

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


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Summer Seminar on Research Integrity
26th August 2021, Vrije Universiteit Amsterdam

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”

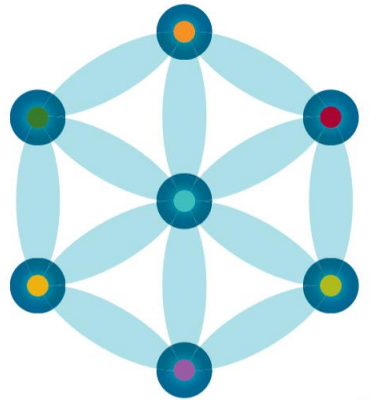
Zwart & ter Meulen 2019;
Begley, Buchan & Dirnagl 2015;
Munafò 2019;
Benedictus, Miedema & Ferguson 2016



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



[Home](#) > [Publications](#) > [Towards a Research Integrity Culture at Universities: From Recommendations to Implementation](#)

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

📅 Year of publication:

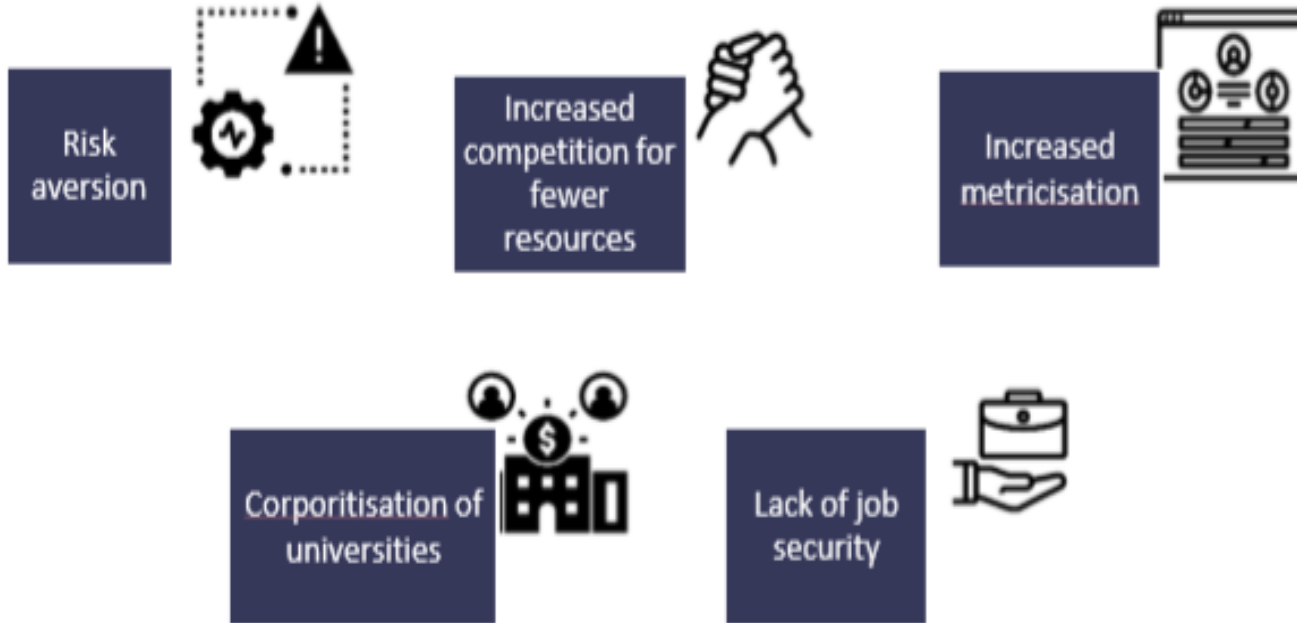
Jan 2020



SOPs4RI

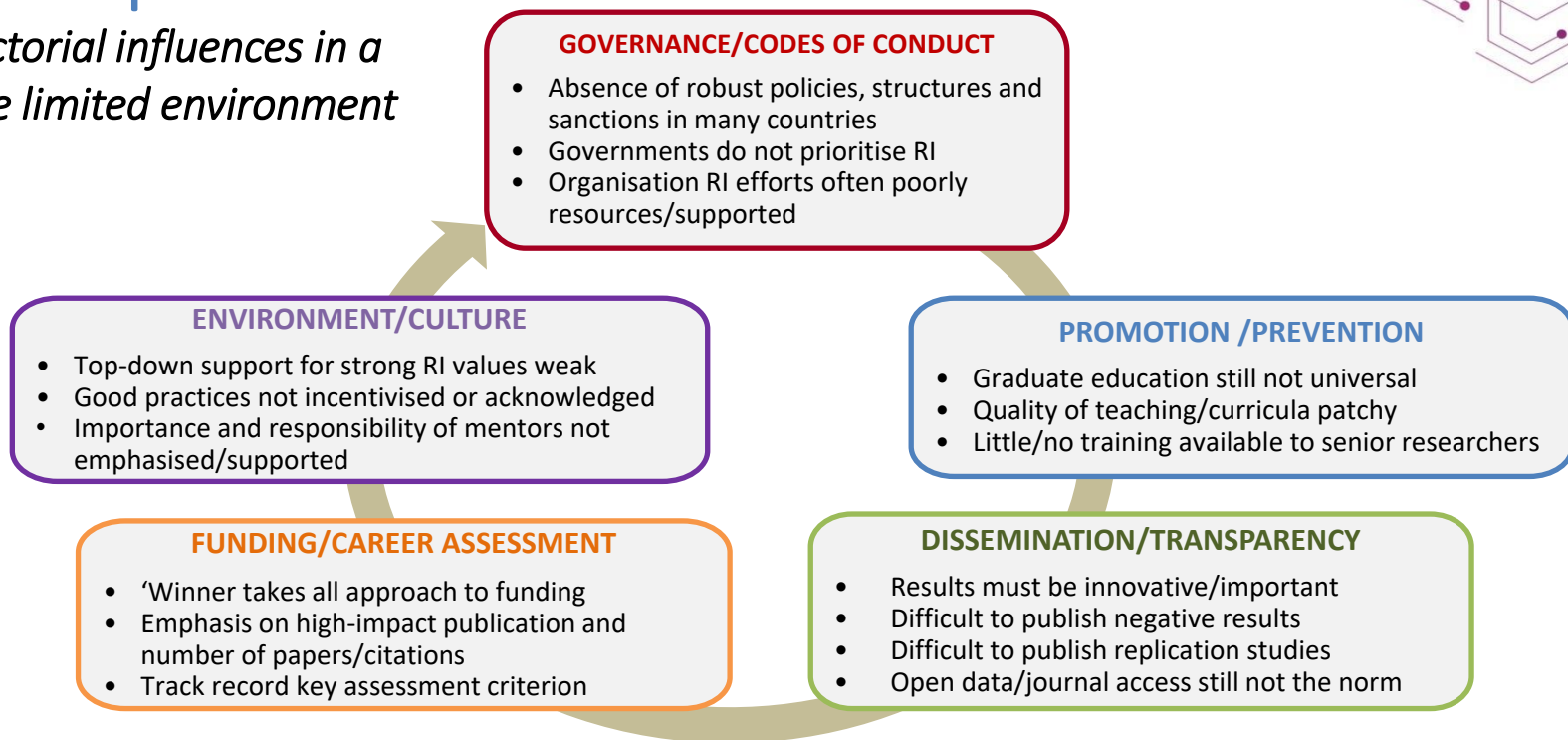
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Threats to a positive research culture identified



