



The Experience of Institution-Wide Open Science Training

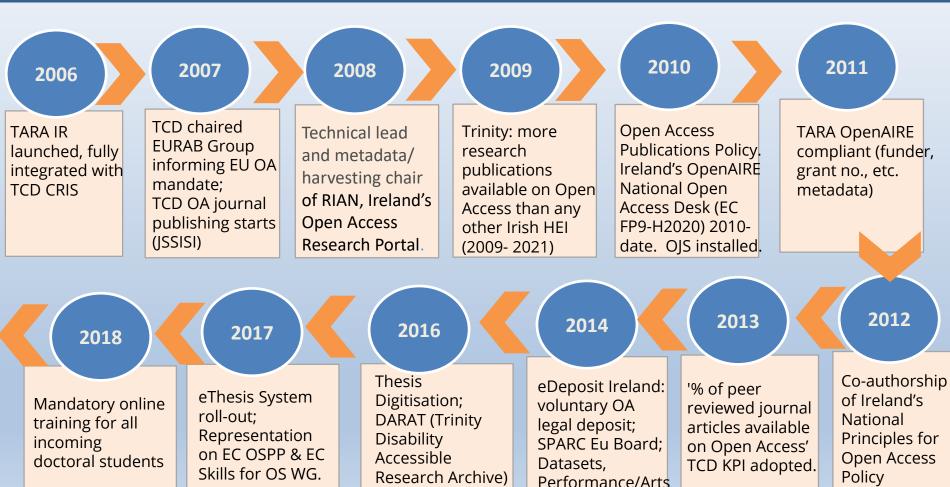
CHARM-EU Open Science Day, 9th June 2023

Niamh Brennan, Programme Manager, TCD Research Informatics Edie Davis, Content Manager, TCD Research Informatics

Project Team: Niamh Brennan, Edie Davis, Monica Sanchidrián (Research Informatics), Trinity Online Services

CA 7000 / RIO Instructors: Dr Irene Walsh, Evelyn Fox, Dr Geoff Bradley, Niamh Brennan CA 7000 / RIO funding: National Forum for the Enhancement of Teaching & Learning Dean of Graduate Studies: Dr Neville Cox; Dr Martine Smith

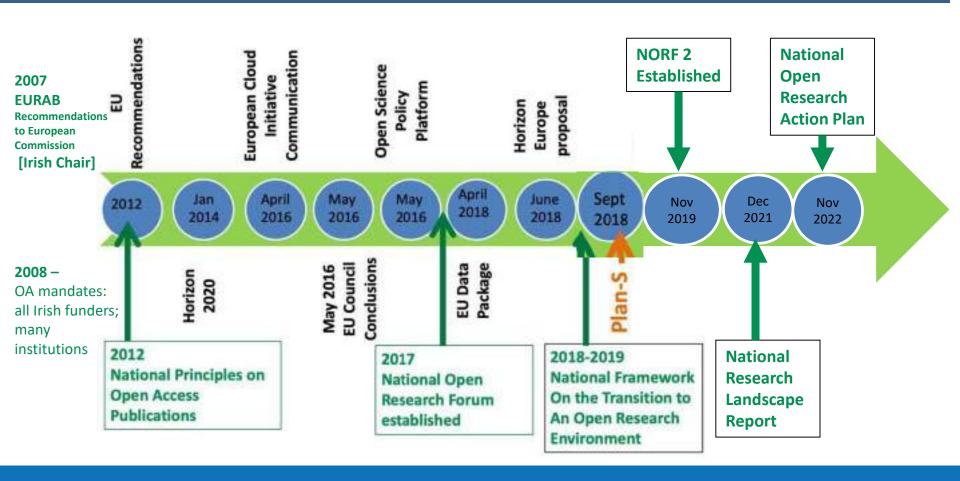
Open Access/Open Research in Trinity College Dublin



