# Research Africa

# The deeper wickedness of the HIV/Aids epidemic—p22

Rwanda The R&D profile—p19

**SA Budget** Will South Africa meet its 1% science target for 2008? p4

# Development bank sets sights on universities

### Capacity building, tech transfer and reform high on AfDB agenda

**IN AN UNPRECEDENTED** move to harness innovation for economic growth on the continent, the African Development Bank (AfDB) is building up a pipeline of projects to strengthen science and technology capacity in universities.

In July this year, the AfDB is expected to adopt a vision to lead investments in African higher education infrastructure. It will also position the bank as a catalyst for linking academics and the private sector, and as as an instigator of innovation policy reform.

The new strategy will be the work of the bank's new science division whose manager, Sibry Tapsoba, says it is the result of a "very profound conviction" that innovation is Africa's ticket out of poverty.

"We believe profoundly that this will be the driver of growth in Africa. We believe that we can transform the current resource-based economy into a knowledge-based economy," he told *Research Africa* in an interview on 13 March.

The strategy will make a break with the bank's history of funding African universities, which Tapsoba describes as "ad-hoc". Universities were overlooked in favour of poverty and the Millennium Development Goals, but demands on the higher education sector have grown faster than in any other sector, he adds.

In a provisional draft of the strategy, three missions are identified for the bank: The first is to take the lead in financing science and technology infrastructure in Africa. Not only is there is a demand for this, Tapsoba says, there is also political support from national governments and the African Union.

The second mission will be to link higher education science and technology with the productive sector, to encourage technology transfer. This will include, for example, efforts to ensure that training options at universities are linked to employer demand. "The

extractive industry is going to play an increasingly big role in Africa, with the expansion of the oil and mining industries. But we don't have engineering schools. The African Union wants to build roads and dams—and this requires human capacity," Tapsoba said.

The third mission will be to partner with policymakers to instigate the policy reforms necessary to build a knowledge-based society—for example, giving the private sector incentives to innovate. This would be done in partnership with organisations like the World Bank. "We want a concerted effort," said Tapsoba.

THE BANK IS ALREADY supporting capacity building in universities. It recently finished a \$25 million study into the needs of francophone universities in West Africa, which will feed into project plans for the region. A similar study is underway in Central Africa. The bank is also supporting virtual universities out of its Kenyan office. And together with the World Bank, it is one of he main backers of the African Institutes for Science and Technology.

In future, the bank will focus on creating centres of excellence out of existing institutions, says Tapsoba. One of the goals is to place a small number of African institutions among the top 100 in the world.

As demand increases, there may be a need to build new institutions, but such an endeavour should be driven by the private sector.

"We want to encourage [industry] to go there. That is where their future is," he said.

Calestous Juma, professor of international development at Harvard University in the US, said, "The initiative represents an important milestone in the role of multilateral development agencies in placing

technological innovation at the centre of Africa's development process."

Every new funding opportunity for African researchers

From every sponsor in the US, Europe & Africa Every discipline

### The Research Africa Consortium

- Southern African Research & Innovation Management Association
- The Association of Commonwealth Universities
- Research Research Ltd



Edited by Linda Nordling editor@research-africa.net Tel: +27 21 409 7912 Fax: +27 21 409 7913 Randwidth Barn 125 Buitangracht St. Cana Town 801

Bandwidth Barn, 125 Buitengracht St, Cape Town 8001, South Africa

# Fishing for results

Science for development ... it used to be so simple. A village had no water. You paid for some engineers to go there and, using modern technology, they built a well. The success would be a fact—until the pump clogged up or blew a gasket and no replacement came.

Then there were the educators. "Give a man a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime." That was their mantra, and it worked well enough where problems were simple and had straightforward solutions. But teaching a man to fish is one thing. Giving him the capacity and knowledge to start up a profitable fishing business to rival better-equipped competitors in the global economy is quite another.

Today, the science-for-development lobby uses a third type of rhetoric: Set up a university, and among the skilled people it produces will be innovators. These will learn how to fish and then use that knowledge to beat the educators at their own fishing game. It also allows recipient institutions more autonomy in deciding what research priorities to focus on.

But as the thinking behind the investment in science for development has become increasingly more sophisticated, the impacts have also become more difficult to track. This is particularly true for aid agencies.

Over the last ten years, the Swedish International Development Cooperation Agency (Sida) has been one of the trailblazers to focus investment increasingly on building institutional capacity for science and technology. Sida and its research-supporting arm Sarec were recently subject to an external review of its research programmes. This found that Sida had been successful in shifting the focus of its funding from projects to capacity building in developing country institutions.

However, the reviewers did not see that this was having a clear effect on fighting poverty. "Support has the potential to be relevant for the purpose of development and poverty reduction, but these effects tend to be indirect and long-term," their report reads.

Well, duh. Of course effects will be indirect and long-term. But this may cause a problem in the international development community.

Science is not a magic bullet—it has to be utilised to be of service. Even if relevant science is created in institutions, what are the chances of it being transferred into policy without solid policy systems to do so?

Funders are realising this. On the cover of this issue of *Research Africa*, the head of the African Development Bank's new science division explains that technology transfer and policymaking will form equally big components of the bank's forthcoming science strategy as will capacity building in African universities. And last month, the World Bank devoted a global forum to how to boost innovation in developing countries.

African countries are also making headway. On page 5 the permanent secretary of Kenya's science ministry explains that the country's new science vision will include a National Innovation Strategy. Rwanda, profiled on page 19, is setting up a National Council for Science, Technology and Innovation to implement its new strategy, with an emphasis on translating outcomes into economic and social benefits.

The challenge will be to find effective indicators for monitoring outcomes and impact success. But how long-term, and how indirect can we expect the impact on poverty to be? Failure to grapple with this chestnut will result in expectations that science cannot meet. Again.

"How many more clinical trials are we going to be able to do with dramatic failures like this?"

Ronald Veazey, chair of a division of comparative pathology in Louisiana, US, advocating a change in the field of research on microbiocides to prevent HIV/Aids infection in women in the wake of the failed trial of Cellulose Sulphate in South Africa. He and many other researchers argue that the large number of candidate microbiocides should be further investigated before the most promising are put through to Phase III clinical trial stage. Nature, 28/22/07

"There is extremely limited information on the top black scientists in Africa who have made immense contributions to mankind through their innovations ... Much more needs to be done to document and publicise the achievements of blacks in science, which were buried in the footnotes of history or remained ignored or unreported."

Zimbabwean journalist Sifelani Tsiko calling on African scientists to 'reawaken' in The Herald, 5/3/07

"It is a sad loss. I knew Professor Bwayo personally; he was an early leader in the Aids response in Kenya and Africa and his tireless work to find an HIV vaccine has inspired many in the field."

UNĀIDS executive director *Peter Piot*, on the death of Job Joab Bwayo, Kenyan medical researcher and HIV/Aids expert, who was murdered in a Nairobi car-jacking on 4 February. UNAIDS statement, 7/2/07

"Kenya's well-earned prominence in the global HIV vaccine research arena is a great testimony to Professor Bwayo's scientific leadership and determination." Geoffrey Lamb, chairman of the International Aids Vaccine Initiative Board, quoted in an obituary to Bwayo, 5 February, IAVI website.

"We need to ensure that the laboratories are there, the research departments of the universities need to be adequately funded ... if we keep on doing the right things, Ghana can regain its past glory and rub shoulders with the international world." Jophus Anamuah-Mensah, vice chancellor of the University of Education in Winneba, Ghana, saying the country's education system needs investment to regain its former glory. VoaNews, 2/3/07

"It is our hope that the important efforts being put in motion by Fara will yield tangible results that will benefit the livelihoods of the vast majority of the rural farming population."

Nepad chief executive Firmino Mucavele, commenting on the agreement earlier this month between Nepad and the Forum on African Research in Agriculture (Fara) to join forces to bring new agricultural technologies to farmers. SciDev.Net, 1/3/07

### what's going on

### Sub-Saharan science lags behind

Sub-Saharan Africa needs to step up its work to strengthen scientific capacity if it is to achieve any success in alleviating poverty, says Mohammed Hassan, executive director of the Academy of Sciences for the Developing World (TWAS). Addressing the American Association for the Advancement of Science (AAAS) in San Francisco on 19 February, Hassan said countries such as China had shown remarkable scientific growth in a short time. But a recent survey by TWAS identifies 77 developing countries that have failed to strengthen their scientific capacities, many of them located in Sub-Saharan Africa.

### AU launches science magazine

Stepping up efforts to use science for economic growth, the African Union Commission this week launched a biannual science publication, in a bid to improve and coordinate continental integration. The *African Integration Review* follows the pledge at a recent AU summit by African heads of state to harness knowledge for economic growth. The journal will focus on integration-related issues and will consider contributions from those involved in scientific research, as well as teachers and graduates from continental and Diaspora universities.

### SA joins European biodiversity project

South Africa has joined Europe's largest research project in the area of terrestrial biodiversity—a study to assess large-scale environmental risks for biodiversity with tested methods (Alarm). The three-year-old project draws on 200 scientists from 35 countries to investigate four areas believed to contribute to the decline in biodiversity: global climate change, loss of pollinators such as bees, bumblebees and butterflies, harmful substances in the environment and the invasion of foreign animal and plant species.

### Southern Africa hosts TB drug trials

The European and Developing Countries Clinical Trials Partnership (EDCTP) and the Wellcome Trust have awarded £3 million (\$5.7m) to a four-year trial of a new combination of drugs to fight tuberculosis. The trials, due to begin in July, will take place in Southern Africa. Researchers believe the new approach could cut the medication period and increase success. Trials will be conducted in Mozambique, Zambia, Zimbabwe and South Africa.

### Wits University launches bioethics centre

The University of the Witwatersrand launched South Africa's first centre for bioethics on 9 February. The Steve Biko Centre for Bioethics will aim to ease the "growing moral uncertainty" about bioethics, said director Ames Dhai. He said the centre would achieve its goals through academic training, by advising health providers on policy matters, by providing an ethics consultation service to academic hospitals and primary healthcare clinics, and by raising awareness about bioethics in the media.

### 2007 Trieste prize open for nominations

African scientists have a chance to compete with and prove their worth to other nationals from developing countries for this year's Trieste Science Prize awarded for outstanding scientific achievements. The award, to be given in recognition of research done in chemical and agricultural sciences, is sponsored by the Academy of Sciences for the Developing World (TWAS) and Illycaffè. The deadline for nominations is 31 March.

For more, visit http://www.twas.org.

news

# Budget boost propels South Africa towards 1 % target

**[CAPE TOWN]** A budget boost announced last month by South Africa's finance minister may propel the country's spending on science and innovation to over one percent of GDP for the first time since the end of apartheid.

The boost in public sector funding, combined with the entry into force of the South African R&D tax credits for companies in September or October this year, makes it likely that South Africa's total R&D budget for 2007/08 will exceed one percent of GDP, thus meeting the national target for 2008, says Phil Mjwara, director general of the Department of Science and Technology.

On 21 February, finance minister Trevor Manuel unveiled a ZAR1.2 billion (\$170m) boost for the DST to come on stream over the next three years. In addition, universities will get ZAR2.2 billion (\$296m) extra to increase enrolment and produce more science, engineering and technology graduates.

Of the DST funding, ZAR500 million (\$67m) is earmarked for the country's bid to host the \$1bn Square Kilometre Array (SKA) radio telescope. It is hoped that the funds will give South Africa a leading edge over sole remaining competitor Australia.

The South African Research Network, which aims to provide low-cost broadband links for the country's academic community, will get ZAR95 million (\$12.7m). There are also funds to boost science and technology monitoring and evaluation facilities, and efforts to support the funding and uptake of research in development.

In universities, ZAR60 million (\$8m) will pay for an extra 210 research chairs by 2010. It is envisaged that 60 percent of the chairs will be filled from outside the South African education system. In particular, researchers from the African Diaspora and overseas-based South Africans will be welcomed. It is expected that 60 percent will be black, and 50 percent women. Twenty-one chairs

were already awarded in December last year and thirtyfour more are expected by June this year.

The constraints on the SKA funding have caused some confusion, however. In the budget speech, Manuel said the funds would be awarded only if South Africa was to secure the project. However, says Mjwara, it is more likely to be contingent on the DST securing co-sponsors for boosting the country's current radio astronomy capacity.

The SKA siting decision was envisaged for 2008, but is likely to be delayed by one or two years. This is due partly to the failure of some of the backers to secure budgets from their national governments, and partly to the need to conduct more detailed testing on the sites.

"We ought to put ourselves in a position where, when the decision is made, these things are in place. We think the R500m will be released if we get co-funders on board, but we are asking the National Treasury for clarifications on this point," Mjwara told Research Africa.

"Moving to one percent of GDP spent on non-military R&D will be a milestone in the country's history," said Wieland Gevers, executive officer of the Academy of Science of South Africa. At the end of the apartheid era, R&D spending exceeded one percent of GDP, much due to the regime's military science projects. The dismantling of these after 1994 caused a drop in the national science budget.

The research chairs, astronomy boost and funds for centres of excellence is all good news, Gevers said. But, he added, "on the problematic side, the National Research Foundation seems still not to receive the significantly increased agency funds it undoubtedly needs to ensure that the core national science endeavour is adequately resourced. This was strongly recommended in the independent 2005 Institutional Review of the NRF." See <a href="http://www.treasury.gov.za/">http://www.treasury.gov.za/</a>

# Nigeria close to \$180m science education deal

The government of Nigeria is likely to secure a \$180 million grant by the end of May this year to support post-basic science education. Final negotiations are taking place this month to seal the deal with the World Bank, which is offering finance for it.

The Science and Technology Education at Post-Basic Level (Step B) project aims to improve the quality and relevance of science education in Nigeria and produce more and better science and technology graduates. It will also address problems identified by the bank in ground-lay-

ing surveys of the Nigerian R&D base, including a lack of capacity in the science funding system for quality control and merit-based funding. The bank also plans to support science education by co-financing the African Institutes of Science and Technology (AIST), the first of which is emerging in Nigeria [See RA9 20/2/07 p20].

See http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2007/02/15/000104615\_20070220133752/Rendered/PDF/Integrated OSaf1heet010Concept0Stage.pdf for project details.

# Kenya's science vision takes shape

A large endowment fund to support science and technology and a National Innovation System are two of the proposals being drawn up for Kenya's new science strategy to be agreed over the next few months.

"Science and technology is the future. There is no gainsaying [sic] it," said Crispus Kiamba, permanent secretary in Kenya's science ministry. Kiamba is travelling around the country talking to researchers about the work so far on the national science strategy.

"As a ministry, we're preparing two things. One is finalising the strategic plan for the ministry. The draft is ready, and there will be discussions at the end of March to finalise the plan," Kiamba told *Research Africa* in an interview last week. The other is to coordinate the new science and technology strategy for the country. This will be part of Kenya's forthcoming reform plan for growth, dubbed Vision 2030.

"Science and technology has been scattered all over. It has not been coordinated, not comprehensive," Kiamba said. His work involves coordinating input from across government, civil society and the private sector. The strategy will cover areas such as health, agriculture and energy, using existing and seeking new technology to tackle development challenges.

Kenya intends to go beyond the Addis Ababa declaration of African states to spend one percent of GDP on research and development by 2010. It will aim for a figure of between 1.5 to 2 percent, and set up an endowment for science, technology and innovation.

A National Innovation System is also likely to form part of the science strategy. This will endeavour to make innovation integral to the way universities interact with industry, while establishing organisations that will be responsible for supporting and coordinating the innovation process.

Cabinet and parliamentary approval of the final strategy is expected between April and June. In preparation, sector working groups are to meet this month to discuss interim proposals, at the conclusion of which a draft strategy will be posted on the science ministry website. A stakeholder conference to discuss the draft will be arranged by the ministry in April. "We want to ask Kenyans across the world to let us know whether we are thinking correctly," Kiamba said.

The science strategy enjoys presidential backing. Launching the work to prepare Vision 2030 in October last year, President Mwai Kibaki said science and technology was at the centre of it. "The economic performance of any country is closely tied to the application of science and technology. However there [are ...] serious limitations in application of technology," he said.

"This is a serious weakness in our development strategy, which requires urgent attention. It is important that the Vision strategy, which is being developed, is geared towards enhancing Kenya's scientific and technological capacity, inculcating scientific culture, and integrating science and technology in our production and services sectors," Kibaki added.

# **news** in brief

### news African chemistry site launched

The Federation of African Societies of Chemistry (Fasc) last week launched its official website. The

site is intended to serve as a medium of information and knowledge exchange between member societies and the international chemistry community. www.faschem.org.

### **Boost for drug discovery in South Africa**

A new training programme will boost Southern Africa's capacity to develop new drugs. The programme invites South African scientists to train at Emory University in Atlanta in the US, to gain hands-on experience in drug discovery.

"By training African scientists in drug discovery, the partnership is designed to give South Africans not only a voice but also a choice in how best to combat their disease epidemics," said Dennis Liotta, professor of chemistry at Emory. Priority will be given drugs that focus on HIV and tuberculosis.

"The fact that several small pharmaceutical companies are beginning to spring up in Africa makes this an ideal time to develop a drug discovery training programme,"

Liotta added. Support for the programme will come from the South African government and the Emory Global Health Institute, and training will be provided in chemistry, pharmacology and other biomedical sciences.

### Uganda to host innovation symposium

An international symposium in Uganda later this year will focus on harnessing science and innovation for socio-economic tranformation. It will aim to bridge the gap between industry and academia, and will take place at Mbarara University from 3 to 5 September.

The symposium is jointly organised by MUST, Makerere University, the Uganda National Council for Science and Technology, the Association of Commonwealth Universities, the British Council, the Commonwealth Foundation and the UK's Royal Society of Chemistry.

Frederick Kayanja, vice chancellor of Mbarara University, said, "It is said, with some justification, that Africa is still a sleeping giant. This Conference must be part of the awakening process. The ingredients of science, technology and innovation are not only key drivers for socio-economic transformation; they are at the heart of the awakening process of this vast continent"

# Focus on secondary education

Africa will need to improve the quality and accessibility of secondary education if it is to achieve any measure of economic and social growth. That is the message of a report from Secondary Education in Africa (SEIA) that is to be discussed by education ministers next month.

The third SEIA conference, to be held in Accra, Ghana, from 1 to 4 April, will bring together African ministers with representatives from the teaching community and donor agencies. Organised by the World Bank, it will aim to generate consensus among stakeholders to boost secondary education quality in Africa.

Most African countries have made moves to place on the agenda relevant science topics such as environmental degradation, low agricultural productivity and HIV in the science curricula. But there has been no collaborative effort to improve the quality of education in line with technological advances, which in turn has hampered the process, says the report.

The report calls for changes in the administration and curricula of science and technology subjects at secondary-school level. It suggests extending primary level education to ensure that students are adequately prepared for secondary school, and recommends that partnerships between the private sector and government

be combined with budget boosts to raise the quality of teaching and learning.

One of the most urgent problems is the lack of secondary school students choosing to study science and technology subjects, says Jacob Bregman, lead education specialist at the World Bank and SEIA task team leader. "This has multiple causes, but results simply in a smaller and smaller pool of talented students going into higher education for science and technology studies. This will be, and is already, a big problem, which is not catching the eye of the African politicians," he said.

Sub-Saharan Africa falls behind the rest of the world in international benchmarks on student performance in science and mathematics. Between 1990 and 2004 the best African performer in the Trends in International Mathematics and Science Study, Botswana, recorded a score averaging 365 out of 800, compared with the international average of 467.

Funding is a problem, the report adds. "The existing systems were designed to educate a small elite. They will not be able to provide a much greater proportion of the Sub-Saharan African youth with an education that effectively prepares them for work and for further education and training," it says.

### The Research Africa Consortium

Southern African Research and Innovation Management Association (SARIMA)



SARIMA is an association for administrators and managers of the research and innovation enterprise.