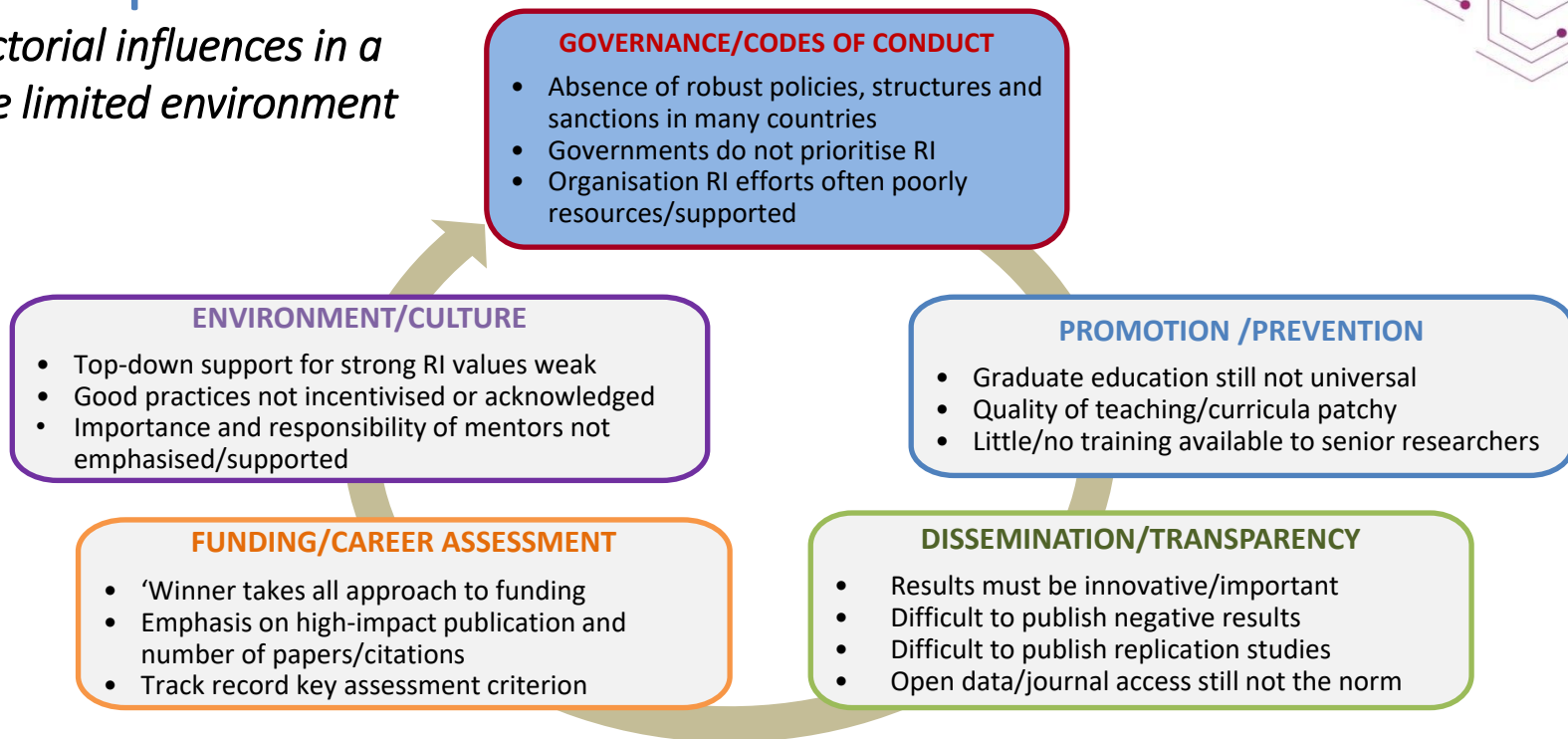
A wicked problem

Multifactorial influences in a resource limited environment

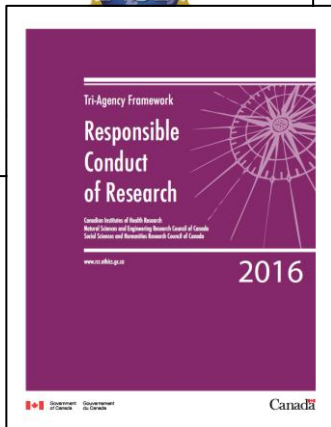
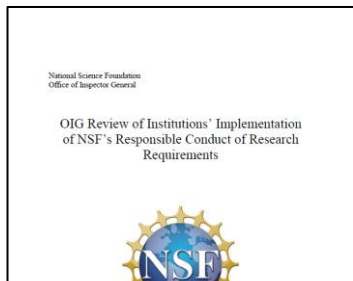


A wicked problem

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, announced in October and signed by Universities UK and the seven research funders, £7 billion annually will be agreed to "only fund research that meets the highest standards of 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."

