



Deutscher Akademischer Austauschdienst  
German Academic Exchange Service



Federal Ministry  
of Education  
and Research

## CALL FOR APPLICATIONS

### PhD Fellowship in **Signalling Dynamics in Cells and Tissues** at the African Institute for Mathematical Sciences (AIMS) in Ghana

The German Research Chair, Prof. Nick Monk at AIMS Ghana, in collaboration with Prof. Dr. Kevin Thurley at the Universitätsklinikum (University of Bonn, Germany), is offering Ph.D. fellowships at the AIMS Ghana Research Centre in Accra. These fellowships are made available and funded by the DAAD to promote international academic exchange as well as educational co-operation with developing countries through a variety of funding and scholarship programs.

#### Scientific interests

We are looking for excellent candidates with strong interest in research in **Mathematical Modelling of Cell and Tissue Dynamics**. The research topics will be mathematical, motivated by processes involved in the regulation of the spatiotemporal dynamics of cells and tissues, with particular emphasis on embryonic development and immunology.

Among others, we are seeking for candidates with a strong interest in one of the following areas:

- Mathematical modelling.
- Mathematical biology and medicine.
- Differential Equation models and Dynamical Systems.
- Spatial Pattern Formation.
- Numerical Solution of Differential Equation and stochastic models.

#### Eligibility

- A good Master's degree in mathematical sciences (two-year degree is preferred).
- **Strong interest** in one of the areas indicated above.
- Experience in mathematical modelling; experience in mathematical biology is a plus.
- Excellent academic track record.
- Good communication skills in English.
- Good coding / numerical simulation skills (e.g. Python, Matla, C and similar) are an advantage.
- Preferably a national of an African country.

Female candidates and candidates from less privileged regions or groups are especially encouraged to apply.



### Scholarship benefits

- The Ph.D. positions are tenable for 3 years, contingent on satisfactory progress, and could be extended for one more year.
- Monthly scholarships are €1,275 (during stays in Ghana) and €1,200 (during research stays in Germany).
- Tuition fees are covered.
- Travel costs (if applicable) are covered.
- Health insurance costs are covered.
- Additional benefits are made available for mobility when commencing and finishing the scholarship in Ghana and for research stay at the University of Bonn during the doctoral project.
- The positions are expected to start as soon as practicable.

### Fellowship holders

Successful fellows are expected to conduct research in the thematic areas indicated in the section “Scientific interests”. They are expected to publish their results in peer-reviewed journals and conferences, and to be actively engaged in the research activities of the German Research Chair, as well as contribute to the implementation of the cooperation between the Chair and the Universitätsklinikum / University of Bonn in Germany. Fellows are also expected to have some involvement in the AIMS Ghana academic programs. Fellows will be affiliated with AIMS Ghana, but they will be encouraged to conduct scientific visits in Germany.

### Application documents

1. Letter of motivation.
  2. Curriculum vitae.
  3. Copies of university degrees (including transcripts; students and alumni of AIMS and/or AMMI are advised to include the transcripts with all their grades).
  4. Copy of passport or national ID.
  5. Names and email addresses of two academic referees. Referees will be contacted to submit their confidential references by 1 March 2024. You are advised to confirm the willingness of named referees to provide a reference promptly after this date.
- The application is not complete without the references.**

The letter of motivation should briefly (1 page A4 maximum) and concretely state the candidate’s interests and motivations in the research area. A detailed research plan is not required.

### Application instructions

Please send completed applications by email to **nick@aims.edu.gh** with subject line containing “DAAD postdoc. application”. Applicants should submit the documents in a **single PDF file**. Applications not following these instructions risk rejection without reading.

**Please see <https://sites.google.com/aims.edu.gh/nick-monk> for further details and updates.** For questions, please email **nick@aims.edu.gh**.

### Deadline

The deadline for the applications is **Friday 23 February, 2024**.





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Category 2 Centre  
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## **African Institute for Mathematical Sciences Ghana (AIMS Ghana)**

**DISCLAIMER:** AIMS Ghana and the University of Bonn reserve the right to disqualify ineligible, incomplete and/or inappropriate applications. AIMS Ghana also reserves the right not to make an appointment to the position as advertised or to extend the deadline for applications. Only successful applicants will be contacted.

