Translating research integrity issues into educational initiatives– *an Asia-Pacific perspective*

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Research integrity issues in a global setting

Outline

- ▸ Research Integrity @ HKU
- ▸ Challenges with alleged research misconduct cases
- ▸ Promoting Responsible Conduct of Research @ HKU
- ▸ Common research integrity issues in Asia-Pacific countries

Overview of HKU

▸ Research intensive

▸ Comprehensive with 10 faculties: Arts, Science, Medicine, Engineering, Dentistry, Law, Education, Architecture, Social Sciences, Business and Economics

▸ 16,187 undergraduates and 11,746 postgraduates

▸ 3,000+ academic research staff (1,138 professoriate)

Our 3+1 Is:

Internationalisation
Innovation
Interdisciplinarity
IMPACT

INTERNATIONALISATION

To promote global citizenship and competitiveness, we plan to provide all students with at least one mainland China and one overseas learning opportunity by 2022.

INNOVATION

Is there life out there? Are we alone? We wish to continue encouraging critical questioning and thinking to innovate for change and social good.

INTERDISCIPLINARITY

By bringing together different and divergent minds, we aim to drive and catalyse new ways of thinking, new ideas and concepts and new ways of doing things.

IMPACT

From contributing to finding cures for the world's greatest diseases, promoting oral hygiene in developing countries, to rebuilding homes in China, our aim is to embed impact into all of our academic and educational outcomes.

Quality research, Responsible research and Impactful research

Research Integrity @ HKU

▶ Research Integrity is the central and guiding principle for all the University's scholarly activities

▶ "In pursuing our research activities, all members of the University should clearly understand our responsibility to
  ◦ uphold the highest standard of professional conduct,
  ◦ abide by the University's rules, policies and guidelines, and by relevant laws"

  (*Policy on Research Integrity, revised Jan 2013, Feb 2017*)

▶ Liaison Person on Research Integrity matters in each Faculty to strengthen communications

▶ Director and Deputy Director of Education and Development for Research Integrity appointed since 2011

Research Integrity @ HKU

- Policy on Research Integrity
- Procedures for dealing with alleged staff misconduct in research
- Regulations governing students' academic conduct concerning assessment
- Promoting responsible conducts of research

Research Integrity
A Guide for Research Postgraduate Students
at The University of Hong Kong

A publication of the Graduate School

Dealing with research misconduct @HKU

"Research Misconduct refers to:

❖ unethical practices that seriously deviate from those that are commonly accepted within the academic community for proposing, conducting, or reporting research.

❖ It can take many forms, including but not limited to:

– Plagiarism and self-plagiarism

– Abuse of data (e.g. fabrication, falsification, unethical collection and unauthorised use of data)

– Improper ascription of authorship

– Non-disclosure of potential conflict of interest

– Non-compliance with regulations and specific contractual terms"

(*Procedures for Dealing with Alleged Staff Misconduct in Research*)

Challenges in handling alleged research integrity cases

- Identifying and appointing facilitators, members of evaluation panels and investigation committee
  - Involving internal and external (overseas) members
  - Engaging senior academics with no conflict of interests
- Need to adhere to procedures strictly
- Need to engage legal advisor where appropriate
- Complete within reasonable or defined time frame at every step
- Costly
- Cases can be satisfactorily resolved, but the parties involved are generally left with a less than satisfactory experience

Promoting Responsible Conduct of Research

- University wide seminars on RCR

- Research integrity funding schemes for promotion of RCR

- Online RCR materials for self education

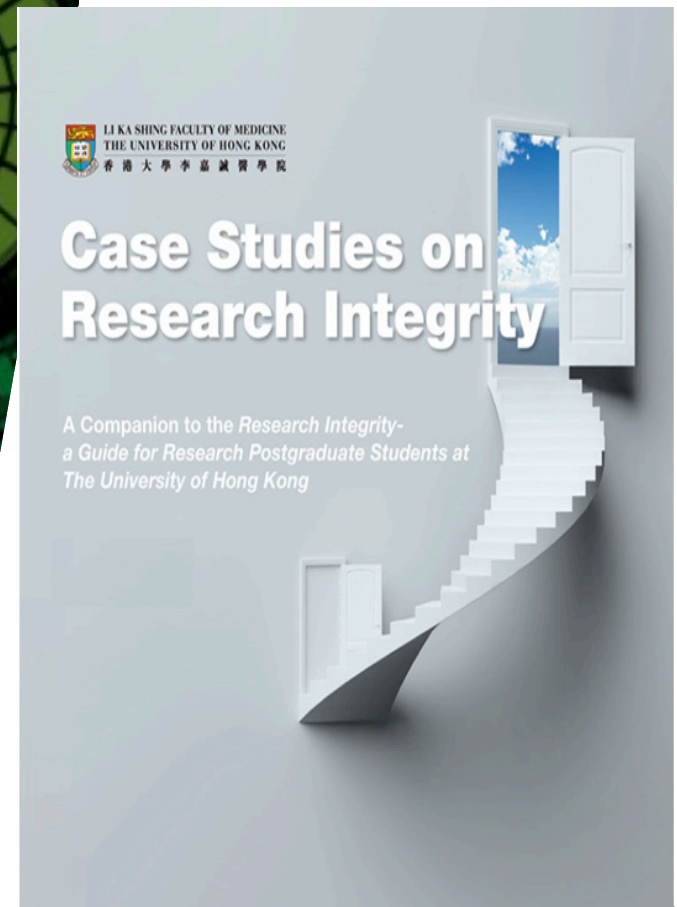- Education and promotion of RCR practices for research students

