in a multi-lingual system
- Be applicable to a range of stakeholders including industry (EC public-private funding a big driver)
- Be broad enough to apply across disciplines

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



Horizon Europe requirement



<p>6) We declare that the proposal complies with ethical principles (including the highest standards of research integrity as set out in the ALLEA European Code of Conduct for Research Integrity, as well as applicable international and national law, including the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights and its Supplementary Protocols. Appropriate procedures, policies and structures are in place to foster responsible research practices, to prevent questionable research practices and research misconduct, and to handle allegations of breaches of the principles and standards in the Code of Conduct.</p>	<input type="checkbox"/>
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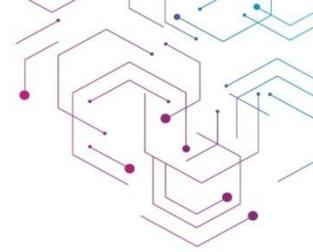


Standard Operating Procedures for Research Integrity

SOPs4RI aims to develop a Toolbox containing guidelines, standard operating procedures, inspirational cases and other resources that RPOs and RFOs can apply selectively when tailoring their individual Research Integrity Promotion Plan (RIPP).

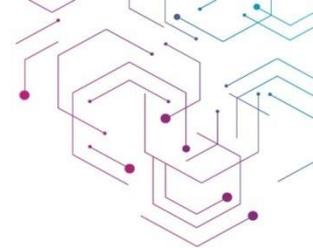


In SOPs4RI, we work on ...



- **Defining the topics and subtopics** that should be addressed by research performing organizations (RPOs) and research funding organizations (RFOs) in their Research Integrity Promotion Plans (RIPPs).
- **Creating a free, online toolbox containing:**
 - Good examples of Standard Operating Procedures (SOPs) and Guidelines for all the topics and subtopics.
 - SOPs and guidelines that RPOs and RFOs can use as inspiration when formulating their own RI policies.

From principles to practice



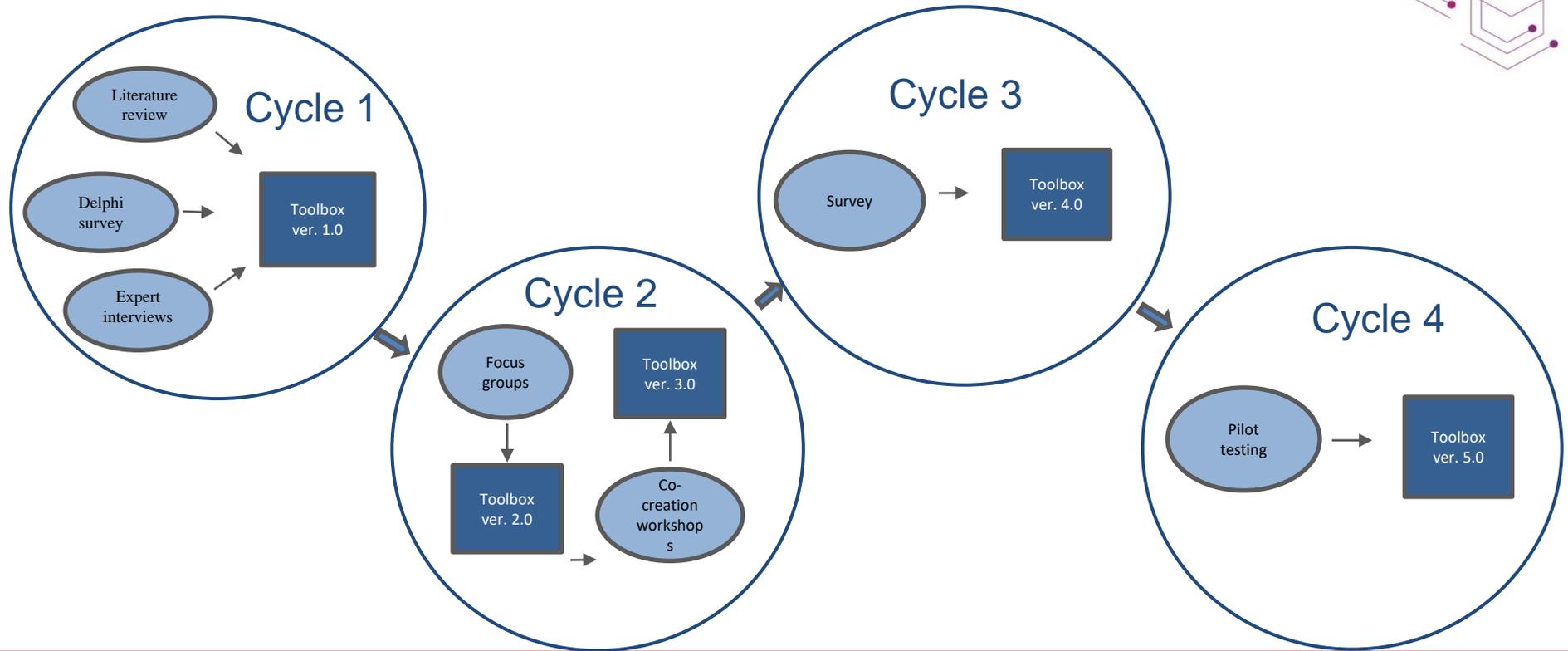
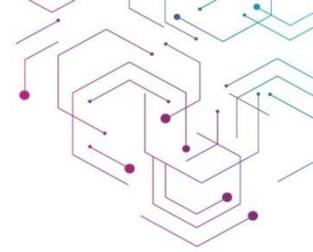
Research Integrity Promotion Plan (RIPP)

