

Organization	African Institute for Mathematical Sciences – Next Einstein Initiative (AIMS-NEI)
Position title	Joint Research Chair
Target group	Researchers in academic disciplines with substantial mathematical science components
Category	Academic Development
Duty station	AIMS-Ghana, AIMS-South Africa and Canada
Closing date	22 <sup>nd</sup> of November 2013
Start date	As soon as possible
Application submission	academic-dev@nexteinstein.org
Vacancy Notice #	ACDEV001
URL	http://www.nexteinstein.org/jobs

### BACKGROUND

The African Institute for Mathematical Sciences (AIMS) is an innovative, pan-African centre of excellence for post-graduate education, research and outreach which has achieved global recognition since opening its first centre in South Africa in 2003 (<a href="www.aims.ac.za">www.aims.ac.za</a>). AIMS centres offer a number of educational programs including a one-year taught Master's program and postgraduate research. Each AIMS centre provides an intensive and broad education to over 50 African students each year and prepares them for leadership careers in academia, governance and industry. The AIMS educational program relies on top international lecturers who teach in a 24-hour learning environment.

Based on the success of the first AIMS centre, the AIMS Next Einstein Initiative (AIMS-NEI, <a href="https://www.nexteinstein.org">www.nexteinstein.org</a>) was launched with the mission of enabling Africa's brightest students to flourish as independent thinkers, problem solvers and innovators capable of propelling Africa's future scientific, educational and economic self-sufficiency. As part of this network, the AIMS-NEI secretariat acts as a coordinating body for all centres. AIMS centres are currently found in Ghana, South Africa, Senegal and very recently in Cameroon. Each centre is expected to become a leading research-intensive, internationally recognized, mathematical-science research hub conducting research of relevance to societal, local or regional development challenges, and with the potential to impact local government policies.

### **SCOPE OF THE POSITION**

Through the Canadian International Development Research Centre (IDRC), the AIMS-NEI secretariat has secured funds for a Joint Research Chair, which in a five-year period can position the AIMS centres

in Ghana and South Africa as world-class mathematical science research hubs. The objectives of this research chair position are three fold:

- 1. To act as a catalyst to strengthen and grow the current AIMS network research programs;
- 2. To position AIMS research centres as centres of excellence globally;
- 3. To contribute towards capacity building of AIMS alumni, positioning them as the next generation of African researchers actively involved in Africa's socio-economic growth through mathematical science research initiatives.

The joint research Chair is also expected to work in partnership with a Canadian institution, spending 40% of their time at AIMS-Ghana, 40% at AIMS-South Africa and 20% at a Canadian partner institution, to establish a mathematical-science focused research agenda which is relevant to Africa's development. A generous funding has been allocated for this position including funds for the recruitment of two PhDs and two Post-doctorate fellows to support the Chair's research activities. However, it is expected that the proposed research program should be attractive enough to raise additional funds and ensure its sustainability in these institutions beyond the current five-year funding period.

## CHARACTERISTICS OF THE IDEAL PROPOSED RESEARCH PROGRAM

- The incumbent is expected to identify, develop and implement an innovative research program in an academic discipline which has a strong mathematical sciences component and which can be relevant for AIMS-Ghana, AIMS-South Africa and a Canadian partner Institution.
- The proposed research program should also demonstrate the potential to attract highly qualified collaborators, students and trainees including AIMS alumni to strengthen and broaden the AIMS network's current research and partnership program.
- The ability for the program to create appropriate interdisciplinary research collaborations, that will position AIMS-NEI research and industry initiatives globally, is vital.
- The research should ideally address development challenges in one or more of the African host countries.

# QUALIFICATION, EXPERTISE AND EXPERIENCE OF THE CANDIDATE

It is expected that the research Chair should:

- Hold a doctorate degree or equivalent with at least five years of post-doctorate experience in any academic field which has a strong mathematical science component;
- Be qualified for appointment as an associate professor as measured by the Ghanaian, South African and Canadian tertiary education systems;
- Be an excellent international researcher capable of establishing an innovative internationalclass mathematical science research in AIMS-Ghana, AIMS-South Africa while working in collaboration with a Canadian institution:
- Have a strong human-capital output trajectory and able to attract and successfully supervise postgraduate and post-doctorate fellows;
- Be able to achieve international recognition during the five-year period through research publication output in high-impact, peer-reviewed journals. Additionally, their research results should impact the local community and/or inform local government policies;

- Be willing to annually split their schedule by spending 40% of their time in Ghana, 40% in South Africa and 20% at the Canadian partner Institution;
- Also important is the ability of the incumbent to act as a steward of research and industry initiatives for the creation of new collaborative multidisciplinary research areas with internal and external groups;
- Have the capacity to assist with developing and strengthening undergraduate and postgraduate study programs locally to ensure that local capacity in their proposed research area is promoted;
- Have the potential to mobilize resources for the acquisition of relevant infrastructure, facilities and equipment to enable colleagues, collaborators and students to conduct advanced research;
- Optimize the use of research resources through strategic planning, excellence in teaching and training of researchers:
- Collaborate with the research manager, finance department and relevant departments at the AIMS-NEI secretariat to plan, mobilize resources and identify new partnership opportunities;
- Promote the image of AIMS-NEI, contribute to knowledge transfer and take the lead in identifying new partnerships for the network through active participation in scientific events (conferences, workshops, meetings).

# **APPLICATION PACKAGE**

Applications must be written in English and in a clear manner understandable to a broad audience. All files should be submitted using the format: surname-file type-ACDEV001 (e.g surname-application form-ACDEV001) in the subject line.

The application package should consist of:

- 1. The completed application form which should include details of the full proposal (download the application form from here);
- 2. A cover letter clearly stating the vision of the proposed research program (1-3 pages);
- 3. Curriculum vitae (download the CV template from here);
- 4. A zipped file of the full articles of the Candidate's five key publications sent as a separate attachment.

#### The applicant should obtain:

- Three international expert review letters. Candidates are expected to <u>download the Referee</u> form from here and email this to the Referee. Applicants should ensure that Referees email these references directly to <u>academic-dev@nexteinstein.org</u>.
- Statement by potential collaborating partner(s) in Canada. This is not mandatory but applicable
  if the Candidate has already identified potential collaborators in Canada.

## RECRUITMENT TIMELINE

Activity	Deadline
Application opened	18th October 2013
Application closed	22nd November 2013
Pre-screening and short listing of candidates (internal)	25th – 29th November , 2013
Formal interview of shortlisted candidates	12th - 15th December, 2013
Recruitment process	December 15th 2013 – January 15th , 2014
Start date for selected candidate	End of January 2014 or earliest possible date

AISM-NEI will continue to welcome applications after the 22<sup>nd</sup> of November 2013 in case a suitable candidate has not been identified.

# **REMUNERATION**

• An attractive remuneration package will be provided and negotiated with the candidate based on their research calibre and the depth of their proposed research program.

# **CONTRACT PERIOD**

The contract will initially be signed for a period of three years renewable for two additional years based on satisfactory progress. However, the candidate is expected to mobilize additional resources to sustain the program beyond the current five-year funding period.

### **DISCLAIMER**

- Women are encouraged to apply as the program aims at ensuring access and opportunities to the most highly qualified candidates.
- AIMS-NEI is a fair and equal-opportunity employer and does not discriminate against any person or groups of persons.