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.



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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



SOPS4RI



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



Horizon Europe requirement




Horizon Europe Programme
Standard Application Form (HE RIA, IA)

Application form (Part A)
Project proposal – Technical description (Part B)

Version 3.0
26 May 2021

<p>6) We declare that the proposal complies with ethical principles (including the highest standards of research integrity as set out in the <u>ALLEA European Code of Conduct for Research Integrity</u>, 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. <u>Appropriate procedures, policies and structures</u> 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



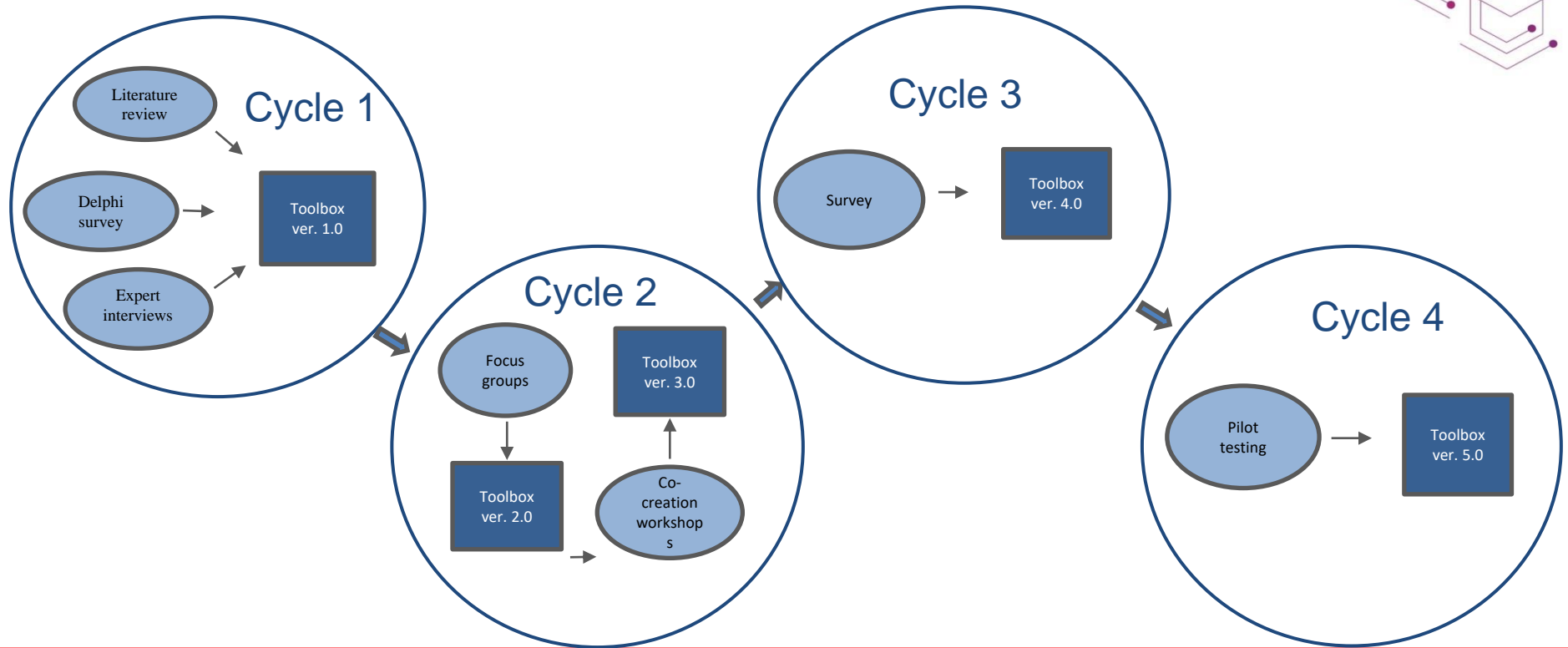
Research Integrity Promotion Plan (RIPP)

- 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.



