

## **RISE Forum and Conference**

Kopanong Centre, Benoni, South Africa  
Tuesday, October 5, 2010 – Friday, October 8, 2010

### **Welcome remarks**

The meeting opened with a welcome from **Phillip Griffiths**, Chair of the Science Initiative Group and **Jane Morris**, Director of the African Center for Gene Technologies, a leader of the SABINA RISE network, and the local organizer of the conference. **John Griffith** from the US Embassy in Pretoria congratulated RISE members on the work done so far to prepare the next generation of science faculty in Africa in areas critical to Africa's future.

### **Presentations by RISE Leaders**

#### **[RISE-AFNNET: African Natural Products Network](#)**

**John David Kabasa**, Makerere University

#### **[SABINA: Southern African Biochemistry and Informatics for Natural Products](#)**

**John Kalenga Saka**, University of Malawi

Jane Morris provided additional information about POL-SABINA, the EU grant awarded to the SABINA network members. One of its current focal projects is to set up groups involved in natural product resource management on a national and regional basis.

#### **[WIO-RISE: Western Indian Ocean Regional Initiative](#)**

**Margareth Kyewalyanga**, Institute of Marine Sciences, UDSM

#### **[SSAWRN: Sub-Saharan Africa Water Resources Network](#)**

**Denis Hughes**, Rhodes University

#### **[AMSEN: African Materials Science and Engineering Network](#)**

**Lesley Cornish**, University of the Witwatersrand

Presentations were followed by a discussion session. Issues of dealing fairly with indigenous groups when accessing their natural products knowledge, managing programs across national boundaries, value chain management, succession plans and complementarity with other programs were discussed.

### **Panel on the Role of Governments**

**Panel Chair: Tom Hexner**, Science Initiative Group (SIG)

#### **Speakers**

**Evelyne Mbede**, Director of Science and Technology, Ministry of Communications, Science and Technology, Tanzania

**Ben Durham**, Director: Biotechnology, Department of Science and Technology, South Africa

**Andrew Kaniki**, Executive Director of Knowledge Management and Strategy, National Research Council, South Africa

**Marilyn Pifer**, Senior Program Manager and Senior Technical Advisor, CRDF Global

#### **Evelyne Mbede**

The Tanzanian government is working towards spending 1% of its GDP on S&T; this year funding increased to .1%, so there is still progress to be made. As a scientist, Dr. Mbede recommended

studying one's government to figure out how to mainstream ideas so that specific S&T ideas become a part of the government system.

### **Ben Durham**

The DST focuses on contributing to 3 of the 12 performance contracts developed by the President of South Africa: jobs, improved quality of life and economic growth. DST is supportive of networks in the sciences.

### **Andrew Kaniki**

The NRF mandate is to support and promote research, and it does so in a variety of ways. NRF awards student grants and provides funding for strategic initiative programs such as the National Astrophysics Program and a regional science center for climate change.

### **Marilyn Pifer**

Two general truths about governments are that they only do things in their own interest, and that leaders can change but bureaucracies remain the same. S&T agreements between countries are frequently signed, but they are very infrequently funded.

The US is making a concerted effort to push S&T to the forefront of diplomacy right now through Science Envoys, USAID, and other avenues. In changing its approach, the US is working to focus on a country's need rather than US government's perception of that need.

African governments need to show a willingness to invest in STI. It can be extremely helpful for governments to offer cost sharing for specific development programs. This causes them to take a leadership role and helps provide a path to sustainability for programs.

### *Discussion Session:*

When participants noted that governments say they are interested but offer little support for efforts such as RISE, panelists urged RISE members to make their governments aware of what they are doing. A discussion on inadequate infrastructure was followed by the suggestion of creating tax incentives for doing science in the region. Attendees were told that government cost sharing can be a small percentage of a total project budget, but that it is a crucial one.