Promoting Responsible Conduct of Research

- RCR Seminars for current and new staff at all levels
- Mandatory for all staff to attend to be eligible for internal research grants and conference support
- 14 seminars organized since March 2010, over 1,300 staff have attended

Promoting Responsible Conduct of Research

The University of Hong Kong

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Support and information for HKU researchers

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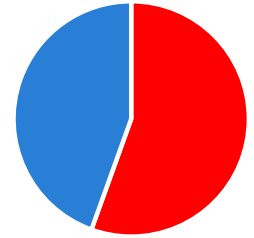   Research Data and Records Management
   Research Ethics Compliance
   Safety Approval & Insurance

Honours & Awards

RAE 2014 & Resources
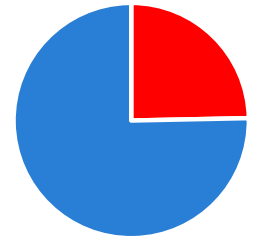
As a world-class comprehensive university with research activities spanning all major disciplines, HKU always realises the vital importance of research integrity, and all members of the University must observe the highest standards of professional conduct in pursuing their research activities. The institutional policy and arrangements for safeguarding research integrity, as approved by the Council on January 29, 2013 and adopted with immediate effect, are set out in the following documents:

▶ Policy on Research Integrity

▶ Procedures for Dealing with Alleged Staff Misconduct in Research

▶ Regulations Governing Students' Academic Conduct Concerning Assessment

Responsible Conduct of Research

HKU promotes and fosters the highest standards of conduct in the research activities of all of its members, and the University has introduced a range of initiatives including courses, seminars and a funding scheme.

▶ Responsible Conduct of Research

Research Data and Records Management

Effective research data and records management supports both high quality research and academic integrity. HKU's *Policy on the Management of Research Data and Records* was approved by the Senate on May 5, 2015. A Task Force will oversee the planning for the implementation.

▶ Policy on the Management of Research Data and Records

Asian and Pacific Rim Countries

◦ >50% of world population

◦ >25% of research publications

◦ Cross border research collaborations

◦ Share similar challenges in culture and research development

APRI

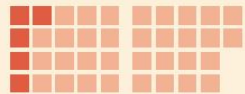# Research publications from China

TOP INSTITUTIONS

The Chinese Academy of Sciences and the nation's leading universities produce tens of thousands of papers every year. A sizeable portion of those rank among the world's best.

- 250 papers published in 2015
- Papers in the world's top 10%

CHINESE ACADEMY OF SCIENCES
Network of institutes headquartered in Beijing
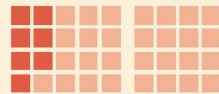**36,996** papers / **19%** in the top 10%

