

**INTEGRATED RESEARCH  
INTEGRITY MANAGEMENT SYSTEM  
(IRIMS)  
FOR THE FACULTY OF HEALTH  
SCIENCES  
(Detailed version)**

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*2022*



# Introduction



2015 - 2019 built an effective research ethics system in the FHS and the University.



Potential research non-compliance and/or violation of good research practice were handled by the Dean and the Head of the Ethics Office.



Potential research misconduct was handled by the Dean and the Head of the Ethics Office and referred to the Registrar.



2018 brought about changes: 1) Appointment of the DD: R&I; 2) NWU “Policy on Academic Integrity (2018 revised 2021)”; and 3) an increase in cases of breaches in research integrity in the FHS.

- The latter developed a greater awareness of research integrity.
- Management of RI was delegated to the DD: R&I.

2018

- 2018 several two-hour training sessions in RI.

2019

- 2019 a morning training session became an integral part of research ethics training courses.

2020

- 2020 the development of an Integrated Research Integrity Management System (IRIMS) for the FHS (Prof Greeff).

2021

- 2021 University management approval of the IRIMS

2021

- 2021 FHS approval and role out:
  - Establishment of the administrative system (still in process).
  - Training (directors, academics, students).

# Conceptualization of *research ethics* and *research integrity* at the NWU?

- **Research ethics**

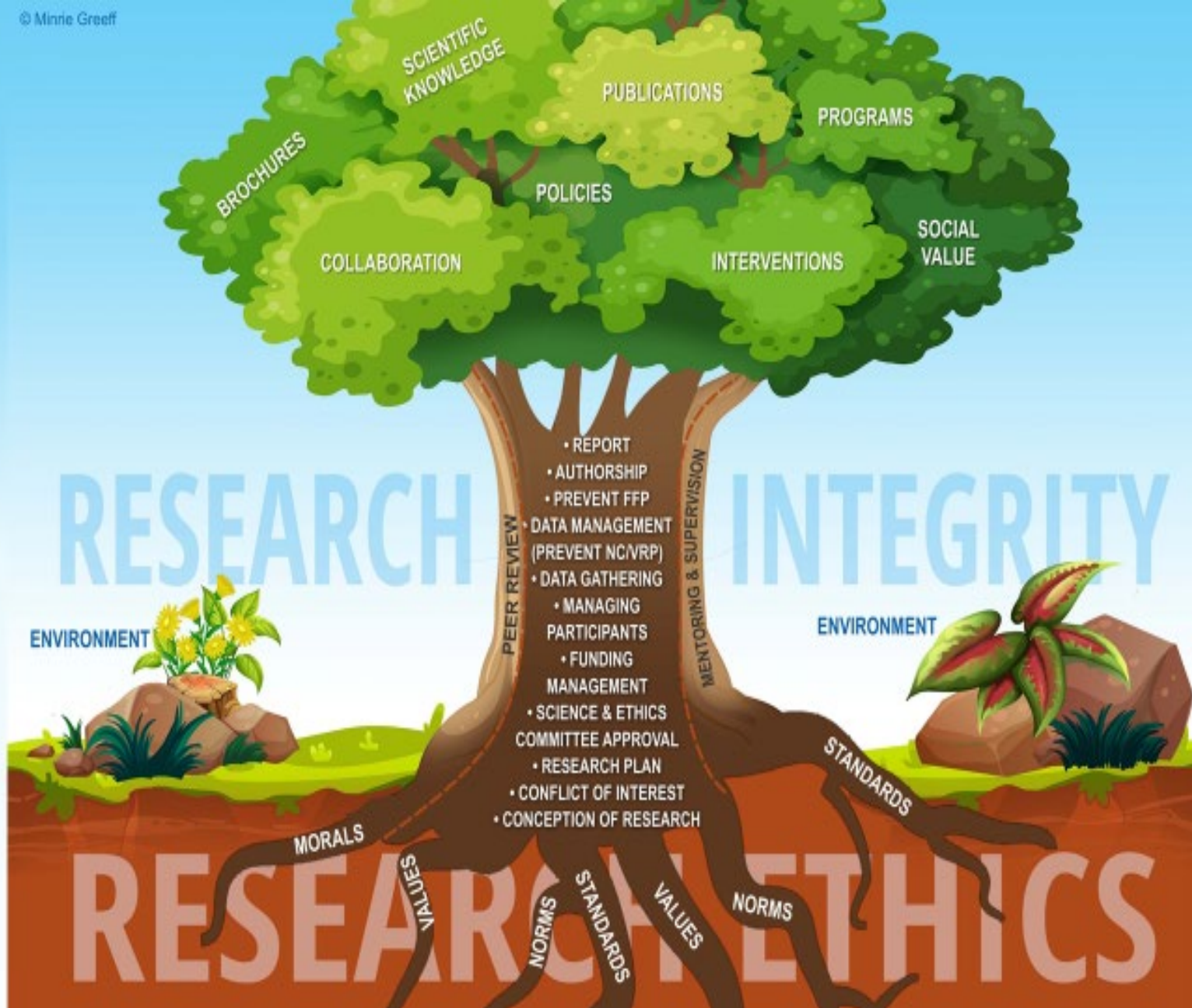
Research ethics refers to a set of rules based on specific principles and governed by norms and standards of conduct for researchers on how research is performed and how it is disseminated (Wallace & Sheldon, 2015:272, Greenwood, 2016:514).

- **Research integrity**

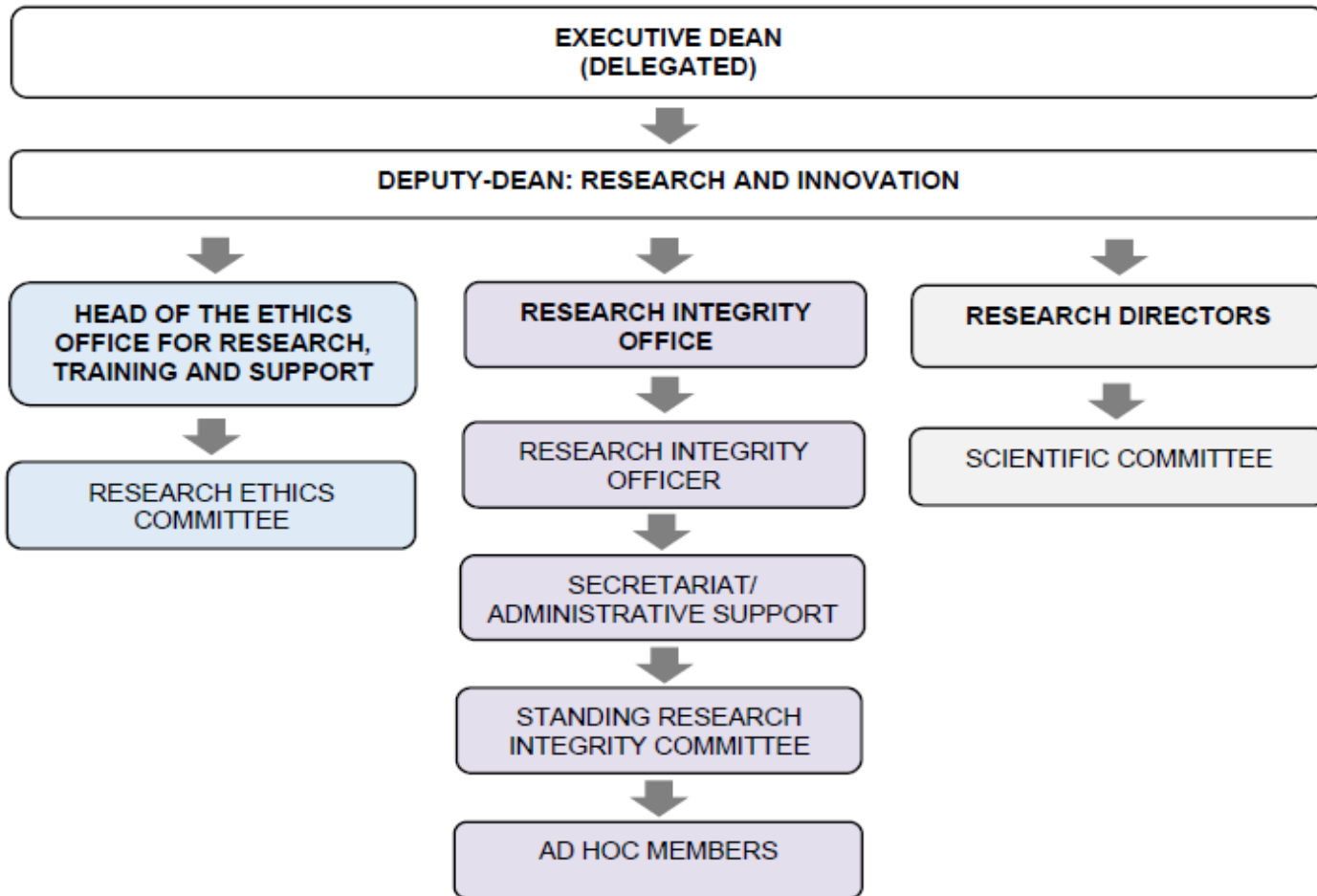
The active adherence to specific research integrity principles and responsibilities that becomes visible in Responsible Conduct of Research (RCR) as stated in the Singapore Statement of Research Integrity, 2010.