- All RPOs and RFOs should have a RIPP
- The RIPP outlines the steps that the organisation takes to promote research integrity in the context of its mission and disciplinary focus
- A RIPP should address core topics and outline policies and procedures for how these topics will be handled.
- Tools in the SOPs4RI Toolbox can be adopted or used for inspiration

Responsible
Conduct of
Research
(and a change /
improvement in
research culture)



How do you decide what should be included in a RIPP?



University efforts: exemplary cases

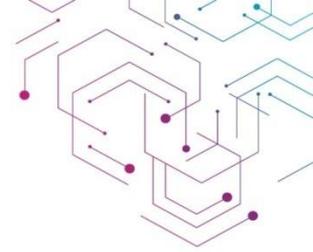
Promoting responsible conduct of research through local policies

Targeted policies and procedures:

- Delft (data champions)
- Oxford (open scholarship, reproducibility)
- Luxembourg (RI coaches)
- Ghent (research assessment; research careers)
- Glasgow (collegiality)
- Copenhagen (counselors, courses and training)

Extensive, cross-cutting policies and procedures:

- Amsterdam (discipline-tailored RI policies)



Horizon Europe requirement

6) We declare that the proposal complies with ethical principles (including the highest standards of research integrity as set out in the [ALLEA European Code of Conduct for Research Integrity](#), as well as applicable international and national law, including the Charter of Fundamental Rights of the European Union and the European Convention on Human Rights and its Supplementary Protocols. Appropriate procedures, policies and structures are in place to foster responsible research practices, to prevent questionable research practices and research misconduct, and to handle allegations of breaches of the principles and standards in the Code of Conduct.



