China's Research Integrity Monitoring System study and application

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Outlines

- Why do we need Research Integrity Monitoring System(RIMS)?
- What should RIMS be in China?
 - --Research and analysis
 - -- The framework of China's RIMS
- The application of the RIMS in China
- Discussion.

1. Why do we need RI monitoring system?

- The retraction paper incident in 2017 (Tumor biology) has made people eager to know what the integrity status is in China.
- Next year, the policy "Opinions on further strengthening research integrity" was issued by central government indicated that the government need to do the monitoring and evaluation on RI.
- However, there is no RIMS that can be used directly.



中共中央办公厅 国务院办公厅印发《关于进一步弘扬科学家精神加强作风和学风建设的意见》

"Conduct dynamic monitoring ..., results serve as an important basis for improving related work, as well as performance evaluation of research institutions and government funding for enterprises." --Opinions on further strengthening research integrity by Chinese Central government

- Nothing can be evaluated in isolation from its original historical context.
- Understanding the **development process** of RI in China is of great significance to know the status and the problem of RI field in China.
- Misconduct appeared, government paid attention on it.
- Quantitative indicators(SCI) began to be used in grant review, award review, institution assessment et al.

1980s

 Joint working mechanism on research integrity(JWMRI)

2000-2017

2018-

Representative event

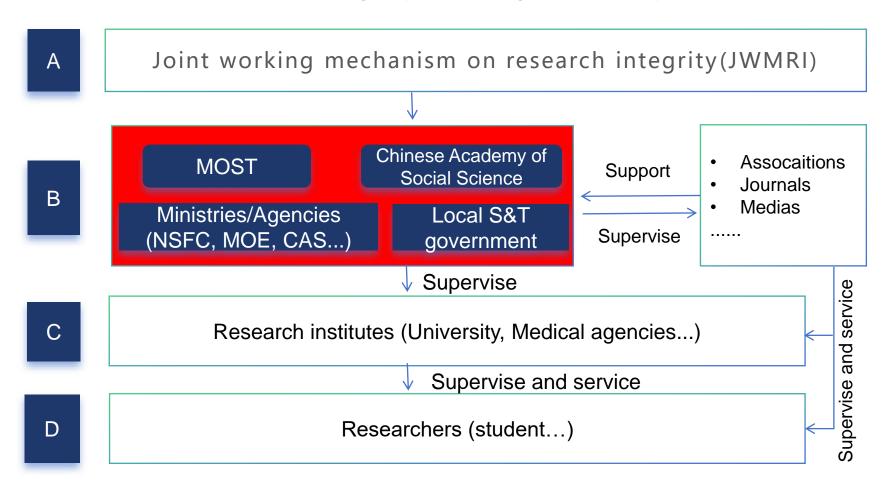
- Ethics and Equity Committee(CAS, 1996)
- Scientific Ethics Committee (CAST, 1996)

1990s

Supervisory Committee(NSFC)

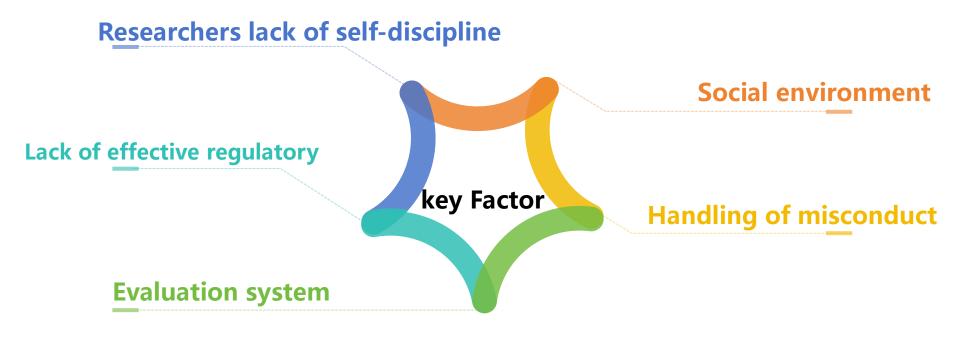
- JWMRI member increased from 6 to 21.
- Policy system
- Management system
- ...

China's Research Integrity Management System



(Summarized by Yao Yang)

Key Influencing Factors of Research Integrity



Referenced the Fourth National Survey Report on Science and Technology professionals conducted by Chinese Association for Science and Technology.