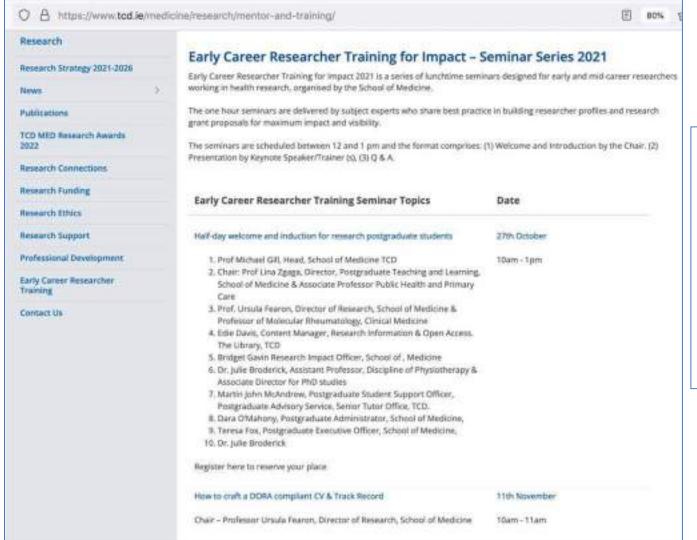
works in TARA

Statement

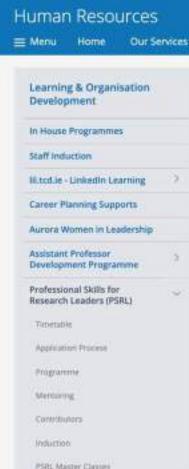
Ireland's Developing Open Research Policy



Title	Partner	Target Group	Frequency		TCD Resear	ch Informatics
New Academic Staff Induction	Research	New Academic &	Bi-Annual			
	Informatics+ HR	Research staff			chedule of	Research Skills
Professional Research Skills: Six	Research	Academic staff	Annual Janu	Train	ning for Aca	demic & Research
Workshop Programme on Research	Informatics+ HR			Training for Academic & Research		
Integrity and Impact					_	taff
Master Class Programme	Research	Early Career	Annual / Bi-A	Annual	March/April	2-hour Workshop +online Epigeum
'Communicating Your Research' (ARC programme)	Informatics+ HR	Researchers		Includ	les:	course 'Communicating Your
CA 70000: Research Integrity and Impact in an Open Scholarship Era	Office of the Dean of Graduate Studies; SATLE Project Team	Compulsory course incoming doctoral students.	Ongoing	 Joint workshops with Schools & research institutes Joint events with publisher/s. 		
RIO: Research Integrity and Impact in an Open Scholarship Era for Staff	Research Informatics+ HR +Schools	TCD academic, research and administrative staff	Ongoing			
'Your Research Impact Health Check'	Schools, Institutes, Research Centres/Groups.	Staff and students	On demand.			
'Research Data Management and Your DMP'	Research Informatics+Trinity Research & Innovation	RPOs and other TR&I staff, ERC awardees, ERC potential applicants	On demand; once a year			
Horizon2020 and Open Research	Schools, Institutes, Research Centres/Groups.	EC & ERC awardees, potential applicants	On demand; once a year			
Academic Promotions/ Tenure applications	Research Informatics+HR	Academic staff; Potential applicants	Linked to pro	omotions	Year round	HR Roadshow: 1 hour; + 1-to-1 support
Faculty Research Metrics / research evaluation		Directors of Research, Academic staff, Admin staff	Linked to Qu Reviews / Ev exercises		Year round; Spring focus	1 hour workshop; short (10 minute) refreshers



TCD School of
Medicine
Early Career
Researcher
Training for
Impact
Seminar Series 2021



Mentoring

Performance Management

CEARWING & ORGANISATION DEVELOPMENT / PROFESSIONAL SKILLS FOR RESEARCH LEADERS (PSRL)

Privacy

Professional Skills for Research Leaders

News

The Professional Skills for Research Leaders (PSRL) programme was developed by epigeum, a leading publisher of online courses that specifically target researchers, students, and professional staff in the higher education sector, in consultation with a number of universities worldwide, including Trinity College Dublin.

