Workshop on Best Practices for Ensuring Scientific Integrity and Preventing Misconduct

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Scientific Misconduct

How to define Scientific Misconduct?

- Fabrication, Falsification and Plagiarism (FFP)
- Questionable Research Practices (QRP) as important, given frequency

Consequences of Misconduct

- Harm to individuals, society, and research subjects (e.g. unsafe product or process);
- Damage to science itself (false leads)
- Increase in bureaucracy; decrease in funding
- Undermining public trust, declining enrolment
- Declining credibility of scientific analysis and policy advice

General Structure of a System

- Focus on Integrity rather than Misconduct
- Establish a Code of Conduct, accepted by Community
- Have a strong Education System for Prevention
- Give Institutions primary responsibility for maintaining Integrity
- Have a consistent, widely publicized System for handling Allegations

Systems for Misconduct Allegations

- National Level Committee(s) (Denmark, Norway)
- Institutional Standing Committees
- Institutional Ad Hoc Committees (Canada)
- Above may be with or without Standards body (US-ORI, UK-RIO), or Ombudsman (Germany)

Principles of an Integrity System

- Transparency
- Confidentiality
- Consistency (in process, penalties)
- Fairness (C of I, separation of roles etc.)
- Appropriate degree of Bureaucracy

Causes and Contributing Factors

- Competition for funds
- Pressure to publish
- Lack of time for research
- Promotion criteria

Remedies, Preventive Measures

- Implement a formal, effective Integrity System
- Adopt clear definitions, rules, codes of conduct
- Implement strong Educational Measures
- Promote Integrity from Institutional Leader on down
- Increase chances of being caught, publicize cases
- Review whole science system (e.g. pressures on researchers)