*\* In this session specifically refer to the management of research integrity.*

# Research Ethics & Research Integrity Tree



# ORGANISATIONAL STRUCTURE FOR RESEARCH INTEGRITY (purple middle section)



# INTEGRATED RESEARCH INTEGRITY MANAGEMENT SYSTEM (IRIMS)

## Integrated Research Integrity Management System (IRIMS)

Foster a **climate** of Responsible Conduct of Research (RCR).

- i. Support
- ii. Organization
- iii. Communication
- iv. Training

Effectively manage **potential breaches** in research integrity through acts of:

- i. Research non-compliance
- ii. Violation of good research practice
- iii. Research misconduct

Effectively manage possible **appeals** stemming from research integrity assessments or investigations.

# FOSTERING A CLIMATE OF RESPONSIBLE CONDUCT OF RESEARCH (RCR)

Faculty of Health Sciences

What a research environment should be like.

What to strive towards.

What to include in personal development plans.


Area	Topic and Actions
Support	<b>Research environment:</b> <ul style="list-style-type: none"><li>• Research director – administrative support, support in generating Turnitin reports, critical readers.</li><li>• Fair, transparent, and responsible assessment procedures during task agreements, appointments, and promotions.</li><li>• Consultation services on research ethics and integrity related matters for researchers.</li><li>• Counselling on research integrity related matters for researchers.</li></ul>
	<b>Research study supervision:</b> <ul style="list-style-type: none"><li>• Clear guidelines for study supervision i.e. Higher degrees manual.</li><li>• Skills training for study supervision.</li></ul>
	<b>Mentoring:</b> <ul style="list-style-type: none"><li>• Postgraduate students.</li><li>• Young scientists.</li><li>• Ongoing throughout the career of a researcher.</li></ul>



**FOSTERING A CLIMATE OF RESPONSIBLE CONDUCT OF RESEARCH (RCR)**  
Faculty of Health Sciences

Area	Topic and Actions
<b>Organization</b>	<b>Research ethics structure:</b> <ul style="list-style-type: none"><li>• Establish and maintain a research ethics structure and clearly described SOPs.</li><li>• Provide high quality ethics review processes by dedicated NHREC registered RECs.</li><li>• Provide clear review guidelines for REC members and researchers.</li><li>• Provide training for REC members on review and governance of research ethics.</li><li>• Provide training for researchers on research ethics and administration.</li></ul>
	<b>Scientific committee structure:</b> <ul style="list-style-type: none"><li>• Establish and maintain a scientific committee structure and clearly described SOPs.</li><li>• Provide high quality scientific review processes by research entity scientific committees.</li><li>• Provide clear review guidelines for members and researchers.</li><li>• Provide training for committee members on the review process.</li><li>• Provide training for researchers on scientific review and administration.</li></ul>

**FOSTERING A CLIMATE OF RESPONSIBLE CONDUCT OF RESEARCH (RCR)**  
 Faculty of Health Sciences

Area	Topic and Actions		
<b>Organization</b>	<p><b>Integrated Research Integrity Management System (IRIMS):</b></p> <ul style="list-style-type: none"> <li>• Foster responsible conduct of research practices.               <ul style="list-style-type: none"> <li>➤ Organizational structures and practices.</li> <li>➤ Training opportunities for academics and postgraduate students.</li> </ul> </li> <li>• Management of integrity breaches:               <ul style="list-style-type: none"> <li>➤ Formalized transparent procedures and processes.</li> <li>➤ Establish a standing committee for research integrity (SCRI).</li> <li>➤ Protect whistle-blowers.</li> <li>➤ Fairly handle those accused of breaches.</li> <li>➤ Establish a mentorship system for those found in breach of research integrity (restorative actions).</li> </ul> </li> </ul> <div style="text-align: center; margin: 20px 0;">  </div> <table style="width: 100%; border: none;"> <tr> <td style="width: 50%; text-align: center; vertical-align: top;"> <p><b><i>Intra-faculty:</i></b></p> <ul style="list-style-type: none"> <li>• Restorative.</li> <li>• Intra-faculty disciplinary process.</li> <li>• Appeals process.</li> </ul> </td> <td style="width: 50%; text-align: center; vertical-align: top;"> <p><b><i>Institutional:</i></b></p> <ul style="list-style-type: none"> <li>• Disciplinary.</li> <li>• Legal.</li> <li>• Referred back to IRIMS.</li> </ul> </td> </tr> </table>	<p><b><i>Intra-faculty:</i></b></p> <ul style="list-style-type: none"> <li>• Restorative.</li> <li>• Intra-faculty disciplinary process.</li> <li>• Appeals process.</li> </ul>	<p><b><i>Institutional:</i></b></p> <ul style="list-style-type: none"> <li>• Disciplinary.</li> <li>• Legal.</li> <li>• Referred back to IRIMS.</li> </ul>
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**FOSTERING A CLIMATE OF RESPONSIBLE CONDUCT OF RESEARCH (RCR)**  
Faculty of Health Sciences

Area	Topic and Actions
Organization	<b>Data practices and management:</b> <ul style="list-style-type: none"><li>• Data management system (infrastructure) for secure data collection, storage, retention, archiving, and sharing.</li><li>• Data management plan.</li><li>• Curate and share according to FAIR principles. (FAIR = Findable, accessible, interoperable, and reusable).</li></ul>
	<b>Fair research assessment practices:</b> <ul style="list-style-type: none"><li>• Clear examination guidelines.</li><li>• Clear peer review guidelines.</li></ul>

**FOSTERING A CLIMATE OF RESPONSIBLE CONDUCT OF RESEARCH (RCR)**  
 Faculty of Health Sciences

Area	Topic and Actions
<p align="center"><b>Communication</b></p>	<p><b>Research collaboration:</b></p> <ul style="list-style-type: none"> <li>• Establish sound rules for transparent working agreements.</li> <li>• Have MOUs in place.</li> <li>• Have MTAs in place for samples or data.</li> <li>• Ensure that collaborators all have practices for protection of personal information in place (POPIA)</li> </ul>
	<p><b>Declaration of interests:</b></p> <ul style="list-style-type: none"> <li>• Clear guidance on the university's approach to declaring interest and handling of conflict of interest.</li> <li>• Ensure transparent declarations of interest (financial e.g. funding, personal interests or professional activities e.g. peer review, evaluation, assessment, promotion, and collaboration).</li> <li>• Ensure that conflicts are handled adequately.</li> <li>• Clear guidelines for contract research.</li> </ul>
	<p><b>Stakeholder/external organization communication:</b></p> <ul style="list-style-type: none"> <li>• Guidance on the research integrity processes of the FHS</li> </ul>