**Panel Chair: John Butler-Adam**, Ford Foundation

### **Speakers:**

**Rocky Skeef**, International Council for Science (ICSU) ([presentation here](#))

**Tichaona Mangwende**, Southern Africa Network for Biosciences (SANBio)

**F.A.O. (Fred) Otieno**, African Network of Scientific and Technical institutions (ANSTI) ([presentation here](#))

**Sibusiso Sibisi**, Council for Scientific and Industrial Research (CSIR)

### **Rocky Skeef**

ICSU's regional office in South Africa works to ensure that the voice of developing countries is heard at the scientific table and that scientists from the South are included on the international scientific agenda. The thematic areas that the ICSU office in Africa focuses on align with the Millennium Development Goals: sustainable energy, hazards and disasters, health and human well-being, and global environmental change.

### **Tichaona Mangwende**

SANBio is a NEPAD agency that was launched in 2005, and it complements other regional biosciences networks in Africa. African governments are slowly beginning to buy into various science programs, as government representatives stated in earlier presentations. SANBio is funded by the South African Department of Science and Technology.

### **F.A.O. (Fred) Otieno**

ANSTI was established in 1980 by UNESCO, UNDP, and Germany to develop high-level S&T capacity in Africa. It currently has 184 member institutions in 37 countries. ANSTI focuses on regional cooperation because of resource limitations, disparities in resource distributions, and isolation of individual scientists.

### **Sibusiso Sibisi**

CSIR works with NEPAD to support and nurture science in South Africa. The main site is in Pretoria, and there are regional offices in other provinces. CSIR currently has 10 core research areas and 3 emerging research areas of focus.

*Discussion Session led by **Peter Sundin**, International Science Programme (ISP)*

Participants discussed the issue of ICSU membership fees being a deterrent to joining the council. The question of whether a reduced membership fee means a reduced voting right in ICSU was posed, and Dr. Skeef agreed to look into the issue. RISE leaders inquired about funding opportunities from Ford Foundation and were told that Ford focuses on social sciences. However, Ford's Global Travel and Learning Fund could potentially support students wanting to attend regional courses. Participants agreed that sharing information across networks (for example, sharing lists of available instrumentation and notices of relevant funding opportunities) and with the public (about RISE efforts and accomplishments) are both important parts of the RISE mission.

**Wednesday, October 6, 2010**

### **Panel on Science Academies and Young Scientists**

Panel Chair: **Burton Mwamila**, NM AIST-Arusha, Tanzania

Speakers:

**Matthew Luhanga**, President, Tanzania Academy of Sciences ([presentation here](#))

**Orlando Quilambo**, President, Academy of Sciences of Mozambique ([presentation here](#))

**Jackie Olang**, Network Coordinator, Network of African Science Academies (NASAC) ([presentation here](#)) ([What is An Academy?](#))

### **Matthew Luhanga**

The Tanzania Academy of Sciences is a young organization. It is looking to include more young scientists, and it participates in the Network of African Science Academies (NASAC) and partners with the Royal Society.

### **Orlando Quilambo**

The Academy of Sciences of Mozambique was created in 2009, and it currently has about 100 fellows, including some young scientists. The academy includes individuals in technological sciences, natural sciences, arts and social sciences, and biomedical sciences.

## **Jackie Olang**

NASAC is a network organization for all science academies in Africa. It was established in 2001 to provide authoritative science advice to policy makers in Africa. There are currently 17 member countries. NASAC seeks to empower existing academies, help create new ones, be a voice of science in Africa, and provide an independent platform for credible advice.

### *Discussion Session*

Participants discussed barriers to joining academies, including the perception that they are “clubs of old men” and have entry requirements that discourage potential members from applying. Regarding scientific advocacy work, the possibility of separating these efforts from honorary scientific societies was mentioned, with the American Association for the Advancement of Science (AAAS) cited as an example.