Its objectives are to promote best practice in management and administration of research and innovation; awareness of the value of a strong research and innovation system and the contribution it can make to economic and social development; appropriate national and institutional policies supporting research and innovation; as well as African science technology and innovation, including addressing the asymmetries in access to, and diffusion of, knowledge between 'North and 'South'.

http://www.sarima.co.za

### Research Research Ltd Research Research

Located in the UK

Research Research Limited is a publishing group that specialises in high-quality reporting on science, technology and innovation.

The product range comprises both paper and electronic publications and their best-in-the-world funding and sponsor databases. From Research Research.com you can access services customised to your requirements.

In addition to specialist e-publications for Australia and New Zealand, Sweden and Ireland and Worldwide, our main publications are Research Fortnight, Research Europe, Onderzoek Nederland and Research Africa.

http://www.researchresearch.com

### The Association of Commonwealth Universities (ACU)

The Association of Commonwealth Universities

The Association of Commonwealth Universities recognises the potential of African higher education to contribute to development and to international research activity.

Research Management has a truly global dimension, as international collaboration becomes increasingly important. While changes in research policy have come about quickly, few believe they have found the perfect solutions.

The ACU supports the Research Africa project as a new and innovative approach to engaging African institutions in this emerging area.

http://www.acu.ac.uk

### DFID

"Research, the process that generates new technologies and ideas, is one of the driving



forces behind gains in human development and poverty reduction"
-DFID Research Funding Framework 2005-2007

DFID supports projects that strengthen institutions in Africa as part of its Millennium Goal programme. Strengthening research and research management capacity, developing robust research networks and effective linkages between researchers and policy makers within Africa and globally will make a positive contribution to achieving these Goals

http://www.dfid.gov.uk/aboutdfid/

# funding opportunities

every new opportunity every discipline

### highlights

Issue no. 10

### **Bioscience grants**

Biosciences Eastern and Central Africa offers up to \$100,000 for its competitive grants and fellowships. These awards support research in livestock and crop health and production, and their relation to human health and the environment [item 9].

### **Antarctic programme**

The National Research Foundation invites grant applications under its South African national Antarctic programme and its focus area grants across the natural, social and human sciences. Funding will support five years of research [item 16].

### Food security grants

The European Commission invites applications for funding under its food security programme for non-governmental organisations in Malawi and Burkina Faso. Funding of up to 1.25 million euros is available for these calls [items 149 and 158].

### **DOC** awards

Grants of up to \$1.5 million are available from the Department of Commerce's National Institute of Standards and Technology for grant programmes in areas including engineering, chemical and physical sciences [item 67].

### FP7 Marie Curie award

A total of 24 million euros is available from the European Commission for its Marie Curie fellowships in support of international collaboration [item 175].

### deadlines

1.12 = Issue 1 Item 12

### March

- 27 UK Hans Rausing endangered languages documentation programme field trip grant 9.37
- 28 SE GEMI Fund clinical use of gases research grants 9.38
- 29 BI EuropeAid micro-projects for the European democracy and human rights initiative: Burundi 9.39
  - **SD** EuropeAid micro-projects for the European democracy and human rights initiative: Sudan 9.40
  - **US** NIH integration of food and nutrition into prevention, care and treatment of HIV infection and Aids (RO3) RFA-HD-07-001 9.81
  - **US** Department of Defense battlefield helicopter emulator programme 9.208
- 30 UK NERC/ESRC/DfID ecosystem services and poverty alleviation programme: situation analyses 9.41
  - **US** American Chemical Society type AC and type B research grants 9.211 **IS** Dan David Foundation Dan David scholarships 8.99
  - **∏** European University Institute senior fellowships 7.104
  - **UK** Royal Geographical Society (with the Institute of British Geographers) Thesiger-Oman international research fellowship 7.105
  - **UK** Royal College of Obstetricians and Gynaecologists Malcolm Black travel fellowship and overseas fund travel grants 6.121
- **31 TZ** Economic and Social Research Foundation international fellowships 9.7
  - ZA South African Medical Research Council distinguished guest speaker sponsorship 9.8
  - **NG** Africa Regional Sexuality Resource Centre sexuality leadership development fellowship grants 9.9
  - IT Academy of Sciences for the Developing World prizes 9.42
  - ${\rm I\hspace{-.1em}T}$  International Centre for Genetic Engineering and Biotechnology fellowships 9.43
  - **IT** Third World Academy of Sciences Trieste science prize 9.45
  - **CH** Actelion Pharmaceuticals Ltd Actelion endothelin research awards
  - **US** Ochsner Clinic Foundation Alton Ochsner award relating to smoking and health 9.213
  - **US** Brandeis University Feldman scholarships and graduate fellowship 9 214
  - **KE** Aga Khan Foundation international scholarships: Kenya 8.2
  - **TZ** Aga Khan Foundation international scholarships: Tanzania 8.3
  - **UG** Aga Khan Foundation international scholarships: Uganda 8.4
  - MG Aga Khan Foundation international scholarships: Madagascar 8.5
  - **MZ** Aga Khan Foundation international scholarships: Mozambique 8.6
  - **US** Society of Automotive Engineers Cliff Garrett turbomachinery engineering award 8.35

- **UK** Physiological Society network interaction grants 8.70
- NL European and Developing Countries Clinical Trials Partnership Capacity building in preparation for the conduct of preventive HIV vaccine trials grants 8.71
- **UK** Society for Experimental Biology travel grant 8.72
- **KE** African Forest Research Network junior and senior scientists fellowship programmes 7.13
- **US** American Association of Stratigraphic Palynologists student scholarships 7.65
- **US** AVS Science and Technology Society Medard W Welch, Albert Nerken and Peter Mark memorial awards 7.66
- **UK** Scottish Hospital Endowments Research Trust foreign travel grants 7.106
- **ET** Embassy of the USA in Ethiopia self-help fund and democracy and human rights fund 6.13
- **US** Christensen Fund geographic focus programme and global biocultural initiative programme 6.83
- **UK** Royal Anthropological Institute Amaury Talbot prize for African anthropology 6.123
- **ZA** South African Medical Research Council overseas doctoral scholarships
- **FR** Fyssen Foundation postdoctoral study grants 5.129
- **CH** Swiss Federal Institute of Technology Zürich PhD and postdoctoral fellowships 5.130
- **DE** International Council of Ophthalmology IFOS/ICO fellowships 5.132
- **ZA** Rhodes University Hobart Houghton fellowships 4.12

### April

- 1 US Cancer Research Institute postdoctoral fellowships 9.217
- **ZA** South African Astronomical Observatory observing time 8.7
- **US** Biophysical Society US awards 8.36
- **US** Institute of International Education scholar rescue fund fellowships 8.39
- **UK** DEBRA research into epidermolysis bullosa 8.73
- **UK** Society of Libyan Studies grants in aid of research 8.74
- **UK** Royal Society of Chemistry JWT Jones travelling fellowship and journals grants for international authors 8.75
- **UK** Novartis Foundation symposium bursary scheme 8.77
- **US** American Society for Microbiology Sanofi-Aventis pharmaceuticals award 7.69
- **US** Religious Research Association Constant H Jacquet research awards 7.70
- **US** Biophysical Society Avanti award in lipids 7.71
- **UK** British Ecological Society small ecological project grants 7.110
- **KE** African Economic Research Consortium PhD thesis research awards 6.15
- **SE** Nordic Africa Institute African guest researcher's scholarship programme 5.134

- **CH** Roche Organ Transplantation Research Foundation grants 5.135
- 2 GH Department of Agriculture Norman E Borlaug international science and technology fellows programme 9.10
- **UK** Wellcome Trust fellowships in public health and tropical medicine 9.48
- **AU** Australian Academy of Technological Sciences and Engineering Derek Tribe award 9.246
- **UK** Association of Clinical Pathologists career development award 8.78
- CI EuropeAid micro-projects for the European democracy and human rights initiative: Ivory Coast 9.51
- US Sigma Theta Tau International/ Hospice and Palliative Nurses Foundation end of life nursing care research grant and Sigma Theta Tau International/Association of Nurses in Aids Care grant 9.218
- **US** American Physical Society James Clerk Maxwell prize for plasma physics
- 4 ZW EuropeAid micro-projects for the European democracy and human rights initiative: Zimbabwe 9.52
  - US Nasa research opportunities in space and earth science: Science Mission Directorate education and public outreach 8.40
- 5 US Harvard University Schlesinger research support grants and dissertation grants 10.21
- 6 US DoN network sensors: electrooptical and infrared discovery and invention 10.23
- O US NIH Ruth L Kirschstein national research service awards for individual senior fellows (F33) PA-07-172 9.83
- 10 US James S McDonnell Foundation 21st century science initiative scholar awards 9.221
  - IR Royan Institute international research award in reproductive biomedicine 9.247
- 13 **UK** British Telecommunications plc short-term research fellowships 10.140
  - US NIH interaction of HIV infection and alcohol abuse on central nervous system morbidity (U01) RFA-AA-07 -019 9.84
  - **US** American Chemical Society type SE grants 9.222
  - **US** Nasa research opportunities in space and earth science: astronomy and physics research and analysis 8.41
- 15 ZA Academy of Science of South Africa Sydney Brenner fellowship 10.8
  - **US** Society of Systematic Biologists Ernst Mayr award 10.25
  - **US** March of Dimes Birth Defects Foundation prematurity research initiative 10.26
  - **US** American Foundation for Suicide Prevention pilot grants 10.27 **CH** Roche Research Foundation
  - fellowships 10.141 **UK** European Association of Cardio-Thoracic Surgery 10.142
  - **US** Earthwatch field research 9.223
  - **UK** Society for Endocrinology conference grants 8.79
  - **US** Fats and Proteins Research Foundation research projects 7.72

### NOT TO BE PHOTOCOPIED

### africa

### Mauritian research grants

The Mauritius Research Council is offering its unsolicited research grants. Individual researchers and research institutions are invited to submit proposals in their own areas of interest. Proposals that are multidisciplinary and involve inter-institutional or inter-departmental collaboration are particularly encouraged. The current priority areas for the MRC are: biomedics; biotechnology; energy and energy efficiency; water resources; information and communication technology; manufacturing technology; marine resources; land and land use; science education; social/ economic fields. Preference will be given to proposals that are supported by the following institutions or organisations: the University of Mauritius, other tertiary institutions and polytechnics; any technical or training institutions registered with the industrial and vocational training board; governmental and non-governmental organisations; private companies. RA id:

Contact: MRC, La Maison de Carné, Royal Road, Rose-Hill, Mauritius. Tel +230 465 1235. Fax +230 465 1239. Email mrc@ intnet.mu. Web http://www.mrc.org. mu/Urgs.htm

No deadline [1]

### Tanzanian civil society

The Foundation for Civil Society invites applications for the following awards:

• strategic grants. Funding of up to TZS100 million (\$80,932) per year is available for up to three years to support a variety of activities that are of relevance to the poor and vulnerable. Projects must fall into one of the following thematic areas: policy; governance; safety nets for the vulnerable; advocacy and network strengthening. Applications are accepted from not-for-profit organisations registered in mainland Tanzania or Zanzibar. Projects must be undertaken in Tanzania. RA id: 199191;

• registration grants. Grants of up to TZS200,000 are available to assist unregistered organisations to become registered. Organisations should be working within one of the foundation's thematic areas. RA id: 199194.

Contact: Foundation for Civil Society, Haidery Plaza, 5th floor, Upanga/Kisutu Street, PO Box 7192, Dar es Salaam, Tanzania. Tel+255 22 213 8530. Fax+255 22 213 8533. Email information@ thefoundation-tz.org. Web http:// www.thefoundation-tz.org/eng/view -foundation-tz-grants.php

No deadline [2]

#### Mauritian research funds

The Mauritius Research Council invites applications for its collaborative research grants. The following awards are available:

• private sector grants. Proposals are invited from private sector companies, including small and medium enterprises, for innovative, commercially feasible collaborative research in partnership with local research, academic or training institutions. Proposals will be accepted in the area of science and technology including information and communication technology. Research must be conducted in Mauritius or its dependent territories;

• public sector grants. Applications are invited from researchers and research institutions in the public sector to submit proposals focusing on the following areas: flexitime; performance management; leadership; motivation; quality management; human resource management and development. Grants normally last for up to two years. RA id: 199215.

Contact: MRC, La Maison de Carné, Royal Road, Rose-Hill, Mauritania. Tel +230 465 1235. Fax +230 465 1239. Email mrc@ intnet.mu. Web http://www.mrc.org. mu/Funding.htm

No deadline [4]

### **South Africa fellowships**

The Africa Institute of South Africa invites applications for the following awards:

- the Archie Mafeje fellowship. This enables African scholars to conduct research contributing to ATSA's research programmes: sustainable development; peace and government; African diaspora; Pan-African parliament; internship. Candidates should be non-South Africans in possession of a PhD in a field relevant to African studies. Fellowships lasts three months. RA id: 199252:
- the Bernard Magubane fellowship. The aim is to provide an opportunity for young South African graduates to conduct research contributing to AISA's research programmes. Candidates should be South African masters graduates with the intention to study or already studying towards a PhD in a field relating to African studies. Fellowships lasts three months. RA id: 199258:
- resident fellowships. These aim to create space for debates or interaction between African scholars and policymakers and other stakeholders. Fellows should be South African scholars who wish to conduct research and writing at AISA for a limited period, or senior personnel, from either the public or private sectors. The duration of the fellowship is two weeks. RA id: 199260.

Successful applicants will receive a stipend, travelling expenses and basic working and living accommodation. Fellowships are based at AISA's offices in Pretoria, South Africa

Contact: Outreach and International Liaison, AISA Fellowship Programmes, PO Box 630, Pretoria 0001, South Africa. Tel +27 12 304 9700. Fax +27 12 321 3164. Web http://www.ai.org.za/fellowship\_programmes.asp

No deadline [5]

### Molecular biosciences

The Academy of Science of South Africa, in collaboration with the National Academy of Sciences of the US, invites applications for the Sydney Brenner fellowship. This will be awarded for postdoctoral studies in the molecular and cellular biosciences to be conducted in South Africa. Fellowships are worth ZAR150,000 (\$20,359) per annum for up to two years. Some travel and moving costs will also be covered. RAid: 198849.

Contact: Wieland Gevers, Tel +27 21 686 4450. Fax +27 21 606 4450. Email wieland@telkomsa.net. Web http://www.assaf.co.za/

Deadline: 15 April 2007 [8]

### **ZA-Italian grants**

The National Research Foundation, in cooperation with the Italian Ministry of Foreign Affairs and the Department of Science and Technology of the Republic of South Africa,

invites applications for joint research project funding. The aim is to encourage scientific and technological cooperation between Italy and South Africa. Each researcher must submit one project only. Projects may be submitted in the following priority research areas: agriculture; energy and environment; biotechnology; nanoscience and new and advanced material; information and telecommunication technologies; medicine and health; technologies applied to cultural heritage. Projects that demonstrate strong elements of capacity building will be highly considered. Only the cost of the exchange of researchers will be financed. Annually one short-term stay, of up to 10 days, or one long-term stay, of up to 30 days, will be financed per project. Travel costs will be covered by the sending party. The receiving party will give a contribution towards accommodation expenses. RA id: 199803.

Contact: Lutanani Rambau, National Research Foundation, GMSA (ISC-G), PO Box 2600, Pretoria 0001, South Africa. Tel +27 12 481 4208. Fax +27 12 481 4054. Email Lutanani@nrf.ac.za. Web http:// www.nrf.ac.za/services/isl/index.stm

Deadline: 16 April 2007 [8.1]

### **Bioscience grants**

Biosciences Eastern and Central Africa invites applications for the following awards;

- competitive grants. These support projects that may lead to products or the development of more significant collaborative research projects. Proposals are invited in the following areas: livestock health and production; crop health and production; interface of the two thematic areas above with special emphasis on human health and environment. Funding of up to \$100,000 for a maximum of two years is available. RA id: 199614;
- fellowships. These provide support for postgraduate training while also facilitating biosciences to address high priority agricultural problems. Applications are welcomed in the following areas: livestock health and production; crop health and production; interface of the two areas above with special emphasis on human health and environment. Three types of fellowship are available: competitive research fellowships; research fellowships for young African women scientists; research fellowships targeting post-conflict countries. Masters degree applicants must have completed the first year of their masters programme. Male applicants may be up to 30 years of age and female applicants up to 35 years of age. Doctoral degree applicants must have completed a master degree and be up to 35 years of age if male and up to 40 years if

female. Fellowships are worth \$20,000 per annum and are available for a period of one year for a masters degree and two years for a PhD. RA id: 199620.

Scientists from the following countries are eligible to apply: Eritrea; Ethiopia; Somalia; Kenya; Uganda; Rwanda; Burundi; Madagascar; Tanzania; Sudan; Democratic Republic of Congo; Congo Brazzaville; Central African Republic; Gabon; Cameroon; Equatorial Guinea; Sao Tome Principal.

Contact: Enyonam Norgbey, Biosciences Eastern and Central Africa, PO Box 30709, Nairobi 00100, Kenya. Tel +254 20 4223000. Fax +254 20 4223001. Email e.norgbey@cgiar.org.

Deadline: 20 April 2007 [9]

### **ZA-German grants**

The National Research Foundation, in cooperation with the Federal Ministry for Education and Research of Germany, invites applications for its South Africa and Germany joint research project funding. This call is open to researchers who reside in South . Africa and are affiliated with a recognised higher education or research institution. An application must designate two principal investigators, one in South Africa and one in Germany. Both principal investigators must be in possession of a PhD. Applications from any recognised field of study will be accepted. A maximum of ZAR300,000 (\$40,908) is available per project for up to three years. RA id: 198796.

Contact: Lutanani Rambau, National Research Foundation, GMSA (ISC-G), PO Box 2600, Pretoria 0001, South Africa. Tel+27 12 481 4208. Fax+27 12 481 4054. Email Lutanani@nrf.ac.za. Web http://www.nrf.ac.za/services/isl/

Deadline: 30 April 2007 [11]

### Social science awards

The Organization for Social Science Research in Eastern and Southern Africa invites applications for the following awards as part of the competition for young scholars:

• social science research grants. The goals are to encourage young scholars to conduct research in the social sciences, to strengthen teaching in the social sciences through the joint participation of faculty and students in field research, and to enhance the subsequent availability of research findings for teaching purposes. Proposals may be submitted by researchers from any of the disciplines in the social sciences. Applicants must be based in Eastern or Southern Africa, currently employed and enrolled in or otherwise affiliated with a national institution which conducts research. Applicants must also hold at least a masters degree. Grants are worth \$5,000. RA id:

### Research-Africa.net

FOR FULL DETAILS OF EVERY FUNDING OPPORTUNITY

Funding opportunities	\$
123456	ок
	-

Online subscribers can quickly and easily pull up the full details of funding opportunities using the RR ID shown in the listing. To view an opportunity insert the ID, eg 123456, in the "Simple search" option in the top right of your screen.

### Research Africa

#### ISSN 1751-617X

Published monthly. The next edition will be published on 24 April.

Research Africa 6th Floor, Bandwidth Barn 125 Buitengraght Street Cape Town 8001, South Africa Tel +27 21 409 7912 Fax +27 21 409 7913 Letters to ln@research-africa.net

**Editor-in-Chief** William Cullerne Bown

Editor Linda Nordling Sub Editors Linda Cilliers Contributors Deborah-Fay Ndlovhu, Anastasia Nylund

Funding Editor Malin Carlberg Editorial Assistants Maya Berger, Adam Cranfield, John Fogarty, Laura Hood, Anastasia Nylund, Carl Samuelsson, Daniel Whibley, Nicola Williams, Lydia Winklhofer

**Production Assistant** Katherine Stewart

IT and Production Manager Steve Potter

#### Subscriptions

Call the Cape Town office for a trial subscription to either the paper or online edition.