**FOSTERING A CLIMATE OF RESPONSIBLE CONDUCT OF RESEARCH (RCR)**  
Faculty of Health Sciences

Area	Topic and Actions
Communication	<b>Publication and communication:</b> <ul style="list-style-type: none"><li>• Clear guidelines for authorship.</li><li>• Clear guidelines for publication practices e.g. plagiarism guidelines.</li><li>• Ensure openness and clarity in public engagement.</li></ul>
	<b>Research ethics and research integrity webpage:</b> <ul style="list-style-type: none"><li>• Enhance communication with academics and postgraduate students.</li><li>• Provide resources on research integrity.</li></ul>

**FOSTERING A CLIMATE OF RESPONSIBLE CONDUCT OF RESEARCH (RCR)**  
**Faculty of Health Sciences**

Area	Topic and Actions	
Training	<b>Research ethics and research integrity training</b>	
	<b><i>Academics</i></b>	<b><i>Postgraduate students</i></b>
	<ul style="list-style-type: none"> <li>• Introduction to research ethics (including review and administration).</li> <li>• Introduction to research integrity (including review and administration).</li> <li>• Responsible conduct of research.</li> <li>• Research related policies, guidelines, and SOPs.</li> <li>• Refresher courses on research methodology.</li> <li>• Moral character development.</li> <li>• Research project planning and management.</li> <li>• On being a “good” scientist.</li> <li>• Study supervision: How to become an effective study supervisor.</li> <li>• Mentorship: How to be a mentor.</li> <li>• Faculty of Health Sciences Research Mentorship Program.</li> <li>• Future Professors’ Program for Mid-level Academics.</li> </ul>	<ul style="list-style-type: none"> <li>• Introduction to research ethics (including review and administration).</li> <li>• Introduction to research integrity (including review and administration).</li> <li>• Responsible conduct of research.</li> <li>• Research related policies, guidelines, and SOPs.</li> <li>• Research methodology.</li> <li>• Moral character development.</li> <li>• Research project planning and management.</li> <li>• Plagiarism.</li> <li>• On being a “good” student in research.</li> <li>• Scientific writing.</li> </ul>

**FOSTERING A CLIMATE OF RESPONSIBLE CONDUCT OF RESEARCH (RCR)**  
**Faculty of Health Sciences**

Area	Topic and Actions	
<b>Training</b>	<b>Research ethics and research integrity training (cont.)</b>	
	<b><i>Academics</i></b>	<b><i>Postgraduate students</i></b>
	<ul style="list-style-type: none"> <li>• RSA Future Professors' Program (DHED).</li> <li>• Peer review:               <ul style="list-style-type: none"> <li>➤ Publications.</li> <li>➤ Examination: Guidelines on how to examine.</li> <li>➤ Scientific committee.</li> <li>➤ Research ethics committee.</li> <li>➤ Promotion.</li> <li>➤ Grant applications.</li> <li>➤ Etc .</li> </ul> </li> <li>• Plagiarism.</li> <li>• Publication:               <ul style="list-style-type: none"> <li>➤ Publication ethics.</li> <li>➤ Authorship.</li> <li>➤ Writing for publication.</li> </ul> </li> <li>• Data management.</li> <li>• How to engage with the public on sharing research results.</li> </ul>	

# FOSTERING A CLIMATE OF RCR MATRIX

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PROF MINRIE GREEFF

RIO



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# MATRIX OF RESEARCH TRAINING OPPORTUNITIES



Training offered by the research support office.



Formal training programs within the FHS:

Research Ethics  
Research Integrity  
Faculty of Health Sciences Research  
Mentorship Program.



Research entity specific career development opportunities:

Future Professors' Program for Mid-level Academics



Personal development planning during task performance agreements based on what manager identifies or what researcher identifies as a need.



IRIMS related mentorship on an individualized bases as part of restorative actions.

## Management of transgressions

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Managed within the “NWU policy on academic integrity” (2018 revised 2021).

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An initial intra-faculty process.

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Focus on restorative actions and mentorship and less punitive or disciplinary in nature.

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If, however, it is *research misconduct* it is escalated to the student judicial office or the office of the registrar.

# POTENTIAL BREACHES IN RESEARCH INTEGRITY



# What are these acts that impact on the value or quality of research? (Greeff, 2021)

## ***Research Non-Compliance***

Any violation of:

- Any institutional and/or REC policies, procedures and regulation governing human or animal research.
- Any deviation from the REC-approved proposal/protocol.
- Types:
  - Minor
  - Serious
  - Continuous

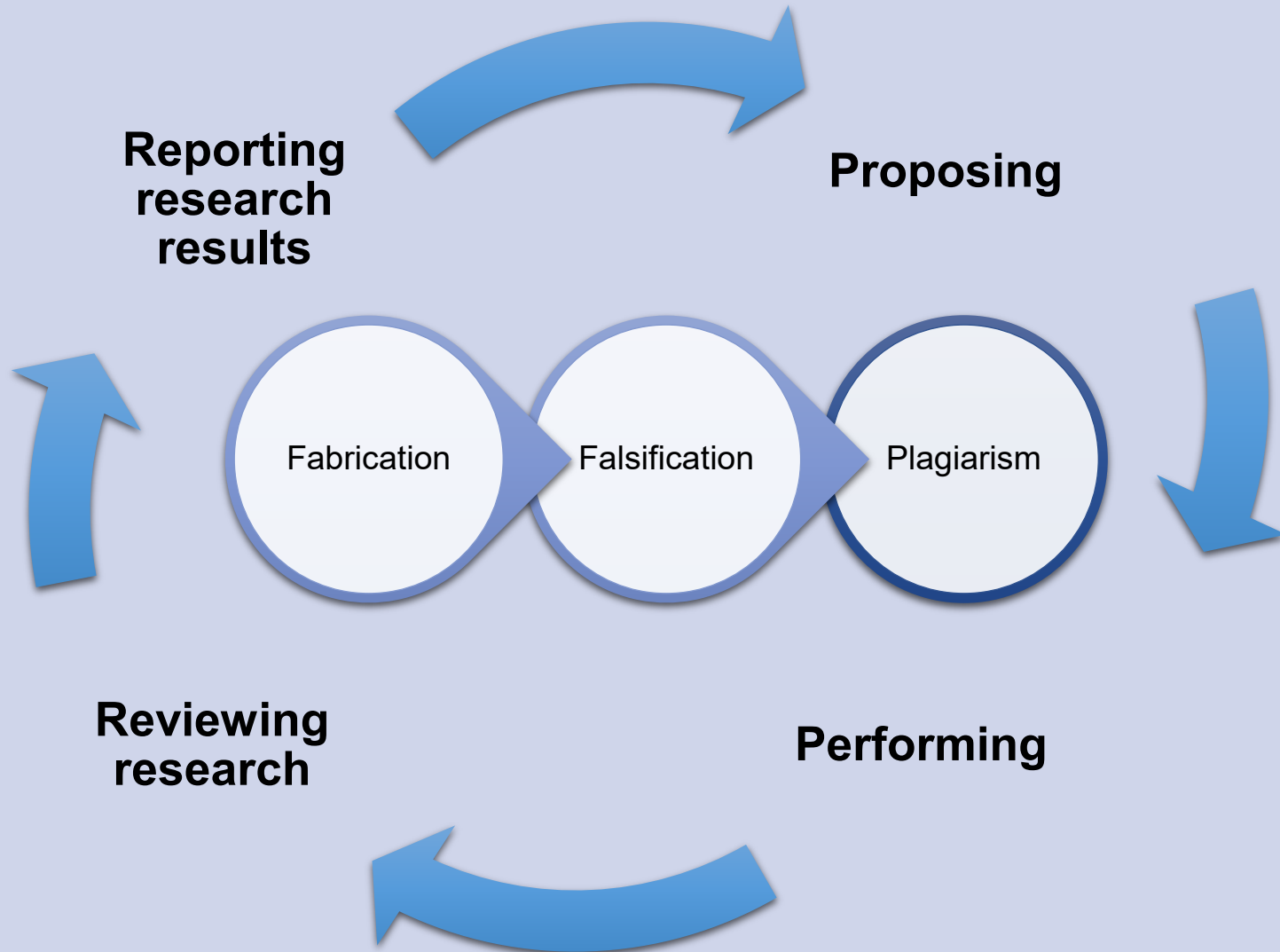
## ***Violation of good research practice***

Acts that damage the integrity of the research process or of researchers.