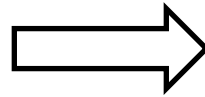
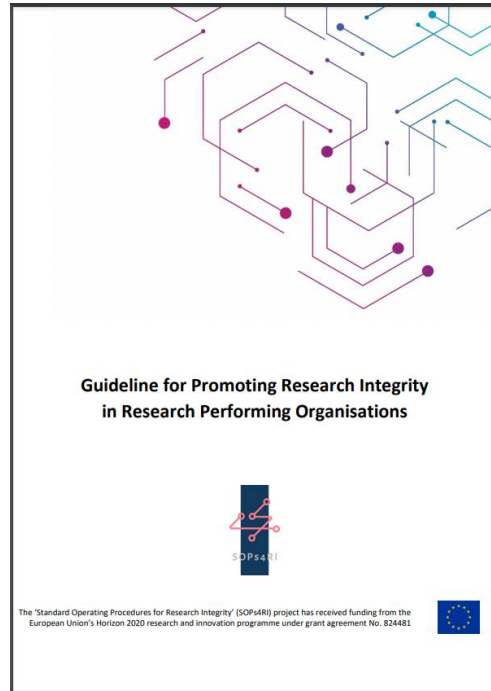
Guideline for Promoting Research Integrity in Research Performing Organisations















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.



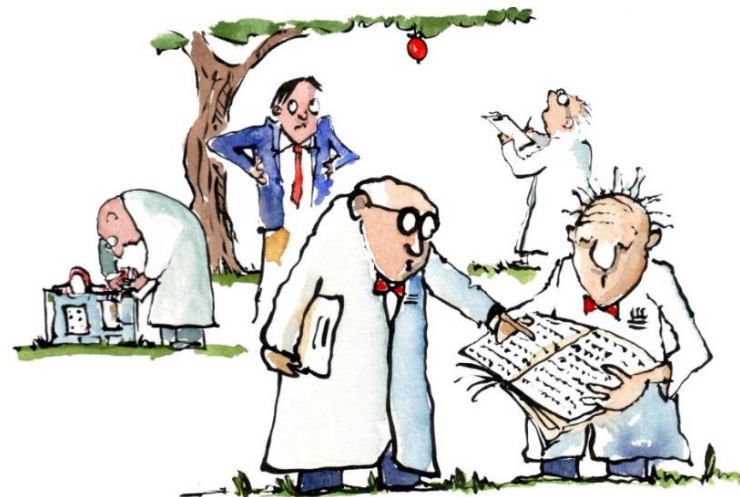
Topics to be addressed in a RIPP for RPOs



 SUPPORT	 ORGANISE	 COMMUNICATE
ENVIRONMENT 	COMMITTEES 	COLLABORATION 
MENTORING 	BREACHES 	CONFLICT 
TRAINING 	DATA 	PUBLICATION 

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



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RPO RIPP: 2. Organisation

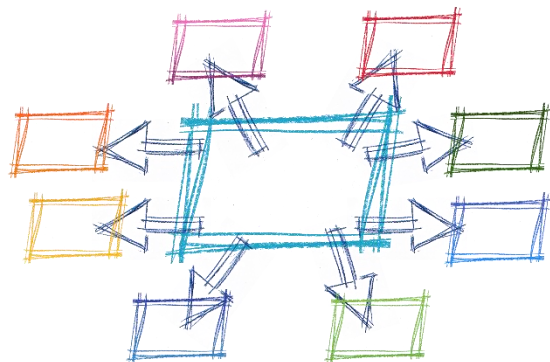


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TOPICS	ACTION (examples)
Ethics structures	Establish review procedures that accommodate different types of research and disciplines
Integrity breaches	Formalize procedures that protect both whistle-blowers and those accused of misconduct
Data practices 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