Tel +27 21 409 7912 Fax +27 21 409 7913 subs@research-africa.net

Publisher Diana Coates
Sales and Marketing Director
Kenneth Gambo
Subscriptions Heather Anderson

### Advertising

Contact Kenneth Gambo for job and funding ads. kg@research-africa.net

Published by Research Research (Africa) (Pty) Ltd. Copyright © Research Research Ltd and Research Research (Africa) (Pty) Ltd 2007.

### ALL RIGHTS RESERVED

Reproducing Research Africa by photocopying, electronic or other means in any language without the permission of the publisher is illegal.

For further information about Research Africa, see our website www.research-africa.net

Research Africa is an independent newspaper. It has received startup funding from the Department for International Development in the UK, but the views expressed here do not in any way reflect DFID or UK policy.

NOT TO BE PHOTOCOPIED

• genders issues research grants. The aim is to encourage young scholars to conduct research that will contribute to the elucidation and understanding of gender issues as they relate to development. A secondary aim is to encourage the availability of research findings for policymakers as well as for teaching purposes. Proposals may be submitted by researchers from any of the disciplines in the social sciences, with a focus on gender issues. Suggested topics include the following: access to and control of resources; gender and sociopolitical dynamics; changing gender and generational relations in Aids-ravaged communities; gender, economy and globalisation; framework and policy for the integration of women in development; sexuality and reproductive health; gender and trade: political mobilisation and good governance; literature, religion and culture; gender violence. Applicants must be based in Eastern or Southern Africa, currently employed and enrolled in or otherwise affiliated with a national institution which conducts research. Candidates must hold a masters degree. Women are strongly encouraged to apply. Grants are worth \$5,000. RA id: 199449.

Contact: Coordinator, OSSREA, PO Box 31971, Addis Ababa, Ethiopia. Tel+25111 1239484. Fax +251 11 1223921. Web http://www.ossrea.net/announcements/

Deadline: 30 April 2007 [12]

### Small thesis writing grants

The Council for the Development of Social Science Research invites applications for its small grants for thesis writing. The grants are intended to contribute to the development of the social sciences in Africa and the continuous renewal and strengthening of research capacities in African universities through the funding of primary research. Applications are welcomed from graduate students and professionals registered in African universities preparing their theses and dissertations in social science fields and other disciplines involving social or economic analysis. RA id: 198791.

Contact: CODESRIA, BP 3304, CP 18524, Dakar, Senegal. Tel +221 825 9822. Fax +221 824 1289. Email small.grants@ codesria.sn. Web http://www.codesria. orr/news.htm

Deadline: 11 May 2007 [15]

### Antarctic programme grants

The National Research Foundation invites applications for the following awards:

• the South African national Antarctic programme. Grants are available for projects concerned with understanding environmental variability to ensure quality of life via sustainable interactions with the Earth system that supports human existence and the social context in which humans operate. Proposals should address one of the following themes: Antarctica – a window into geospace; climate variability - past, present and future; biodiversity responses to Earth system variability; engineering a sustainable presence in Antarctica; the history, sociology, politics and culture of Antarctic research and exploration. Applications are welcomed from researchers in higher education and at other recognised research institutions in South Africa. RAid: 199320;

• focus area grants. Funding is available for researchers across the natural, social and human sciences, engineering and technology to pursue their research interests taking into account the macro-environment as well as relevant national developments. Projects will be supported in the following focus areas: challenge of globalisation perspectives from the global South; conservation and management of ecosystems and biodiversity; distinct South African research opportunities; economic growth and international competitiveness; education and the challenges for change; information and communication technology and the information society in South Africa; sustainable livelihoods and the eradication of poverty; unlocking the future - advancing and strengthening strategic knowledge. Researchers, either as individuals or as teams, in natural sciences, engineering, social sciences, law and humanities may apply for funding. Applicants must be employed at an NRF recognised research institution in South Africa. Funding will be available for five years. RA id: 199331.

Contact: NRF, PO Box 2600, Pretoria 0001, South Africa. Tel +27 12 481 4180. Web http://www.nrf.ac.za/

Deadline: 14 May 2007 [16]

### Social science seminars

The Council for the Development of Social Science Research invites applications for its social science faculty seminar grants. These contribute to the development, restoration or consolidation of a culture of regular faculty seminars in African universities. Staff of faculties of social science are invited to submit applications. A total of \$100,000 is available to support up to 10 faculty seminars across Africa. A provision for the purchase of books and journals is also available. RA id: 199098.

Contact: CODESRIA, BP 3304, CP 18524, Dakar, Senegal. Tel +221 825 9822. Fax +221 824 1289. Email faculty.seminars@ codesria.sn. Web http://www.codesria. org/news.htm

Deadline: 15 May 2007 [18]

usa

### Parkinson's disease

The Michael J Fox Foundation for Parkinson's Research invites applications for its rapid response innovation awards. The aim is to support research focused on the cause of, and cure for, Parkinson's disease. Research grants of up to \$75,000 are available. Applications may be submitted by US and non-US entities, public and private non-profit entities, units of state and local governments, and eligible agencies of the federal government and for-profit entities. RA id: 197425.

Contact: MJFF, 381 Park Avenue South, Suite 820, New York, NY 10016, USA. Tel +1 212 509 0995 ext 228. Email research@ michaeljfox.org. Web http://www. michaeljfox.org/research/fundingopp. php?id=29

No deadline [19]

### Diabetes industry grants

The Juvenile Diabetes Research Foundation International is soliciting proposals under its industry discovery and development partnerships programme. JDRF seeks proposals for the discovery, development and commercialisation of therapeutics for type one diabetes and its complications. Projects should focus on one of the following areas of interest: restoring beta cell function; restoring immunoregulation; preventing, postponing and reversing diabets.

ic complications. Grants will support research in biotechnology companies or other for-profit entities. JDRF will fund applied research programmes at different stages of development up to a level of \$5 million per programme. RA id: 198492.

Contact: Paul Burn, JDRF, 120 Wall Street, 19th Floor, New York, NY 10005-4001, USA. Tel +1 212 479 7572. Email pburn@jdrf.org. Web http://www. jdrf.org/index.cfm?page\_id=103207

No deadline [20]

### **Schlesinger Library grants**

The Schlesinger Library at the Radcliffe Institute for Advanced Studies invites applications for the following awards:

• research support grants. Applicants must have a doctoral degree or equivalent experience. RA id: 198919;

• dissertation grants. Applicants must have advanced to candidacy in a doctoral programme in a relevant field and have an approved dissertation topic. RAid: 198915.

Grants are available for scholars whose research requires use of the library's collections on the history of women in America. Funding of up to \$3,000 is available for travel, living expenses, photocopying and other expenses.

Contact: Schlesinger Library, Radcliffe Institute for Advanced Study, 10 Garden Street, Cambridge, MA 02138, USA. Tel +1 617 495 8647. Fax +1 617 496 8340. Email slgrants@radcliffe.edu. Web http://www.radcliffe.edu/schles/grants/ index.php

Deadline: 5 April 2007 [21]

### **Electro-optical technologies**

The Office of Naval Research solicits proposals for its network sensors: electro-optical and infrared discovery and invention programme. White papers are sought under the following interest areas: electro-optical and infrared sensor electronic field of regard, field-of-view and magnification; electro-optical and infrared scene simulation for persistent surveillance development. ONR anticipates a budget of \$2.5 million per year. Individual awards are expected to be in the region of \$100,000 to \$500,000 per year for up to three years. ONR BAA 07-015. RA id: 199385.

Contact: Carol Brown, Contract and Grant Awards Management, Office of Naval Research, Code BD 251, 875 North Randolph Street, Arlington, VA 22203-1995, USA. Email carol\_brown@onr.navy. mil. Web http://www.fbo.gov/spg/ DON/ONR/ONR/ONRBAA07%2D015/ Attachments.html

Deadline: white papers 6 April; full proposals 15 June 2007 [23]

### Systematic biology award

The Society of Systematic Biologists invites applications for the Ernst Mayr award. This is given to the presenter of a student paper in the field of systematics at the annual meetings of SSB. The award is worth \$1,000. RA id: 198823.

Contact: Kelly R Zamudio, SSB, c/o Cornell University, Department of Ecology and Evolutionary Biology, E209 Corson Hall, Ithaca, NY 14853-2701, USA. Email krz2@cornell.edu. Web http://systbio. org/?q=node/10

Deadline: 15 April 2007 [25]

### Premature births research

The March of Dimes Birth Defects Foundation is requesting proposals for projects related to causes of prematurity. Proposals on new paradigms based on strong conceptual frameworks are invited. The aim is to provide insights into the large proportion of preterm deliveries in which the cause remains elusive. Proposals need to consider, but not be limited to, genetics and geneenvironment interactions, and animal models. Applicants must be members of not-for-profit institutions. Grants are awarded for a three-year period, with an annual funding of up to \$133,332. RA id: 199041.

Contact: March of Dimes Birth Defects Foundation, 1275 Mamaroneck Avenue, White Plains, NY 10605, USA. Tel +1 914 997 4488. Email researchgrants@ marchofdimes.com. Web http://www. marchofdimes.com/professionals/691\_

Deadline: letters of intent 15 April; invited full applications 15 July 2007 [26]

### **Suicide prevention**

The American Foundation for Suicide Prevention invites applications for its pilot grants, which provide seed money for new projects. Funding of up to \$10,000 per year is available for projects lasting up to two years. Research may focus on a variety of disciplines, including psychiatry, medicine, psychology, genetics, epidemiology, neurobiology, sociology, nursing and healthcare administration. RA id: 199456.

Contact: American Foundation for Suicide Prevention, 120 Wall Street, 22nd Floor, New York, NY 10005, USA. Tel+1212 363 3500. Fax +1 212 363 6237. Email inquiry@afsp.org. Web http://www. afsp.org/index.cfm?page\_id=0535FDA2 -FA7D-AAE8-D7A9A6BCFFE3574B

Deadline: 15 April 2007 [27]

### **Neurofibromatosis** awards

The Army Medical Research and Materiel Command solicits proposals for the following awards under the Department of Defense neurofibromatosis research programme:

• investigator-initiated research award. Total funding of approximately \$3 million is available. Applicants must be independent investigators at the assistant professor level or higher. W81XWH-07-NFRP-IIRA. RA id: 199465:

• new investigator award. The aim is to help investigators at the early stages of their careers become NF or Schwannomatosis researchers. Funding can be requested for up to \$375,000 over a threeyear period. Projects that include a qualified collaborator are eligible for funding of up to \$525,000. Applicants must be independent investigators below the level of associate professor with access to research facilities. W81XWH-07-NFRP-NIA. RA id: 199469

Proposals are sought to address the needs of the NF community in the following areas: translational research; complications of NF; refinement and standardisation of imaging techniques for use in clinical trials.

Contact: Commander, USAMRAA, 1077 Patchel Street, Bldg 1077, Fort Detrick, MD 21702-5024, USA, Tel +1 301 619 7079. Fax +1 301 619 7792. Email cdmrp.pa@ det.amedd.army.mil. Web http://cdmrp. army.mil/funding/nfrp.htm

Deadline: pre-applications 5pm EST 19 April; full proposals 11.59pm EST, 15 May 2007 [29]

### RF electronics

The Office of Naval Research invites proposals for affordable electronically scanned array technology for next generation naval platforms as part of its future naval capability initiative. ONR seeks proposals addressing technologies and concepts that support advanced naval theatre air and missile defence radars and electronic warfare systems. Projects should aim to reduce the cost of radar and electronic warfare systems while improving power, efficiency and cooling capabilities. Technologies and concepts that maximise radiated power and minimise prime power and waste heat are of particular interest. Contracts are available for up to \$5 million. Grants will be awarded for up to \$200,000 per year for up to five years. BAA 07-010. RA id: 199389.

Contact: Dan Purdy, Office of Naval Research, One Liberty Place, 875 North Randolph Street, Suite 1425, Arlington, VA 22203-1995, USA. Email purdyd@ onr.navy.mil. Web http://www.fbo.gov/ spg/DON/ONR/ONR/ONRBAA07%2D010/ listing.html

Deadline: 20 April; full proposals 20 July 2007 [31]

### Nanotechnology research

The Army Research, Development and Engineering Command-Armaments Research, Development and Engineering Center invites proposals under its nanotechnologies programme. The aim is to identify and develop nanotechnologies for the purpose of generating future armament systems. W15QKN-07-R-0210. RA id: 199667.

Contact: Margaret Rhinesmith, US Army ARDEC, AMSTA-AR-PC, Picatinny Arsenal, New Jersey 07806-5000, USA. Tel +1 973 724 3294. Email mrhines@pica.army.mil. Web http://procnet.pica.army.mil/ dbi/Download/GoGetSolicitation.cfm? SolNum=W15QKN-07-R-0210

Deadline: 25 April 2007 [32]

### Pain research grants

The International Association for the Study of Pain invites proposals for its collaborative research grants. These support multidisciplinary collaborative research between research groups located in different countries. Priority will be given to collaborations between basic science and clinical research groups. The principal investigator must be a member of IASP. The maximum grant awarded will be of \$15,000 for travel and accommodation costs, RAid: 199069.

Contact: IASP Secretariat, 111 Queen Anne Avenue N, Suite 501, Seattle, WA 98109-4955, USA. Tel +1 206 283 0311. Fax +1 206 283 9403. Email iaspdesk@ iasp-pain.org. Web http://www.iasp -pain.org/AM/Template.cfm?Section= Grants1&Template=/CM/HTMLDisplay.cfm &ContentID=1557

Deadline: 30 April 2007 [33]

### Cancer research prize

The Memorial Sloan-Kettering Cancer Center invites nominations for the Paul Marks prizes. These recognise young investigators who have made contributions to increase the understanding of cancer or improve the treatment of the disease through basic or clinical research. The winners will present their work at MSKCC and share an award of \$150,000. RAid: 199412.

Contact: Mary Alice Yates, Office of the President, MSKCC, 1275 York Avenue, New York, NY 10021, USA. Tel+12126393956. Email publicaffairs@mskcc.org. Web http:// www.mskcc.org/mskcc/html/53983.cfm

Deadline: 30 April 2007 [34]

#### Primate conservation

The American Society of Primatologists invites nominations for its conservation award. This provides recognition and financial support for students and young investigators from habitat countries who demonstrate notential for making contributions to primate conservation. Those eligible include students, researchers and educators from primate habitat countries for whom no more than five years have elapsed since receipt of their last degree. The award is valued at \$750. RA id: 198990.

Contact: Kimberley A. Phillips, ASP Conservation Committee, Hiram College, Department of Psychology, Hiram OH 44234, USA. Email phillipsk@hiram.edu. Web http://www.asp.org/grants/ ConservationAwards/AwardAnounce2007.

Deadline: 1 May 2007 [35]

### **Atmospheric composition**

Nasa invites proposals to participate in the science advisory group for the glory mission. This is intended to continue and improve upon long-term monitoring of the key forces influencing the global climate. One of the principal objectives is to determine the global distribution of detailed aerosol and cloud properties with unprecedented accuracy, thereby facilitating reliable quantification of the aerosol direct and indirect effects on climate. The mission will also continue to record satellite-based measurements of total solar irradiance and thereby enable the quantification of the effect of solar variability on the Earth's climate. Nasa anticipates making around 15 awards for projects lasting up to two years. The total annual budget is \$600,000. NNH07ZDA001N-GSAG. RA id: 198991.

Contact: Hal Maring, Earth Science Division, Science Mission Directorate, Nasa, Washington, DC 20546-0001, USA. Tel+1 202 358 1679. Email hal.maring@ nasa.gov. Web http://nspires.nasaprs. com/external/solicitations/summary.do? method=init&solId=%7B4E73B21F-A23E -BC4B-BA3E-A3D6E2819682%7D&path =open

Deadline: 1 May 2007 [36]

### **Heliophysics investigators**

Nasa's Science Mission Directorate invites applications for its heliophysics quest investigators programme under its research opportunities in space and Earth science announcement. The programme is offered for investigations that draw upon the data sets from Nasa's heliophysics spaceflight missions. Investigations using data from multiple spacecraft and global system problems are of special interest. Investigations may also use theory and modelling to carry out the associated interpretative data analysis. Special areas of interest include: geospace missions; solar and heliospheric missions; STEREO mission quest investigators. Nasa anticipates making up to 55 awards in geospace and solar and heliospheric missions from a total budget of \$5.5 million. Up to eight STEREO mission quest investigator awards will be made from a total budget of \$800,000. NNH07ZDA001N-HGT. RA id: 198999

Contact: Charles P Holmes, Heliophysics Division, Science Mission Directorate, Nasa Headquarters, Washington, DC 20546-0001, USA. Tel +1 202 358 2224. Email Charles.P.Holmes@nasa.gov. Web http://nspires.nasaprs.com/external/ solicitations/summary.do?method=init& solId=%7B95D45260-C710-33AB-F7F6 -539E379E69D8%7D&path=open

Deadline: 11 May 2007 [37]

#### Nasa awards 1

Nasa invites proposals for the following awards under its research opportunities in space and Earth sciences programme:

• projects on airborne instrument technology transition. This will provide an opportunity for the integration of existing instruments, developed under the Nasa instrument incubator programme or similar programmes, onto any available platform supported by the Nasa suborbital science programme. The proposed investigation should support the objectives of at least one of the following focus areas: carbon cycle and ecosystems; climate variability and change; water and energy cycle; atmospheric composition; weather; Earth surface and interior. The proposed budget for this programme is \$2.5 million for the first year of funding and \$1.5m for the second year. NNH07ZDA001N-AITT. RA id: 198973;

• wind lidar science investigations. Proposals are sought in preparation for a potential global winds measurement mission in the following areas: examining data from the geoscience laser altimeter system, the cloud-aerosol lidar, and the infrared pathfinder satellite observation lidar; studying how to utilise velocity and ranging information from orbiting Doppler lidars to improve the value of cloud motion winds and scatterometer ocean surface winds; performing observing system simulation experiments using a nature run such as the European Centre for Medium Range Weather Forecasts; performing experimental studies on the statistics of the vertical wind from ground-based observations; conducting an intercomparison of several coherent and direct detection Doppler lidars at Nasa's lidar intercomparison facility; investigating the importance of each individual component of the orbiting wind mission measurement requirements. There is an annual budget of \$1m for projects lasting up to three years. NNH07ZDA001N-WLS. RA id: 198961:

 planetary geology and geophysics research. This supports investigations of the planetary surfaces and interiors, satellites, satellite and ring systems, and smaller solar system bodies such as asteroids and comets. The aim is to foster the gathering, synthesis, analysis, and comparative study of data that will improve the understanding of the extent and influence of planetary geological and geophysical processes on the bodies of the solar system, the origin and evolution of the solar system, and the nature of Earth and its history in comparison to other planets. The annual budget is anticipated to be \$4m. NNH07ZDA001N-PGG. RA id: 199315.

Contact: Ramesh Kakar, Earth Science Division, Science Mission Directorate, Nasa, Washington, DC 20546-0001, USA. Tel+1 202 358 0240. Email ramesh.k.kakar@ nasa.gov. Web http://nspires.nasaprs.com/external/solicitations/solicitations.do?id=NNH07ZDA001N&method=program Elements&path=open

Deadline: 16 May 2007 [38]

### Neuropsychopharmacology

The American College of Neuropsychopharmacology invites applications for the following awards:

• the Joel Elkes research award, presented to a young scientist in recognition of a clinical or translational contribution to neuropsychopharmacology. The award consists of a paid trip to the ACNP annual meeting and a monetary award. RA id: 199125;

• the Efron award, given to an individual on the basis of basic or translational research contributions to neuropsychopharmacology. The contributions may be preclinical or work which emphasises the interface between basic and clinical research. The award consists of an expenses paid trip to the ACNP annual meeting and a monetary award. RA id: 199162.