(Can also be continuous)

# Research Misconduct

- Misconduct involves *intentional deception*.
- Referred to as **FFP**.



Breaches	Level of management	Structure
<ul style="list-style-type: none"> <li>Research non-compliance</li> <li>Violation of good research practice</li> </ul>	<p>Intra-faculty (Restorative under mentorship)</p> <p><b>SOP 1:</b> Management of Research Non-compliance and/or Violation of Good Research Practice</p>	ERIC
<p>Continuous:</p> <ul style="list-style-type: none"> <li>Research non-compliance</li> <li>Violation of good research practice</li> </ul>	<p>Intra-faculty (From the IRIMS to an intra-faculty disciplinary system involving HR)</p> <p><b>SOP 2:</b> Management of Continuous Research Non-compliance and/or Violation of Good research practice</p>	SRIC
<p>Research misconduct (FFP)</p>	<p>Escalated to institutional level:</p> <ul style="list-style-type: none"> <li>Office of the Registrar (Staff member)</li> <li>Student Judicial Office (Postgraduate student)</li> </ul> <p><b>SOP 3:</b> Management of Research Misconduct</p>	SRIC
<p>Other</p>	<p><b>SOP 4:</b> Management of the Research Integrity Appeals Process</p> <p><b>SOP 5:</b> Management of Plagiarism and/or Copyright Infringement by an External Author</p> <p><b>SOP 6:</b> Management of a Referral from the Registrar as a Breach in Research Integrity</p> <p><b>SOP 7:</b> Management of Whistleblowing pertaining to Research Ethics and Research Integrity</p>	SRIC

# STANDING RESEARCH INTEGRITY COMMITTEE (SRIC)

**A Standing Research Integrity Committee (SRIC) appointed in the FHS and consisting of the following members:**

- Chairperson: DD: R&I.
- Research Integrity Officer (RIO).
- Head of the Ethics Office for Research, Training and Support.
- A Research Director in the FHS knowledgeable in the management of RI (*appointed for three years*).
- Secretariat.

**In cases of fabrication and falsification the following independent ad hoc members are included:**

- Consulting attorney when required.
- Two subject experts appropriate to the case at hand.



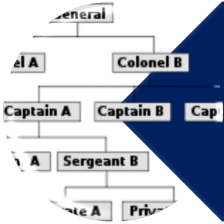
# EMPANNELED RESEARCH INTEGRITY COMMITTEE (ERIC) ON INTRA-FACULTY LEVEL



A committee specifically empanelled and chaired by the DD: R&I.



For a specific formal intra-faculty research integrity assessment of an alleged research integrity breach (Non-Compliance, Violation of research practices, and continuous Non-Compliance).



The composition varies in each case.



Is made up of the Standing Research Integrity Committee (SRIC) and specific ad hoc members that will differ according to each new case at hand.



# ERIC:

Standing Research  
Integrity Committee  
(SRIC)



## Ad Hoc Members:

- Research Director (RD) (unit in which the alleged resides).
- School Director (SD) (school in which the alleged resides).
- An independent person (expert on the required research integrity issue at hand).

# Processes and procedures

- Overarching IRIMS guidelines (see next slide).
- 7 Standard Operating Procedure (SOP) documents:
  - 1) SOP\_FHS Research Integrity\_1. Management of Research Non-compliance and/or Violation of Good Research Practice.
  - 2) SOP\_FHS Research Integrity\_2. Management of Continuous Research Non-compliance and/or Violation of Good Research Practice.
  - 3) SOP\_FHS Research Integrity\_3. Management of Research Misconduct.
  - 4) SOP\_FHS Research Integrity\_4. Management of the Research Integrity Appeals Process.
  - 5) SOP\_FHS Research Integrity\_5. Management of Plagiarism and/or Copyright Infringement by External Authors.
  - 6) SOP\_FHS Research Integrity\_6. Management of a Referral Received from the Registrar as a Breach in Research Integrity.
  - 7) SOP\_FHS Research Integrity\_7. Management of Whistleblowing Pertaining to Research Ethics and Research Integrity.

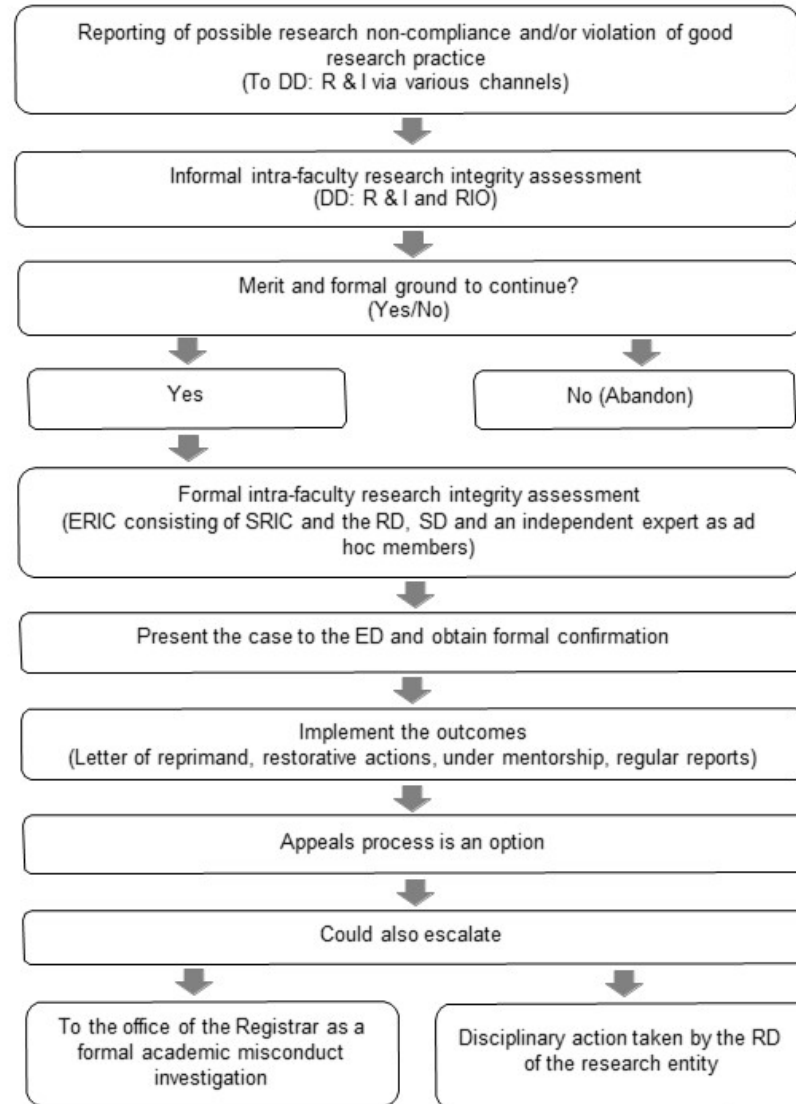
# IRIMS GUIDELINES

Guidance to staff and students of the IRIMS.