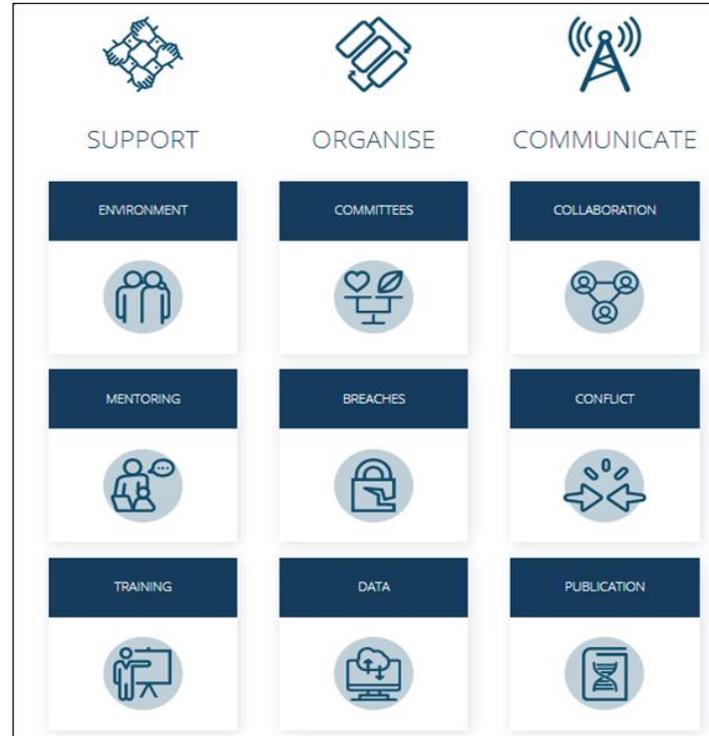
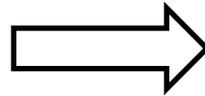
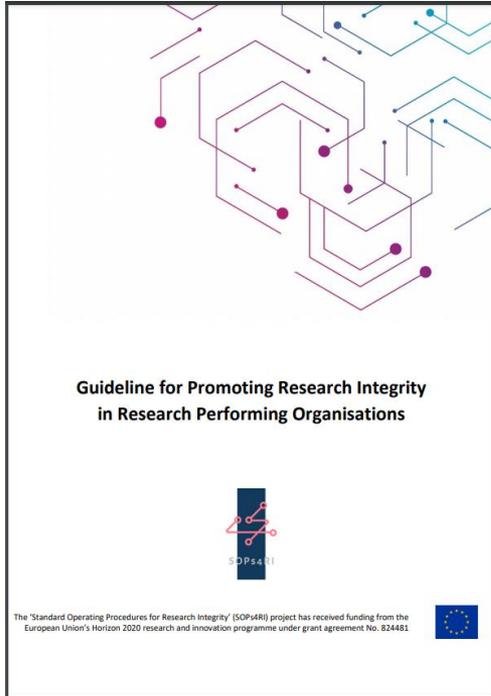
Guideline for Promoting Research Integrity in Research Performing Organisations



The 'Standard Operating Procedures for Research Integrity' (SOPs4RI) project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 824481



Topics to be addressed in a RIPP for RPOs



RPO RIFF: 1. Support

TOPIC	ACTION (examples)
Research environment	Ensure fair assessment procedures and prevent hyper-competition and excessive publication pressure
Supervision and mentoring	Create clear guidelines for PhD supervision (such as on meeting frequency); set up skills training and mentoring
Integrity training	Establish training and confidential counselling for all researchers



CC-BY-NC-ND-4.0 Originator: Frits Ahlefeldt

RPO RIPP: 2. Organisation

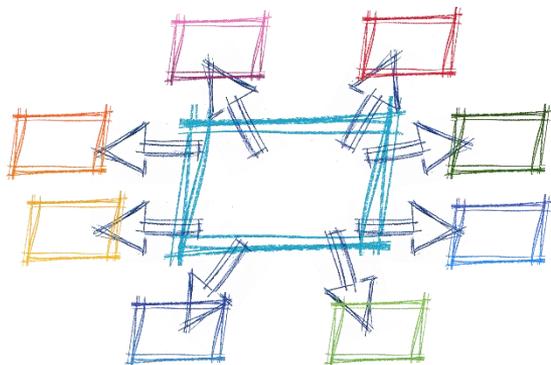
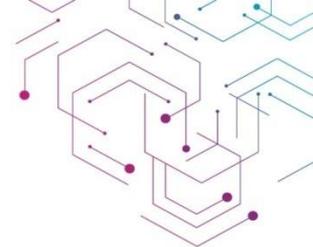


image: Freepik.com

TOPICS	ACTION (examples)
Ethics structures	Establish review procedures that accommodate different types of research and disciplines
Integrity breaches	Formalize procedures that protect both whistle-blowers and those accused of misconduct
Data practices and management	Provide training, incentives and infrastructure to curate and share data according to FAIR principles