## **RISE Universities Panel**

Panel Chair: **Matthew Luhanga**, University of Dar es Salaam & Tanzania Academy of Sciences  
Speakers:

**Adebisi M. Balogun**, Vice Chancellor, FUTA-Akure, Nigeria ([presentation here](#))

**Yunus Ballim**, Deputy Vice Chancellor: Academics, University of the Witwatersrand

**Peter Clayton**, Deputy Vice Chancellor for Research & Development, Rhodes University, South Africa

**Leonard Kamwanja**, Pro Vice-Chancellor, University of Malawi ([presentation here](#))

**A.S. Kumwenda**, Director, Tea Research Foundation of Central Africa, Malawi ([presentation here](#))

**Francis S. Magingo**, Principal, College of Natural Applied Sciences, University of Dar es Salaam, Tanzania ([presentation here](#))

**Gerald C. Monela**, Vice Chancellor, Sokoine University of Agriculture, Tanzania ([presentation here](#))

**Osmund D. Mwandemele**, Pro-Vice Chancellor for Academic Affairs & Research, University of Namibia ([presentation here](#))

**Orlando Quilambo**, Academic Vice Rector, Eduardo Mondlane University, Mozambique ([presentation here](#))

**Anton Ströh**, Dean, Faculty of Natural and Agricultural Sciences, University of Pretoria, South Africa

**Lillian Tibatemwa-Ekirikubinza**, Deputy Vice Chancellor for Academic Affairs, Makerere University, Uganda ([presentation here](#))

## **Adebisi M. Balogun**

FUTA is working with multiple organizations and programs to support and grow the university. A number of the faculty members are participating in RISE as students and advisors.

## **Yunus Ballim**

The University of the Witwatersrand is committed to projects such as RISE. Universities need to make sure they are a part of their communities and work as knowledge partners towards development.

## **Peter Clayton**

The Institute for Water Research at Rhodes intends to be a regional African institute, and it welcomes collaboration with other universities and networks. Rhodes' programs in natural products, marine science and biodiversity would also be eager to link up with existing RISE networks. The university is

pleased to participate in this initiative that provides tangible resources to delve into substantive issues facing the African continent.

**Leonard Kamwanja**

The University of Malawi is involved in a number of international networking grant programs, including those funded by HED, NUFU, VLIR, ISP, RUFORUM and the Scotland-Malawi Partnership. The university is fully committed to RISE at the senior management level, and university leadership is focused on issues such as standardization of fees across SADC universities that will make RISE more successful.

**A.S. Kumwenda**

The Tea Research Foundation of Central Africa brings the industry perspective to the SABINA partnership. The foundation is working to produce more high-yield and high-quality tea, and two of the staff members are getting their PhDs through SABINA. The facilities at the Foundation open to all universities in the network, and faculty/students may conduct studies on the premises.

**Francis S. Magingo**

The University of Dar es Salaam participates in both SABINA and WIO-RISE, and it is eager to participate in AMSEN and AFNNET as well. UDSM is involved in numerous network, regional, and international partnerships, and it is looking at ways to work across these projects to produce the maximum benefit to all involved.

**Gerald C. Monela**

Sokoine University of Agriculture started as part of UDSM before becoming a university specializing in agriculture. Two members of the faculty are currently earning their PhDs through RISE, and Sokoine has also used RISE funds to purchase new equipment and upgrade existing equipment.

**Osmund D. Mwandemele**

The University of Namibia is involved in two RISE networks, AMSEN and SABINA, and it values the network structure's ability to strengthen the faculty. UNAM is willing to waive bench fees and other charges for students in networks such as RISE, and it has contributed funding to purchase equipment for RISE students and professors.

**Orlando Quilambo**

University of Eduardo Mondlane is focused on addressing gaps in postgraduate training and research, research management, and instrumentation, and the university is working with multiple donors to achieve these aims. RISE is proving to be a successful South-South cooperation program to help augment postgraduate capabilities at UEM.

**Anton Ströh**

The University of Pretoria is pleased to be involved in RISE through SABINA, and it supports the idea of networks in the sciences helping partner universities leverage their collective strengths. The University of Pretoria sees RISE contributing to the production of graduates with well-rounded skills in sub-Saharan Africa.

