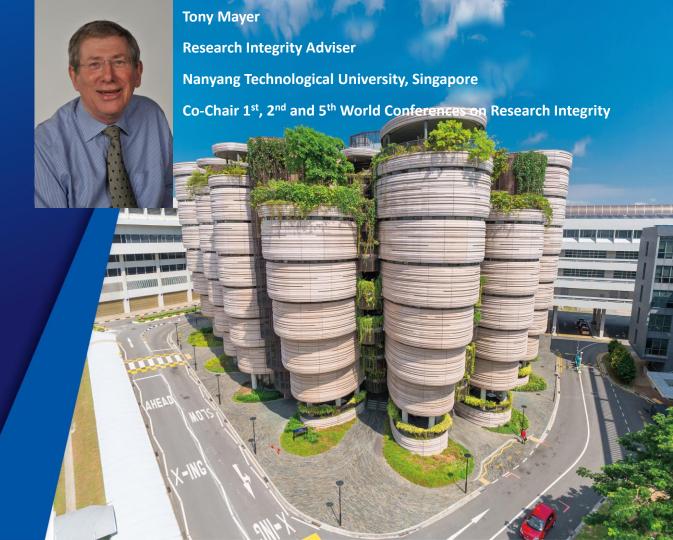


Research Integrity & Ethics – are we getting it right? -

12 July 2018





### **Research Integrity ≠ Research Misconduct**

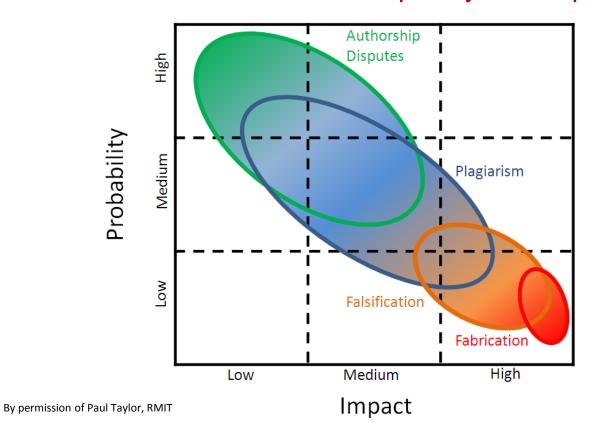
# Research Integrity should address Good Research Practice/Responsible Conduct of Research

#### **Research Misconduct**

#### represents Failures at multiple levels

- the Individual
- the PI and Group/Laboratory
  - the Institution
    - the Funder
  - the Government

#### Research Misconduct - Frequency and Impact



## There are Multiple Pressures on the Individual

#### 'Stick-to-the-Basics'

■ Staff

■ Students

#### 'Good-Manners-Cost- Nothing'

■ Provide role models

■ Modesty trumps hubris

#### 'Life-is-Complicated'

- Family pressure
- Illness
- Financial stress

# Research Misconduct Competitive Pressures

#### 'The-Mind-Plays-Tricks'

- Fear of failure
- Perfectionism

'Winning-isn't-Everything'

Publications ■ Funding ■ Positions ■ Prestige

Courtesy Tim White, NTU

# Clear lines of action needed

- Mentor the Mentors
- Train the Trainers
- Educate the Researchers in Good Practice and Strong Ethics

# Reproducibility is the Key

- Planning research including Data Management Planning - DMP
- Open access
- Transparency and accountability

# The Mallorca Declaration on Open Science

 Open Science is essential if the world is to successfully address the major challenges that it now faces. To have impact, Open Science must be based on accessibility, transparency and integrity, enabling trusted collaboration for research excellence and optimal delivery......

Ensure research integrity



# **Need to give credit for Good Research Practice**

- Conduct multiple experiments
- Ensure data is saved in multiple databases with ample security and date stamped and is searchable and accessible. Citing such sources gives credit to the researcher
- One-off data gathering (e.g. social surveys and clinical trials) has to be meticulous
- Outliers and negative results have to be reported
- Journals should publish/report repeat and replicability studies and negative outcomes

# **Need for International Collaboration in Research Integrity:** the World Conferences on Research Integrity



Second Conference (2010) responsibilities in Research Integrity

Singapore Statement on principles and



Third Conference (2013) Collaborations



Montréal Statement on Integrity in Research



- Amsterdam Agenda to assess efforts to improve Fifth Conference (2017) research integrity & the use of empirical information developing RI policies
- Sixth Conference (2019)



Hong Kong Declaration?



# Need for International Collaboration in Research Integrity: Regional Networks in Research Integrity



**ENRIO - European Network of Research Integrity Offices** 



**APRI - Asia-Pacific Research Integrity Network** 



**ARIN - African Research Integrity Network** 

## MAJOR NEW CHALLENGES IN RESEARCH INTEGRITY

- Big increase in the number of researchers and volume of research funding
  - Increasing trend of international, multi-authored publications
    - Changing technologies
      - Open Access
- CAUTION Imagery manipulation – technological advances lead to stricter rules from journals
  - Predatory Journals distorting publication
  - Rise of 'contract' PhDs extra vigilance required

# Thank You! Merci!

谢谢!

Diolch!

நன்றி Terima kasih

Dėkoju Gracias

Dziękuje Ci

Grazie

**Obrigado** 

**Aitäh** 

**Kiitos** Ďakujem Hvala

Grazzi

Tak skal du have

Ευχαριστώ

**Bedankt** 

Köszönöm

Mulţumesc

Tack

Благодаря ти

Děkuji

Go raibh maith agat

**Paldies** 

NANYANG TECHNOLOGICAL UNIVERSITY | SINGAPORE

Danke schoen

Hvala vam