#### Metodologi Penelitian Ilmiah

# Research Misconduct

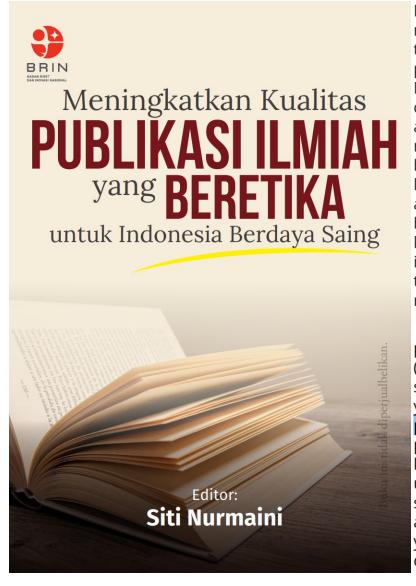


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## Mengapa terjadi?



Hasil riset dan pengembangan wajib dipublikasikan dan didiseminasikan oleh sumber daya manusia (SDM) ilmu pengetahuan dan teknologi (iptek) dan/atau kelembagaan iptek yang diatur pada pasal 2, Undang-undang Nomor 11 Tahun 2019 tentang Sistem Nasional Ilmu Pengetahuan dan Teknologi. Peraturan ini berlaku di lembaga penelitian dan pengembangan (litbang) serta perguruan tinggi (PT). Sesungguhnya banyak lembaga di Indonesia yang melakukan kegiatan riset; setiap PT wajib melaksanakan riset sebagaimana amanah Tridarma PT, demikian juga dengan lembaga litbang pemerintah dan non-pemerintah. Hasil olahan data dan analisis menunjukkan bahwa implementasi regulasi tersebut pada badan litbang dan PT melalui berbagai kebijakan pendukung, khususnya mengenai indikator luaran riset, yaitu publikasi ilmiah internasional bereputasi yang berkualitas, ternyata masih terbatas. Dengan demikian, perbaikannya perlu diawali melalui suatu risalah kebijakan.

Empat masalah yang telah diidentifikasi dan perlu mendapat perhatian pemerintah dan setiap pemangku kepentingan meliputi, (1) rendahnya jumlah publikasi ilmiah berkualitas, (2) rendahnya sitasi publikasi ilmiah internasional, (3) rendahnya sinergi pendayagunaan SDM iptek nasional dan internasional, dan (4) rendahnya pembinaan atas etika dan integritas akademik. Keempat masalah pokok tersebut diangkat sebagai isu strategis terkait peningkatan kualitas publikasi ilmiah internasional bereputasi yang beretika untuk Indonesia berdaya saing. Risalah kebijakan ini memberikan sepuluh rekomendasi. Infografis yang disajikan merupakan hasil analisis data yang dikumpulkan dari berbagai sumber basis data yang relevan pada periode tahun yang berbeda serta disesuaikan dengan keperluan informasi yang dibutuhkan.

### Mengapa terjadi?

- Supervisi yang buruk
- Kurangnya pengetahuan
- Ingin mendapatkan posisi strategis
- Tekanan rekan / lingkungan
- Ingin terlihat hebat
- Ingin mendapatkan nilai A di Makul MPI (\*\*)?





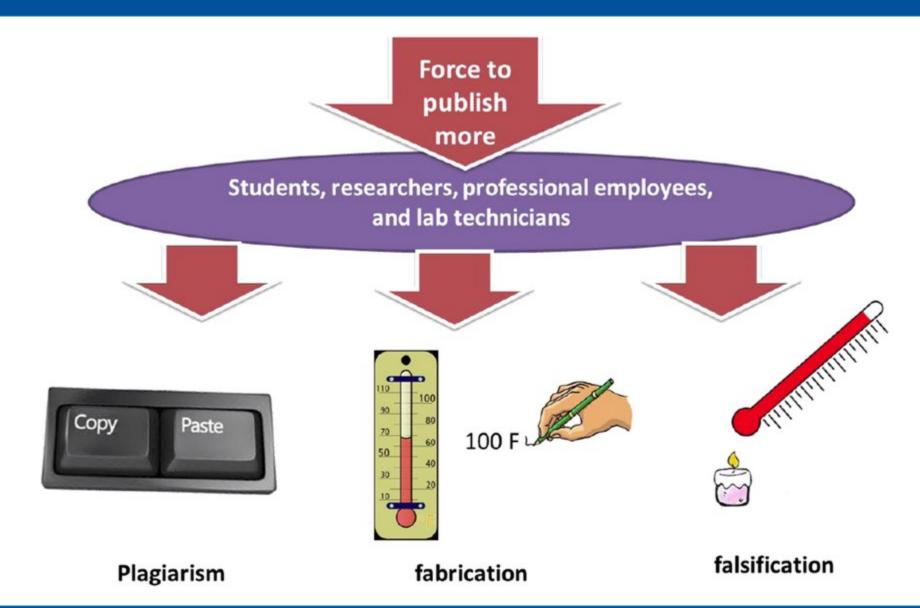
#### Questions?

