أخلاقيات البحث العلمي

Ethics of Scientific Research

 وكلاء 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 is 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?