

# **Report of the Task Force on Scientific Ethics:**

**Review and Update of AGU Policies on Scientific  
Integrity and Professional Ethics**

# Task Force

- **Chair:** Linda Gundersen, USGS
- **AGU Staff Liaison:** Randy Townsend
- **Members:**
  - David J. Chesney, Michigan Tech University
  - Floyd DesChamps, Alliance to Save Energy
  - Karen Fischer, Brown University
  - Tim Grove, Massachusetts Institute of Technology
  - Noel Gurwick, Union of Concerned Scientists
  - Dennis Moore, National Oceanic and Atmospheric Administration
  - Arthur Nowell, University of Washington
  - Len Pietrafesa, Coastal Carolina University
  - Jeff Plescia, The Johns Hopkins University, Applied Physics Lab
  - Peter Schuck, National Aeronautics and Space Administration
  - Jagadish Shukla, Geo Mason-Center Ocean/Land Atmosphere
  - Vivian Weil, Center for Ethics, Illinois Institute of Technology

# Report Recommendations

1. Provide opportunities for members to discuss policy use symposia and workshops
2. Provide special sessions and training aimed at students and early career scientists.
3. Provide a “one-stop” webpage that allows members to readily find this new policy and related policies
4. Establish an Ethics Committee and Charter
5. Utilize both education activities and sanctions to mitigate scientific misconduct
6. Review policy periodically for updates
7. Create a system for collecting, tracking, recording, and archiving relevant information from the allegation and publications processes related to scientific misconduct.
8. Publish annually the statistics regarding allegations
9. Work with sister societies to reinforce these policies across the scientific enterprise.
10. Consider requiring the reading and agreeing to this policy as a condition of membership.

# The Policy

1. The membership will conduct themselves according to the highest professional and ethical standard in their professional activities, scientific research, communications, and public engagement in order to preserve the integrity of science and the public trust.
2. Scientific research, and the preparation of the results, must be free of any impropriety or undisclosed conflicts of interest. Intentional plagiarism, fabrication, or falsification are serious examples of scientific misconduct and as such are inappropriate actions that will discredit the Union and compromise the integrity of science.
3. The peer review process must strive to be fair, unbiased, and committed to upholding the scientific excellence of research.
4. An investigation of any alleged violation of these principles or code shall be conducted in the event of credible accusations to ensure that the scientific community and public continue to regard AGU as ethical, authoritative, objective, and professional.
5. It is the responsibility of each member of the Union to uphold the standards of scientific conduct and to report allegations of unethical scientific practice to the AGU Ethics Committee.

# Scientific Code of Conduct includes:

- 13 responsibilities for all members based upon the internationally accepted Singapore Statement on Research Integrity (<http://www.singaporestatement.org/>)
- 10 responsibilities specifically for AGU Volunteers and Leaders
- Ethical Guidelines for Publication for Editors, Reviewers and Authors
- Procedures for filing, receiving, and responding to allegations, conducting investigations, and actions to be taken.

# Scientific Misconduct

Definition of “scientific misconduct “ used in this policy includes violations of the scientific codes of conduct and professional ethics as provided in this policy and the formal definition of research misconduct from the Federal Policy on Research Misconduct - Falsification, Fabrication, and Plagiarism

# Allegations

A finding of scientific misconduct requires that:

1. There is a significant departure from accepted practices of the relevant research community; and
2. The misconduct be committed intentionally, or knowingly or recklessly; and
3. The allegation must be proven by a preponderance of evidence.

The policy contains procedures for filing, receiving, and responding to allegations, the conduct of investigations, actions that can be taken, conditions of appeal and dismissal.

# Ethics Committee

- Reports to the Board of Directors
- Responsible for investigating allegations that are deemed by the Chair of the Ethics Committee to be substantial.
- Membership includes one representative from each of the following groups: the Publications Committee, the Meetings Committee, and the Outreach Committee, and additionally, one Editor from the following three categories: AGU Editors in Chief, Editors, and Associate Editors. Additional members may be added to a specific investigation to provide subject matter expertise pursuant to the allegation.
- The Chair will name one of the Committee members as Vice Chair
- Members serve for two years and will be nominated from their respective committees and the community of Editors.



# Findings and Sanctions

- The Board of Directors has the final authority to determine what actions will be taken if an allegation of scientific misconduct is found to be substantiated.
- Sanctions include a broad variety of actions that vary in severity from written reprimands to suspension of membership, to permanent expulsion from AGU, to notification of the home institution, to a public statement regarding the scientific misconduct
- Interactions with other institutions may be required by Federal law when the research in question is funded by the Federal Government
- Editors and the Ethics Committee will be responsible for recording allegations and decisions in a secure AGU database with access limited to their use and that of the Board of Directors

# Questions