Contact: ACNP Executive Office, Honorific Awards, 545 Mainstream Drive, Suite 110, Nashville, TN 37228, USA. Tel +1 615 324 2360. Fax +1 615 324 2361. Email acnp@acnp.org. Web http://www.acnp.org/Default.aspx?Page=fellowships Deadline: 18 May 2007 [41]

### Nasa awards 2

The Nasa Science Mission Directorate invites applications for the following awards under its research opportunities in space and Earth science programme:

· cosmochemistry research. The programme supports investigations of a variety of extraterrestrial materials that are aimed at understanding the geochemistry of the solar system bodies. Nasa is particularly interested in proposals for samplefocused research projects that closely support its activities for exploring the solar system or that contribute to the development of techniques for such further exploration. Proposed periods of performance may be up to three years each. The annual funding level will be approximately \$5 million. Applicants may also submit proposals under the planetary major equipment programme for upgrading the analytical. computational, telescopic, and other instrumentation required by investigations for this programme. NNH07ZDA001N-COS. RA

• Kepler mission participating scientists programme. The aims include providing a statistically significant value for the frequency of Earth-size and larger planets in and near the habitable zone, characterising the size and orbital distributions of such planets and identifying correlations between the presence and characteristics of planetary systems with stellar properties of the host star. Successful applicants will participate in Kepler science team activities in one of the following disciplines: asteroseismology; transit follow-up observations; planetary system characterisation; astrometry; analysis algorithm development. Approximately \$1m will be available per year. RA id: 199329.

Contact: Science Mission Directorate, Nasa Headquarters, Washington, DC 20546-0001, USA. Tel +1 202 358 0311. Web http://nspires.nasaprs.com/external/ solicitations/solicitations.do?id=NNH07ZD A001N&method=programElements&path

Deadline: 18 May 2007 [43]

### **Network technologies**

The Defense Advanced Research Projects Agency invites proposals for adaptive network development under its wireless network after next programme. The aim is to design and develop the network technologies necessary to establish ultra-large, highly-scalable, highly-adaptive ad-hoc networks that provide robust networking across densely-connected deployments of inexpensive wireless nodes. Proposers will develop WNaN network technologies that support network scalability as node density increases. BAA07-07. RA id: 199436.

Contact: Patty Matyskiela, Contract Specialist, DARPA, Contracts Management Office, 3701 North Fairfax Drive, Arlington, VA, 22203-1714, USA. Email Patricia. Matyskiela@darpa.mil. Web http://www.fbo.gov/spg/ODA/DARPA/CMO/BAAO7%2D07/listing.html

Deadline: 31 May 2007 [45]

### **Textile arts fellowships**

The Embroiderers' Guild of America invites applications for the research fellowship grants. These promote research in all areas of embroidery and allied textile arts and create a basis for dialogue between EGA and other research institutions. Grants are worth up to \$1,000. RA id: 197511.

Contact: Embroiderers' Guild of America, 426 West Jefferson Street, Louisville, KY 40202, USA. Tel +1 502 589 6956. Fax +1 502 584 7900. Email egahq@egausa.org.Webhttp://www.egausa.org/html/scholarships\_awards.html

Deadline: 1 June 2007 [46]

### Psychology award

The American Psychological Association invites nominations for its international award for contributions to the international advancement of psychology. This award recognises lifetime contributions to the international cooperation and advancement of knowledge in psychology. RA id: 198831.

Contact: Sally Leverty, American Psychological Association, Office of International Affairs, 750 First Street, NE, Washington, DC 20002-4242, USA. Tel+1 202 336 6025. Fax+1 202 312 6499. Email sleverty@apa.org. Web http://www.apa.org/international/awarddistcall.html

Deadline: 1 June 2007 [47]

### Second language testing

The Educational Testing Service's test of English as a foreign language board invites applications for the Jacqueline A Ross dissertation award. This award of \$2,500 is for completed doctoral dissertation research that makes a contribution to knowledge about second or foreign language tests and testing or the use and development of such tests and testing. RA id: 199026.

Contact: ETS, TOEFL Grants and Awards Program, MS 3-L, PO Box 6155, Princeton, NJ 08541-6155, USA. Fax +1 609 683 2022. Email TOEFL\_awards@ets.org. Web http://www.ets.org. Then click on 'TOEFL' and 'grants and awards'.

Deadline: 2 June 2007 [49]

### Anesthesiology research

The International Anesthesia Research Society invites applications for its clinical scholar research awards. The aim is to further the understanding of clinical practice in anaesthesiology and related sciences through clinical investigations. Research must

involve human subjects, in vivo or in vitro. The maximum amount to be awarded for any project is \$80,000. The principal applicant must be a member of the society. RA id: 198947.

Contact: International Anesthesia Research Society, 2 Summit Park Drive, Suite 140, Cleveland, OH 44131-2571, USA. Tel+1216642 1124. Fax+1216642 1127. Email iarshq@iars.org. Web http://www.iars.org/researchawards/ clinicalDetail.shtm

Deadline: 4 June 2007 [50]

### Huntington's disease awards

The Huntington's Disease Society of America invites applications for the following awards:

• research grants which serve as seed monies for new or innovative research projects with the expectation that they will develop sufficiently to attract funding from other sources. Grants are available to principal investigators in the amount of up to \$50,000 for a one year period. RA id: 197246:

• fellowships. These are designed to help promising postdoctoral investigators in the early stages of their careers. Fellowships are available in the amount of up to \$40,000 for one year with the possibility of a second year of funding. RA id: 197247.

Contact: Robert Graze, Medical/Scientific Programmes, Huntington's Disease Society of America, 505 Eighth Avenue, Suite 902, New York, NY 10018, USA. Tel +1 212 242 1968 ext 27. Fax +1 212 239 3430. Email rgraze@hdsa.org. Web http:// www.hdsa.org/site/PageServer?pagename =HDSA\_Research\_Grants\_and\_Fellowships \_Programs

Deadline: 1 July 2007 [51]

### Research on orchids

The American Orchid Society awards grants for non-commercial conservation projects, as well as experimental projects of fundamental and applied research on orchids. The aim is to advance the conservation and preservation of orchids, and advance the scientific study of orchids as well as to assist in the publication of scholarly and popular scientific literature on orchids. Qualified personnel associated with accredited institutions or organisations and graduate students with appropriate interests may apply. Salary may be supported. Grants are worth up to \$12,000. The maximum duration of support is three years. RA id: 197418.

Contact: American Orchid Society, 16700 AOS Lane, Delray Beach, FL 33446-4351, USA. Tel +1 561 404 2000. Fax +1 561 404 2045. Email TheAOS@aos.org. Web http://www.aos.org/aos/research/ page04 asnx

**Deadline: 7 July 2007** [53]

### Physics awards

The American Physical Society invites nominations for the following awards:

• the Aneesur Rahman prize for computational physics. The aim is to recognise achievements in computational physics. The prize consists of \$5,000 and an allowance for travel to the meeting of the society at which the prize is awarded and at which the recipient will deliver the Rahman lecture. RA id: 198139;

• the Arthur L Schawlow prize in laser science. This recognises contributions to basic research that uses lasers to advance knowledge of the fundamental physical properties of materials and their interaction with light. The prize consists of \$10,000 plus an allowance for travel to the meeting at which the prize is awarded. RA id: 198140;

• the biological physics prize to recognise achievements in biological physics research. The prize consists of \$5,000, an allowance for travel to attend the meeting at which the prize is awarded and a certificate citing the contributions made by the recipient or recipients. RA id: 198191;

• the Dannie Heineman prize for mathematical physics. The aim is to recognise publications in the field of mathematical physics. The prize consists of \$7,500 plus travel expenses to attend the meeting at which the prize is bestowed. RA id: 198192;

• the Davisson-Germer prize in atomic or surface physics. The aim is to recognise work in atomic physics or surface physics. The 2008 prize recipient will be selected for work done in the area of atomic physics. The prize consists of \$5,000. RAid: 198194:

• the Frank Isakson prize for optical effects in solids. The \$5,000 prize aims to recognise contributions to the field of optical effects in solids. RA id: 198197.

Contact: APS, One Physics Ellipse College Park, MD 20740-3844. Tel +1 301 209 3268. Fax +1 301 209 0865. Web http://www.aps.org/programs/honors/prizes/

**Deadline: 1 July 2007** [54]

### International development

The Conservation Food and Health Foundation invites applications for its project grants. These assist in the conservation of natural resources, the production and distribution of food and the improvement and promotion of health in the developing world. The foundation is especially interested in projects that lead to the transfer of responsibility to the citizens of developing countries for managing and solving their own problems and developing the capacity of local organisations. Preference will be given to projects in areas that tend to be underfunded. The average grant is approximately \$11,000, and grants exceeding \$25,000 are rarely awarded. Preference will be given to organisations located in developing countries or to developed country organisations whose activities are of benefit to developing countries. RA id: 198924.

Contact: Prentice Zinn, Grants Management Associates, Conservation, Food, and Health Foundation, 77 Summer Street, Suite 800, Boston, MA 02110-1006, USA. Tel +1 617 426 7080 ext 307. Fax +1 617 426 7087. Email pzinn@grantsmanagement.com.Web http://www.grantsmanagement.com/cfhquide.html

Deadline: concept applications 2 July; invited applications 3 September 2007

### **Fundamental aeronautics**

Nasa's Aeronautics Research Mission Directorate is inviting applications for a subsonic rotary wing project under the fundamental aeronautics section of its research opportunities in aeronautics solicitation. The aim is to develop validated physics-based multidisciplinary design and analysis tools for rotorcraft, integrated with technology development, enabling rotorcraft with advanced capabilities to fly as designed for any mission. The focus is on the civil utility of rotorcraft. Several facets of competitiveness will be attacked at the fundamental research level: efficiency; productivity; environmental acceptance. Nasa intends to commit \$2.9 million annually to

fund up to 10 awards under this solicitation. Awards will be for up to three years. NNH067FA001N-SSRW2 RA id: 198167

Contact: Susan A Gorton (SRW PI), Nasa, Email Susan.A.Gorton@nasa.gov. Web http://nspires.nasaprs.com/external/ solicitations/summary.do?method=init &solId={E89FB23B-2092-091C-06D2 -FCED8BA5051F}&path=open

Deadline: 5 July 2007 [61]

### **Human origins**

The Leakey Foundation invites applications for its general research grants for studies into human origins. Priorities include research into: environment, archaeology, and human palaeontology; behaviour, morphology, and ecology of the great apes and other primate species; behavioural ecology of contemporary hunter-gatherers. Grants to doctoral students are worth up to \$13,500; larger grants may be funded up to \$22,000. RA id: 197380.

Contact: Leakey Foundation, PO Box 29346, 1002A O'Reilly Avenue, San Francisco, CA 94129-0346, USA, Tel +1 415 5614646. Fax +1 415 5614647. Email grants@leakeyfoundation.org. Web http:// www.leakeyfoundation.org/grants/g2.jsp

### Deadline: 15 July 2007 [62]

### Combination myeloma award

The Multiple Myeloma Research Foundation is inviting applications for its validation of novel combination awards. These support the testing of several targeted therapeutic agents in innovative, rationally-designed combinations and sequences. Proposals may request up to \$100,000 for one year.

Contact: Multiple Myeloma Research Foundation, 383 Main Avenue, 5th floor, Norwalk, CT 06851, USA. Tel +1 203 229 0464. Email info@themmrf.org. Web http://multiplemyeloma.org/research/ 5.10.html

Deadline: 31 July 2007 [174]

### **Biomedicine prize**

The Wiley Foundation invites nominations for its prize in biomedical sciences. The prize of \$25,000 recognises contributions that have opened new fields of research or advanced novel concepts or their applications in a particular biomedical discipline. The award may recognise a specific contribution or a series of contributions that demonstrate the nominee's leadership in the development of research concepts or their clinical application. RA id: 197039.

Contact: Deborah E Wiley, Wiley Foundation, John Wiley & Sons Inc, 111 River Street, Hoboken, NJ 07030, USA. Tel +1 201 748 6783, Fax +1 201 748 6940, Fmail dwiley@wiley.com. Web http://www. wiley.com/legacy/wileyfoundation/about

Deadline: 31 July 2007 [63]

### Homeland security

The Department of Homeland Security, Science and Technology Directorate, invites proposals under its SAFE container programme. The aim is to develop technologies to detect objects or human beings concealed inside maritime shipping containers. Proposals are sought in the following areas: chemical agent detectors; biological agent detectors; explosives detection; advanced lightweight composites: detection of living persons; other contraband detectors. The focus is on developing and demonstrating high risk and high payoff complete systems or subsystems rather than advances in basic science A total fund of approximately \$4.5 million is available. HSARPA BAA07-02A. RA id: 198144.

Contact: Margaret L Graves, Department of Homeland Security, Science and Technology Acquisitions, Washington, DC 2052, USA. Email BAA07-02@dhs.gov. Web http://www.fbo.gov/spg/DHS/ OCPO/DHS%2DOCPO/BAA07%2D02A/ listing.html

Deadline: 4.30pm, 15 September 2007 [65]

#### Oceanic research

The Department of Commerce invites applications for its 2007 National Oceanic and Atmospheric Administration broad agency announcement. The aim of this is to fund extramural research, innovative projects and sponsorships such as conferences associated with NOAA's strategic plan and mission goals. Proposals should address one or more of the following goals: protect, restore and manage the use of coastal and ocean resources through an ecosystem approach to management; understand climate variability and change to enhance society's ability to plan and respond; serve society's needs for weather and water information; support the nation's commerce with information for safe, efficient and environmentally sound transportation; provide critical support for NOAA's mission. Eliqible applicants may be institutions of higher education, non-profit organisations, commercial organisations, international or foreign organisations or governments, individuals, or state, local and Indian tribal governments. NFA-NFA-2007-2000946. RA

Contact: Sharon Schroeder, OAR, Route R/OM61 , Bldg SSMC3, R00m11464, 1315 East West Hwy, Silver Spring, MD 20910-3282, USA. Tel +1 301 713 2474. Web http://www.grants.gov/search/search. do?mode=VIEW&oppId=12665

Deadline: 28 September 2007 [66]

#### **DOC** awards

The National Institute of Standards and Technology of the Department of Commerce is soliciting proposals for the following awards:

- manufacturing engineering laboratory grants programme. This will cover research into the areas of dimensional metrology for manufacturing, mechanical metrology for manufacturing, machine tool and machining process metrology, intelligent systems and information systems integration for applications in manufacturing. MEL anticipates the availability of \$500,000 to fund individual awards ranging from \$25,000 to \$300,000. Proposals will be considered for projects from one to three years. 2007-MSE-01. RA id: 197735:
- physics laboratory grants programme. This provides grants and cooperative agreements in the following fields of research: electron and optical physics; atomic physics; optical technology; ionising radiation; time and frequency; quantum physics. It is anticipated that \$1.5 million will be available to fund individual awards. 2007-MSE-01. RA
- · chemical science and technology laboratory grants programme. Support will be provided in the following fields of measurement science: biotechnology; process measurements; surface and microanalysis

science; physical and chemical properties; analytical chemistry. The CTSL grants programme anticipates committing \$2m to fund individual awards ranging up to \$100,000. 2007-MSE-01. RA id: 197750;

- material science and engineering laboratory grants programme. This provides grants and cooperative agreements in the following fields of research: ceramics: metallurgy; polymer sciences; materials reliability. The MSEL grants programme anticipates funding of approximately \$4.5m. Most grants and cooperative agreements are expected to be in the region of \$2,000 to \$500,000 per year. 2007-MSE-01. RA id: 197759;
- · building research grants and cooperative agreements programme. This supports the formal mission of the building and fire research laboratory, which is to meet the measurement and standards needs of the building and fire communities. This programme will provide grants and cooperative agreements in the following fields of research: structures; construction metrology and automation; inorganic materials, polymeric materials; heating, ventilating, air conditioning and refrigerating equipment performance; mechanical systems and controls: heat transfer and alternative energy systems; computer integrated building processes; indoor air quality and ventilation. Individual awards are expected to range from \$5,000 to \$150,000. 2007-MSE-01. RA id: 197762:
- fire research grants programme. The aims are: to develop understanding and predictive methods for dynamic fire phenomena to advance fire science and engineering practice; to apply measurement science in the development and quantification of experimental methods to understand fire phenomena; to conduct research that enables advances in fire fighter safety: to advance the effectiveness of fire safety standards and codes; to perform research enabling the confident development by industry of new, less-flammable materials and products; to create and disseminate enhanced data, develop fundamental understanding of fire and emergency phenomena, and support computer modeling and prediction. The annual budget for this programme is up to \$1.5m. Most grants and cooperative agreements are in the \$25,000 to \$125,000 per year range. 2007-MSE-01. RA id: 197765;
- neutron research grant programme. This provides grants and cooperative agreements for research involving neutron scattering, for the development of technologies that advance the state-of-the-art in neutron research and for the support of conferences or workshops that advance these objectives. Awards are likely to be in the region of \$25,000 to \$100,000 per year. 2007-MSE-01. RA id: 197772:

Proposals will be considered for projects for up to three years. The programme is be open to institutions of higher education; hospitals; non-profit organisations; commercial organisations; state, local and Indian tribal governments; foreign governments; organisations under the jurisdiction of foreign governments; international organisations.