Contact

The PSRL programme is designed to help independent researchers develop their leadership, management and engagement strategies. The programme is targeted at early and mid-career researchers who wish to progress from where they are now to where they want to be professionally by equipping them with the skills needed for professional development in a higher education context.

A new programme and format is currently being redeveloped.

in Spring 2022, the new PSRI, Programme will be launched and it will be known as "Advancing your Research Career". New modules will include:

- · Actively Managing Your Research Coreer
- Building a Positive Research Culture
- . The Value of Mentoring
- · Accelerating the impact of your Research through Engagement.
- . Funding your Research
- . Leadership for Successful Project Management.
- Collaboration

HR A-Z

Forms A-Z

- · Managing a Research Team
- · Communicating your Research
- Continuing Professional Development Plan

More information will be added when it is available.

If you have any questions about the programme please contact staffdev@tcd.ie

OXFORD epigeum

Epigeum 'PSRL' course provided via HR

Gaeilge

TCD HR:
https://www.tcd.ie
/hr/learning-anddevelopment/rese
arch-leaders/

TCD Research Skills Programme

TCD Research Informatics with TCD HR (Staff Development)

	Title	Audience	Delivery
Research Skills 1	Research Metrics	Academic &	Scheduled, Zoom & face to
	and Evaluation	research staff	face
Research Skills 2	Promoting Your	Academic &	Scheduled, Zoom & face to
	Work	research staff	face
Research Skills 3	Open Access	Academic &	Scheduled, Zoom & face to
	Publishing	research staff	face
Research Skills 4	FAIR Data	Academic &	Scheduled, Zoom & face to
	Management	research staff	face
Research Skills 5	Publishing and	Academic &	Scheduled, Zoom & face to
	Disseminating Your	research staff	face
	Research		
Research Skills 6	Your Research	Academic &	Scheduled, Zoom & face to
	Impact	research staff	face

⁻ With more from colleagues in TCD Research & Innovation and other departments

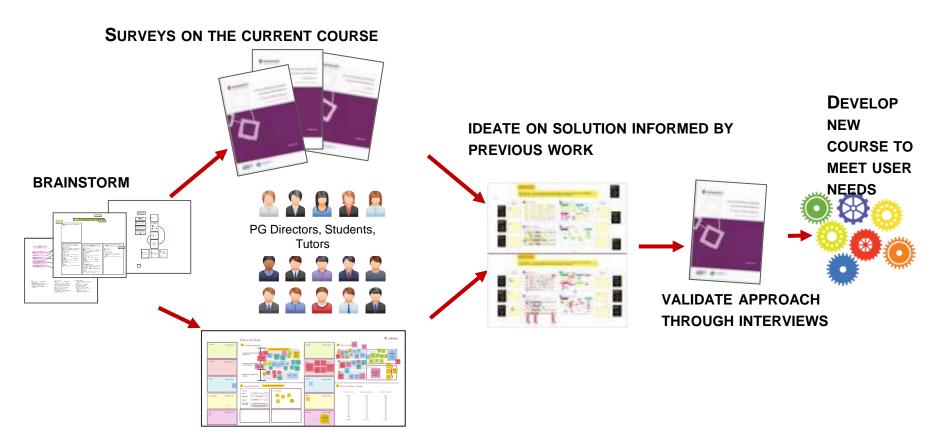
Structured PhD Module in Research Integrity and Impact in an Open Scholarship Era



