

For reference only -- competition is closed.

**Carnegie-IAS Regional Initiative in Science and Education (RISE)
Request for Concept Proposals**

Deadline: March 7, 2008

RISE will prepare PhD-level scientists and engineers in sub-Saharan Africa through university-based research and training networks in selected areas (listed below under “Priority Areas”). Its primary goals are to prepare new faculty to teach in African universities and allow existing faculty to advance to the PhD level.

Research and training networks comprising universities in at least three different countries in sub-Saharan Africa are eligible to compete. Each RISE network will be expected to grant a minimum of 15 PhD and Masters degrees over 4-6 years. Additional requirements are listed below.

Three networks will be selected to receive funding of approximately US\$800,000 each over 2 ½ years, with the likelihood of continuing funding after the initial period, assuming a positive interim evaluation.

Selection criteria will include scientific merit, training capacity, research activities, evidence of institutional support, added value of the network versus separate support to individual institutions, and potential for sustainability. Especially important is a strategy for retaining at universities in the region faculty members who have received their training through RISE.

Selection Timetable: Selection will take place in two stages. Concept proposals will be reviewed by an international committee of scientists, who will determine which applicants will be invited to submit fully developed proposals. Finalists will be notified in early April 2008, and the deadline for full proposals will be in early June. Networks will be chosen by the end of June, and network programs are expected to commence between September 2008 and January 2009.

Concept proposals should include the following:

1. Cover page, including name of proposed network; name, affiliation and email address of Academic Director; name and email address of contact person, if other than Academic Director; location of Secretariat, if other than Academic Director’s home institution; and list of universities and institutions included in the proposed network
2. Succinct statement (one page maximum) describing the network’s objective and mode of operation.
3. C.V. of the network’s Academic Director, who also will serve as Principal Investigator for the RISE proposal.
4. Letter of support from vice-chancellor (or equivalent) of each participating university or institution.

5. Narrative of up to 7 pages describing briefly how each of the elements listed below will be addressed by the network. Applicants invited to submit full proposals will be required to explain each item in detail and provide a timetable.
6. Approximate budget breakdown for the first 2 ½ years of operation, assuming a total of \$800,000 per network over 2 ½ years. Categories eligible for funding are listed below. Please also indicate additional sources of financial or in-kind support.

Required Elements

- **PhD Training:** Each RISE network will be expected to grant a minimum of 15 degrees over 4-6 years, including at least 10 PhD's and 5 non-terminal Masters, with the understanding that the latter will plan to continue toward their PhD's. (See next section for list of preferred fields.) Proposals must include a strategy for achieving this target. Proposals also should present strategies for attracting qualified women into RISE training and research programs.
- **Research Plan:** Each network should propose a research plan that indicates how research opportunities will be made available within the network for academic staff and for students.
- **Minimum of Three Nodes:** Each network must comprise nodes in at least three different countries in sub-Saharan Africa. These nodes will typically be located in university departments. A node may be based at a research institution or government lab if it provides expertise or equipment unavailable at the university-based nodes and contributes to the goal of training university faculty. Collaborations with universities outside the region will be encouraged, but support will be limited to travel, communications, and visitor stipends; universities outside the core networks are not eligible to receive RISE funding. Additional international contacts will be facilitated by RISE management and advisors after networks have been selected. Universities in South Africa are eligible to be part of networks, but it is recommended that the Academic Director and the Secretariat be based in sub-Saharan African countries other than South Africa.
- **Contributions by All Nodes:** While academic strength and training capacity may vary among nodes in a given network, every node must be prepared to make a contribution that benefits the entire network. For example a university not yet able to offer the PhD degree, or a government lab unauthorized to offer degrees, may organize intensive short courses by distinguished visiting faculty, or provide laboratory facilities or access to electronic resources. Networks might (but are not required to) include a mix of established universities and newer ones with strong potential.
- **PHEA Affiliation:** At least one node in each network must be located in a science or engineering department in a university supported by one of the member foundations of the Partnership for Higher Education in Africa*.