RPO RIPP: 3. Communication



TOPICS	ACTION (examples)
Research collaboration	Establish sound rules for transparent working with industry and international partners
Declaration of interests	State conflicts (financial and personal) in research, review and other professional activities
Publication and communication	Respect guidelines for authorship and ensure openness and clarity in public engagement

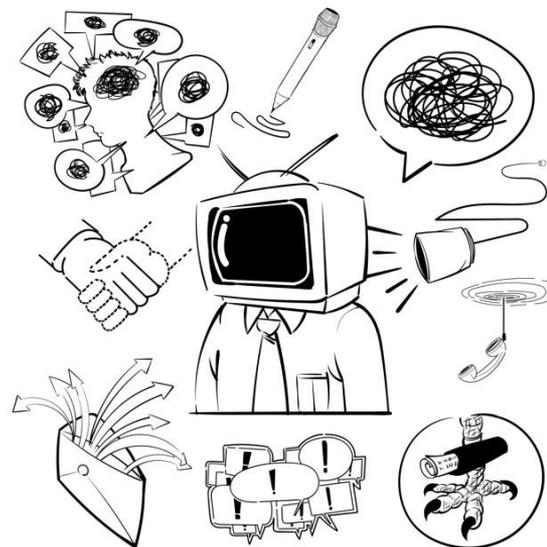
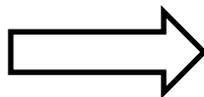


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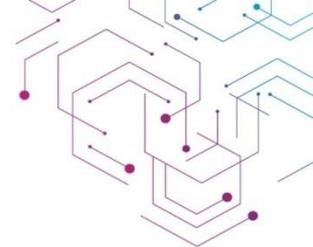
Topics to be addressed in a RIPP for RFOs



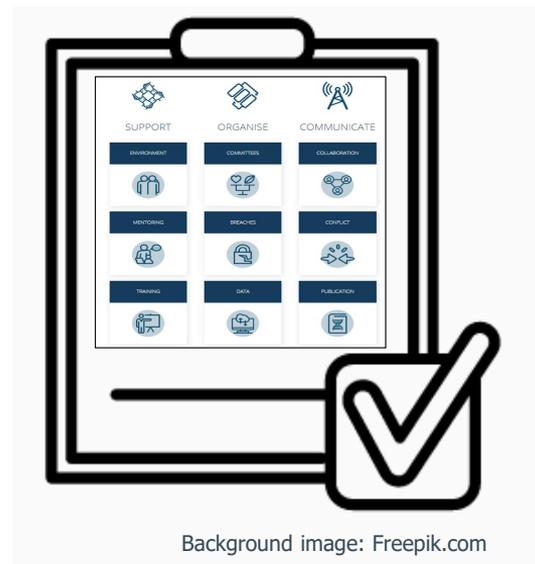
External		Internal	
Compliance with RI standards	Assessing grant applications	Monitoring funded grants	
			
Expectations for RPOs	Declaration of interests	Internal breaches of RI	
			

The table outlines six key topics for a RIPP for RFOs, categorized into External and Internal. Each topic is accompanied by a representative icon.