Contact: NIST, 100 Bureau Dr, Stop 8200, Gaithersburg, MD 20899-8621, USA. Tel +1 301 975 3400. Web http://www. grants.gov/search/search.do?mode=VIEW &oppId=12347

Deadline: 5pm DST, 30 September 2007 [67]

### nih

### NIH collaborative clinical trials in drug abuse

RR id: 199099. Web http://grants1.nih. gov/grants/guide/pa-files/PAR-07-232. html

Deadline: letters of intent 17 March; full applications 17 April 2007 [76]

#### NIH lung cancer and inflammation (RO1) RFA-CA-07-046

RR id: 198606. Web http://grants1.nih. gov/grants/guide/rfa-files/RFA-CA-07 -046.html

Deadline: letters of intent 23 March; full applications 5pm proposer's local time, 23 April 2007 [77]

#### NIH diet composition and energy balance (RO1): Aids-related PA-07-218 RR id: 198668. Web http://grants1.nih.

qov/grants/quide/pa-files/PA-07-218.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [78]

### NIH diet composition and energy balance (RO1): Aids-related PA-07-218 RR id: 198670. Web http://grants1.nih.

gov/grants/guide/pa-files/PA-07-218.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [79]

NIH diet composition and energy balance (R01): Aids-related PA-07-218 RR id: 198671. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-218.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [80]

NIH diet composition and energy balance (R01): Aids-related PA-07-218 RR id: 198672. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-218.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [81]

### NIH diet composition and energy balance (RO1): Aids-related PA-07-218

RR id: 198673. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-218.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [82]

### NIH diet composition and energy balance (R01): Aids-related PA-07-218

RR id: 198674. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-218.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [83]

NIH diet composition and energy balance (RO1): Aids-related PA-07-218 RR id: 198675. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-218.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [84]

### NIH diet composition and energy balance (R01): Aids-related PA-07-218 RR id: 198676. Web http://grants1.nih.

gov/grants/guide/pa-files/PA-07-218.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [85]

### NIH diet composition and energy balance (RO1): Aids-related PA-07-218

RR id: 198677. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-218.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [86]

#### NIH fragile X pre-mutation and ovarian function (RO1): Aids-related PA-07-219

RR id: 198721. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-219.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [87]

### NIH fragile X pre-mutation and ovarian function (RO3): Aids-related PA-07-20

RR id: 198793. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-219.html Deadline: every 1 May, 1 September and 2 January until 6 March 2010 [88]

### NIH oral health promotion research across the lifespan (RO1): Aidsrelated PA-07-225

RR id: 199068. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-225.html Deadline: every 1 May, 1 September and 2 January until 3 March 2010 [89]

### NIH collaborative clinical trials in drug abuse PAR-07-232

RR id: 199110. Web http://grants1.nih. gov/grants/guide/pa-files/PAR-07-232. html

Deadline: letters of intent 17 March; full applications 7 May 2007 [90]

#### NIH neuroscience research on drug abuse (R01): Aids-related PA-07-226 RR id: 199197. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-226.html Deadline: every 7 May, 7 September and 7 January until 2 May 2010 [91]

#### NIH pilot and feasibility studies on oral health promotion research across the life span (R21): Aids-related PA-07-223

RR id: 199333. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-223.html Deadline: every 7 May, 7 September and 7 January until 16 March 2010 [92]

### NIH neuroscience research on drug abuse (R21): Aids-related PA-07-227

RR id: 199360. Web http://grants.nih. gov/grants/guide/pa-files/PA-07-227.html Deadline: 5pm proposer's local time, every 7 May, 7 September and 7 January until 2 May 2010 [93]

### NIH neuroscience research on drug abuse (RO3): Aids-related PA-07-228

RR id: 199375. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-228.html Deadline: 5pm proposer's local time, every 7 May, 7 September and 7 January until 2 May 2010 [94]

#### NIH planning grant for oral health promotion research across the life span (R21): Aids-related PAR-07-224 RR id: 199384. Web http://grants1.nih

RR id: 199384. Web http://grants1.nih.gov/grants/guide/pa-files/PAR-07-224.html

Deadline: every 7 May, 7 September and 7 January until 2 March 2010 [95]

### NIH NLM grants for scholarly works in biomedicine and health (G13): Aidsrelated PAR-07-237

RR id: 199485. Web http://grants1.nih. gov/grants/guide/pa-files/PAR-07-237. html

Deadline: every 7 January, 7 May, 7 September until 2 May 2010 [96]

#### NIH NLM grants for scholarly works in biomedicine and health (G13) PAR-07-237

RR id: 199473. Web http://grants1.nih. gov/grants/guide/pa-files/PAR-07-237. html

Deadline: every 25 January, 25 May and 25 September until 2 May 2010 [97]

#### NIH mechanisms, models, measurement and management in pain research (RO1) PA-07-282

RR id: 197201. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-282.html Deadline: every 5 February, 5 June and 5 October until 2 September 2009 [98] NIH shared neurobiology of fragile X syndrome and autism (R01) PA-07-284 RR id: 197225. Web http://grants1.nih.gov/grants/guide/pa-files/PA-07-284.html

# Deadline: every 5 February, 5 June and 5 October until 2 July 2008 [99] NIH research on social work practice and

concepts in health (R01) PA-07-292 RR id: 197238. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-292.html Deadline: every 5 February, 5 June and 5

October 5 until 1 February 2009 [100]

### NIH collaborative multisite research in addiction (RO1) PA-07-286

RR id: 197256. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-286.html Deadline: 5pm proposer's local time, every 5 February, 5 June and 5 October until 2 March 2008 [101]

### NIH immunology of biofilms (R01) PA-07-288

RR id: 197264. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-288.html Deadline: 5pm proposer's local time, every 5 February, 5 June and 5 October until 2 July 2009 [102]

### NIH advances in polycystic kidney disease (RO1) PA-07-293

RR id: 197272. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-293.html Deadline: 5pm proposer's local time, every 5 February, 5 June and 5 October until 2 March 2009 [103]

### NIH translational research in eating disorders (R01) PA-07-285

RR id: 197315. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-285.html Deadline: every 5 February, 5 June and 5 October until 2 July 2009 [104]

### NIH application of metabolomics for translational and biological research (R01) PA-07-301

RR id: 197459. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-301.html Deadline: every 5 February, 5 June and 5 October until 3 January 2010 [105]

### NIH epigenetic approaches in cancer epidemiology (RO1) PA-07-298

RR id: 197539. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-298.html Deadline: every 5 February, 5 June and 5 October until 3 January 2010 [106]

#### NIH novel approaches to enhance animal stem cell research (RO1) PA-07-303

RR id: 197581. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-303.html Deadline: every 5 February, 5 June and 5 October until 3 January 2010 [107]

# NIH hypersensitivity pneumonitis — early identification and mechanisms of disease (R01) PA-07-300

RR id: 197616. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-300.html Deadline: every 5 February, 5 June and 5 October until 6 November 2009 [108]

#### NIH neurobiology of migraine (RO1) PA-07-305

RR id: 197799. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-305.html Deadline: every 5 February, 5 June and 5 October until 6 November 2009 [109]

### NIH mental health consequences of violence and trauma (R01) PA-07-312

RR id: 197872. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-312.html Deadline: every 5 February, 5 June and 5 October until 6 November 2009 [110]

### NIH research on clinical decisionmaking in life-threatening illness (R21) PA-07-316

RR id: 197889. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-316.html Deadline: every 5 February, 5 June and 5 October until 2 January 2010 [111]

### NIH stress management interventions to reduce risk of coronary artery disease (RO1) PA-07-322

RR id: 197964. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-322.html eadline: every 5 February, 5 June and 5 October until 3 January 2010 [112]

### NIH Drug abuse, risky decision making and HIV/AIDS (RO1) PAS-07-324

RRid: 198145. Web http://grants1.nih. gov/grants/guide/pa-files/PAS-07 -324.html

Deadline: 5pm proposer's local time, every 5 February, 5 June and 5 October until 3 January 2010 [113]

# NIH hyperglycaemic exacerbation of ischaemia/reperfusion injury after ischaemic insult (RO1) PA-07-323

RR id: 198360. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-323.html Deadline: every 5 June, 5 October and 5 February until 7 February 2009 [114]

#### NIH academic-industrial partnerships for development and validation of in vivo imaging systems and methods for cancer investigations (RO1) PAR-07-214

RR id: 198494. Web http://grants1.nih. gov/grants/guide/pa-files/PAR-07 -214.html

Deadline: 5pm proposer's local time, every 5 June, 5 October and 5 February until 6 March 2010 [115]

### NIH diet composition and energy balance (RO1) PA-07-218

RR id: 198621. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-218.html Deadline: every 5 June, 5 October and 5 February until 6 March 2010 [116]

### NIH fragile X pre-mutation and ovarian function (R01) PA-07-219

RR id: 198712. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-219.html Deadline: every 5 June, 5 October and 5 February until 6 March 2010 [117]

### NIH fragile X pre-mutation and ovarian function (RO3) PA-07-220

RR id: 198786. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-219.html Deadline: every 5 June, 5 October and 5 February until 6 March 2010 [118]

### NIH oral health promotion research across the lifespan (RO1) PA-07-225

RR id: 199062. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-225.html Deadline: every 5 June, 5 October and 5 February until 3 March 2010 [119]

### NIH neuroscience research on drug abuse (R01) PA-07-226

RR id: 199201. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-226.html Deadline: every 5 June, 5 October and 5 February until 2 May 2010 [120]

### NIH pilot and feasibility studies on oral health promotion research across the life span (R21) PA-07-223

RR id: 199332. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-223.html Deadline: every 5 June, 5 October and 5 February until 16 March 2010 [121]

### NIH-CDC occupational safety and health research (RO1) PA-07-318

RR id: 199626. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-318.html Deadline: every 5 June, 5 October and 5 February until 6 March 2010 [122]

# NIH non-biodefence emerging infectious diseases research opportunities (RO1) PA-07-246

RR id: 199644. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-246.html Deadline: every 5 June, 5 October and 5 February until 6 March 2010 [123]

### NIH neuroscience research on drug abuse (R21) PA-07-227

RR id: 199356. Web http://grants.nih. gov/grants/guide/pa-files/PA-07-227.html Deadline: 5pm proposer's local time, every 16 June, 16 October and 16 February until 2 May 2010 [124]

### NIH neuroscience research on drug abuse (RO3) PA-07-228

RR id: 199374. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-228.html Deadline: 5pm proposer's local time, every 16 June, 16 October and 16 February until 2 May 2010 [125]

### NIH planning grant for oral health promotion research across the life span (R21) PAR-07-224

RR id: 199383. Web http://grants1.nih. gov/grants/guide/pa-files/PAR-07-224.

Deadline: every 16 June, 16 October and 16 February until 2 May 2010 [126]

## NIH alcohol use disorders: treatment, services research, and recovery (RO3) PA-07-215

RR id: 199416. Web http://grants.nih. gov/grants/guide/pa-files/PA-07-215.html Deadline: every 16 June, 16 October and 16 February until 17 March 2010 [127]

### NIH developmental psychopharmacology (R21) PA-07-222

RR id: 199434. Web http://grants1.nih. gov/grants/guide/pa-files/PA-07-222.html Deadline: 5pm proposer's local time, every 16 June, 16 October and 16 February until 17 March 2010 [128]

### NIH cooperative research partnerships for biodefence (U01) RFA-AI-07-003

RR id: 195777. Web http://grants1.nih. gov/grants/guide/rfa-files/RFA-AI-07 -003.html

Deadline: letters of intent 18 May; full applications 18 June 2007 [129]

### NIH research on pathways linking environments, behaviours and HIV/Aids (RO1) PAR-07-143

RR id: 196353. Web http://grants1.nih. gov/grants/guide/pa-files/PAR-07-143. html

Deadline: 1 September 2007 [130]

#### NIH dissemination and implementation research in health (RO1): Aidsrelated PAR-07-086

RR id: 197168. Web http://grants1.nih. gov/grants/guide/pa-files/PAR-07-086. html

Deadline: 1 September 2007, 1 May 2008, 2 January and 1 September 2009 [131]

### NIH tools for zebrafish research (RO1) PAR-07-145

RR id: 196034. Web http://grants1.nih.gov/grants/guide/pa-files/PAR-07-145.html

Deadline: letters of intent 19 August; full proposals 19 September 2007 [132]

### europe

### Research in Germany

The Alexander von Humboldt Foundation and Helmholtz Association invite nominations for their Helmholtz Humboldt research awards. Up to six awards are available for internationally acknowledged scientists from outside of Germany in recognition of their research achievements. Award-winners are invited to carry out research projects of their own choice in the fields of energy, Earth and environment, health, key technologies, structure of matter, transportation and space in cooperation with German scientists at one of the 15 member-centres of the Helmholtz Association for periods of up to one year. Awards are worth up to 75,000 euros (\$98,352). An additional 25,000 euros is provided by the Helmholtz Association for the promotion of cooperation in particular with university partners, if the awardee accepts the invitation to undertake research in Germany. Travel expenses and the costs of language courses are also provided. RA id: 198555.

Contact: Alexander von Humboldt Foundation, Jean-Paul-Str 12, D-53173 Bonn, Germany. Tel +49 0228 833 0. Fax +49 0228 833 199. Email humboldt-award. select@avh.de. Web http://www. humboldt-foundation.de/en/programme/ preise/helmholtz.htm

No deadline [136]

### **Equipment grant**

The Wellcome Trust invites applications for its biomedical science equipment grants. These support for multi-user items of equipment, including equipment required to create a central resource for a number of disparate scientific programmes. The scheme is open to researchers working in a developing or restructuring country, provided that they have a track record of trust funding as a principal investigator, coapplicant or fellow. Awards are worth up to £1 million (\$1.9m) and will cover costs for equipment, staff, maintenance and necessary refurbishment work. RAid: 198612.

Contact: Equipment Grants, Wellcome Trust, Gibbs Building, 215 Euston Road, London NW1 2BE, UK. Tel +44 20 7611 8888. Fax +44 20 7611 8352. Email contact@wellcome.ac.uk. Web http:// www.wellcome.ac.uk/node2123.html

No deadline [137]

### Influenza research

The Wellcome Trust is invites research proposals that aim to further the understanding of avian and human flu via the project grant and programme grant schemes. Research proposals addressing questions that are urgent and timely will be fasttracked. Proposals in the following areas are particularly welcome: epidemiology; molecular basis of virulence; molecular architecture and evolution of influenza viruses: interspecies transmission; genetic susceptibility to infection; diagnostics; approaches to prevention and treatment. Grant applications under this call should be addressed to the relevant funding stream: immunology and infectious disease contacts; populations and public health; neuroscience and mental health; physiological sciences; molecules, genes and cells. Applications are open to researchers based in developing and restructuring countries who have a track record of trust funding as a principal investigator, co-applicant or fellow, RA id: 198873.

Contact: Wellcome Trust, Gibbs Building, 215 Euston Road, London NW1 2BE, UK. Tel+44 20 7611 8888. Email contact@ wellcome.ac.uk. Web http://www. wellcome.ac.uk/doc\_WTX028376.html No deadline [138]

### Visiting fellowships

Ghent University invites applications for its visiting postdoctoral fellowships. The fellowships aim to introduce external expertise and to encourage collaborations between Flemish and foreign research units. Applications are open to fellows of a foreign nationality who have taken a doctoral degree after defending a thesis at a university outside of Belgium. The following awards are

- junior postdoctoral fellowship for applicants who have completed their doctoral degrees within the past five years. A monthly allowance of 1,500 euros (\$1,967) is
- senior postdoctoral fellowship for applicants who have completed their doctoral degrees within the last five to ten years. A monthly allowance of 2,000 euros is available.

Fellowships are available for up to 12 months. RA id: 198987.

Contact: Lieve Huys, Ghent Universty, Tel +32 9 264 3028. Fax +32 9 264 3583. Email lieve.huys@UGent.be. Web http:// www.ugent.be/en/research/opportunities/ postdoc/grants/fwopostdoc.htm

No deadline [139]

### Land mines programme

The European Commission invites applications for its anti-land mine programme in the Democratic Republic of Congo. Funding is available for projects that contribute to the fight against land mines in DRC communities. Proposals should fall under one of the following categories:

- projects to reduce the threat of land mines through community awareness programmes, increased safety measures, or land mine removal operations;
- · projects to support the socioeconomic rehabilitation of land mine victims;
- projects to provide local anti-land mine groups with new technologies and expertise.

Grants will range from 450,000 euros (\$593,841) to 1 million euros for projects lasting up to three years. EuropeAid/ 124818/M/ACT/CD. RA id: 199674.

Contact: Délégation de la Commission Européenne en RDC, Section I (Economie et Droits de l'Homme), Immeuble BCDC, Bvd du 30 Juin, 14ème étage, BP 2699, Gombe - Kinshasa, Democratic Republic of the Congo. Email eugenie.musau@ ec.europa.eu. Web http://ec.europa.eu/ europeaid/cgi/frame12.pl

Deadline: 4pm local time, 3 April 2007

### **Telecommunications grants**

British Telecommunications plc invites applications for its short-term research fellowships aimed at furthering links between BT and academia. The scheme enables researchers to carry out a project, typically of six weeks duration, with a focus on innovative ideas that will challenge current thinking. The proposal should be relevant to BT business. There is an honorarium payment of £4,400 (\$8,497) after the fellowship is completed. Travel and subsistence is negotiated with the fellow's BT line manager. RA id: 198323.

Contact: BT Group plc, BT Centre, 81 Newgate Street, London EC1A 7AJ, UK. Tel +44 20 7356 5000. Email fellow@ bt.com. Web http://www.btplc.com/ Careercentre/Researchfellowships/ Researchfellowship.htm

Deadline: 13 April 2007 [140]

### Research in Switzerland

The Roche Research Foundation invites applications for its one-year fellowships for research in Switzerland. Funding is provided for young researchers, doctoral or postdoctoral students and clinicians based outside Switzerland to visit Swiss institutions to collaborate on scientific projects or the development of new techniques or clinical treatments. The foundation supports research in the areas of biology, chemistry and medicine. RA id: 197398.

Contact: Margrit Freiburghaus, F Hoffmann-La Roche Ltd, Grenzacherstrasse 124, CH-4070 Basel, Switzerland. Tel+41616885227. Fax+44616881460. Email research.foundation@roche.com. Web http://www.research-foundation.

Deadline: 15 April 2007 [141]

#### Cardio-thoracic award

The European Association of Cardio-Tho- ${\it racic Surgery is inviting applications for the}$ Francis Fontan prize. This is awarded to a cardiac, cardiothoracic or thoracic surgeon with postgraduate training. The award should cover the costs of one year's stay at a major European department or any other research facility. The activities should primarily involve research training, research activities, advanced clinical education or departmental management. RAid: 199013.

Contact: EACTS, 3 Park Street, Windsor, Berks SL4 1LU, UK. Tel +44 1753 832166. Fax +44 1753 620407. Email info@ eacts.co.uk. Web http://meetings. eacts.org/sections/Abstracts/Awards

Deadline: 15 April 2007 [142]

### Maths/physics fellowships

The Institut des Hautes Études Scientifiques calls for applications for its fellowships. Mathematicians and theoretical physicists from all over the world are invited to the institute for periods ranging from a few days to two years. Accommodation is included. RA id: 199500.

Contact: IHÉS, 35 route de Chartres, Les Bois-Marie, F-91440 Bures-sur-Yvette, France. Tel +33 1 60 92 66 00. Fax +33 1 60 92 66 69. Fmail info-ihes@ihes.fr. Web http://www.ihes.fr/APPLICATION/Ihes/ applicationihes.html

Deadline: 20 April 2007 [143]

### **Development grants**

The European Commission invites grant applications to help civil organisations in Guinea Bissau whose work relates to local development and combatting poverty. Eligible activities include conducting an inventory of civil organisations in Guinea -Bissau in order to identify those with real potential; creating partnerships between civil organisations; material support to improve the operational capacities of nongovernmental organisations; and creating training programmes for staff from such organisations. Grants will be made from a total budget of 470,000 euros (\$616,393).

Applicants must belong to an intergovernmental or NGO to be eligible. Grantees must be present in Guinea-Bissau for the duration of the project. Projects may last up to 24 months. EuropeAid/125050/D/ACT/GW. RA id: 199637.

Contact: Célula de Apoio ao Ordenador Nacional do FED, Avenida Francisco Mendes, CP 1410, Bissau, Guinée-Bissau. Email caonfedgb@hotmail.com. Web http://ec.europa.eu/europeaid/cgi/ frame12.pl

Deadline: 3pm local time, 26 April 2007 [144]

### **Cancer projects**

The Association for International Cancer Research invites applications for its three -year project grants and one-year pilot study awards to support research into the causes, mechanisms, diagnosis, treatment and prevention of cancer. The emphasis is on basic rather than clinical research. The association particularly supports: projects by recently qualified researchers; work in areas that are underfunded or unexplored; pump -priming or preliminary projects; proposals involving international collaboration. Grants are open to staff at universities and research institutions. The main applicant should have a PhD or equivalent qualification or research experience. RA id: 194409.

Contact: Linsey Carqill, AICR, Grants Administration Office, Madras House, St. Andrews, Fife KY16 9EH, UK. Tel +44 1334 477910. Fax +44 1334 478667. Email linsey.cargill@aicr.org.uk. Web http:// www.aicr.org.uk/information.stm

Deadline: 27 April 2007 [145]

#### Developmental biology

The Company of Biologists offers travel fellowships of up to £2,500 (\$4,000) to graduate and postdoctoral students wishing to make collaborative visits to other laboratories. The fellowships cover the cost of travel and other expenses. Applicants should be working in the field of developmental biology with the intention of visiting a laboratory in another country. RAid: 196942.

Contact: Jim Smith, Wellcome Trust and Cancer Research UK Gurdon Institute. Tennis Court Road, Cambridge CB2 1QN, UK. Tel +44 1223 334 088. Fax +44 1223 334 089. Email development@gurdon. cam.ac.uk. Web http://dev.biologists. org/misc/fellowships.shtml

**Ďeadline: 30 April 2007** [146]

### Virology prize

The Royal Netherlands Academy of Arts and Sciences invites nominations for the MW Beijerinck virology prize. The award, worth 34,000 euros (\$44,584), is for international achievement in virology, including the biochemical and biophysical aspects. Candidates are nominated by other scientists or scientific institutions. RA id: 199230.

