As young scientists from all five continents, we are passionate about science, and we are passionate about science contributing to a better world. We wish to enhance the contribution that we can make to science and that science can make to society. Science and technology play an important role in addressing the challenges we face today, from reducing hunger and poverty, finding a cure for diseases such as malaria, to protecting the environment. We believe that these are universal aspirations, shared by young scientists around the world and deserving global solutions. Actions are required at local, national and international levels by young scientists themselves, senior scientists, science policy makers, politicians, the private and civil society sectors and the general public.

For science and young scientists to play the role required in the modern, technological and challenging world, public support is essential. For this support to be fostered, scientists - and especially young scientists - need to engage with and educate the general public. The public must be made aware of the strategic importance of the investment in science and technology. To this end, country-specific and global initiatives aimed at enabling the vast resource available in young scientists should be actively sought and encouraged. We are committed to contribute to such processes and see this statement as a first step on our part to realize such a vision.

We endeavour to pursue excellence in all that we do. To achieve excellence in science requires good governance in our academic institutions and beyond, strict adherence to the highest standard of ethical conduct in research by all stakeholders, and the freedom to conduct independent research. In addition to these fundamental prerequisites, we have identified three important factors that determine the effectiveness of our work. We strongly advocate the development of coherent, internationally consistent policies to support each of these specific areas. We believe that these challenges are most painfully felt in developing countries where resources are scarcer. Therefore, we would like to call attention to the need to foster support for access to electronic and technological tools, in order to build a true and integrated global scientific community, regardless of geographical or financial barriers.
Competency and Career Development

Young scientists critically depend on continuous investment in their skills and on support for their often-fragile career trajectories. We hence require early independence; encouragement and freedom to establish our own research networks; fair, independent and merit-based evaluation, promotion, grant-awarding processes and refereeing processes in publishing; encouragement to pursue alternative pathways for disseminating science and technology; as well as mentoring and life-long learning. We call for policies to enable family-work balance, to promote equity, and to eliminate discrimination on any basis. We also ask for a fair distribution of administrative and teaching tasks; effective support in implementing administrative and managerial roles; and the chance to represent our views as young scientists within scientific institutions. We note the positive effects resulting by the establishment of ‘Young Academies of Sciences’ as special branches of existing Academies, in which young scientists can conduct research across disciplines, organize out-reach activities and exchange their views on science policy issues, both among each other and with senior academicians, and both on a national and international level.

Collaboration and Mobility

The challenges facing our world today are increasingly complex and interdisciplinary. Cross-disciplinary work and international collaborations are essential for tackling these challenges. We urgently need policies at all levels – governmental, institutional, and within administrative units – that promote collaboration and interdisciplinary research and training programs. We envisage a world without borders where scientists can move freely to advance their research. We aim to reach out to the creative potential of other communities beyond the traditional academic research community to tap the global wealth of knowledge, experience and creativity. In this spirit, we also wish to encourage and educate the next generation of global young scientists throughout their career, passing knowledge and experience on to our successors in science, including in the principles and ethics of science.
Contributing to a Better World

We engage in science and technology to pursue knowledge in order to improve the state of the world. To achieve this vision, we need to interact more with other stakeholders, improving the dissemination of our findings and encouraging others to assist us in this regard. We particularly recognize the need to develop and deliver a robust science culture at all levels of society; communicating science in the education system and to the general public is something in which young scientists are particularly well placed and willing to contribute. The scientific community should interact more closely and regularly with society as a whole in efforts to explain the work of scientists to a larger public. In order for this to be possible we need to explore the many possibilities offered by the Internet and mass media, since these are essential in a global village society. We can therefore enhance the dissemination of information about research and discoveries in science, and favour public debates and events in order to mobilize and to involve the general public for the essential role and functions of the scientific community. Policies at all levels of government should be developed based on the best and most complete evidence, in active consultation with scientists. Developing national science policies should emphasize the importance of basic research, while taking into account the need to set priorities in areas for accelerated development.

Making a better world needs better science – we young scientists are ready to contribute our share.

Tianjin, September 2008
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