Overview of SATLE-funded project 2019-2021



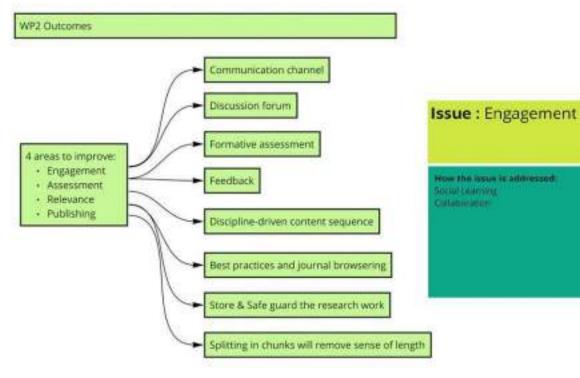
REDESIGN PROCESS



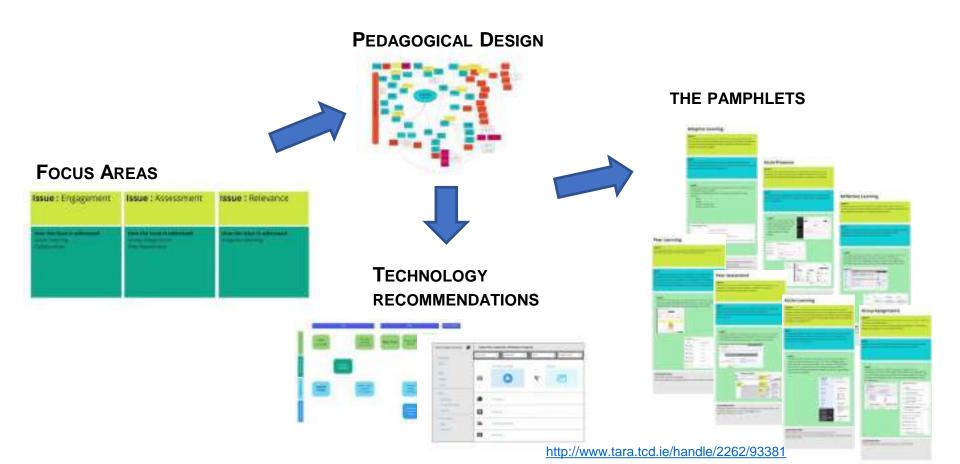
PROBLEM WORKSHOP TO
IDENTIFY AND PRIORITISE LEARNER NEEDS

INPUTS & INSIGHTS





OUTLINE OF INNOVATION APPROACH



Research Integrity and Ethics in an Open Scholarship Era CA 7000

Compulsory, 5 ECTS, Online module. Started: 2018 – to date (redesigned with NFETL funding, 2020-2021) Audience: all incoming PG research students. Coordination: Niamh Brenan & Monica Sanchidrián



Professor Irene Walsh (CSLS)

Dr Geoff Bradley (IT Services)

Niamh Brennan (Research Informatics)

Niamh Brennan (Research Informatics)

Niamh Brennan (Research Informatics)

Evelyn Fox (DPO)



ASSESSMENT

Assessment Information

ONLINE SESSIONS

Session 1: Research Integrity and Ethics

Session 2: Copyright. Intellectual Property and **Data Protection**

Session 3: Research Data Management and the Construction and Application of Data

Management Plans Session 4: Research Communication, Dissemination and Publishing

Session 5: Research Evaluation and Impact in an Open Scholarship Era

MODULE TOOLS

Module Discussion Forum

Module Learning Journal

Welcome from the Dean of Graduate Studies

Welcome to and open so

researching

that you fine

1. Research Integrity & Ethics

nationally a 2. Copyright, Intellectual Property & Data Protection

Principles

3. Research Data Management & the FAIR Data

This module 4. Research Communication, Dissemination & the Module Publishing

Rationale

5. Research Evaluation & Impact in an Open Scholarship Era

The concept of open scholarship has radically altered the way in which academic research operates in Europe, providing as it does both opportunities and challenges for research students. In addition, funders are increasingly demanding that researchers, including research students, must, as a prerequisite to securing grant funding, have undertaken some training in research ethics. Finally, there are increasing pressures on students, as they conduct research, to be aware of and comply with obligations under intellectual property and data protection law and indeed to ensure the proper

proceed with their research. This module is mandatory for all incoming PhD students in line with the decision of Graduate Studies Committee (March 2018) and Council (April 2018).