Contact: MW Beijerinck Virology Fund, RNAAS, PO Box 19121, 1000 GC Amsterdam, Netherlands. Tel +31 20 5 51 07 00. Fax +31 20 6 20 49 41. Email knaw@ bureau.knaw.nl. Web http://www.knaw. nl/Beijerinck/

Deadline: 1 May 2007 [147]

### Research visits

The Institut des Hautes Études Scientifiques invites applications for its programme for sub-Saharan researchers. This enables researchers in mathematics and theoretical physics to visit the institute for periods

up to two years. The programme provides recipients with travel costs of up to 1,200 euros (\$1,573), living expenses, free lodging and free lunches at the institute. Applicants must hold a PhD in mathematics or theoretical physics and be affiliated with an institution located in a sub-Saharan country. RA id: 199310.

Contact: IHÉS, Le Bois-Marie, 35 Route de Chartres, F-91440 Bures-sur-Yvette, France. Tel +33 1 60 92 66 68. Fax +33 1 60 92 66 69. Email candidature -ap@ihes.fr. Web http://www.ihes. fr/APPLICATION/Ihes/schlumberger.html

Deadlines: 1 May 2007 [147.1]

### **Collaboration grants**

The Swedish Research Council is interested in receiving applications for its grants under the Swedish research links programme. The main objectives are: to produce new knowledge and enhance the understanding in fields of mutual concern and relevance in all disciplines; to promote research excellence and quality; to establish a basis for long-term research cooperation between researchers in Asia. Menaregion, South Africa and Sweden: to encourage the internationalisation of higher education institutions. Research projects within all disciplines will be considered. Funding covers additional costs that originate from research collaboration. Funding will be available for three years, with a possible extension of one year. It is also possible to apply for a one year planning grant. The joint application must include two principal investigators. The programme is open to interregional collaborations but must include one partner in Sweden. Each country involved must be represented by a principal investigator that is affiliated to a university or research institution in Sweden and in the region/country. RA id: 198682.

Contact: Lena Johansson de Château, SRC, Regeringsgatan 56, 103 78 Stockholm, Sweden, Tel +46 8 546 44 208, Email li@ vr.se. Web http://www.vr.se/huvudmeny/ sokabidrag/vetenskapsradetsutlysningar/ swedishresearchlinksprogramme.4. 6a9398491107cea06a580002766.html

Deadline: 3 May 2007 [148]

### Food security Malawi

The European Commission invites applications for funding under its food security programme for non-governmental organisations in Malawi. The aim is to improve food security in Malawi by addressing availability and accessibility of food at household, local and national level. Projects should address one of the following issues:

- information, awareness and communication. This aims to increase the quality and flow of information in order to enhance food security. Grants of up to 1.25 million euros (\$1.6m) are available;
- support to vulnerable groups. This assists vulnerable groups to achieve food security. Grants are worth up to 1.25m
- sustainable irrigation, diversification and food preservation. This aims to improve food security by diversification, improved food storage facilities and extending the potential period of production. Grants of up to 2m euros will be awarded.

Applicants must be legal persons, nonprofit making and be an NGO. Projects must take place in one or more districts of Malawi. Projects may last up to four years. EuropeAid/124947/L/ACT/MW. RAid: 199579.

Contact: Delegation of the European Commission to Malawi, Rural Development and Food Security Section, PO Box 30102, Lilongwe 3, Malawi. Email delegation-malawi-CFP@ec.europa.eu. Web http://ec.europa.eu/europeaid/ cgi/frame12.pl

Deadline: 4pm local time, 7 May 2007

### Slovakian scholarships

The Slovak Academic Information Agency and the Ministry of Education invite applications for their PhD scholarships. These allow foreign PhD students to take a part of a PhD study over a period of one to 12 months at Slovak higher education institutions or research institutes of the Slovak Academy of Sciences. The main areas of research are: information society; education and employment; business environment. Applicants from the Republic of South Africa may apply. The monthly stipend ranges from SKK14,000 (\$540) to SKK30,000. RA id: 194988.

Contact: Slovak Academic Information Agency, Námestie slobody 23, 812 20 Bratislava 1, Slovakia. Tel +421 2 5441 1426. Fax +421 2 5441 1429. Email saia@saia.sk. Web http://www.saia. sk/eng/?c=410

Deadline: 15 May 2007 [150]

### **International relations**

Fondazione Istituto Piemontese Antonio Gramsci Onlus invites nominations for its international Giuseppe Sormani prize for work on Antonio Gramsci's life, work and thought. The competition may be entered with scientific works published between 2004 and 2006, written in any language. The winning work will be awarded 3,000 euros (\$3,934). RA id: 199650.

Contact: Fondazione Istituto Piemontese Antonio Gramsci Onlus, Via Vanchiglia 3, 10124 Torino, Italy. Tel +39 11 83 95 402. Fax +39 11 83 95 403. Email segreteria@gramscitorino.it. Web http://www.gramscitorino.it/premio\_

Deadline: 30 May 2007 [151]

### **Grants for scientific meetings**

The Abdus Salam International Centre for Theoretical Physics invites applications for its grants for scientific meetings in developing countries. Grants are available for institutions in developing countries for conferences, workshops or schools in the fields of physics and mathematics. Up to 5,000 euros (\$6,557) are available to fund travel expenses or speakers from developing countries except the home country. Up to 25 per cent of the grant may be used to cover board and lodging. Each application must show at least a matching contribution from local sources. RA id: 198240.

Contact: Office of External Activities, Abdus Salam International Centre for Theoretical Physics, Via Beirut 6, I-34014 Trieste, Italy. Tel +39 040 2240323. Fax +39 040 2240443. Email oea@ictp.trieste.it. Web http://www.ictp.trieste.it/www \_users/oea/SM/index\_sm.html

Deadline: 31 May 2007 [152]

### Review of health research

The World Health Organisation's special programme for tropical diseases, in collaboration with the Joanna Briggs Institute, invites applications for its African training course in the comprehensive systematic review of quantitative and qualitative health research for evidence based health care and research. Applications are welcomed from African research or academic centres engaged in research or training in tropical diseases for groups of three health professionals/health scientists, who have previously undertaken a research methods course, to participate in a one-week training programme in September 2007. The aim is to build capacity in evidencebased health care and healthcare quality improvement through establishing and providing ongoing support to JBI evidence synthesis groups in selected African countries. All costs of attending the training will be covered by TDR. RA id: 199495.

Contact: Steven Wayling, Special Programme for Research and Training in Tropical Diseases, World Health Organization, 1211 Geneva 27, Switzerland. Tel +41 22 791 3909. Fax +41 22 791 4854. Email wavlings@who.int. Web http://www. who.int/tdr/grants/grants/african\_ training.htm

Deadline: 31 May 2007 [153]

### Healthy skin award

The Epidermal and Sensory Research and Investigation Centre is inviting applications for its research award to honour the accomplishments of a researcher in dermatology. The field of research may be fundamental or clinical in nature and must concern the physiology or biology of healthy skin or its reactions to environmental factors. The award will be for 40,000 euros (\$52,456). RA id: 198371.

Contact: Ceries Research Award, 20 Rue Victor Noir, F-92521 Neuilly sur Seine Cedex, France. Tel +33 1 46 43 49 37. Fax +33 1 46 43 46 00. Email contact@ceries -lab.com. Web http://www.ceries.fr/ anglais/prix\_recherche/instructions2007.

Deadline: 1 June 2007 [154]

### Algal biology awards

The British Phycological Society is inviting applications for funding for attendance at courses at meetings. Funding supports students attending the society's winter meeting and other meetings significantly concerned with algal biology, including non-award-bearing courses. Scientists from eastern Europe and developing countries are welcome to apply. RA id: 199576.

Contact: Barry S C Leadbeater, BPS Awards, School of Biosciences, University of Birmingham, Edgbaston, Birmingham B15 2TT, UK. Tel +44 121 414 5567. Fax +44 121 414 5925. Email b.s.c.leadbeater@ bham.ac.uk. Web http://www.brphycsoc. org/funding.lasso

Deadline: 1 June 2007[155]

### **Exchange programmes 1**

The Academy of Sciences for the Developing World and the Council of Scientific and Industrial Research in India invite applications for the following awards:

· research fellowships for postgraduate studies in India. These are for foreign scholars from developing countries who wish to pursue research leading towards a PhD in newly emerging areas in science and technology at laboratories or institutes of the CSIR. The fellowships cover a monthly stipend of INR8,000 (\$181) for the first two years and INR9,000 per month for the third year. A contingency grant of INR20,000 per year will be provided to the host institute for study tours and equipment. Applicants need to hold a masters degree in science or engineering or an equivalent qualification and must be a regular employee in a developing country. RA id: 199596;

• fellowships for postdoctoral research in India. These are for foreign scholars from developing countries who wish to pursue postdoctoral research in newly emerging areas in science and technology at laboratories or institutes of the CSTR. The fellowship covers a monthly stipend of INR11,500 for up to 12 months. A contingency grant of INR20,000 per annum will be provided to the host institute for study tours and equipment. Applicants need to hold a PhD degree in science or technology and must be a regular employee in a developing country. RA id: 199602.

The laboratories and institutes cover a wide range of industrial research in biological, physical, chemical, engineering and information sciences. Economy international travel will be covered.

Contact: Cristina Simões, TWAS Fellowships, c/o Abdus Salam International Centre for Theoretical Physics, Strada Costiera 11, 34014 Trieste, Italy. Tel +39 040 2240314. Fax +39 040 224559. Email fellowships@twas.org. Web http:// www.ictp.trieste.it/~twas/Exchange.html

Deadline: 1 June 2007 [156]

### **Food security Burkino Faso**

The European Commission invites applications for funding under its food security programme for non-governmental organisations in Burkina Faso. This aims to improve food security for vulnerable communities in Burkina Faso through projects at a domestic level or concerning food production organisations. Projects should aim to address up to two of the following issues: village-based strategies to prevent malnutrition; strengthening and diversifying agriculture through the support of crop production and the development of market gardening; improving conservation and storage techniques for agricultural products; improving conservation and commercialisation procedures; specific applications of agricultural production, transformation and commercialisation methods to aminals and animal by-products. All proposals must take into consideration the rights of women and the effect the project will have on the environment. Applications are accepted from non-governmental, non-profit organsations and individuals from Burkina Faso. Grants of up to 1.5 million euros (\$1.9m) are available for projects lasting up to four years. EuropeAid/125248/L/ACT/BF. RAid:

Contact: Délégation de la Commission Européenne au Burkina Faso, Avenue Kwame N'Krumah, 01 BP 352 Ouagadougou 01, Burkina Faso. Tel +226 50 49 29 00. Fax +226 50 49 29 99. Email Delegation-Burkina-Faso-DEVRUR@ec. europa.eu. Web http://ec.europa.eu/ europeaid/cgi/frame12.pl

Deadline: 12pm local time, 1 June 2007 [158]

### **DFID-ESRC** poverty reduction

The Department for International Development and the Economic and Social Research Council invite proposals for funding under their joint scheme for research on international poverty reduction. The scheme supports scientific research on issues relating to economic development and quality of life in less developed countries with the potential for impact on policy and practice

for poverty reduction. Applications are sought from the social sciences. Multidisciplinary projects are particularly encouraged. The scheme is open to researchers based in higher education institutions. research organisations or other organisations with a credible research capacity. Up to £3 million (\$5,796,417) will be available to fund smaller-scale projects with a full economic cost value ranging between £100,000 and £250,000. RA id: 199581.

Contact: Lyndy Griffin, ESRC, Polaris House, North Star Avenue, Swindon SN2 1UJ, UK. Tel +44 1793 413135. Email lyndy. griffin@esrc.ac.uk. Web http://www. esrcsocietytoday.ac.uk/. Then click on 'funding opportunities', 'current funding opportunities' and 'DFID-ESRC third call'.

Deadline: 4pm, 5 June 2007 [159]

### Avian diseases travel

The Houghton Trust invites applications for its international travel grants. These are for young researchers working in the field of avian diseases. Grants cover travel and subsistence costs for: attendance and participation in scientific meetings; short visits to laboratories; attendance at training courses. Awards are normally made for periods not exceeding 14 days. Applicants should be aged 35 or under. RAid: 198866.

Contact: J KA Cook, The Houghton Trust, 138 Hartford Road, Huntingdon, Cambridgeshire PE29 1XQ, UK. Tel +44 1480 453230. Web http://www.houghtontrust. org.uk/travelgrants.shtml

Deadline: 15 June 2007 [160]

### **Nursing research**

The Florence Nightingale Foundation invites applications for its Band Trust research scholarships. These are offered for one academic year, to British and Commonwealth nurses, midwives and health visitors who have a current registration with the Nursing and Midwifery Council and are working in the UK. The awards enable candidates to undertake: a course in research methods; an evidence-based practice module or a research-based component of a graduate programme; a dissertation as part of a degree course. Applicants should have at least one year post-registration clinical experience and have current clinical links. RA id: 198862.

Contact: Mary Spinks, Florence Nightingale Foundation, Suite 3, 38 Ebury St, London SW1W OLU, UK. Email admin@ florence-nightingale-foundation.org.uk. Web http://www.florence-nightingale -foundation.org.uk/

Deadline: 15 June 2007 [161]

### Agriculture fellowships

Rothamsted International invites applications for its African fellows programme. The aim is to assist in capacity building, institutional strengthening and knowledge transfer in order to find relevant solutions to the problems of achieving sustainable agricultural production, as well as improving rural development and conservation of biodiversity. The programme supports research scientists from Africa to work at a European centre of excellence for up to twelve months. The fellowship covers a return travel trip and a monthly stipend of £900 (\$1,748) for accommodation and subsistence. The European partner can apply for a budget to cover the costs of the proiect up to a maximum of £11,000 per year. Applications are welcomed from mid-career scientists who are citizens of an African country, or whose scientific work has been based in Africa and directed at problems of relevance to Africa. The applicants need to develop a project through liaison with a project leader in their chosen European institution. RA id: 199662.

Contact: Rothamsted International. Harpenden, Hertforshire AL5 2JQ, UK, Tel +44 1582 763133 ext 2475, Fax +44 1582 467490. Email rothamsted. international@bbsrc.ac.uk. Web http:// www.rothamsted-international.org/HTML/ Fellowships/AFP\_main\_page.html

Deadline: 22 June 2007 [162]

### Sustainable management

The International Foundation for Science invites applications for its research grants. These enable young scientists from developing countries to conduct research on the sustainable management of biological resources. The grants have a maximum value of \$12,000 and are intended for the purchase of equipment, expendable supplies and literature and to arrange fieldwork activities. It is expected that the applicants already receive a salary and are employed by or otherwise attached to a developing country research institution. The project should normally last up to three years. Applicants need to be citizens of a developing country and conduct their research in a developing country. They should be at the beginning of their research career, have a minimum academic degree of an MSc/MA and be younger than 45. RA id: 198411.

Contact: IFS, Karlavägen 108, 5th Floor, 115 26 Stockholm, Sweden. Tel +46 8 545 818 00. Fax +46 8 545 818 01. Web http://www.ifs.se/Programme/granting \_programme.asp

Deadline: 30 June 2007 [163]

### **Tropical forest management**

The Tronical Forest Trust invites applications for the Jourdain scholarships for tropical forestry. Funding enables tropical foresters to study the practice of sustainable forest management at masters level, or to take shorter specialist courses. Scholars will learn about sustainable forest management and study its links with international timber markets and forest politics. Applicants must have a first degree in forestry and have been accepted to, or be planning to enroll on, a masters level forestry course or short-term training course. Applicants need to be citizens of Cameroon, Central African Republic, Democratic Republic of Congo, Gabon or the Republic of Congo. RA id: 198998.

Contact: A Smith, Tropical Forest Trust, Unit A3, Knowle Village Business Park, Knowle, Hampshire PO17 5DY, UK. Tel +44 1329 833888. Fax +44 1329 833379. Email a.smith@tropicalforesttrust.com. Web http://www.tropicalforesttrust.com/ scholarships-jourdain.php?PHPSESSID =b3d62fd98c27efae4eae962bda141a66

Deadline: 30 June 2007 [164]

### Periodontology research

The British Society of Periodontology invites applications for the Sir Wilfred Fish prize for young researchers. Candidates must be under 40 years of age on 21 September 2007 and must present unpublished work with an application to periodontology. Joint authorship is not permitted. The prize is worth £500 (\$971). RA id: 196956.

Contact: Mark Ide, BSP, c/o Periodontology, Floor 21 Guys Tower, St. Thomas' Street, London Bridge, London SE1 9RT, UK. Tel+44 20 7188 5391. Fax +44 20 7407 6736. Email mark.ide@kcl.ac.uk. Web http://www.bsperio.org.uk/awards.htm

Deadline: notifications of papers 1 July; abstracts 1 September 2007 [165]

### Animal behaviour grants

The Association for the Study of Animal Behaviour invites applications for the following awards:

- research grants. These support pilot and small-scale projects unlikely to attract funding from alternative sources. Applicants must have a PhD and should have been members for a minimum of one year. Funding of up to £5,000 (\$9,703) per award will be made available to cover equipment, research expenses, salaries, travel and subsistence. RA id: 199571;
- postgraduate and research workshops. These advance understanding of some fertile area of animal behaviour by supporting a small meeting of workers in the area concerned. The workshop should formulate proposals for future research or the promotion of animal behaviour science. Grants cover fares, accommodation and running expenses. RA id: 199564;
- travel fund programme. This assists postgraduate members to attend overseas conferences other than those organised by the association. Grants normally support individuals who wish to present papers at the conference. Applicants must be registered for a higher degree. Up to £500 is available to cover part of expenses. RA id: 199552.
- · conference grants. These help postgraduate students and others to attend ASAB conferences. Applicants must be registered for a higher degree, or be without access to other sources of funding. Awards are for a maximum of £400 and will contribute towards the costs of travel, accommodation and meals. RA id: 199575.

Contact: Marc Naguib, ASAB, c/o Department of Animal Behavious, University of Bielefeld, PO Box 100 131, 33501 Bielefeld, Germany. Email marc.naguib@ uni-bielefeld.de. Web http://asab. nottingham.ac.uk/grants/research.php

Deadline: 1 July 2007 [166]

### Nephrology award

The Association of German Nephrology Centers invites nominations for the 2007 Bernd Tersteegen award. This is awarded for basic and particularly for clinical research related to chronic renal insufficiency and to advances in treatment of end-stage renal disease. The award of 8,000 euros (\$10,538) is provided by Roche Pharma AG, Germany. Applicants should be physicians, researchers or engineers involved in research in the area of renal failure and renal replacement therapy. Only research papers that have been published in 2006 or 2007 or have not yet been published are suitable for submission. RA id: 198760.

Contact: Verband Deutsche Nierenzentren der DDnÄ eV, Postfach 132304, D-42050 Wuppertal, Germany. Web http:// www.ddnae.de/index.php?article\_id=51

Deadline: 15 July 2007 [170]

### Leukaemia research grants

The Kay Kendall Leukaemia Fund invites proposals for its programme and project grants. These are awarded for a period of up to five years for research on aspects of leukaemia and related haematological malignancies. The fund also offers grants for the support of programmes associated with the care of patients with leukaemia. Both UK and non-UK based organisations are eligible to apply. RA id: 199351.

Contact: KKLF, Allington House, 150 Victorai Street, London SW1E 5AE, UK. Tel +44 20 7410 0330. Email info@kklf. org.uk. Web http://www.kklf.org.uk/ programme.html

Deadline: 15 July 2007 [171]

### Measurement prize

The Institution of Engineering and Technology invites nominations for the following awards:

- measurement prize. This is for a contribution to the science, art or practice of measurement using electrical, electronic or electromagnetic techniques. The award consists of a cash prize of £1,000 (\$1,942). RA id: 195999:
- the JA Lodge award for medical engineering. This is presented to a promising electronic or electrical engineer up to the age of 35 working in the field of medical engineering. The award consists of a cash prize of £250 and a year's subscription to the IET. RA id: 196001.

