

# BUILDING A SYSTEM TO SUPPORT SUCCESS

*Many young scientists are among the brightest and most creative people in their generation. How can we free them to do their best work?*

 by Sameh Soror



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History tells us that many scientists have their greatest energy and creativity in the early years of their work. It follows that investment in science, and particularly in young scientists, is an investment in the future of any nation. This is especially true for the developing countries, where research and innovation are critically important for economic health and closing the gap between their home countries and the developed world.

The developing countries are facing grand challenges – water scarcity, food and energy security, infectious diseases and environmental threats. Young scientists are capable of contributing to solutions, but to achieve success, they need an environment that develops their full potential and allows them to do their best work.

“GloSYS”, a recent study by the Global Young Academy [GYA], described the challenges that confront most young researchers in developing countries: The most obvious is a lack of resources and funding. But other obstacles also can impede their performance: They lack mentoring and support from superiors and training opportunities to develop professional skills. They are often overloaded with teaching and administrative tasks that leave little

time for research. The process of hiring and promotion often lacks transparency.

To make an effective change, joint efforts are needed from governments, universities, research institutions, international organizations, foundations and young scientists themselves.

Science systems in developing countries should be refined to overcome these obstacles, and especially to support a reasonable balance between research and other duties. Universities and research institutes should work closely with international organizations interested in the developing countries to establish capacity building programs for young staff members to improve technical skills and leadership skills. A good example is the African Leadership Program for young researchers, run by the University of Pretoria in cooperation with GYA and the Bosch Foundation.

The movement to establish academies for excellent young researchers is spreading worldwide, and several developing countries have their own young academies. Networking should provide an ideal platform for these researchers to develop their creative ideas and, through cooperation, to unify their efforts to face local, regional and global challenges.

At the same time, we as young scientists should realize our responsibilities. We should employ our skills, creativity and enthusiasm to support the welfare of our communities. We should not work isolated from our societies. Our research should focus on our problems and challenges. We should express our ideas and needs, and engage in science policy dialogues to make the best use of our knowledge. We have to believe that we can shape the future of our nations. ■



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