

## FROM THE NEW EXECUTIVE DIRECTOR OF TWAS



*I am honoured to have been appointed as the new executive director of TWAS. I would also like to acknowledge the sterling work and achievements of my predecessor, Mohamed Hassan, who has been with TWAS almost since the inception of the Academy and has overseen its growth and influence to what we see today.*

*For those who may not know me, please allow me to provide a little of my background: I was born in Rwanda and raised in Burundi, earned a bachelor's degree in mathematics from the University of Burundi (1982), and a master's degree (1986) and doctorate degree (1990) in physics from the Catholic University of Louvain in Belgium. After working at the European Centre for Advanced Training and Research in Scientific Computation (CERFACS) in Toulouse, France, I moved to the Clark Atlanta University Center for Theoretical Studies of Physical Systems in Georgia, USA, where I was selected chair of the physics department in 1999, becoming a full professor in 2000. My research focused on applications of multidimensional continuous wavelet transforms to quantum mechanics, and image and video processing. In 2001, I was appointed minister of education, science, technology and scientific research in Rwanda, and, in 2006, minister of science, technology and information and communication technologies. I hope that my efforts as a minister have contributed to the expansion and modernization of Rwanda's education system and the building of the country's scientific and technological capacity.*

*In 2009, I left Rwanda to become a senior scholar at AAAS in Washington, DC, and in July 2010 I became director of the AAAS Center for Science, Technology and Sustainable Development, which focuses on issues related to science-based sustainable development, especially in the developing world.*

*From this brief resume, I hope you will have confidence in me to advance our efforts to continue to build scientific capacity in developing countries. Let me assure you that I will be focusing a great deal of attention on strengthening and expanding TWAS's research, fellowship and exchange programmes, especially for scientifically lagging countries. I will also be seeking ways to encourage governments in developing countries to pursue policies that place science and technology at the centre of the development process. TWAS has performed a great service in serving as the "voice of science for the South." It is an honour, a privilege and a great responsibility to be serving as the Academy's executive director, and I looking to working with you in the years ahead.*

*Romain Murenzi (TWAS Fellow 2005)  
TWAS executive director*

## NEWS FROM BIOVISION

BioVision, the world life sciences forum, is held every two years in Lyon, France (alternating with Alexandria, Egypt). On 27-29 March more than 2,500 participants, including key international leaders from government, business, academia, and NGOs, engaged in debates on global issues involving science and society. Participants analysed scientific breakthroughs and pressing global challenges, discussed the most effective solutions, and hopefully built lasting partnerships that will enable them to create positive social change. For complete details, see [www.biovision.org](http://www.biovision.org).

Among the participants were some 120 young scientists participating in an interlinked, parallel event, BioVision.Nxt. TWAS provided travel support to 50 of these young scientists (10 were selected by each of TWAS's five Regional Offices). BioVision.Nxt allowed the up-and-coming generation of young scientists to mingle with Nobel laureates and other experts, including the highly popular 'Coffee with...' sessions where high-profile individuals from the world of life sciences sat together with a group of young researchers to answer their questions. In addition, BioVision.Nxt participants were challenged to break into small teams and to come up with (in just 3 days) a



*BioVision.Nxt participants discuss RNA structure and function – and scientific careers – during 'Coffee with...' Nobel laureate Ada Yonath.*

visionary, inter-disciplinary project that would be judged during the final session. They were also encouraged to present their projects informally to the many high-level delegates present and to seek funding or advice on how it might be implemented.

Another highlight of the 2011 BioVision forum was the presentation at a VIP dinner of the BioVision Lilly Award in conjunction with TWAS. BioVision, the Lilly MDR-TB Partnership and TWAS established the award to honour the outstanding scientific achievements made by individual young scientists from developing countries in the field of tuberculosis. The Award recognized four young scientists who have a track record of excellent research and whose work promises to have a positive impact in the developing world. An international expert committee, largely composed of TWAS Fellows, selected Digby Warner from MRC/NHLS/UCT Molecular Mycobacteriology Research Unit, University of Cape Town (UCT), South Africa, as the winner. The first runner up was fellow South African, Thomas Scriba, South African TB Vaccine Initiative, UCT. Dihadenys L. Molina, Tuberculosis National Reference Laboratory in Havana, Cuba, and Joy S. Michael, Christian Medical College of Vellore, India, were awarded joint second runner-up positions.



*Winner Digby Warner flanked by Joy S. Michael (left) and Dihadenys L. Molina (right), who shared the second runner-up position.*

A short video of the BioVision.Nxt programme is available here: <http://tinyurl.com/6ejejpme>.

## NEW TWAS FELLOWSHIP PROGRAMMES

**TWAS and the Iranian Research Organization for Science and Research (IROST)** have recently signed an agreement to offer postdoctoral fellowships tenable in Iran. The details of the programme are being finalized and the opening of the programme will be announced soon. For details, see: [www.twas.org](http://www.twas.org) > Programmes > Exchange.