Contact: IET, Michael Faraday House, Stevenage, Herts SG1 2AY, UK. Tel +44 1438 765631. Fax +44 1438 767305. Web http:// www.iee.org/EduCareers/Awards/Ach/

Deadline: 27 July 2007 [172]

### FP7 Marie Curie award

The European Commission has issued a call for the Marie Curie international incoming fellowships. This call offers support for training and career development of researchers. This action aims to reinforce the scientific excellence of the member states and the associated countries through knowledge sharing with incoming top-class researchers from third countries to work on research projects in Europe, with the view to developing mutually-beneficial research cooperation between Europe and third countries. The researchers shall be selected by the Commission on the basis of a proposal submitted in liaison with a host organisation in a member state or associated country. The action provides financial support to individual research projects presented by the incoming experienced researchers in liaison with a legal entity in a member state or an associated country, as well as possibly a return host organisation if the researcher's country of origin is an international coop $eration\ partner\ country.\ The\ research\ topic$ will be chosen by the researcher in collaboration with the host organisation. Third country researchers are eligible for this action, except those treated as being from member states or associated countries according to FP7 guidelines. Applicants must have a doctoral degree or at least four years of full-time research experience. The total budget for this call is 24 million euros (\$31.6m), PEOPLE-2007-4-2-IIF, OJ C45/6 (28/2/07) p6. RA id: 199381.

Contact: Web http://cordis.europa.eu/ fp7/dc/index.cfm?fuseaction=UserSite. FP7DetailsCallPage&call\_id=46

Deadline: 5pm Brussels, 14 August 2007 [175]

### Cellular pathology

The Christian de Duve Institute of Cellular Pathology invites applications for its post-doctoral fellowships aimed atyoung scientists who have a PhD, MD or equivalent degree and are preferably not older than 33 years of age. The aim is to provide additional training in one of the disciplines of biomedical research covered by the laboratories of ICP. Fellowships are awarded for one year with a one-year renewable option. The fellowships provide a tax-free monthly allowance of 1,800 euros (\$2,372). ICP will contribute towards the expenses incurred from the travel to join ICP. RA id: 197308.

Contact: Fred R Opperdoes, Christian de Duve Institute of Cellular Pathology, ICP 75.50, Avenue Hippocrate 75, B-1200 Brussels, Belgium. Tel +32 2764 7537. Fax +32 2762 7573. Email opperdoes@bchm. ucl.ac.be. Web http://www.icp.ucl. ac.be/ff/postdoc.htm

Deadline: 15 August 2007 [176]

#### Trauma and surgery

The AO Research Institute invites proposals for the following awards:

- start-up grants. The start-up grants are intended to develop unconventional, novel projects within the broad goals of the AO Foundation. Up to CHF60,000 (\$48,899) is available per year for up to two years. RA id: 198775:
- focus grants. The aim is to provide predominantly seed money but applications from experienced researchers and institutions will be considered. The focus grant category is reserved for projects within the clinical priority areas defined by the AO academic council. Up to CHF100,000 is available per year with a maximum duration of three years. RA id: 198777.

Funding supports projects dealing with trauma, surgery of the loco-motor system, and related basic scientific, preclinical and clinical research.

Contact: A0 Research Institute, Research Fund, Stettbachstr 10, CH-8600 Dübendorf, Switzerland. Tel+41 44 200 24 10. Fax+41 44 200 24 11. Email research.fund@ao-asif.ch. Web http://www.aofoundation.org/. Then click on 'research', 'A0 research fund' and 'forms'.

Deadline: 15 August 2007 [177]

### Visiting paediatricians

The Royal College of Paediatrics and Child Health invites applications for the following awards:

- visiting fellowships for overseas scientists. These allow attachment to a UK paediatric department for three weeks. RA id: 192122;
- the Heinz visiting fellowships. These enable young paediatricians from a Commonwealth country to visit a paediatric department in the UK for 11 weeks. RA id: 192133.

Awards covertravel, accommodation and subsistence for the fellows only. **Contact:** Aaron Barham, RCPCH, 50 Hal-

tontact: Aaron Barnani, RCPCH, 30 Hallam St, London W1W 6DE, UK. Tel +44 20 7307 5633. Fax +44 20 7307 5697. Email aaron.barham@rcpch.ac.uk. Web http:// www.rcpch.ac.uk/education/college\_ fellow\_and\_awards.html

Deadline: applications are accepted between May and 31 August 2007 [179]

### Research unit grants

The Third World Academy of Sciences invites applications for its research units in least developed countries awards. These aim to build and sustain units of scientific excellence, assisting them to achieve a critical mass of highly qualified and innovative scientists who will be able to better address real-life problems facing the countries. Each grant is worth up to \$30,000. The grant can be used for purchasing equipment and supplies and for supporting training programmes. Part of it can also be used for inviting foreign researchers. RA id: 193614.

Contact: M T Mahdavi, TWAS, c/o ICTP, Strada Costiera 11, 34014 Trieste, Italy. Tel+39 040 2240325. Fax+39 040 224559. Email mahdavi@twas.org. Web http:// www.ictp.trieste.it/~twas/mtm/research units.html

Deadline: 31 August 2007 [181]

### **Exchange programmes 2**

The Academy of Sciences for the Developing World invites applications for the following awards:

- fellowships for visiting scholars in China in association with the Chinese Academy of Sciences. These fellowships are for visiting scholars from developing countries other than China who wish to pursue advanced research in the natural sciences. The awards will be tenable at the research institutions of the Chinese Academy of Sciences for a period of up to three months. Applicants must hold a PhD in one of the fields of the natural sciences and a regular research assignment with at least five years of postdoctoral research experience. Only researchers up to a maximum age of 55 years are eligible. RA id: 193617;
- doctoral fellowships at research institutions in Brazil in association with the National Council for Scientific and Technological Development in Brazil. These enable young students from developing countries other than Brazil to pursue studies leading towards a PhD degree in natural sciences. Applicants must hold a masters degree in one of the fields of the natural sciences and must be accepted for doing a PhD at a participating institution in Brazil. Only students up to a maximum age of 30 years are eligible. RA id: 193618;
- fellowships for postgraduate research in China in association with the Chinese Academy of Sciences. These fellowships are for young scientists from developing countries other than China who wish to undertake the last year of their PhD research in natural sciences in China. Applicants must hold a masters degree in one of the fields of the natural sciences and must be accepted for doing a PhD at a CAS listed institution in China. Only students up to a maximum age of 35 years are eligible. RA id: 193619;
- biotechnology fellowships for postgraduate studies in India in association with the Ministry of Science and Technology in India. These fellowships are for foreign scholars from developing countries who wish to pursue research towards a PhD in biotechnology. The fellowships will be tenable at key biotechnology research institutions in India for a period of up to three years at a monthly stipend of INR8,000 (\$180) for the first two years and INR9,000 for the third year. A contingency grant of INR20,000 per annum will be provided to the host institute for study tours

and equipment. Applicants must hold a masters degree in science or engineering. Only students up to a maximum age of 30 years are eligible. RA id: 193628;

- · postgraduate fellowships in India in association with the SN Bose National Centre for Basic Sciences in India. These fellowships will be awarded to young students from developing countries other than India to enable them to pursue studies leading towards a PhD degree in physical sciences. The fellowships cover a monthly stipend of INR8.000. Research areas include: electronic structure and physics of materials; soft condensed matter, complex systems and statistical physics; high energy physics and mathematical physics; optics, mesoscopic phenomena and chemical physics; astrophysics; experimental physics; nanoscience and technology; theoretical chemistry. Applicants must hold a masters degree in physics, mathematics or physical chemistry. Only students up to a maximum age of 30 years are eligible.RA id:
- fellowships for postdoctoral research in Brazil in association with the National Council for Scientific and Technological Development in Brazil. These are for researchers from developing countries other than Brazil wishing to do postdoctoral research in the natural sciences. The fellowships are tenable at an eligible research institution in Brazil for a period of up to 12 months. Applicants must hold a PhD degree in one of the fields of the natural sciences and be regularly employed at a research or teaching institution in their home country where they must hold a research assignment. Only researchers up to a maximum age of 40 years are eligible. RA id: 193631;
- postdoctoral research in China in association with the Chinese Academy of Sciences. These are for scientists from developing countries other than China who wish to pursue postdoctoral research in the natural sciences. The award will be tenable at research institutions of the Chinese Academy of Sciences for up to 12 months. Applicants must hold a PhD degree in one of the fields of the natural sciences and be regularly employed at a research or teaching institution in their home country where they must hold a research assignment. Only researchers up to a maximum age of 40 years are eligible. RA id: 193635.
- biotechnology fellowships for postdoctoral research in India in association with the Department of Biotechnology of the Ministry of Science and Technology in India. These are for foreign scholars from developing countries who wish to pursue

postdoctoral research in biotechnology at laboratories or institutes of the CSIR. The fellowships cover a monthly stipend of INR11,500 for up to 12 months. A contingency grant of INR20,000 per annum will be provided to the host institute for study tours and equipment. Applicants need to hold a PhD in bioscience or biotechnology and be regularly employed at a research or teaching institution in their home country where they must hold a research assignment. Only researchers up to a maximum age of 40 years are eligible. RA id: 193641.

The fellowships provide a stipend to cover food, accommodation, emergency medical aid and economy international travel.

Contact: TWAS Fellowships Office, c/o Abdus Salam Centre for Theoretical Physics (ICTP), Strada Costiera 11, 34014 Trieste, Italy. Tel +39 040 2240314. Fax +39 040 2240689. Email fellowships@twas.org. Web http://www.ictp.trieste.it/~twas/Exchange.html

Deadline: 31 August 2007 [182]

#### **Primate conservation**

The Primate Society of Great Britain's conservation working party invites applications for its conservation grants. These are small grants of up to £750 (\$1,449) which provide funding for: research of benefit to primate conservation; short surveys to identify locations of value to primate conservation; conservation education relevant to primates. Applicants must be members of the society or citizens of primate range states who are sponsored by a member. In addition, PSGB awards one grant of £500 from the Born Free Foundation. This award is mostly targeted at projects which support a primate range-state national, working in the field on a project involving endangered primates or human/non-human primate conflict resolution. RA id: 199372.

Contact: Primate Society of Great Britain, Department of Veterinary Clinical Science, Leahurst , Chester High Road , Neston, Wirral CH64 7TE, UK. Tel +44 151 795 6059. Fax +44 151 795 6066. Web http:// www.psqb.org/Conservation/

Deadline: 31 August 2007 [190]

### rest of world

### Treasury visiting fellowships

The New Zealand Government Treasury invites applications for its visiting research fellowships. These enable academics to spend a period at the treasury working on a project of mutual interest. Research should be relevant to the treasury's main responsibilities of economic and fiscal policy, the

## Research-Africa.net

Connecting the African research world

These blue pages only contain a fraction of the funding opportunities available to African researchers in our database. There are thousands more online.

For the complete picture and personalised email alerts of new opportunities, visit www.Research-Africa.net, search the online database and then enquire about a site license subscription for your organisation. budget, social policy, justice, treaty issues, regulation, taxation and public sector management. Visits typically last up to 12 weeks, but may take the form of a sabbatical of six months or more. The fellow's home institution should meet their salary costs. The treasury contributes towards travel, living or research costs. RR id: 197500.

Contact: Grant Scobie, New Zealand Government Treasury, PO Box 3724, Wellington, NZ. Email grant.scobie@treasury. govt.nz. Web http://www.treasury. govt.nz/academiclinkages/fellowships.

No deadline [191]

### **International fellowships**

The University of Sydney invites applications for its international visiting research fellowships. These are offered to postdoctoral researchers to share and disseminate new and original ideas and techniques initiate and undertake collaborative research and facilitate interaction and training of the University staff and students. Applicants are expected to be based full-time at the university for the duration of the fellowship. Fellowships comprise a living allowance of up to AU\$1,500 (\$1,181) per week and return economy class airfare to Sydney of up to AU\$2,500. RR id: 198469.

Contact: University of Sydney, Research Office, NSW 2006, Australia. Tel +61 2 9351 2222. Email research@usyd.edu.au. Web http://www.usyd.edu.au/research/ fellowships/visiting.shtml

Deadline: 25 May 2007 [192]

### Travel fellowships

The Royal Australasian College of Surgeons invites applications for the following awards:

- the Murray and Unity Pheils travel fellowships. These allow a trainee or recent fellow of the college to travel overseas to obtain further training and experience in the field of colorectal surgery. Overseas graduates wishing to obtain further training and experience in a specialist colorectal unit in Australia or New Zealand are also eligible to apply. The value of the scholarship is AU\$10,000 (\$7,876) for up to 12 months. RR id: 199478;
- the Stuart Morson scholarship in neurosurgery. The scholarship is designed to assist neurosurgeons within five years of obtaining their fellowship to undertake further research or training in neurology overseas. The scholarship is also open to young surgeons registered to practice neurosurgery in Australia or New Zealand who are not fellows of the college. The scholarship may be applied to assist overseas neurosurgeons to spend time in Australia or New Zealand furthering their research in neurosurgery. The value of the scholarship is AU\$20,000 for up to 12 months. RR id:

Contact: Scholarship Officer, RACS, PO Box 553, Stepney SA 5069, Australia. Tel +61 8 8363 7513. Fax +61 8 8362 2077. Email scholarships@surgeons.org. Web http:// www.surgeons.org/. Then click on 'research and audit' and 'scholarship programme'.

Deadline: 5pm, 25 May 2007 [193]

### policy diary

- 21 Launch of the regional office for Africa of the world academy of young scientists. Pretoria, South África. To 22.
- 21 Framework 7 awareness workshop organised by EuroAfrica-ICT. Dakar, Senegal. To 22. http://www. euroafrica-ict.org/awareness\_ workshops.html.

#### April

- 14 2007 session of the Higher Education Research Training Institute: Methods and Theories of Qualitative and Quantitative Investigation. Accra, Ghana. To 28. http://www.aau.org/ studyprogram/herti/index.php.
- 28 Africa Research and Education Networking (AfREN) meeting. Abuja, Nigeria. To 29.
- 30 Fifteenth session of the UN Commission on Sustainable Development. New York, US. To 11 May. http://www.un.org/esa/sustdev/csd.policy.htm.

- 4 Twenty-sixth meeting of the Intergovernmental Panel on Climate Change (IPCC). Bangkok, Thailand.
- 9 IST-Africa 2007 conference. Maputo, Mozambique. To 11. http://www.ist-africa.org/ Conférence2007/.
- 10 G8-UNESCO World Forum. Education, research and innovation: New partnership for sustainable development. Trieste, Italy. To 12. http://g8forum.ictp.it/.
- 21 Tenth session of the UN Commission on Science and Technology. Geneva, Switzerland. To 25. http://www.unctad.org.

- 10 Fourth general assembly of the Forum for Agricultural Research in Africa (Fara). Johannesburg, South Africa. To 16.
- 13 World Economic Forum on Africa. Cape Town, South Africa. To 15.
- 18 International field workshop on renewable energy for sustainable development in Africa. Mauritius. To 21.

#### July

23 International Council for Science (ICSU) East African rift system conference. Kampala, Uganda. To 25.

22 Council for the Development of Social Science Research in Africa (Codesria) continental conference on development. Zomba, Malawi. To 24.

### September

- 3 Pre-CHOGM East Africa science and technology symposium. Mbarara University, Uganda. To 5.
- Bio2Biz conference. Cape Town, South Africa. To 19.
- 27 African regional conference of vice-chancellors, provosts and deans of science, engineering and technology. Pretora, South Africa. To 27. http://www.aau.org/. events@research-africa.net

**Professional Administration** 

### **BecANet grants** beckoning for African scientists

The Biosciences Eastern and Central Africa Network (BecANet) has embarked on a large human resources capacities development project by announcing a number of research grants and fellowships for 2007.

Invitations have been extended to BecANet member countries to submit research proposals for livestock health and production, and in crop health and production. Grants will be worth between \$25,000 and \$100,000 and will be awarded for a maximum of two years.

Fellowships valued at \$20 000 a year are also offered to researchers active in the 17 BecANet countries in Central and East Africa. Special post-conflict fellowships are available for scientists from the Central African Republic, Sudan, the Democratic Republic of Congo, Burundi, Eritrea, Ethiopia, Uganda and Somalia.

"BecANet's mission is to improve the livelihoods of resourcepoor people, sustain agricultural production, improve human health and conserve the environment through the development and use of new bioscience technologies and strategies," the organisation said.

BecANet is an initiative of the New Partnership for African Development (Nepad), and is funded by a donation from the Canadian government. Similar bioscience networks are active in Northern (NabNET) and Southern Africa (SanBIO).

The deadline for all funding awards is 20 April. To find out more, visit the BecANet website at www.africabiosciences.org.

### Chivvving up for HIV vaccines ...

Africa stands to benefit from a new \$138 million collaborative initiative between the government of Canada and the Bill and Melinda Gates Foundation, aimed at contributing to global efforts to develop safe, effective, affordable and widely accessible HTV vaccines.

Codenamed the Canadian HIV Vaccine Initiative, the project will give support to researchers and research institutions in low- and middle-income countries to strengthen capacity to conduct high-quality clinical trials for HIV vaccines. The CHVI also seeks to address policy issues and human rights frameworks for HIV vaccines.

### ... and health research ethics

Meanwhile, the African Malaria Network Trust (Amanet) has received \$4.1 million from the Gates Foundation to build institutional capacities in health research ethics in Africa. The project will focus on strengthening HRE review processes across sub-Saharan Africa, particularly in institutions undertaking, or about to undertake, malaria intervention trials.

Got a question? Email admin@research-africa.net

This is the fifth of 22 country R&D profiles that Research Africa will be publishing over the next two years. They have been prepared by the Centre for Research on Science and Technology (CREST) at Stellenbosch University.

# Vigorous vision

The impact of the genocide on the Rwandan society and economy has been immense. However, the government has embarked with great vigour on new initiatives in science and technology (S&T) to develop the country.

### Governance and science advice

The S&T directorate of Rwanda initially fell under the ministry of education, science, technology and scientific research, but was recently relocated to the office of the president. In 2005, it developed a national science, technology and innovation policy document, which supports the use of S&T to overcome challenges across all sectors of the economy. It also emphasises the importance of government's role in fostering a culture of partnership and strategic purpose in S&T training and research. A new National Council for Science, Technology and Innovation (NCSTI) will be responsible for the development, promotion and coordination of the policy.

### Policy and research priorities

Priority areas in the science policy include: education, health, agriculture and animal husbandry, biotechnology, environment, energy, transport, water and sanitation, and information and communication technologies (ICTs).

Since 1998, the Rwandan government has worked on a national framework for the development of an ICT sector. The ICT policy for Rwanda was adopted at the beginning of 2000. It is a vision for transforming Rwanda's predominantly agricultural economy into a knowledge-based economy, through the adoption and development of ICTs. Microsoft has donated laptops to parliament, significantly boosting its ICT capacity. Not only does the Rwandan parliament have one of the most sophisticated ICT systems of any national institution in Africa today, its legislature on electronic service delivery leads the way on the continent.

### **R&D** performing institutions

Higher education in Rwanda expanded rapidly in the post-genocide years. Since 1997, three new public institutions have been created, the number of government-sponsored students has risen by nearly 250 percent and the public budget for S&T has grown by a massive 340 percent to its current level of almost Rwf 12 billion (nearly \$27m). The Institute of Scientific and Technological Research (IRST) based in Butare is a multidisciplinary public institute of scientific and technological research.

Rwanda	
Population	9m
Life expectancy	47.3 years
GDP (2005)	\$1.82bn
GDP growth rate	5.8%
R&D expenditure as % of GDP	Proposed 1%
Total ISI-journal articles	139

Due to a limitation of funds, the institution faces challenges in terms of human capacity development. ISRT also has infrastructural capacity problems with a need for more offices, laboratories and library services, and it needs better IT facilities.