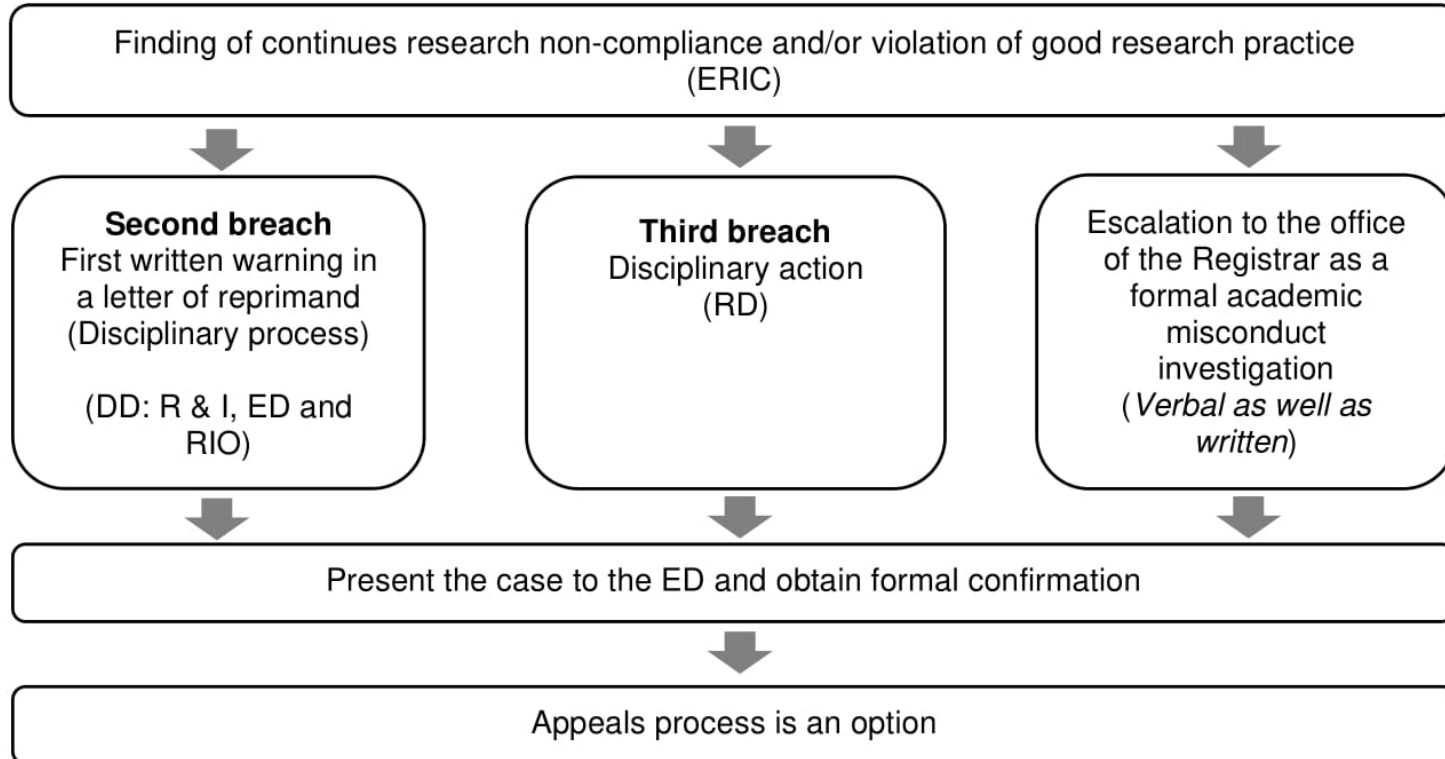
Overarching document that links various processes and procedures:

- Definitions
- Explaining research ethics and research integrity
- Fostering of a climate of Responsible Conduct of Research (RCR).
- Effective management of potential breaches in research integrity through acts of:
  - Research non-compliance.
  - Violation of good research practice.
  - Continuous research non-compliance and/or violation of good research practice.
  - Research misconduct (fabrication, falsification and plagiarism).
- Effective management of appeals processes stemming from assessments or investigations.

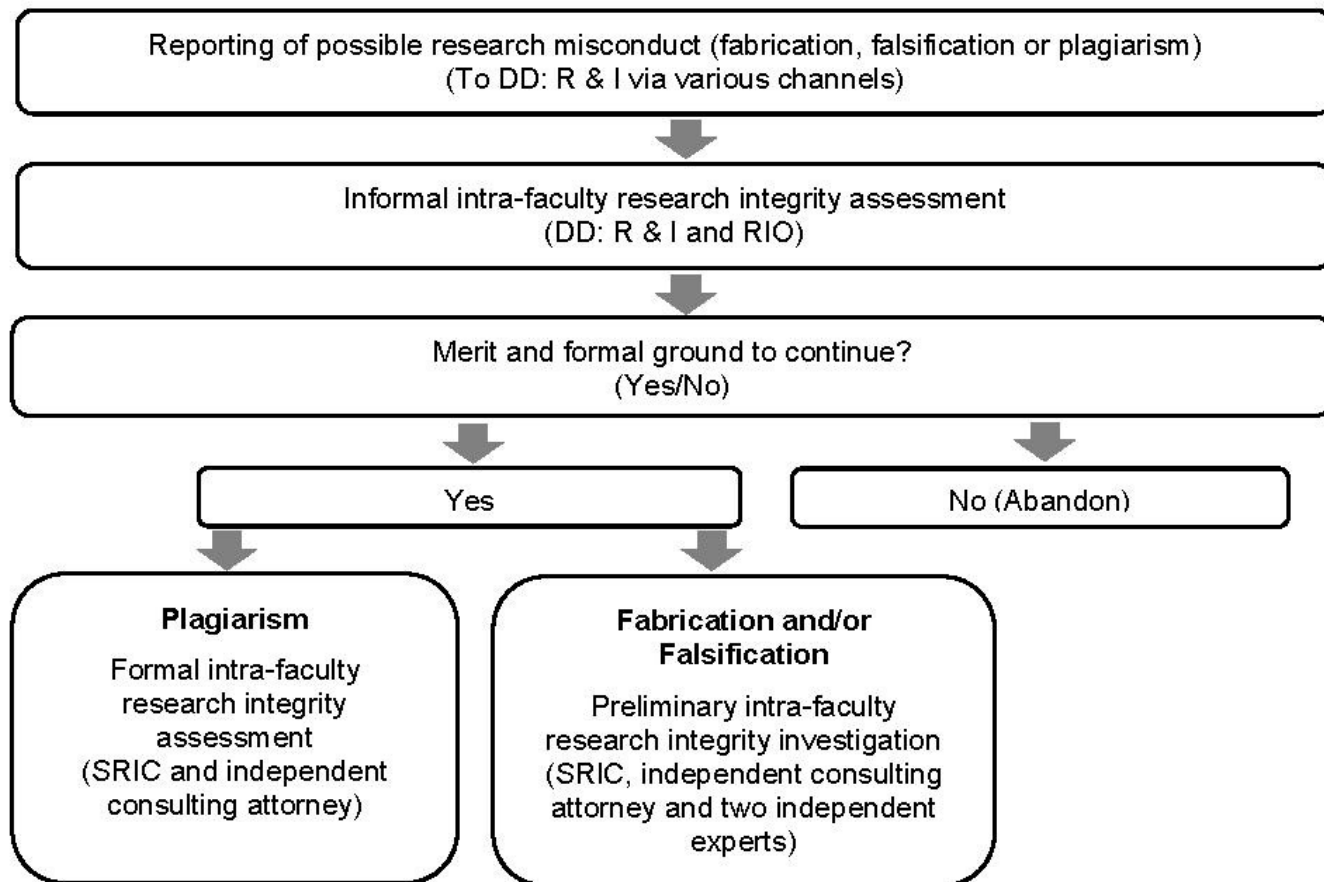
# SOP 1: PROCESS AND PROCEDURE FOR THE MANAGEMENT OF RESEARCH NON-COMPLIANCE AND/OR VIOLATION OF GOOD RESEARCH PRACTICE



