

# STATEMENT OF PRINCIPLES FOR SCIENTIFIC MERIT REVIEW\*



## Preamble

Research funding agencies worldwide identify and support scientific research that creates new knowledge and benefits society. Trusted with government funding, these agencies are publicly accountable for their funded research efforts. As stewards of the public trust, these institutions must demonstrate excellence in the assessment of proposed research and be responsive to program objectives. Rigorous and transparent scientific merit review helps to assure that government funding is appropriately expended on the most worthy projects to advance the progress of science and address societal challenges.

The rapid growth of research and education capacity worldwide is enabling unprecedented opportunities for global collaboration to expand scientific knowledge and to improve the quality of life and well-being of citizens. To foster collaborations and to realize the benefits of international cooperation, the following Principles for Scientific Merit Review are endorsed at the May 2012 Global Summit on Scientific Merit Review.

## Principles

### Expert Assessment

Collectively, reviewers should have the appropriate knowledge and expertise to assess the proposal both at the level of the broad context of the research field(s) to which it contributes and with respect to the specific objectives and methodology. Reviewers should be selected according to clear criteria.

### Transparency

Decisions must be based on clearly described rules, procedures and evaluation criteria that are published *a priori*. Applicants should receive appropriate feedback on the evaluation of their proposal.

### Impartiality

Proposals must be assessed fairly and on their merit. Conflicts of interest must be declared and managed according to defined, published processes.

### Appropriateness

The review process should be consistent with the nature of the call, with the research area addressed, and in proportion to the investment and complexity of the work.

### Confidentiality

All proposals, including related data, intellectual property and other documents, must be treated in confidence by reviewers and organizations involved in the review process.

### Integrity and Ethical Considerations

Ethics and integrity are paramount to the review process.

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\* The terms Merit Review and Peer Review are used interchangeably in the context of this document.

## The Development of the Statement of Principles on Merit Review

The May 2012 Global Summit on Merit Review was hosted by the U.S. National Science Foundation (NSF) in Arlington, Virginia, USA. Heads of science and engineering funding agencies from approximately 50 countries or regions (primarily comprising the G20 and Organisation for Economic Co-operation and Development (OECD) countries) participated in the meeting.

The genesis for the Global Summit on Merit Review came from two separate avenues. In October 2010, the European Science Foundation and the EUROHORCs (European Heads of Research Councils) organizations hosted a "Pilot High Level Round Table Meeting with non-European Counterparts." At this international meeting, the ESF/EUROHORCs Vision<sup>1</sup> for enhanced international research cooperation was presented. NSF was invited to host a subsequent HORC meeting on the topic of peer review. In parallel with the European activities, in early 2011, the White House Office of Science and Technology Policy (OSTP) invited the NSF Director to convene a meeting of counterparts from around the world to discuss ways to further international research cooperation.

In the summer of 2011, NSF formed an International Steering Committee (ISC) that was tasked with obtaining broad international input into a statement of principles on merit review with the objective of framing the discussion at the May 2012 Summit. Members of the ISC came from research funding agencies around the world<sup>2</sup>, and organized regional meetings in Brazil (for the Americas), South Africa (for Africa), India (for Asia and Australasia), Saudi Arabia (for North Africa and the Middle East) and Brussels (for Europe) to solicit opinions on merit review from regional stakeholders. These regional meetings also involved participation from countries that are not members of the G20 or OECD.

In December 2011, the ISC met in Paris to integrate the results of the regional meetings into a single set of principles. The result of this integration is the Statement of Principles on Scientific Merit Review. The principles draw heavily on the policies and practices of all the funding agencies that participated in the regional meetings, and reflect a broad worldwide consensus. Throughout the process, it was clear that agencies around the world had consulted with each other in developing a core global standard for merit review. Example of this consultation include: the ESF *European Peer Review Guide*<sup>3</sup>; the South Africa NRF publication *Promoting Quality Research*<sup>4</sup>; and resources available on the US NSF website<sup>5</sup>.

The Statement of Principles on Scientific Merit Review was developed with two primary objectives. First, the worldwide agreement on core, high-level principles should foster international cooperation among funding agencies that support the scientific research<sup>6</sup> community. Second, for those countries that are developing new funding agencies, the principles provide a global consensus on the key elements necessary for a rigorous and transparent review system.

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<sup>1</sup> [http://www.eurohorcs.org/SiteCollectionDocuments/EUROHORCs\\_ESF\\_ERA\\_RoadMap.pdf](http://www.eurohorcs.org/SiteCollectionDocuments/EUROHORCs_ESF_ERA_RoadMap.pdf)

<sup>2</sup> Brazil, Canada, China, Egypt, India, Japan, South Africa, Sweden, Switzerland, United States

<sup>3</sup> [http://www.esf.org/fileadmin/FlipBooks/Peer\\_Review/peer\\_review.html](http://www.esf.org/fileadmin/FlipBooks/Peer_Review/peer_review.html)

<sup>4</sup> Marais, H.C., Earle-Mallesson, N., Gathua, S., Grobbelaar, J. & Taylor, J. 2010. *Promoting quality research: An evaluation of the peer-review system as managed by the National Research Foundation*. Pretoria: NRF.

<sup>5</sup> <http://www.nsf.gov/bfa/dias/policy/meritreview/>

<sup>6</sup> For the purposes of this document, "scientific research" can include the sciences, arts and humanities.