The National Academies of SCIENCES ENGINEERING MEDICINE

Call for Applications
BUILDING CAPACITY IN PAKISTAN: TRAINING IN THE USE OF POLYMERASE CHAIN REACTION

The U.S. National Academies of Sciences, Engineering, and Medicine is supporting a training program for early career scientists in Pakistan to develop and improve advanced molecular-based polymerase chain reaction (PCR) techniques. PCR methods improve capacity for targeted surveillance and detection of high threat pathogens and outbreaks, and reduce the need to culture and store infectious material. The training will be conducted in collaboration with the National Institute of Health in Pakistan and the Kenya Medical Research Institute.

The Opportunity

Competitively chosen applicants will be selected to participate in a three-phase training program. An international committee of experts with membership from Pakistan, the United States, and Kenya, appointed by the U.S. National Academies, will oversee selection of trainees and development of the training program.

Introductory Workshop in Islamabad, Pakistan

A three-day introductory workshop will be held at the National Institute of Health of Pakistan in Islamabad in summer 2019. Trainees will participate in a discussion and demonstration of PCR best practices. Trainees will discuss experimental designs for their individual research conducted at their home institutions.

Supporting Webinars

After the workshop, trainees will participate in webinar-based training covering topics relevant to PCR. These may include reagent and primer acquisition, assay development, sample preparation, and other topics.

Training in Nairobi, Kenya

A one-week training course will be conducted at the Kenya Medical Research Institute in Nairobi in fall 2019. Fellows will receive in-depth experience conducting and troubleshooting PCR techniques. Fellows will have the opportunity to address identified shortfalls from practice at their home institution and work on methods and analysis applicable to their research interests.

Support

The U.S. National Academies will fund all travel expenses to Islamabad and Nairobi and provide the materials utilized during the training activities.

Criteria and Application Requirements

Eligibility

Up to 14 candidates at early to mid-career level, such as Postdoctoral Researcher, Lecturer, or Assistant or Associate Professor from governmental or non-governmental universities, laboratories, or other research institutions, will be considered for this fellowship program. Applications will be accepted from Pakistani citizens holding positions at Pakistani institutions.

Who Should Apply

Applicants should demonstrate in their application the following qualifications:

- Research interests benefited by PCR methods, with some knowledge of the application of PCR.
- Access to PCR equipment.
- Institutional support, such as a mentor or other senior team member, to guide PCR-related experience and research.
- Interest and willingness to apply best practices and provide training for PCR techniques in their home institution.
- Research on infectious disease impacting the health of human and/or animal populations, with topics including, but not limited to:
    - Infectious disease surveillance.
    - Epidemiological studies.
    - Diagnostic development.
    - Infectious disease prevention.
    - Immunological response to infectious disease.
    - Vaccines/antimicrobial research.
    - Zoonotic diseases.
    - Food and water safety.

Application Materials

Applicants will be required to submit the following materials through the link provided below:

- Complete Application Form
- Letter of Recommendation
- A C.V./resume no more than 4 pages in length. Please follow the U.S. NIH guidelines for Biographical Sketch Format (non-fellowship) found here: https://grants.nih.gov/grants/forms/biosketch.htm.

To apply, visit:
http://sgiz.mobi/s3/PCR-Training-Application

DEADLINE FOR THE APPLICATION

Sunday, June 23 at 11:59pm
Pakistan Standard Time (GMT+5)