Contact Penn State's Research Integrity Officer, Candice Yekel: Email: researchconcerns@psu.edu

Phone: 814-865-1775



# Mengapa terjadi?



Metodologi Penelitian Ilmiah

### **Definisi**

- Research misconduct defined as Fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results. (Code of Federal Regulations 42 CFR Part 93, 2006)
- Research misconduct occurs when a researcher fabricates or falsifies data, or plagiarizes information or ideas within a research report. (APA, 2008)

technically correct; and (4) use plain, and more precise language.

#### III. Significant Comments Not Resulting in Changes

A. Definition of Research Misconduct, Sec. 93.103

Although most commentators supported the new definition of research misconduct, there were a number of comments recommending changes, including that: (1) The definition should be based on deception; (2) the definition of falsification is inadequate because it does not cover the nonexperimental manipulation of human or animal subjects with the goal of influencing research results, or bias in the coding of qualitative data; (3) the definition of plagiarism should expressly exclude authorship and credit disputes; and (4) the definition of misconduct should be expanded to include negligent and intentional mistreatment of animals.

As explained in the preamble of the NPRM, the proposed definition of research misconduct, which is included in this final rule without change, includes OSTP's description of "fabrication, falsification, and not, they are plagiarism." That description is clear complete all and sufficiently concrete to provide the complete in basis for reasonable determinations of whether research misconduct has

occurred and whether the misconduct

We have r the other pr institutions respondents research sub from research believe thes same protec Institutions discretion in confidential to extend th committee r consistent v OSTP confid complainan not requirin

#### C. Definition Oral Allegai

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### **Definisi**

(Resources for Research Ethics Eduation)

- Fabrication
   making up data or results and recording or reporting them
- Falsification
   manipulating research material, equipment, or processes, or changing or omitting
   data or results such that the research is not accurately represented in the research
   record
- Plagiarism
   the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

### Jumlah Pelanggaran Penelitian

(Resources for Research Ethics Eduation)

- There are some indications that research misconduct occurs only rarely, although questionable research practices may be common (e.g., Kalichman and Friedman, 1992; Martinson et al., 2006).
- However, there are many barriers to accurately quantifying the extent of research misconduct; for example, cases may go unreported and institutions may be biased against finding misconduct.
- The actual rate of research misconduct could be as low as 1 in 100,000 or as high as 1 in 100 (Steneck, 2000; Steneck, 2006). Yet, in the past 25 years, many serious allegations of misconduct have been widely publicized, and some of those were borne out by subsequent investigation.

### Jumlah Pelanggaran Penelitian

(Resources for Research Ethics Education)

Hwang Woo-suk's Stem Cell Research (Sang-Hun, 2009)

In 2006, Korean researcher Hwang Woo-suk was found to have fabricated a series of experiments in stem cell research. He reported creating embryonic stem cells through cloning in two Science journal articles. In addition to research misconduct, Hwang was charged with embezzlement and bioethics violations.

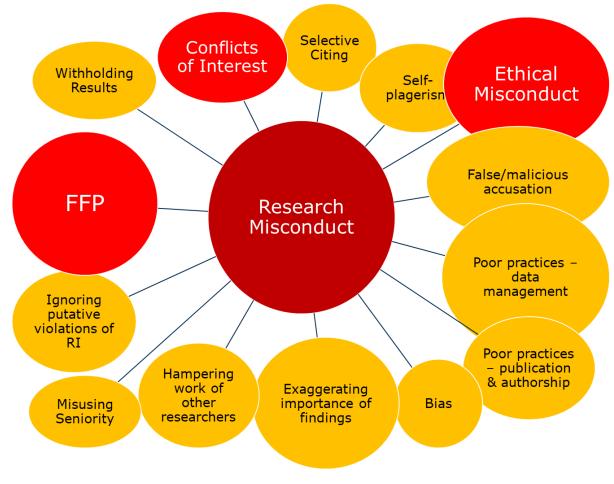
Bengü Sezen's Research Misconduct (Marcus, 2010)

Bengü Sezen, a chemistry researcher at Columbia University, is notorious for one of the worst cases of research misconduct in the chemistry community. Sezen perpetrated a massive, sustained effort to manipulate and falsify research data. Even going to the extent of creating fictitious people and organizations to backup her data. The Office of Research Integrity found Sezen guilty of 21 counts of research misconduct.