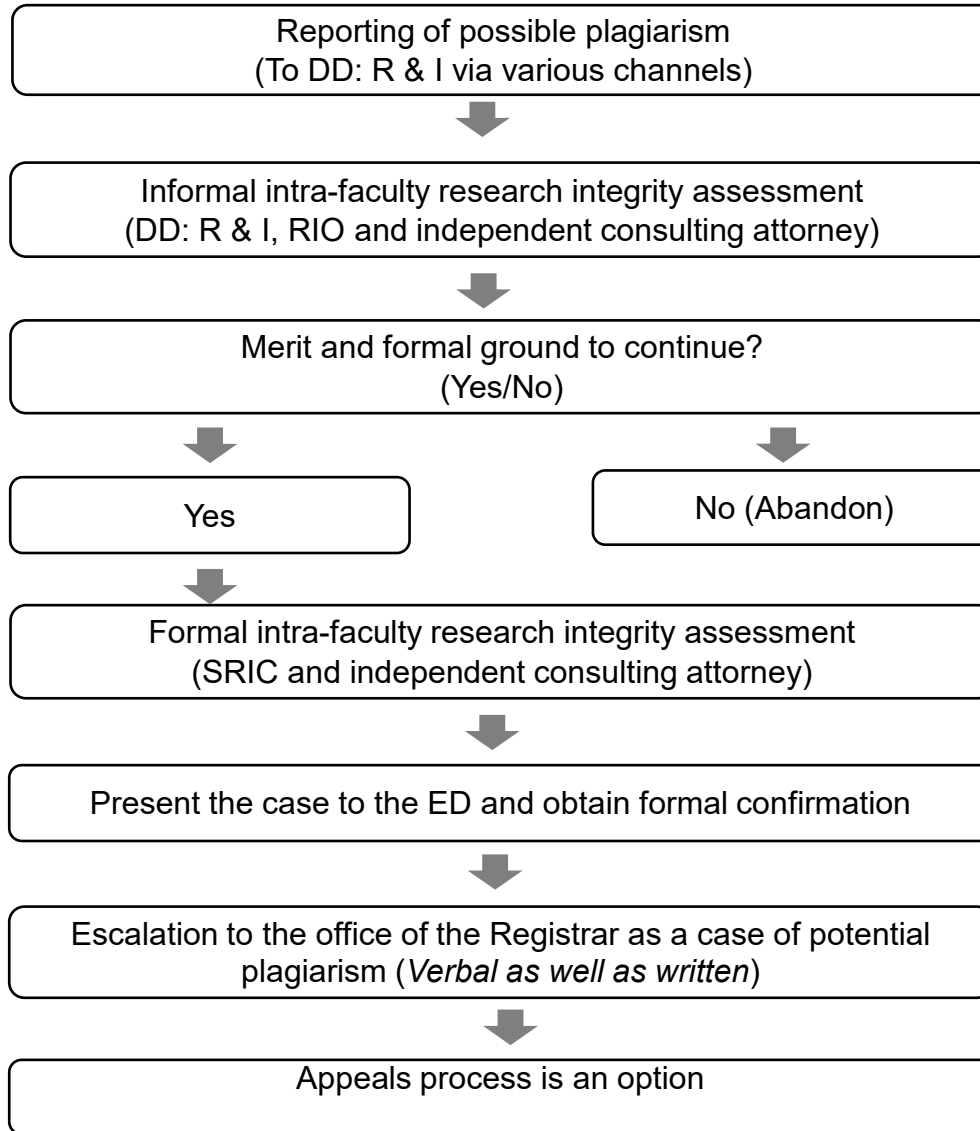
# SOP 2: PROCESS AND PROCEDURE FOR THE MANAGEMENT OF CONTINUOUS RESEARCH NON-COMPLIANCE AND/OR VIOLATION OF GOOD RESEARCH PRACTICE



