



**Global Scientific Challenges:
Perspectives from Young Scientists**
An international conference celebrating 75 years of ICSU
4-6 April 2007
Lindau, Germany.

Background

From sustainable development, to emerging disease epidemics, the interaction of humankind with its environment lies at the core of a myriad of complex global challenges. Scientific research is a critical resource for addressing these challenges, whether that be via the development of new technologies or the promotion of better policies. At the same time, the speed of scientific and technological innovation and concerns about the potential misuse of science are creating tensions at the interface between scientists and society. New approaches are necessary for the planning, conduct, and communication of international research and a closer partnership needs to be built between science and society as a whole.

Aim

This conference will bring together approximately two hundred young scientists from across the world, and from different disciplines, to discuss and debate some of the key challenges for science in the 21st century. The conference is designed to attract and stimulate the interests of those who will play a leading role in international research over future decades. Through the critical assessment of specific case studies and experiences, the conference will serve as a space for reflection on the future conduct of science in the context of a rapidly changing world.

The conference will serve as a forum for young scientists to:

- Exchange knowledge and experience with their peers in an interdisciplinary and intercultural setting
- Debate key issues at the interface between science and society
- Identify and discuss emerging obstacles and challenges for the scientist of tomorrow

It will provide a unique international networking opportunity that is quite distinct from the usual discipline or topic-focussed meeting.

Themes

The conference be structured around a matrix of key issues, related to the conduct of science, and cross-cutting scientific topics.

Key issues

International Cooperation
 Transdisciplinary Collaboration
 Public Engagement
 Science for Policy
 Scientific Freedom and Responsibilities
 Science and the Private Sector

Scientific topics

Environmental Change
 Sustainable Development
 Human Health
 Basic Research and Discovery

The selected scientific topics are deliberately broad and inclusive and are characterised by the need for international and interdisciplinary cooperation.

Format

The conference will include a number of keynote addresses and panel discussions, involving a mix of senior and junior scientists. However, the majority of the time will be devoted to interactive, small-group presentations and discussions, so that each participant has an opportunity to share his or her own experiences and perspectives. The meeting will be structured to deliberately mix people from diverse scientific and geographic backgrounds, whilst respecting their interest in the selected scientific topics.

Participant profile

Participants should ideally be under 35 years old (with an absolute age limit of 40 years). Participants should have a PhD or MSc or have completed at least 2 years of post-graduate research studies, and must have demonstrated an active interest in at least one of the scientific topics and/or cross-cutting issues listed above. Efforts will be made to include scientists who work in a variety of professional settings, including academia, government laboratories, the private sector, science policy/mangement and science communication. English will be the working language for the conference.

All ICSU National Members (105), International Scientific Unions (29), and Interdisciplinary Bodies (18) are being invited to nominate and sponsor a young scientist to attend the conference. Additional invitees and speakers will be selected by the Conference Planning Committee.¹ Financial support will be available only for National Members from developing countries that have identified a participant and cannot provide sponsorship.

¹ The Conference Planning Committee is made up of the following members: Gaëll Mainguy, Chair (World Academy of Young Scientists) France; Ravinder Bhatia (the Scholar Ship) UK; Juan Pablo Pardo Guerra (Young Pugwash) Mexico [Edinburgh]; Rehana Jauhangeer (UNESCO-L'Oreal Fellow) Mauritius [London]; Daniele Cesano (LEAD Fellow) Italy; Mustapha Mokrane, Laurie Geller & Belle Dumé (ICSU Secretariat).