

THE RESPONSIBILITIES AND RIGHTS OF SCIENTISTS

The American Geophysical Union (AGU) believes that the free, open, and responsible practice of science is fundamental to scientific advancement for both human and environmental well-being. Science requires freedom of movement, collaboration, and communication, as well as equitable access to data and resources. It requires scientists to conduct and communicate scientific work for the benefit of society, with excellence, integrity, respect, fairness, trustworthiness, clarity, and transparency. AGU rejects discrimination and harassment of any kind, including that based on such factors as ethnic origin, religion, citizenship, language, politics, sex, gender identity, sexual orientation, disability, or age, among others. AGU supports fair, just, and equitable access to scientific endeavors for all peoples and communities¹.

Although the culture of science differs internationally, the integrity of the scientific process must always be inviolate. Students, post-docs, and scientists at all career levels share responsibilities and rights that must be followed individually and defended universally.

1. Responsibilities of All Scientists

a. Excellence in the Conduct of Research

- i. Employ high quality research methods to the best of one's understanding and ability, and base conclusions on critical analysis of all of the evidence.
- ii. Engage honestly and objectively in the publication and peer review process and report results and interpretations fully, accurately, and with honest disclosure of bias.
- iii. Maintain clear, accurate records of research and data, using standards that allow others to verify and replicate the work, in line with the [AGU Position Statement on Data](#).

b. Ethics

- i. Communicate findings, conclusions, and uncertainty honestly, clearly, and transparently and disclose all conflicts of interest from any sources that would, or could be perceived to, bias conclusions whether addressing scientists, policy makers, or the general public.
- ii. Upon publication of results, make all research data, methods, models and source code as open as possible, as closed as necessary, and ensure the outputs of research are findable, accessible, interoperable and reusable ('FAIR'), to maximize their benefits to science and society.
- iii. Seek opportunities to contribute knowledge and technical skills in support of the sustainability, resilience, health, and welfare of the environment and society.
- iv. Protect the health and safety of people, animals, and the environment, following ethical guidelines for their treatment and bearing in mind the broader implications of one's research for the environment and society.
- v. Respect the knowledge systems and relationships that exist between communities and their ecosystems; and consider the impact research may have on them as part of the scientific obligation to protect the welfare of society.
- vi. All lands and waters that are engaged with as part of the scientific endeavor should be done so with a respectful and consensual basis. In particular scientists should receive informed consent, consistent with [UNDRIP](#), when entering into Indigenous territories.

- vii. Oppose any unethical or illegal actions, policies, procedures, or other directives that impact the conduct of science and actively work to correct them.
 - viii. Uphold the standards of the AGU Scientific Code of Conduct and Professional Ethics and report any instances of misconduct.
- c. Inclusion
- i. Cultivate a diverse workforce and equitable and inclusive environment that drives scientific careers to flourish, particularly among underserved communities.
 - ii. Ensure the proper citation and acknowledgement of the work of others, including the intellectual contributions to science from other systems of knowledge.

Rights of All Scientistsⁱⁱ

- a. Conduct of Science
- i. The right to conduct research on any topic that does not breach professional ethical standards.
 - ii. The right to oppose unethical or illegal actions, policies, procedures, or other directives that impact the conduct and publication of science, without fear of retaliation.
 - iii. The right to be clearly informed about the requirements and expectations of employment.
 - iv. The right of due process related to any complaint of scientific misconduct, including the right to review and inspect evidence, have legal representation, provide a defense in a hearing before peers, and appeal.
- b. Collaboration with Others
- i. The right to work with and mentor colleagues of choice, independent of politics or affiliation.
 - ii. The right to decide jointly how research can best be undertaken and shared, adhering to ethical scientific principles and respecting intellectual property.
- c. Communication
- i. The right to freely express results of research at scientific meetings, in scientific literature, and in the media without impediment, harassment, threat, or retaliation.
 - ii. The right to protect preliminary results until publication.
 - iii. The right to protect data related to the privacy of human beings and communities, confidential information covered by law or contract, and the locations of endangered species or important historical or cultural artifacts and fossils.
 - iv. The right to respond to inaccurate portrayals of science by any individual or group including government and institutional administrators, the media, private companies or industry representatives, and political entities.
 - v. The right of last review on institutional communication materials relating to a scientist's work.

Adopted by AGU April 2017; Revised and reaffirmed December 2021.

ⁱ AGU Diversity and Inclusion Strategic Plan <https://www.agu.org/-/media/Files/Learn-About-AGU/AGU-Diversity-and-Inclusion-Strategic-Plan-2019.pdf> [PDF].

ⁱⁱ Scientists share basic human rights as specified in the United Nations Declaration of Human Rights (1948). References: http://www.icsu.org/publications/icsu-position-statements/freedom-conduct-science/388_DD_FILE_Freedom_Conduct_Science_oct_95.pdf, <http://www.singaporestatement.org/statement.html>, [AGU Scientific Integrity and Professional Ethics Policy](#) [PDF].