Studies, surveys and monitoring activities

Models

- Academic Integrity
 Maturity Model (Irene Glendinning group)

Annual report

- Finland
- Austria
- Denmark

Survey

- Netherlands
- Norway
- European
- USA
- Finland

Key Indicators

- Level 1 Misconduct
- One purpose of RI work is to eliminate it.
- Level 2 policy, investigation & handling, training, management office
- fundamental for research institutions to promote RI excellent
- Level 3 information disclosure, cooperation, research
- play important roles in creating good RI environments
- Level 4 social satisfaction
- -directly reflect the quality of RI



• It should be--comprehensiveness, dynamicity, operability, efficiency

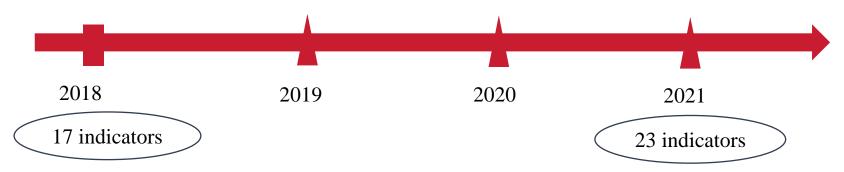
Primary indicator	Secondary indicator	Data collection
•	•	method
RI policy	1.Central government RI policy	ab
	2.Local government RI policy	ab
	3.Research institution RI policy	ce
	4. Association for Science and Technology	ce
	RI policy	
	5.Journal RI policy	ce
RI management institute	6.RI management institution of national	a
	level	
	7.RI management institution of local	ab
	government	
	8. RI management department of research	aef
	institution	
	9.RI informatization	a

Note: a, desk study. b, network retrieval. c, questionnaire survey. d, bibliometric. e, interview. f, field visit.

L	1	
Training and education	10.Training in national level	ab
	11.Training in local level	ae
	12.Training in Association for Science and	cef
	Technology	
	13.Training in research institution	cef
	14.Curriculum education in research	cef
	institution	
	15.misconduct handing in national level	abd
Misconduct occurrence and	16.Misconduct occurrence in research	<u>cd</u>
	institution	
handing	17.misconduct handing in research	<u>cd</u>
	institution	
Misconduct paper	18.Retraction of international papers	d
retraction	19.Types of misconducts	d
RI academic study and cooperation	20.International papers in RI field	d
	21.Important meeting or cooperation in RI	ab
	field	
	22.Social satisfaction	С
Social satisfaction	23.Feelings on the occurrence of	С
	misconduct around them	

3. The application of the RIMS in China

 The system has been used in China since 2018, it was optimized on some indicators during these years.



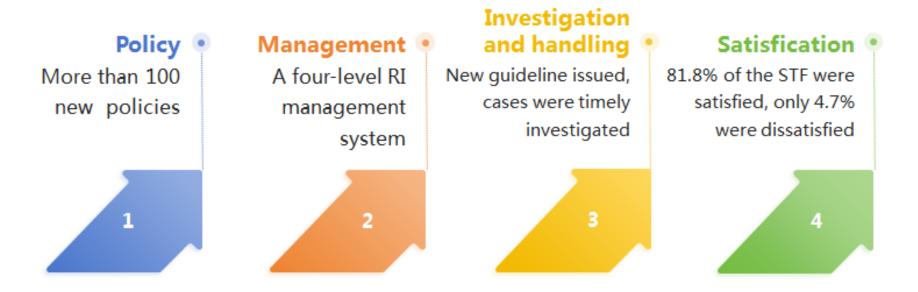
- **Desk study:** *more than* **200** *reports and papers*
- Questionnaire survey: 420 institutions, 36 Associations, 14014 researchers
- Interview: experts in RI field, RI manager in institutions

- Network retrieval: government websites related to RI
- **Bibliometric:** more than **29000** retracted papers in RETRACTION WATCH

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4.Discussion

 By analyzing on the monitoring data, it's not difficult to find that China has made great progress in RI in the past few years.



4.Discussion

Challenges as well as the world

- Assessment on science and technology
- scientific and industrial revolution
- paper mills
- **-**

Our monitoring system has some limitations

- First, the monitoring activity requires enough funding for the data collection, data analysis, interview......
- Second, it's difficulties to collect some indicator data in the monitoring process, such as the misconduct data.
- Third, the monitoring system is not universal, it is valuable for other countries to reference but can not be used unchanged.

Thanks for your attention!

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Note: This report only represents personal opinions and does not represent the views of any agency.