### Pelanggaran atau Ketidaksengajaan?

(Resources for Research Ethics Education)

- Setidaknya, sesuatu dianggap sebagai pelanggaran penelitian harus dilakukan dengan
  - sengaja, sadar, atau sembrono
  - harus ada penyimpangan yang signifikan dari praktik wajar yang relevan.
- Tidak semua pelanggaran termuat didalam peraturan terkait
- Jika ada dugaan pelanggaran yang termuat di dalam peraturan, kita dapat melakukan proses tertentu yang harus dilakukan



University College Cork

## Dugaan Pelanggaran

(Resources for Research Ethics Eduation)

- Inquiry: assessment of whether allegation has substance and if an investigation is warranted
- Investigation: formal development of a factual record, and examination of that record leading to dismissal of the case or to a recommendation for a finding of research misconduct or other appropriate remedies
- Adjudication: recommendations are reviewed and appropriate corrective actions determined

# **Dugaan Pelanggaran**

#### Allegations of Research Misconduct

Research misconduct means fabrication, falsification, citation manipulation, or plagiarism in producing, performing, or reviewing research and writing an article by authors, or in reporting research results. When authors are found to have been involved with research misconduct or other serious irregularities involving articles that have been published in scientific journals, Editors have a responsibility to ensure the accuracy and integrity of the scientific record.

In cases of suspected misconduct, the Editors and Editorial Board will use the best practices of COPE to assist them to resolve the complaint and address the misconduct fairly. This will include an investigation of the allegation by the Editors. A submitted manuscript that is found to contain such misconduct will be rejected. In cases where a published paper is found to contain such misconduct, a retraction can be published and will be linked to the original article.

The first step involves determining the validity of the allegation and an assessment of whether the allegation is consistent with the definition of research misconduct. This initial step also involves determining whether the individuals alleging misconduct have relevant conflicts of interest.

If scientific misconduct or the presence of other substantial research irregularities is a possibility, the allegations are shared with the corresponding author, who, on behalf of all of the coauthors, is requested to provide a detailed response. After the response is received and evaluated, additional review and involvement of experts (such as statistical reviewers) may be obtained. For cases in which it is unlikely that misconduct has occurred, clarifications, additional analyses, or both, published as letters to the editor, and often including a correction notice and correction to the published article are sufficient.

Institutions are expected to conduct an appropriate and thorough investigation of allegations of scientific misconduct. Ultimately, authors, journals, and institutions have an important obligation to ensure the accuracy of the scientific record. By responding appropriately to concerns about scientific misconduct, and taking necessary actions based on evaluation of these concerns, such as corrections, retractions with replacement, and retractions, J\_MASIF journal will continue to fulfill the responsibilities of ensuring the validity and integrity of the scientific record.

#### Indexing

J MASIF is indexed by:





Peer Review Process / Policy

Publication Frequency

**Open Access Policy** 

Publication Ethics and Malpractice
Statement

Indexing

**Metodologi Penelitian Ilmiah** 

### Tanggunjawab Bersama

- Penyandang Dana memiliki otoritas pengawasan tertinggi untuk penelitian yang didanai
- Lembaga penelitian memikul tanggung jawab utama untuk pencegahan dan deteksi kesalahan penelitian dan ketika ada laporan pelanggaran penelitian
- Peneliti sebagai pelaku utama penelitian

## Menghindari Pelanggaran Penelitian

Bagaimana menghindari pelanggaran penelitian?

- Fabrication
  - Lakukan penelitian secara nyata, jangan mengada-ada
- Falsification
  - Sampaikan data yang ada meskipun hasilnya kurang memuaskan
  - Sesuaikan dengan level jurnal yang akan dituju
- Plagiarism
  - Gunakan alat bantu deteksi plagiasi
  - Parafrase
  - Kutip/cantumkan karya orang lain



### **Integritas Penelitian**

(UK Research Integrity Office)

#### Rigour

In line with disciplinary norms, including in:

- Appropriate methods
- Following protocols
- Interpreting data
- Drawing conclusions
- Disseminating results

#### **Honesty**

In all aspects of research,

- including:
  - Planning
  - Methods
  - Data collection
  - Credit
  - Reporting
  - Interpretation



#### **Transparency**

Promoting trust and confidence, including by:

- Reporting full methods
- Publishing all results
- Sharing data, code and materials
- Declaring conflicts of interest

#### Respect

For everyone & everything involved in research, including:

- Colleagues
- Other researchers
- Participants
- Animals
- The environment

#### Accountability

Of everyone involved in research, including:

- Researchers
- Institutions
- Funding bodies
- Publishers

### Sekian

# **TERIMAKASIH**

Metodologi Penelitian Ilmiah Research Misconduct