The Institute des Sciences Agronomiques du Rwanda (ISAR) mandate was established to promote the scientific and technical development of agriculture and livestock in the country. To encourage technology transfer, the institute is being restructured to serve farmers' needs.

### **Human resources for S&T**

The ministry of education plans to establish 12 secondary schools as centres of excellence in science and ICT. So far, four have been completed. These schools will be provided with laboratory equipment and computers. The ministry has also launched a project aimed at improving the standard of science teaching in the first secondary school cycle. The National University of Rwanda (NUR) started the 2007 academic year with 70 percent of entrants being admitted into science studies. This sharp increase is said to be due to government's long-term strategy of turning the country into an ICT hub. However, the increase poses challenges in terms of human resources, infrastructure and equipment.

### Funding for science and innovation

Rwanda's president has indicated that government has begun to implement its resolution of spending one percent of GDP on S&T. In the current fiscal year (2007), it is to spend 1.6 percent of GDP, and plans to increase it to three percent over the next five years. Currently, all of Rwanda's higher education and research institutions receive donor funding from various sources for small-scale research projects. But the bulk of funds is received from government. There is a need for greater involvement on the part of institutions in generating an income to facilitate research projects.

### Research output

Over a period of nine years, the country has produced 139 research articles. In almost all of the 139 articles, Rwandan researchers collaborated with international colleagues rather than with their local counterparts.

### comment

# The deeper wickedness of Aids

A solution for the scourge of HIV/Aids will not come with a breakthrough cure. It is high time reserach funders woke up to this fact, arque **Gwyn Prins** and **Steve Rayner**.

The weird and unexpected epidemic that has blighted South and Central Africa for thirty years is wicked. Many people have said so in three senses—although we will endorse only the third. The first has its roots in religion. Being a subtle virus that is fiendishly difficult to attack medically, which is stirred into a toxic social mixture of sex, race and power, HIV/Aids was greeted in the early days in raw, moralistic terms. That the early wave in the USA was among homosexuals guaranteed the explanation of the epidemic by Christian fundamentalists as wickedness punished by God.

But, first in Africa, as is now the case in the larger epidemic in India, the key transmission route has been heterosexual. In this fact, President Thabo Mbeki of South Africa heard a second wickedness—that of racism. The apartheid stereotypes of black men resonated for him in a ghastly tinnitus of accusation against which he raged in reply to a question about the rape crisis in South Africa: "I, for my part, will not keep quiet while others whose minds have been corrupted by the disease of racism accuse us ... as being, by virtue of our Africanness and skin colour, lazy, liars, foul smelling, diseased, corrupt, violent, amoral, sexually depraved, animalistic, savage and rapist."

No one had made such accusations. But the third wickedness of Aids is captured in the question Mbeki

was asked. And it is real. The disease is one of inequality, especially of access to power and, most especially, one of women powerless to control their sexual lives. The differential prevalence rates and death rates in South Africa show this. A 2005 survey in Johannesburg found two percent of boys and four percent of girls infected at the age of 15. These percentages grew to three and 14 percent respectively at age 19; six and 31 percent respectively at 21, and 11 and 26 percent at 24. Early incidence rates in Egypt from 2006 show similar skewing of vulnerabilities.

Mbeki was wrong to finger poverty—but not inequality. Exposure to HIV risk is a lot about being powerless. This is uncomfortable knowledge. But it must be faced. And there is yet a deeper wickedness about the HIV/Aids pandemic than any of these three.

HIV/AIDS IS NOT a "tame" problem. In this context, tame does not mean easy. In the haunting description given by J Robert Oppenheimer of the atom bomb question, tame means "technologically sweet". Tame problems can be precisely described. They are bounded within closed systems and amenable to incremental improvement by repeated experimentation. In the end, there is a man on the moon or there is not; there is a vaccine-controlled virus—or there is not. And Aids is

# An educated view of universities

A survey of African graduates identifies barriers to science enrolment, Elisabeth Moyer explains

Some of the most experienced experts on African higher education are African students themselves. During a teaching visit to Africa I surveyed students from throughout Africa, all math and science graduates, to hear their ideas on and experiences in their universities. Although university systems in the various countries differ widely, students' comments had a few common and near-universal themes. These included:

- Overly theoretical curricula: While students were happy with many aspects of their education, they consistently reported missing applied science and practical demonstrations of the use of knowledge, as well as computing facilities and training in programming.
- **Prohibitive university costs:** The recent introduction of fees in many universities has eased universities' need

for revenues, but at the price of access to education. Fees at public universities are often a substantial fraction of mean national per capita income, and private university fees generally exceed it. In the absence of student loan programmes in most countries, financial hardship is one of the primary reasons cited for students dropping out or failing to enter university.

- Oversubscribed engineering programmes: Many students, often the brightest in their classes, describe being unable to enter engineering programmes due to a lack of places, despite the need for engineers in Africa.
- Not enough research-based graduate opportunities: Students consistently wished for more opportunities to do graduate work, in terms of both programmes and funding. Several reported a lack of PhD programmes in their countries. Many recommended the found-

not tame. It is wicked, in the following definition of the word: There is no definitive formulation of a wicked problem. Its definition is trapped in a vicious circle: the information needed to understand the problem is dependent upon one's idea for solving it.

Aids was initially labelled as a medical problem, so primary effort was via vaccine or anti-retroviral research. There was premature foreclosure by activists, understandably sensing urgency. There were well-meaning, yet ignorant outsiders like Jeffrey Sachs. Their slogans entered the politico-bureaucratic world of the UN and were quickly crystallised, unhelpfully but perhaps inevitably, into the "three-by-five" campaign and the now rapidly fading Millennium Development Goals. Uncomfortably, we now learn that these were not the best first lines of attack.

With wicked problems, there is a no-stopping rule. We cannot know when we have sufficient understanding to stop searching; and if there is premature foreclosure, as there was with Aids, we may get locked onto the wrong tracks. Pieter Fourie's excellent new book *One Burden too Many?* documents how this happened three times in succession in South Africa. Only now is the medical intervention being tailored to the previously underrated social drivers, seeking to give women vaginal microbicides to protect themselves and promoting male circumcision. Recent South African and Ugandan studies show a benefit in reducing transmission as good as could be expected of a new vaccine—over 50 percent in the Rakai (Uganda) study.

Every wicked problem can be considered as a symptom of another problem, so the relationships are complex. This makes for horrible moral dilemmas. With Aids, we

already see that one effect of increasing the use of ARTs, which are unforgiving drugs if not taken scrupulously, is to increase drug resistance. Tuberculosis (TB) is back from the dead as the disease that carries off most Aids sufferers; so a new multi-drug and extreme drug resistant TB strain—a far more potent public health threat, given its air-borne transmission—is riding on the back of Aids. To recognise such trade-offs is not to say, do nothing, still less to join the denialists in and around the Mbeki government. It is to demand a conscious weighing of greater and lesser evils. There are only uncomfortable, messy solutions—but better confront these than those tame ones that miss the target.

WHAT POINTERS DOES recognition of the deeper wickedness of HIV/Aids give for African researchers trying to do better in this demanding field of study? Above all, it highlights the importance of humility to avoid premature foreclosure. Sachs' rhetoric on Aids has been a cautionary example. A careful and conscious epistemological audit of what is, what is not and what maybe cannot be known, is prescribed. The Barnett and Prins LSEAIDS study for UNAIDS (Aids and Security) sought to demonstrate this, giving rise to evidence-driven research method choices. This will permit escape from the illusions of tameness, quietly confronting uncomfortable knowledge and building robust intellectual support for policy.

One of us was invited to review the African programmes of one major US Foundation over a couple of years recently and observed distressingly little real work being done for the money invested, and far too much politically correct hand-waving, *Continued overleaf* 

ing of a pan-African graduate institution, or of increased funding for international graduate study at existing universities.

• Limited access to the international research community: Students reported a lack of access to research journals and connections to foreign universities. Rising journal costs are a source of concern throughout the world: the Massachusetts Institute of Technology in the US currently spends over \$4 million each year for journal subscriptions in science and engineering alone. Open access to research results and increased investment in Internet infrastructure are identified needs for African research programmes.

**THE STUDENTS** overwhelmingly felt that expansion of tertiary education in general (and applied sciences in particular) was necessary for economic development in

Africa. Although some international economists have downplayed the importance of higher education to economic development, no high-income country other than Switzerland has less than 50 percent of its population receiving some form of tertiary education.

The full text of student survey responses makes interesting reading for anyone concerned with African universities. This is available on a website, which also contains practical ideas on how Africa and the North can cooperate to expand university enrolment, address the

needs of universities as identified by students, and retain university graduates in Africa.

For more information, visit www.arp. harvard.edu/AfricaHigherEducation/Essays/Essays.html. Read the writings of students at www.arp.harvard.edu/AfricaHigherEducation/Essays/index.html. Comments to AfricaHigherEducation@huarp.harvard.edu

"Students overwhelmingly felt a need for an expansion of applied sciences"

Elisabeth Moyer is a research associate at Harvard University in Cambridge, USA

### ICSU Africa office

# Tending the grassroots

A vear-and-a-half after its establishment, the ICSU Regional Office for Africa is putting finishing touches to its first four science plans and projects—and is inviting grassroots scientists to set the agenda

The International Council for Science (ICSU) used to ▲ be a Western affair. Founded in 1931 but with roots extending as far back as 1899, its efforts to promote cross-border science extended mainly to the developed world. Lately, this has changed. On 1 September 2005, the ICSU Regional Office for Africa (ICSU ROA) was launched. It is the first of four such offices to be established in developing countries. Three more are to be set up to draw in the Arab states, Latin America and Asia, giving the organisation an unprecedented focus on developing country science.

The results are beginning to show. In the next few months, ICSU ROA is organising two major science workshops: one in July on the threat to the continent posed by man-made and natural hazards such as floods and climate change, the other in June on sustainable energy. Not only will the meetings bring together African scientists and funders in the fields, stimulating cross-border collaboration, it will also lay the foundation for multimillion-dollar research programmes in the future.

These programmes will match the four priority areas ICSU ROA singled out last year. Aside from the two mentioned already, namely hazards and sustainable energy, these are health and human well-being, and global change. Already, groups of leading African scientists

**From p21** which saves no lives. But that is the fault of funders, too: for example, setting requirements that are simultaneously too directive and based on unrealistically short time-scales.

Since money talks, research funders should abjure stringently the temptation to call the tunes they would like to hear. This is now more possible, because there are competent pipers starting to play in the African research community who can call tunes without prompting and who are constructing their own international research networks, rooted in the South and including the North. These, not the "top down" parachuted initiatives, are the networks to back.

Three existing major programmes already point the way towards taking the deeper wickedness seriously. Alan Whiteside's pioneering Health Economics and HIV/ Aids Research Division at the University of KwaZulu-London School of Economics, the consequences of seesome funders' agenda to dictate the terms of their Martin Institute.

have prepared work plans for each of the priority areas (See box opposite). Over the coming six months, the ICSU ROA will form nuclei of networks of African scientists who will be requested to come up with long-term and large-scale project proposals for implementing the projects outlined in the plans. Parts of the work will be carried out at the workshops, but there will also be small, focused meetings involving key experts in the field.

While fleshing out the projects, African scientists will naturally form networks that will be involved in implementation, says Sospeter Muhongo, executive director of ICSU ROA. "The regional office is going to champion the projects, but the implementers will be the grassroots scientists." Researchers outside Africa will be invited to participate, using the large ICSU network as a matchmaking tool. Partners like the African Union, Unesco and the Academy for the Developing World (TWAS) are also supporting the initiative and have offered their help.

Fundraising is scheduled to take off in October, with funding to be raised for each project separately. Fundraising efforts will target organisations like the European Union, the African Development Bank and more subject-specific organisations such as the European Union Energy Initiative.

Contact: s.muhongo@icsu-africa.org.

research. Similarly the Centre for the Study of Aids at the University of Pretoria has pioneered a series of richly effective research reports that build across the medical/ social boundary and which engage other researchers and centres on the continent. It has also created effective local research capacity in the community.

But, in many ways, the best model to study is this year's Unesco prize-winning research unit in Africa, the Human Rights Centre, also in Pretoria. There, Christof Heyns and his colleagues have blazed a trail of research and dissemination method in their field, which HIV/Aids researchers who are attuned to long waves and wickedness could gainfully study and emulate.

Gwyn Prins is Alliance Research Professor jointly at Columbia University, New York and at the London School of Economics, where he is also director of the Mackinder Natal is now actively exploring, with help from the Centre for the Study of Long Wave Events. Steve Rayner is James Martin Professor of Science and Civilisation at the ing Aids as a long-wave event, having bravely resisted University of Oxford, where he is also Director of the James

### ICSU themes and projects

### Sustainable energy

- Development of energy models and scenarios. The flagship project in the energy priority. Activities will involve drawing up models and scenarios for energy use in Africa to inform policy decisions.
- Increase in access to high-quality, reliable and affordable energy in a sustainable manner. Activities may include programmes to promote energy efficiency, review existing energy policy and share lessons.
- Strengthening and retention of human and institutional capacities in the energy sector. Activities may include programmes to boost the number of skilled people in the energy sector and creating centres of excellence.

### Health and human well-being

- Understanding the scientific basis of diseases. Activities include investigating epidemiology of emerging and re-emerging diseases, pathogenesis of common diseases, development of resistance to drugs and pesticides, and mental health.
- Health promotion and disease prevention.
   Activities will include work on food/nutrition security, and on education and awareness.
- Health systems analysis and development. Activities will include advocating for investment in the health systems of African countries, models of health delivery systems

and human, institutional and infrastructure resources for health.

- Traditional and complementary/alternative medicine. Activities will include inventories of indigenous knowledge, scientific validation and safety, drug discovery and development and sustainable utilisation of biodiversity.
- Promotion of human well-being. Activities will include modern research on agriculture, water and sanitation, injuries, violence and trauma, gender and cultural issues.

### Hazards and disasters

- Creating and maintaining a hazards database. This will include the use of earth observation and ground instrumentation.
- Vulnerability science (mitigation of risks and hazards). Activities will include developing vulnerability maps, developing early warning systems, improving communication strategies, human and institutional capacity building and outreach. Integrated modelling of multiple disasters falls within this area.
- Linking science with policy. Activities will promote interdisciplinary science and include improving information transfer from scientists to policymakers.
- Geo-hazards. Activities will be linked with the UN-proclaimed International Year of Planet Earth, and will include outreach and a book on natural and human-induced hazards and disasters in Africa.

#### Global change

- Land degradation and biodiversity loss. Activities will include observing the links between biodiversity and ecosystem function, causes and indicators of biodiversity loss and strategies for sustainable use. The change of land cover in Africa will be made a focus of the project.
- Rainfall. Activities will include linking rainfall to variations in sea surface temperatures, regional climate modelling and adaptation analysis to higher/lower rainfall scenarios.
- Resilience of food systems. Activities will include drawing up models and scenarios on food security in Africa. Research on modern food production, distribution, storage and nutrition will also be undertaken.
- Water resources, governance and sanitation. Activities will include water source assessments, linking them to soil stability. The main focus will be on groundwater, transboundary water resources and sanitation challenges.
- Atmospheric pollution. Activities include expanding capacity for observing air pollution and studies on emissions.
- Africa's oceanographic uniqueness. Activities will focus on the ocean current from Somalia in the East, around the southern tip of the continent, to West Africa, and its uniqueness to the oceanic flora and fauna. The effect of climate change and fisheries on the current will be investigated.

# Research-Africa.net

Connecting the African research world

# Comprehensive online funding opportunities database means you need never miss out on funding again

Our database includes everything you need:

- Detailed profiles of sponsors, funding agencies and their programmes
- In-depth guidance for sponsors making calls for proposals
- Online access to Research Africa news; independent coverage of all science policy and science funding news from Africa and around the world
- Variety of personalised email alert options for funding opportunities and news for all staff

Apply now for an institutional site licence.
Contact the Sales Manager on +27 21 409 7912,
email subs@Research-Africa.net or register your interest on the
Research-Africa.net website.

You can choose from a number of service levels offered by Research-Africa.net, customised to your needs. Whether your institution is large or small, if improving your research profile is important, we can offer the service level that is appropriate and affordable.

### http://www.Research-Africa.net

Start with the entry-level site licence for Research-Africa.net on-line services and give your researchers real-time access to the full list of Africa-eligible Funding Opportunities drawn from our global information database.

# For full online services, choose the Gold Service Site Licence

Research-Africa.net **Gold** option includes all news and analysis as well as the searchable online funding opportunities database, *plus*:

- Database of sponsor profiles
- Guidance articles on how to maximise your chances of winning funding

### interesting if true

**OBITUARY** It's official. Sustainable development is dead. Its recent incarnation thought up in (mostly) Western states has failed. At least according to a report published today (20 March) by the International Institute for Environment and Development in London. In 20 years there has been no significant impact on emissions and pollution as a result of international summitry.

Bad news for the environment. But good news for Africa. Because if powerful people read the report and take heed of its recommendations, they will soon be scouring the globe for a fresh approach to revive sustainable development like a Phoenix from the ashes.

Steve Bass, a former environment advisor to the UK government, is the author of the report and this is what he has to say: "Sustainable development is never going to materialise as a result of edicts from New York or Geneva. It needs to be constructed, shared and implemented in a truly global way that takes account of traditional, local and non-Western approaches."

"It is high time for new questions to be asked," he adds. So, this is the time—Ask them. And keep an eye out for any funding that might come on stream as a result of this clarion call. Africa does not need to follow in the polluted footsteps of the Global North.

**D(F)I(D)SSAPOINTING** After yet another false alarm, we are now hoping that the science strategy of the UK's

Department for International Development will be produced in time for the April issue. It will be about time. The strategy has been forthcoming for over six months now. What is holding it up?

**FANCY A CHANGE?** For the enterprising scientist there is a bunch of jobs going at various policymaking institutions. The government of Rwanda is searching for a science and technology advisor for its ministry of education. The appointment is for one year with options for renewal and CVs should go to averma2@worldbank.org.

Meanwhile, Nepad's science and technology arm has a vacancy for a programme coordinator for science, technology and innovation indicators. So if you are keen to produce the first African Innovation Outlook, send your application to science@nrf.ac.za-but hurry, applications should have been in by 20 March.

**FINALLY** Congratulations to Ameenah Gurib-Fakim, professor of chemistry at the University of Mauritius, for nabbing the L'Oreal-Unesco women in science awards worth \$100,000 for her work on Mauritian plants. A great role model for young girls, Gurib-Fakim said there were pressures on women in science when accepting the accolade. "For a woman to make it, her portfolio has to be ten times heavier than that of her male counterpart," she said. Maybe next year the award should be \$1m.

### Research Africa

For multiple subscriptions, the Research-Africa.net institutional site licence is the answer. Individuals at your institution will get dynamic functionality that allows each person to access and personalise the news and funding opportunity information that they need.

Go to www.Research-Africa.net to register your interest and to request a trial for yourself and/or your institution.

### Yes, I want to subscribe to the **Research Africa paper edition**

I understand that if I am not entirely satisfied, I can cancel my subscription during the first 60 days and get a 100 per cent refund.

Tick one box for your subscription.

□ \$370 (Subscribers living in the Rest of the World)

(Subscribers living in Africa)

Payment: We will invoice you on receipt of your faxed and signed order form Fax this form back to: +27 21 409 7913

Organisation

Position

Postal Address

Email VAT no.

Date

Address: ResearchResearch (Africa) (Pty) Ltd, 6<sup>th</sup> Floor, Bandwidth Barn, Buitengraght Street, Cape Town 8001, SOUTH AFRICA

Enquiries Call +27 21 409 7912 or email subs@Research-Africa.net