

أخلاقيات البحث العلمي

Ethics of Scientific Research

وكالة الجامعة للدراسات العليا والبحث العلمي بجامعة المجمعة

عمادة البحث العلمي

لجنة أخلاقيات البحث العلمي

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Ethics of Scientific Research

- **Presentation outline:**
 - Research Misconduct
 - Mentoring
 - Authorship
 - Research Involving Human Subjects
 - Institutional Review Board (IRB)
 - IRB Approval Requirements

Research Misconduct

Research Misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research or in reporting research results

Fabrication

- **Fabrication: making up data or results and recording and reporting them (OSTP 2000)**
 - Involves fake data to fit a hypothesis
 - It could include:
 - Fictional tables
 - Graphs
 - Figures

That are placed in manuscripts, grant application and poster presentation

Falsification

- ▶ **Falsification: manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record (OSTP 2000)**
 - ▶ Manipulating existing results to fit a preferred hypothesis
 - ▶ Altering data to make them appear more convincing
 - ▶ It can occur in graphs, figures, and images

Plagiarism

- ▶ **Plagiarism: the appropriation of another person's ideas, processes, results, or words without giving appropriate credit (OSTP 2000)**
 - ▶ Using someone else's words or ideas
 - ▶ Without giving proper credit or attribution to the original author

Mentoring

- **Mentoring:** complex phenomenon that can affect the personal and professional lives of the mentor and trainee, the culture of an organization, and the future of research
- **The primary responsibility of a mentor include:**
 - Being an honest and fair person
 - Clarifying expectations
 - Avoiding conflict between roles

Mentoring

- **4 qualities to be an effective mentor**
 - Experience with the research and the challenges that trainees may confront
 - The ability and willingness to communicate that experience
 - An interest in helping another person develop into a successful professional
 - Admirable character traits
- **The roles and responsibilities of a trainee include:**
 - Identifying goals
 - Actively participating in the process of finding a mentor
 - Being a proactive trainee

Authorship

- **Authorship: the way that the research community identifies those who should be both recognized and credited with a specific contribution to the work, and held responsible and accountable for the information contained in publications.**
- Authorship is based on:
 - Substantial contributions to the conception or design of the work, or the acquisition, analysis, or interpretation of data for the work
 - Drafting the work or revising it critically for important intellectual content
 - Final approval of the version to be published
 - Agreement to be accountable for all aspects of the work

Authorship is based on intellectual contribution rather than material contribution

Research Involving Human Subjects

- **Ethical Principles:**
 - Respect for persons
 - Beneficence
 - Justice
 - Informed consent

Informed consent

- **Researchers should address the following points:**
 - The purpose of the research
 - Possible benefits and risks associated with the research
 - The subject's rights (freedom to stop participating at any time)
 - How the subject's privacy and confidentiality will be protected
 - Whether there is compensation for participation
 - Who the contact person if the subject has questions or concern about the research

Institutional Review Board (IRB)

- An IRB, also sometimes referred to Research Ethics Board, seeks to ensure that only ethically and legally research involving human subjects is allowed to proceed.
 - Role:
 - Review the consent form
 - Assess the safety of the subjects
 - Ethical and practical guidelines:
 - Confidentiality
 - Fairness of the review process
 - Professionalism

IRB Approval Requirements

- **Majmaah University:**
 - IRB application
 - Consent form
 - Research proposal
 - CV

- **Other organizations:**
 - MOH: research@moh.gov.sa
 - Requires NIH certificate

References

- ▶ Collaborative institutional training initiative
<https://www.citiprogram.org>

**Thank you for listening
Questions?**