**TWAS and the University of Calabria (UNICAL)**, Italy, will offer fellowships to students from **Haiti** who wish to obtain an MSc degree in the areas of pharmacology or nutrition. Since the fellowship is tenable in Italy and the coursework will be exclusively in Italian, some proof of knowledge of Italian is required. Deadline for applications is 31 July 2011. For details, see: [www.twas.org](http://www.twas.org) > Programmes > Exchange.

**Applications can only be made through:**  
[www.unicaladmission.it](http://www.unicaladmission.it)

## TWAS-ICTP STEP FELLOWSHIPS



From left to right: P.V. Redkin (fellow), N. Binggeli (ICTP, responsible for STEP), Melessew Nigussie Gereme (fellow), M. Essoun (fellow), P. McGrath (TWAS programmes), D. Calligaro (ICTP, secretary-in-charge, STEP), K.S. Gadedjisso-Tossou (fellow).

The ICTP-TWAS STEP fellowship scheme offers research and training opportunities in physics and related areas to PhD students from science-and-technology-lagging countries. It is implemented following the modalities of the Sandwich Training Educational Programme (STEP) at the Abdus Salam International Centre of Theoretical Physics (ICTP) in Trieste, Italy, where TWAS is located. The fellows spend 3 to 6 months per year, for up to 3 years, at a host institution in the Trieste area, where they have a PhD co-supervisor. The PhD degree is delivered by the fellows' home universities so as to favour the permanence of the young PhDs in their home country and therefore to strengthen the local faculty.

For details, see: <http://portal.ictp.it/step>.

## TWAS-AAS-MICROSOFT 2010 AWARD FOR YOUNG SCIENTISTS

Three African scientists have been awarded the 2010 TWAS-AAS-Microsoft Award for Young Scientists, given by TWAS, the African Academy of Sciences (AAS) and Microsoft Research. The award, funded by Microsoft Research, recognizes outstanding research in computer sciences conducted by African scientists that has – or promises to have – an impact in the developing world. The award ceremony took place on 26 February 2011 in Nairobi, Kenya, during the 5th TWAS Regional Office for Sub-Saharan Africa Young Scientists' Conference. Each winner received a cash prize of €7,000. The winners are: **Fayçal Djeflal** (pictured with Mohamed. Hassan, former TWAS executive director), associate professor in the Department of



Electronics, Faculty of Technology, at the University of Batna, Algeria, for developing new soft-computing-based approaches to study nano-scale electronic devices and circuits; **Konrad Scheffler**, associate

professor in the Computer Science Division, Department of Mathematical Sciences, in Matieland, South Africa, for his contributions to the fields of bioinformatics and computational biology, particularly the modelling of molecular evolution in HIV and other organisms; and **Moustafa Youssef**, assistant professor in the Department of Computer Science and Engineering, Egypt-Japan University of Science and Technology (E-JUST), in Alexandria, Egypt, for his contributions to the fields of mobile and wireless networks, particularly in the design, analysis and implementation of location determination systems.

## REGIONAL OFFICES SEEKING YOUNG AFFILIATES

Each year, TWAS's five Regional Offices select up to five Young Affiliates to join the ranks of TWAS members for a 5-year period. Potential Young Affiliates should be under the age of 40 and have at least 10 publications in international peer-reviewed journals. Nominations should be sent directly to the relevant TWAS Regional Office, from where nomination forms can also be obtained.

Recently four Young Affiliates elected in the last few years have been selected to attend the 61st Lindau Meeting of Nobel Laureates. From 26 June – 1 July 2011, 26 Nobel Laureates and 570 young researchers from 80 countries will meet at Lindau, Germany, to exchange ideas, discuss projects and build international networks.

For details, see: [www.lindau-nobel.org](http://www.lindau-nobel.org).

TWAS Regional Offices are also seeking nominations for this year's Regional Prize – in 'Development of Scientific Educational Material'.

Deadlines for both programmes are imminent – please check with your relevant Regional Office.

More information: [www.twas.org](http://www.twas.org) > About TWAS > Regional Offices.

## NEWS FROM TWAS REGIONAL OFFICE IN BRAZIL

Antonio Carlos Campos de Carvalho has been appointed head of the TWAS Regional Office of TWAS for Latin America and the Caribbean (TWAS-ROLAC). de Carvalho, a distinguished scientist in the medical and health sciences, works at the Federal University of Rio de Janeiro and was elected a member of TWAS in 2003. He replaces Marcelo Viana, who stepped down in December 2010.

## TWAS PROGRAMME NEWS



Seyed Muhammad Qaim (pictured, centre) from the *Institut für Nuklearchemie Forschungszentrum Jülich*, Germany, paid his third and last visit to the Dept. of Applied Chemistry

and Chemical Technology, Rajshahi University, Bangladesh from 20 February to 16 March 2011 under the **TWAS Research Professors in Least Developed Countries (LDCs) programme**. This programme is designed to promote long-term links between institutions in LDCs and the expertise of TWAS members.

For complete details, see: [www.twas.org](http://www.twas.org) > Programmes > Exchange.

## TWAS Contact details

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