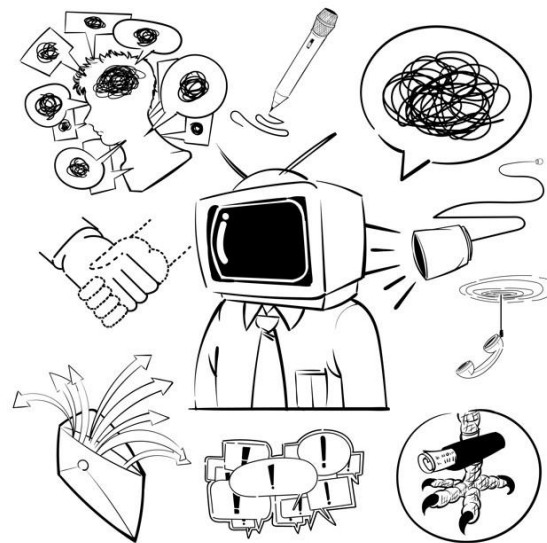
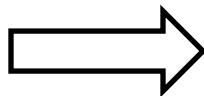








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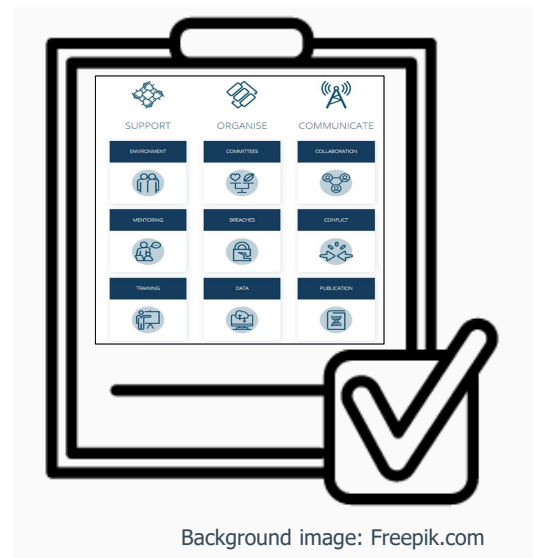
Topics to be addressed in a RIPP for RFOs



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

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

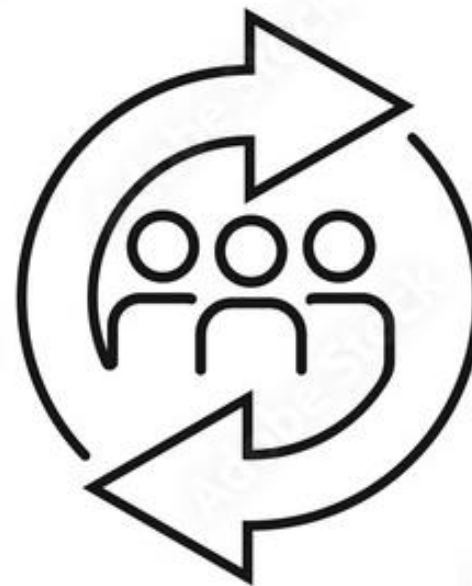


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Toolbox as it develops

For Research Performing Organisations



3 AREAS 9 TOPICS 26 TOOLS

TOOLS >

For 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



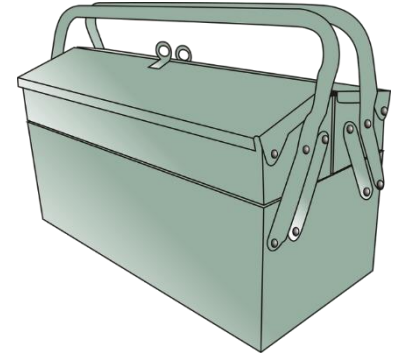
Thank you for listening!



"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



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