Module Learning Outcomes

On successful completion of this module, students should be able to:

- Develop the highest standards of ethical integrity in their research
- Critique the basic principles of intellectual property law as they apply to their research
- Investigate the application of Data Protection law in the context of postgraduate research
- Implement best practice standards in research data management and develop an effective Data Management Plan for their research

management of their research data. This course seeks to provide all Trinity PhD students with the tools necessary to navigate these issues as they

Demonstrate awareness of the opportunities that open scholarship provides for them to ensure that their research has maximum impact.

Quizzes / MCQs

(summative assessment)

Interactivity

- >Ethical dilemmas
- >Tasks for posting & comment, e.g. ORCID
- >Student selection of areas of relevance

2022-2023 Discussion Forum Engagement

	FORUM	DESCRIPTION	TOTAL POSTS
	Induction Discussion Forum		199
	Session 1: Forum		534
D	Session 2: Forum		844
0	Session 3: Forum		407
0	Session 4: Forum		465
0	Session 5: Forum		454

Learning Journal

(formative assessment)

- Summary of ethical issues in individual's research
- Data protection issues & plan for addressing them
- 3. Data Management Plan
- 4. Research
 Dissemination Plan
 (with OA)
- 5. Research Impact Plan

Research Integrity and Ethics in an Open Scholarship Era CA 7000

TIL MAY RUNAL PURK.

Compulsory, 5 ECTS, Online module. Started: 2018 – to date (redesigned with NFETL funding, 2020-2021)
Audience: all incoming PG research students

From Session 1: Research Integrity and Ethics:



CA 7000 [TCD research students] & **RIO** [TCD staff]

- > 2,000+ research students enrolled in CA 7000 since 2018
- > RIO prepared for roll-out to all TCD Staff in Summer 2023



Journal

- Both summative and formative assessment
- **Directly link with TCD Good Research Practice Guidelines**
- Bank of <u>relevant</u> supporting resources
- Updated regularly and at least annually
- **Certification of Completion based on Summative Assessment**
- **Compliance with REAMS (Research Ethics Application Management System)**
- Badging for module achievements (under discussion with HR).

Outcomes

Module	Audience	Platform	Registration	Assessment	Certification
CA 7000	TCD Research Students	TCD Blackboard	SITS	Summative: MCQ Formative: Learning Journal	Certificate of Completion Certificate of Achievement
RIO	TCD Staff	TCD Blackboard	Self- registration	Summative: MCQ Formative: Learning Journal	Certificate of Completion Certificate of Achievement
Open RIO	Open Access	National Forum T&L Open Courses	Self- registration	Summative: MCQ Formative: Learning Journal	Badging

Feedback:

- Strong support from students for certification & for
- forum discussing ORCID profiles;Request for phased iterations over longer

shared activities, e.g.,

Demand from Faculty & Admin/Support staff for access to same course

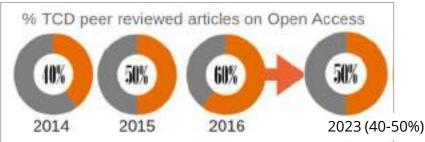
period [2nd year, etc.]

- Request from DPO for extension to undergraduate researchers
- Access requests from external individuals & institutions