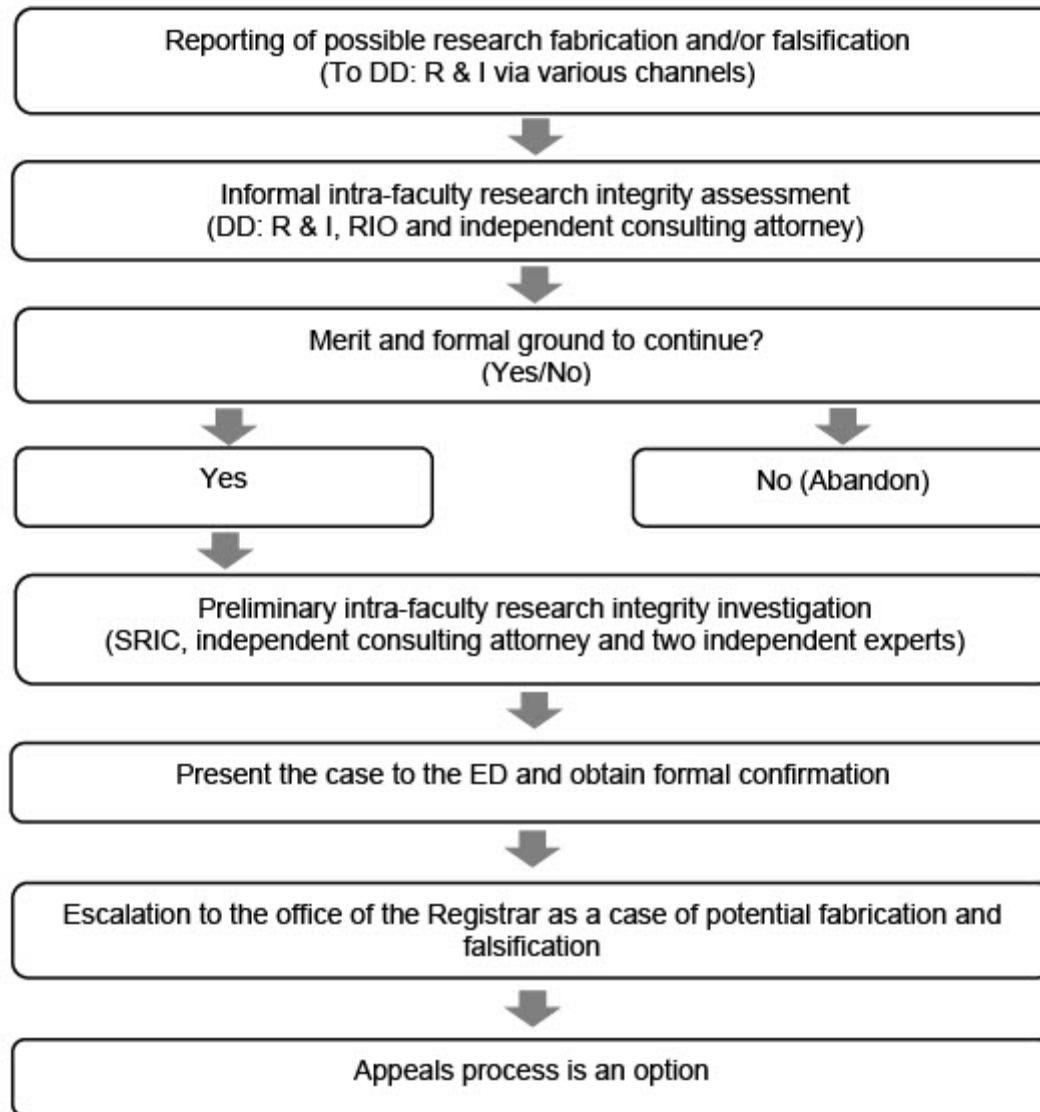
# SOP 3: STRUCTURE FOR THE MANAGEMENT OF RESEARCH MISCONDUCT



# PROCESS AND PROCEDURE FOR THE MANAGEMENT OF RESEARCH MISCONDUCT (*PLAGIARISM*)

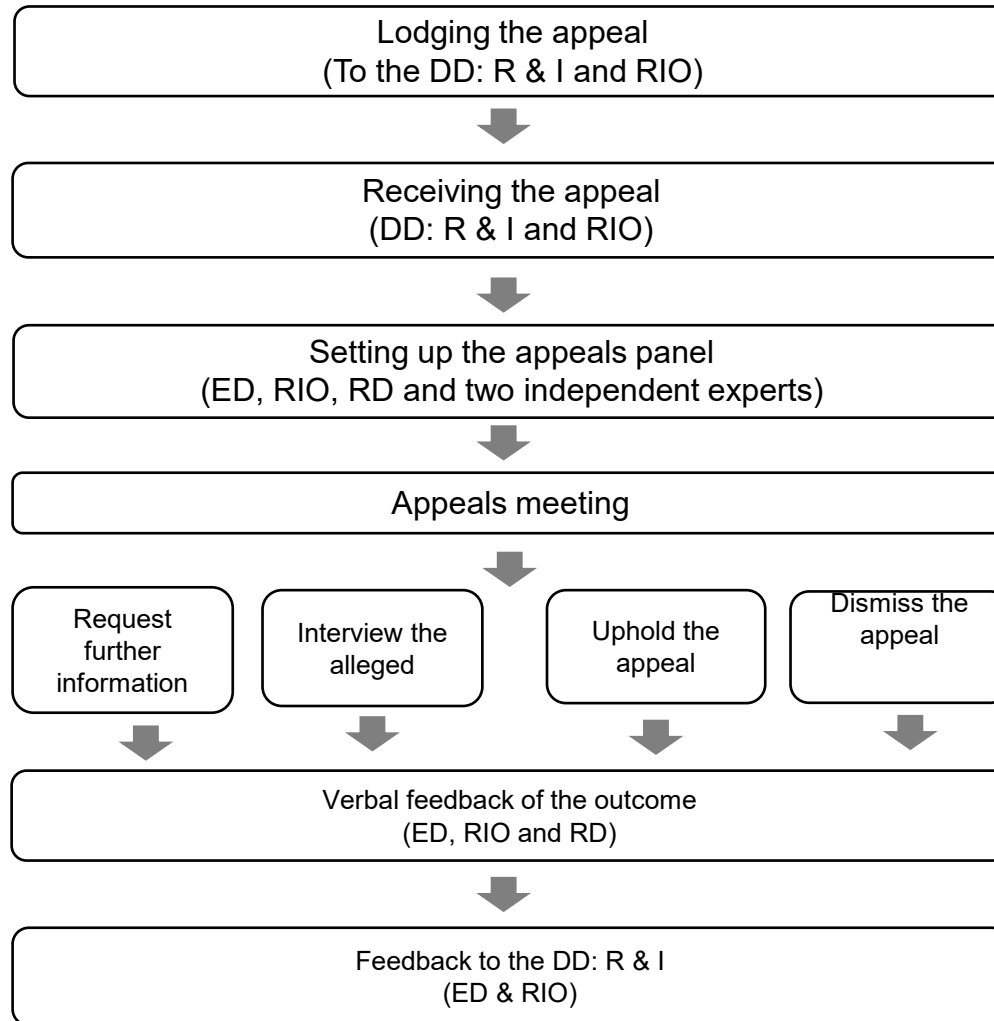


# PROCESS AND PROCEDURE FOR THE MANAGEMENT OF RESEARCH MISCONDUCT (*FALSIFICATION AND FABRICATION*)

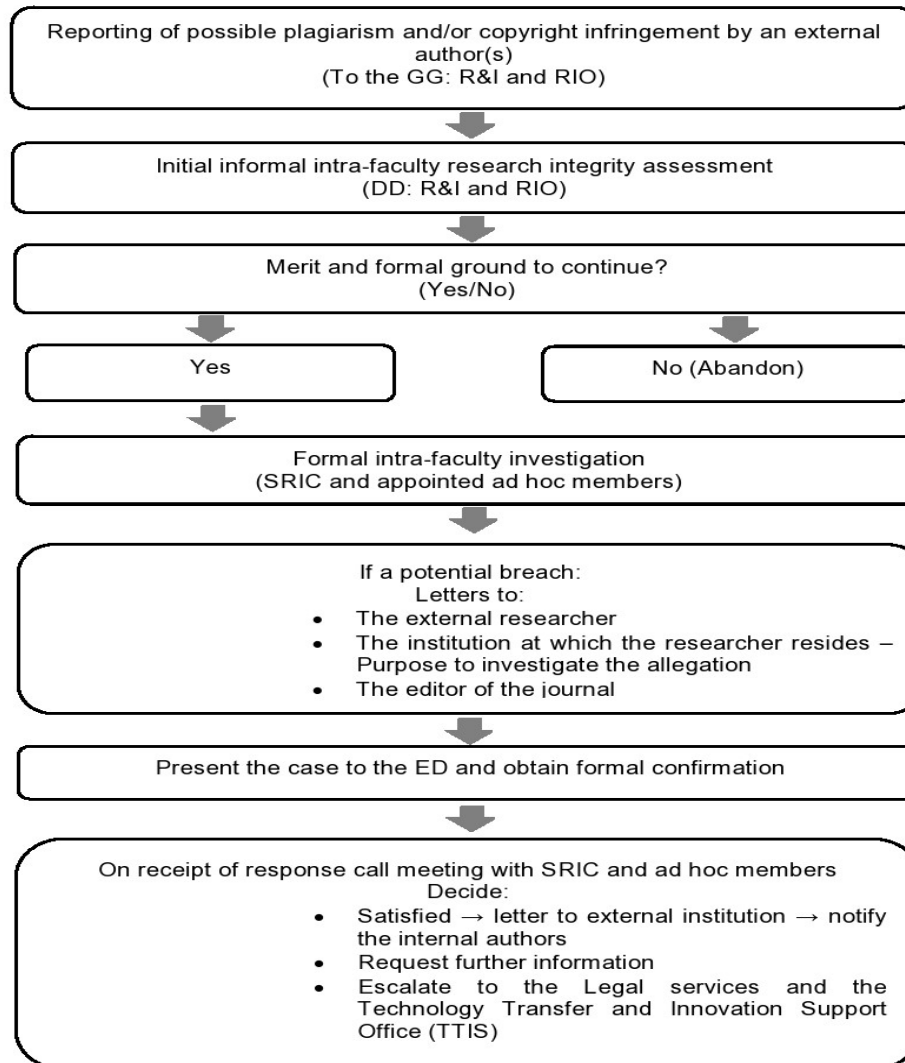




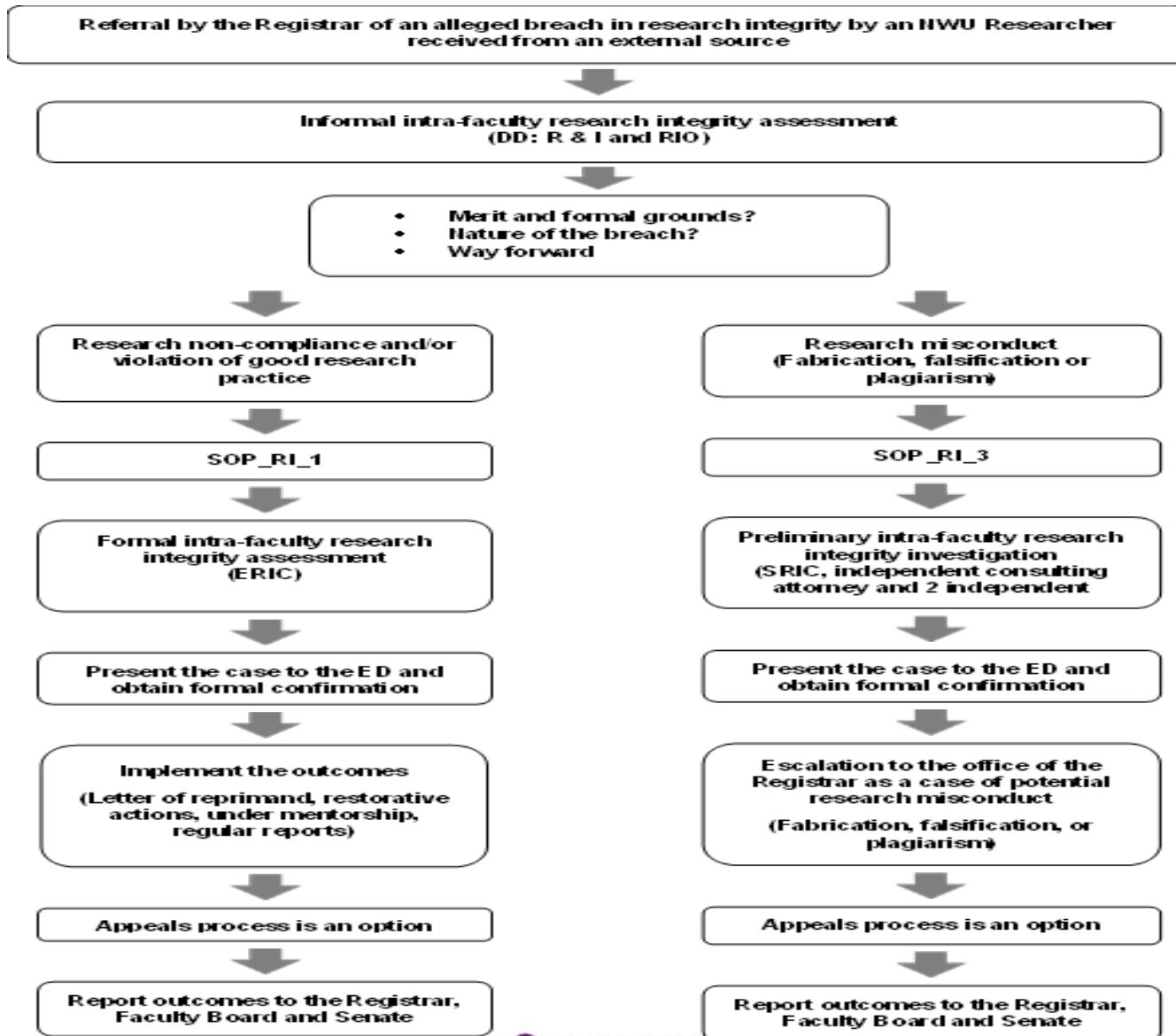
# SOP 4: PROCESS AND PROCEDURE FOR THE MANAGEMENT OF THE APPEALS PROCESS



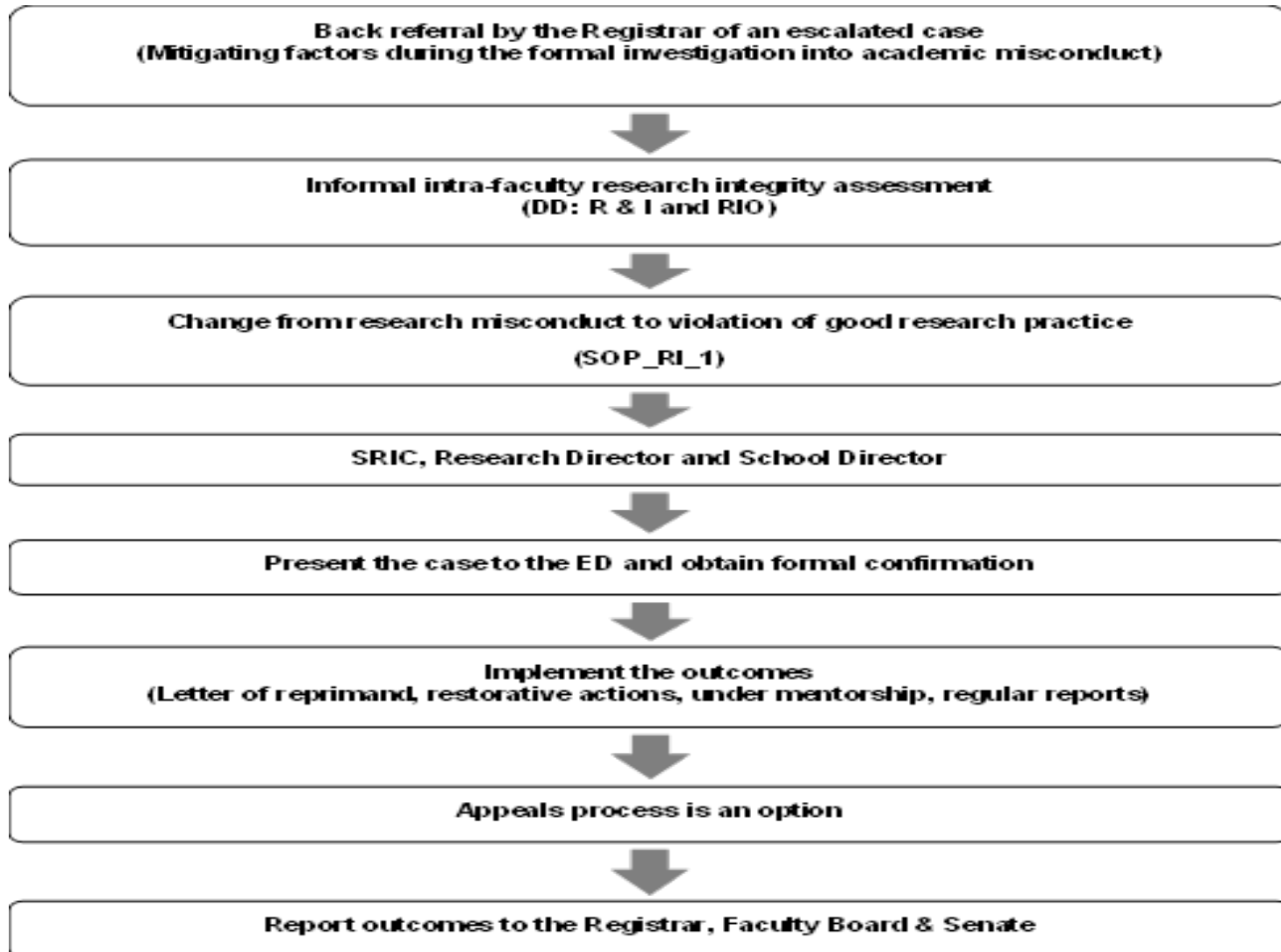
# SOP 5: PROCESS AND PROCEDURE FOR THE MANAGEMENT OF PLAGIARISM BY EXTERNAL AUTHORS



# SOP 6: PROCESS AND PROCEDURE FOR THE MANAGEMENT OF AN EXTERNAL ALLEGATION OF RESEARCH MISCONDUCT AGAINST A NWU RESEARCHER



# Processes and procedures for managing a back referral from the Registrar of an escalated academic or research misconduct case



# SOP 7: MANAGEMENT OF WHISTLEBLOWING PERTAINING TO RESEARCH ETHICS AND RESEARCH INTEGRITY

*\* No flow diagram as it is just another form of reporting. Important however, is the specific form that should be completed.*

# Specific training sessions:

- **Research integrity and research ethics training:**

- September

\*Presented by the Ethics Office, FHS

- **Repeat IRIMS session:**

- 17 August (repeat)

- **Faculty Lecture – Ensuring responsible conduct of research: Research ethics, quality research and research integrity:**

- 19 Oct (repeat)

**THANK YOU AND LOOKING  
FORWARD TO MAKING THIS A  
SUCCESS STORY WITH YOUR  
SUPPORT**





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## QUESTIONS AND DISCUSSION