ZHEJIANG UNIVERSITY
Hangzhou
9,429 / **14%**

TSINGHUA UNIVERSITY
Beijing
9,017 / **18%**

PEKING UNIVERSITY
Beijing
9,030 / **20%**

FUDAN UNIVERSITY
Shanghai
6,072 / **18%**

NANJING UNIVERSITY
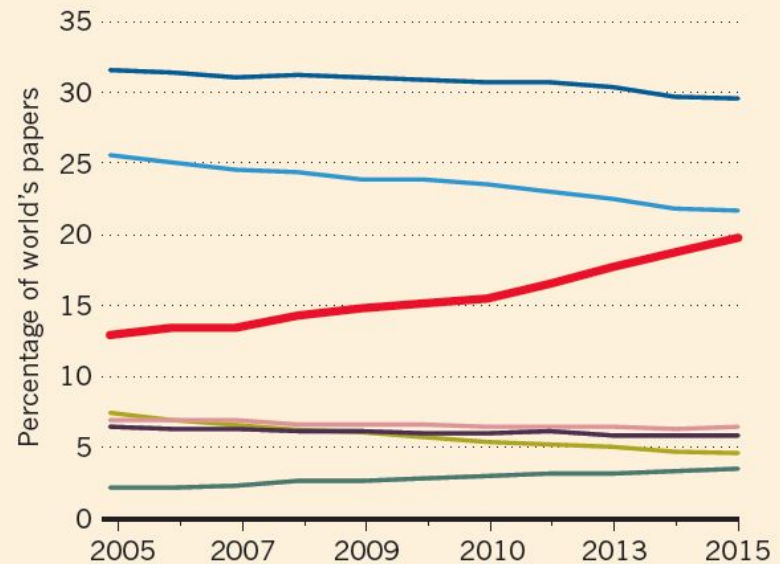*Nanjing*
5,207 / **19%**

UNIVERSITY OF SCIENCE AND TECHNOLOGY OF CHINA
Hefei
4,512 / **22%**

Rounded to nearest 250 papers.

OUTPUT

In the past decade, China's share of the world's research articles has surged from 13% to 20% — and its share of the world's top-cited articles has shown similar growth.
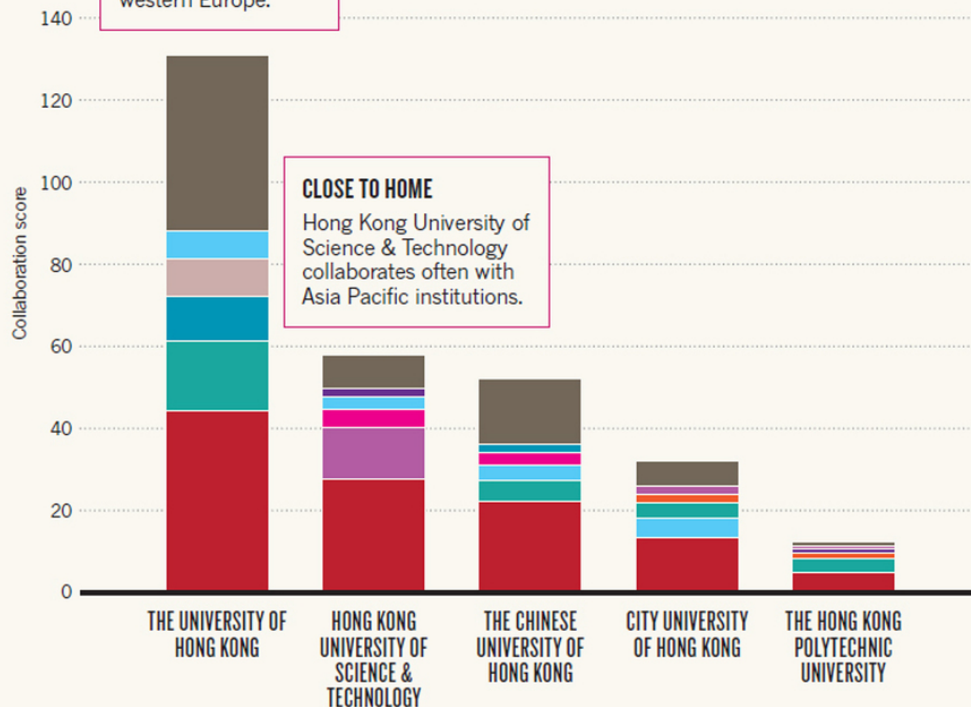
Legend: EU 28 | United States | China | United Kingdom | Germany | Japan | South Korea

Percentage of world's papers — axis: 0, 5, 10, 15, 20, 25, 30, 35
Years: 2005, 2007, 2009, 2010, 2013, 2015

