Writing ethics

Research ethics provides guidelines for the responsible conduct of research. In addition, it educates and monitors scientists conducting research to ensure a high ethical standard. The following is a general summary of some ethical principles:

1.Honesty:

Honestly report data, results, methods and procedures, and publication status. Do not fabricate, falsify, or misrepresent data.

2.Objectivity:

Strive to avoid bias in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of research.

3.Integrity:

Keep your promises and agreements; act with sincerity; strive for consistency of thought and action.

4.Carefulness:

Avoid careless errors and negligence; carefully and critically examine your own work and the work of your peers. Keep good records of research activities.

5.Openness:

Share data, results, ideas, tools, resources. Be open to criticism and new ideas.

6.Respect for Intellectual Property:

Honor patents, copyrights, and other forms of intellectual property. Do not use unpublished data, methods, or results without permission. Give credit where credit is due. Never plagiarize.

7.Confidentiality:

Protect confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets, and patient records.

8.Responsible Publication:

Publish in order to advance research and scholarship, not to advance just your own career. Avoid wasteful and duplicative publication.

9.Responsible Mentoring:

Help to educate, mentor, and advise students. Promote their welfare and allow them to make their own decisions.

10.Respect for Colleagues:

Respect your colleagues and treat them fairly.

11.Social Responsibility:

Strive to promote social good and prevent or mitigate social harms through research, public education, and advocacy.

12.Non-Discrimination:

Avoid discrimination against colleagues or students on the basis of sex, race, ethnicity, or other factors that are not related to their scientific competence and integrity.

13.Competence:

Maintain and improve your own professional competence and expertise through lifelong education and learning; take steps to promote competence in science as a whole.