**Lillian Tibatemwa-Ekirikubinza**

RISE has helped to formalize Makerere's collaborations with other universities, both through AFNNET and SSAWRN. Makerere is excited about the new joint curriculum developed by the

AFNNET coordinators and about increased cooperation between multiple ministries, NGOs, community health practitioners and others being brought about through the program. Teams funded through RISE are now attracting other grants.

#### *Question and Answer Period*

*Q: Sometimes it takes 3 months to source equipment. What can university administrators do to help us make this process much faster?*

*Q: To what extent are organizations such as the AAU catalysts for mobilizing resources to help initiatives such as RISE? Sometimes on the academic end of things, we are unable to see the effects of those networking efforts.*

*Q: We have heard many positive comments from our panelists, yet we still encounter administrative hurdles much of the time. We would value comments from members of panel about how senior members of the university administration can help us work past these hurdles in a practical fashion.*

A: The AAU website posts funding opportunities that it administers on behalf of the AU and EU. The very fact that university administrators were invited here and have a strong showing demonstrates that universities are serious about helping to move things forward. The University of Namibia presentation showed clearly how universities can contribute towards these efforts.

A: Delays vary from institution to institution. Various delays crop up along the process of acquiring new instrumentation. Every institution would wish to minimize obstacles. Normally there are various fora where one can air views about issues like this. The AAU and other regional bodies can have a big role to play in helping networks; they are catalysts but they are also complementary. Regarding practical support from university leaders, senior administrators at each university were required to write in support of the RISE proposals.

A: University leaders agree that bureaucracy is a problem. This is a shared problem and there needs to be a shared conversation about it at the administration level. Today's remarks have brought up the issue of varying fees across universities, especially universities within SADC. Universities have different ways of structuring fees, but university administrators can have conversations about preferential access at universities for programs of this nature. They can also do a much better job integrating international students into their universities.

#### *Afternoon Plenary Discussion Session*

Participants discussed finding ways to get more financial support from RISE universities and talked about the benefits and drawbacks of joining national science academies. When asked what it takes to start a new academy, the importance of finding a champion and fundraising from the beginning of the process were highlighted. Attendees also discussed the various functions that academies serve (and ones that they could serve), including being engines of development.

#### *Student Comment Session*

Students discussed the benefit of the network structure, commenting that having fellow students provides healthy competition and the impetus to work harder; allows for sharing of limited resources; and provides opportunities for networking meetings such as this one.

Students mentioned the need for more international networking and the need for universities to have enough trained staff to look after the instrumentation. SABINA mentioned that an international advisory committee had recently been appointed for their project, which is helping to establish contact with universities abroad. Arlen Hastings noted that SIG is exploring opportunities for partnerships between RISE networks and US universities.

Networks discussed the need to make connections with industry. SABINA leaders noted the Tea Research Foundation provides students with this opportunity. AMSEN leader Lesley Cornish noted that some industry people come back to work part-time at universities, and sometimes companies allow students to use their equipment at no cost.

### **Thursday, October 7 and Friday, October 8**

Thursday consisted of student talks and poster sessions, and RISE supervisors provided feedback to students on both of these at the end of the day.

Friday consisted of the final student talks and poster sessions and a session on TWAS fellowship opportunities. Students raised the issue of age limits on many of the opportunities, which in several cases made RISE students ineligible. SIG promised to follow up on this with TWAS.

### **Concluding remarks**

**Phillip Griffiths** thanked everyone involved in the conference. He noted that while SIG is a resource for the networks, RISE is an African-owned initiative. For RISE to be sustained and possibly scaled up, over time there will need to be engagement by African governments and universities, other development agencies such as the World Bank, and the private sector.

Dr. Griffiths was pleased to observe that the conference's final session was as well attended as the first, and he remarked on the high quality and intensity of the interactions among and between students, professors and other participants throughout the week. He commended the students for their excellent presentations and welcomed them as members of the international scientific community who represent the emerging generation of leaders in African science.