* *Ghana:* University of Ghana

Kenya: Kenyatta University

Madagascar: University of Antananarivo

Mozambique: Eduardo Mondlane University

Nigeria: Obafemi Awolowo, Bayero, Ahmadu Bello Universities; Universities of Ibadan, Jos, Port Harcourt

South Africa: Universities of Cape Town, Johannesburg, KwaZulu-Natal, Pretoria, Rhodes, South Africa,

Stellenbosch, Western Cape, Witwatersrand

Tanzania: University of Dar es Salaam

Uganda: Makerere University

- **Academic Director:** Each network will designate an Academic Director, based at one of the university nodes, to provide overall guidance for, and coordination of, the network's training and research activities. The Academic Director must be a leader and motivator, a practicing scientist with stature in the academic community and strong management skills. He or she will serve as Principal Investigator for the RISE proposal and will be responsible for preparing periodic narrative reports and assessments of the network's operations.
- **Secretariat:** Each network will include a Secretariat, with responsibility for all administrative details including travel among network nodes for faculty, students and visitors, and financial management for the network. The Secretariat may be located in the same node as the Academic Director, but this is not a requirement. RISE networks are encouraged to adopt whatever structure will best ensure that both academic and administrative leadership are effective. The African Academy of Sciences in Nairobi will consider providing Secretariat services, for a fee to be negotiated. Applicants interested in working with the AAS should inquire with RISE management prior to submitting concept proposals.
- **Retention Strategy:** Proposals should include a strategy for retaining at universities in the region faculty members who have received their training through RISE. Retention incentives might include research funding, laboratory equipment, opportunities for international collaboration, and housing subsidies, among others. Applicants are encouraged to establish incentives from the beginning; for example a network might develop the nucleus of a research group by supporting several PhD students working on closely allied topics.
- **Communications Plan:** All networks must include a plan for ensuring regular communications among the network nodes. At a minimum, this should consist of internet and email capacity at all nodes. RISE management will work with networks as needed beginning early in their second year of operation to help expand their communications strategies, including developing websites to serve as a central information resource and as a forum for on-line interaction about both scientific and administrative matters.

Strongly Recommended

- **Existing Networks:** Preference will be given to proposals that build on existing networks in any of a variety of ways, including but not limited to adding nodes, adding a PhD training component to a research-only network, implementing new curricula, increasing the number of PhD's trained, enlarging existing components.
- **Priority Areas:** Preference will be given to networks in the following basic sciences:
 - materials science
 - mathematics
 - chemistry, including natural products and biochemistry
 or in these problem-driven areas:
 - information and communication technology, instrumentation, software engineering
 - renewable energy
 - water resources

Equal consideration will be given to proposals that combine basic and applied areas; for example a network concentrating on safe drinking water might include one node that focuses on chemistry. Creative approaches to interdisciplinary networks are encouraged. Interactions among RISE networks will be encouraged and facilitated as appropriate.

While areas other than those listed above will be given consideration if a strong case is made for their inclusion, proposals in agriculture and in the health sciences will not be accepted, as these fields are already relatively well supported.

- Evidence of government support of the local nodes will be an advantage.
- A plan to link university research with local industry will be an advantage, especially in the applied areas.

Funding Guidelines

The following categories are meant as guidelines only. Because the contributions from participating institutions and the needs of each network will vary, as will contributions from outside sources, the budget breakdown is flexible, and requests for funding for other categories will be considered. Networks are encouraged to draft budgets that will maximize the effectiveness of their work and best contribute to the goal of producing and retaining PhDs. Networks will be given the discretion to revise budgets if needed as programs evolve and complementary resources become available. Grant funds may be paid to the Secretariat or to individual network nodes. Arrangements for distribution of grant funding will be determined on a case-by-case basis.

Categories eligible for funding:

- Graduate training (tuition, stipends, housing, etc.)
- Salary replacement for release time for faculty who serve as mentors for PhD students
- Travel and conferences
- Stipends and expenses for visiting faculty and students
- Equipment (including maintenance and servicing) and supplies
- Books, journals, databases
- Communications
- Secretariat office expenses
- Retention incentives

Submission Instructions

Proposals must be in English.

Your proposal and attachments should be combined into a single PDF or Word file, if possible. If multiple files are submitted, please label each with the same name followed by a number, and send together in one email.

Please submit proposals by email to sig@ias.edu. Questions may be sent to the same email address. Proposals received after the March 7 deadline will not be considered.

For background information, please visit www.ias.edu/sig and click on RISE.