RFO RIPP: Outward-facing topics



TOPICS	ACTION (examples)
Compliance with RI standards	Seek confirmation of compliance from researchers with RI practices (e.g., described as part of the grant writing process)
Expectations for research organisations	Require researchers and RPOs to implement policies and practices including handling of misconduct (e.g., through development and implementation of an RPO RIPP)



RFO RIPP: Inward-facing topics

TOPICS	ACTION (examples)
Declaration of interests	Require conflict of interest statements (financial and personal) from internal staff and evaluators of research reviews
Selection of grant applications	Transparent assessment and selection processes and a move away from impact factor etc. in assessment for funding
Monitoring of funded research	Monitor open science practices as legitimate research outputs
Dealing with internal breaches of RI	Have adequate and transparent procedures to manage RI breaches by staff and evaluations including confidential whistle-blower channels

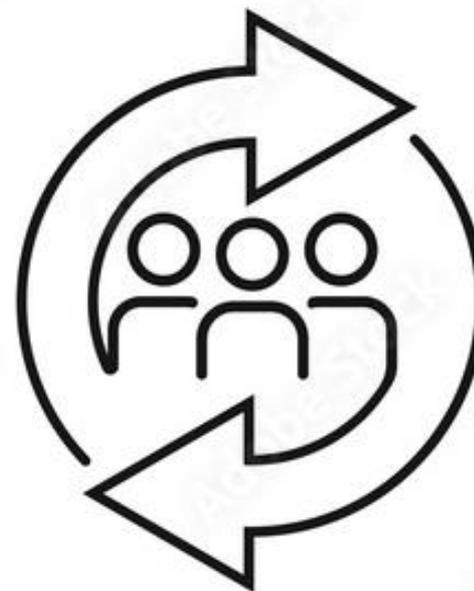
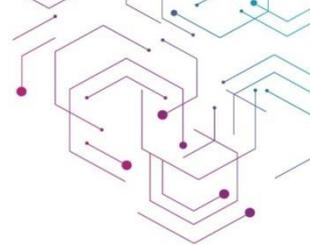


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Toolbox as it develops

For Research Performing Organisations

SOPs4RI: Topics to be addressed by RPOs

A description of the 9 topics to be addressed in a research integrity promotion plan



Research Integrity: nine ways to move from talk to walk

From counseling and coaches to collegiality, institutions share resources to promote best practice in science



3 AREAS 9 TOPICS 26 TOOLS

TOOLS >

For Research Funding Organisations

SOPs4RI: Topics to be addressed by RFOs

Guideline for Promoting Research Integrity in Research Funding Organisations



2 Areas 6 Topics 18 Tools

TOOLS >



'Tools' for inspiration

RESEARCH COLLABORATION

Guideline

Ten Simple Rules for Establishing International Research Collaborations

RE STRUCTURES

Guideline

International Ethical Guidelines for Health-related Research Involving Humans

RI TRAINING

Guideline

University College London (UCL) Research Integrity Training Framework

SUPERVISION and MENTORING

Guideline

A guide to supervision for new and experienced supervisors

DATA MANAGEMENT

Guideline

Guideline to write a Data Management Plan

COMPLIANCE with RI

Guideline

Best practice guidelines on publishing ethics

GRANT ASSESSMENT

Guideline

Changes to the biosketch

EXPECTATIONS for RPOs

Guideline

Guidance for research performing organisations on how to implement responsible and fair approaches for research assessment

MONITORING GRANTS

Guideline

How we monitor and evaluate – Health Research Board



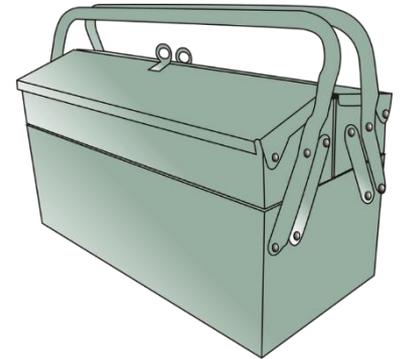
Thank you for listening!



"All along I thought our level of corruption was consistent with community standards."

Follow the development of the toolbox and read more here:

www.sops4ri.eu



Maura Hiney, mhiney@hrb.ie



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