Nature: 23 June 2016

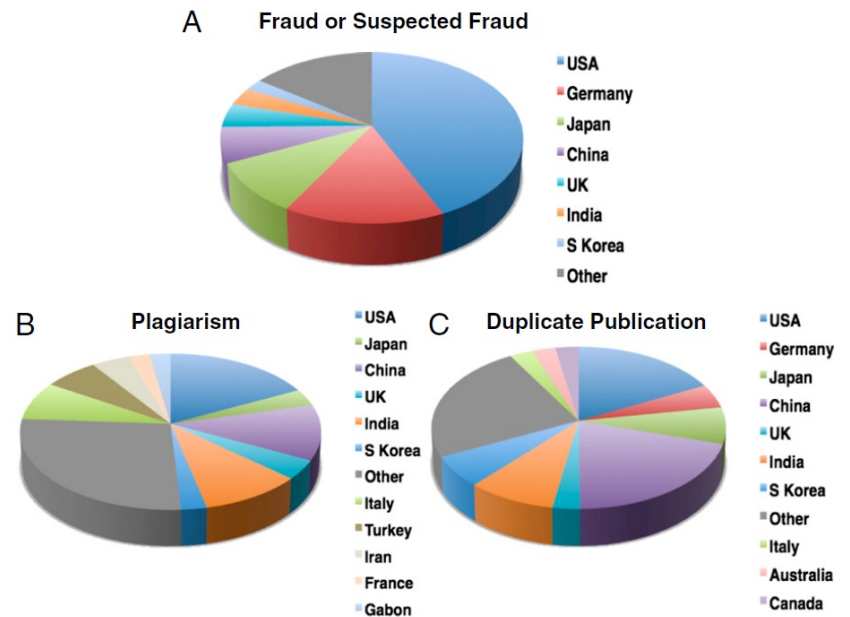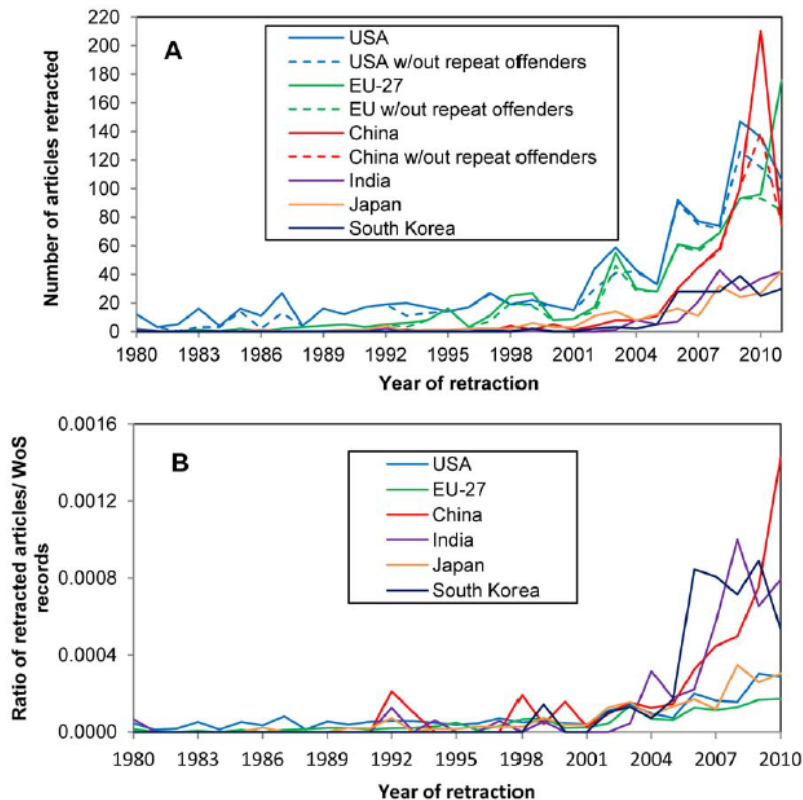# Cross border research collaborations

Correlation between impact factor and retraction index

Fang, F.C. and Casadevall, A. (2011) Infect. Immun. 79:3855–3859.

Retractions come from everywhere

Grieneisen ML and Zhang M
(2012) PLoS ONE, 7:e44118

Fang et al.
PNAS | October 16, 2012 | vol. 109 | no. 42 | 17029

Education and Concerted Efforts are needed for Responsible Conduct of Research

– a global standard for all

Asia–Pacific Research Integrity Network Meeting 2017

Date: February 20 - 22, 2017
Venue: Social Sciences Chamber, 11/F, The Jockey Club Tower
Centennial Campus, The University of Hong Kong

Around 110 participants from 20 countries:
Australia, Bhutan, Cambodia, Canada, China, Hong Kong, India, Indonesia, Japan, Malaysia, Nepal, New Zealand, Pakistan, The Philippines, Singapore, South Korea, Sri Lanka, Taiwan, Thailand, USA

Common issues in APRI network

- Increasing pressure to publish
- Publications link to career advancement
- Lack of clear policies to deal with research misconduct
- Lack of training in scientific writing and publication
- Feudal work culture and loyalty at the cost of integrity
- Lack of understanding on acceptable behaviour:
  ◦ E.g. conflict of interests, authorship attribution, human and animal research ethics approval
- Compliance to international guidelines
- Poor enforcement of policies

What APRI network can help

- Education on responsible conduct of research
- Share best practices in publication
- Coordinate and share institutional policies
- Help develop better and transparent processes
- Sources and support to handle misconduct cases
- Whistleblower protection
- Make concerted efforts

Thank you!