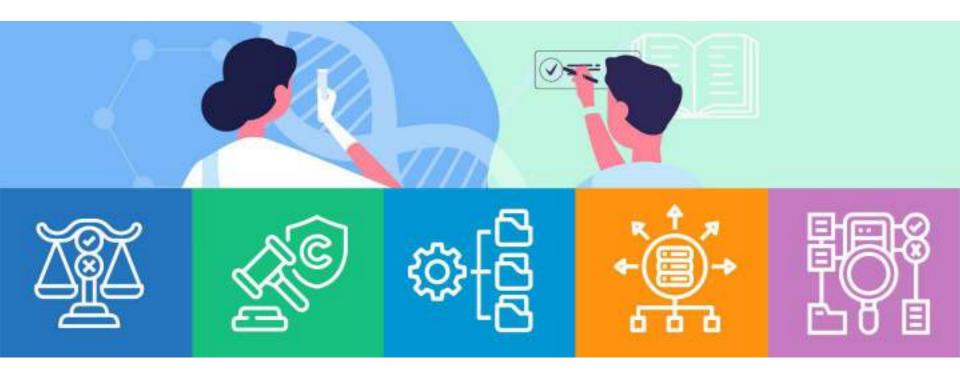
Challenges & Lessons Learned

- Rollout to all students across campus (admin systems not joined up);
- Certification essential; ideally badging too;
- Students require an online learning community, interactivity and relevance
- Extremely difficult to provide formative assessment in a wholly online, largely unmediated course;
- Resources are needed to provide mediation and support ongoing administration;
- Resources are needed for ongoing development & updating;
- A standardized Open Research curriculum should be agreed internationally with capacity for localization – and nationally/internationally acccredited
- No matter how good the training, appropriate rewards & recognition need to be in place for Open Research to be successful. Training and policies/recognition need to work together!

TCD Open Access % publications KPI discontinued after 2016



RIO: Training for TCD Staff



RIO: Pilot

- Staff pilot of RIO will begin in June 2023 and run for 6 weeks
- A small group of interested staff members from departments across the university will participate in the pilot
- Feedback will be collected at the end of the pilot and changes will be made based on the responses
- RIO for staff will launch in August 2023
- The module will be made available on a self-registration basis to all members of staff

OER: National Forum for the Enhancement of Teaching & Learning Open Course



Research Integrity and Impact in an Open Scholarship Era

Dashboard / My courses / Research Integrity and Ethics in an Open Scholarship Era

- Available online & via SCORM download (Summer 2023)
- No TCD branding
- Designed for reuse/localization
- FAIR OER



TROPIC

- The TROPIC project is a two-year project funded under the National Open Research Forum 2022 Open Research Fund. The aim of the project is to develop and pilot a national open research training programme to upskill researchers in the fundamentals of open research practices.
- https://norf.ie/national-open-research-training-programme/



PATTERN







To promote the practice of **Open and Responsible Research and Innovation (Open RRI)** by developing and piloting training activities for researchers at all stages of their careers.

These trainings, strengthening researchers' transferable skills, will empower Higher Education Institutions (HEIs) and research organizations to embrace a transformative process to improve the excellence of the science conducted, the capacity within the European Research Area (ERA) to tackle societal challenges and the interaction between science and society.



PATTERN Methodology



Phase 1

Consolidation of knowledge

PATTERN will start with a **systematic mapping** and a comprehensive **analysis** of the state-of-the-art of **learning opportunities for researchers on Open RRI**, integrated by mutual learning activities and co-creation workshops to identify emerging practices and barriers in Open RRI practices.

01

Phase 2

Developing PATTERN Training Activities and Platform

PATTERN has identified 8 main transferable skills in the context of open RRI, each covered by PATTERN Consortium Partners.

- Open Access
- Research Integrity
- Management and Leadership
- FAIR data management
- Science Communication

- Dissemination and Exploitation of
- Citizen Science

results

Gender, non-discrimination and

inclusion in research

All training modules will be openly available

on the PATTERN platform!

02



PATTERN Methodology



Phase 3

Testing PATTERN Training Modules

During this phase, **PATTERN training will be co-designed** and fine-tuned within PATTERN Consortium to perfectly respond to the needs of end-users across 2 learning cycles, each 12 months long.

03

Phase 4

Evidence for Policy Development

Lastly, PATTERN will build upon knowledge and analysis carried out during the project lifetime to develop a set of policy recommendations addressing authorities and institutions responsible for researcher training.

04







Go raibh míle maith agaibh!

Thank You

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