BIOTEC
a member of NSTDA

CALL FOR APPLICATION
Human Resource Development Program in Biotechnology 2010

The National Center for Genetic Engineering and Biotechnology (BIOTEC) invites research scientists from selected developing countries in East Asia, Southeast Asia and the Pacific to participate in the Human Resource Development Program in Biotechnology for year 2010. The Program aims to build up R&D capability for developing countries as well as fostering research network among countries in this region. The Program places importance on improving research skill, thus it is designed to be an on-the-job and research-based training in BIOTEC's laboratories. Two types of training will be on offer: fundamental courses (3 months) and advanced courses (6 months). The training course consists of classroom session, designing and conducting a mini research project and site visit to factories or project sites. A total of 12 scholarships will be provided.

Eligibility

1) Must be scientists currently being employed in either a public or private academic institute, OR a governmental research organization in the list of eligible countries.
2) Must hold at least a **Bachelor's degree** in sciences for application to a **fundamental course** or at least a **Master's degree** in sciences for application to an **advanced course**. All applicants must have finished course work in biology, microbiology or any related areas that will be required for particular training topics.
3) Must have good command in English.
4) Must be able to attend the course, during 1 July – 30 September 2010 for a fundamental course or 1 July – 30 December 2010 for an advanced course.
5) Must not be older than 32 years of age as of 1 July 2010.
6) Since the training is research-based and trainees will be working in the laboratories, applicants must show on his/her application form that his/her current job involves research, not administrative work.
7) Each selected grant recipient will be assigned to ONE of the available courses. Applicants will have to identify only ONE course in their application form.

List of Eligible Countries

Applicants from the following countries are eligible to apply for Human Resource Development Program in Biotechnology 2010:

East Asia	Southeast Asia	Pacific Islands	
▪ China ▪ Mongolia	▪ Cambodia ▪ Indonesia ▪ Lao PDR ▪ Malaysia ▪ Myanmar ▪ Philippines ▪ Vietnam	▪ American Samoa ▪ Fiji ▪ Kiribati ▪ Marshall Islands ▪ Micronesia ▪ Northern Mariana Islands ▪ Palau	▪ Papua New Guinea ▪ Samoa ▪ Solomon Islands ▪ Tonga ▪ Timor-Leste ▪ Vanuatu

Sponsorship

Selected candidate will be provided with monthly allowance, on-campus accommodation and health insurance.

The international roundtrip airfare funding will only be available for the successful applicants from Laos, Myanmar and Cambodia. However, applicants from those countries who are able to obtain airfare from their own institutes or other funding agencies are strongly encouraged to indicate this fact on the application form.

Available Courses

Course No.	Project title	Course Content
Fundamental Course (3 months)		
F-1	Innovation Technology for Phytoremediation on Salinity Land	▪ Plant material preparation ▪ Experimental design ▪ Salt tolerant screening ▪ Data collection and analysis
F-2	Environmental Control for Oil Palm Micropropagation	▪ Techniques for micropropagation of oil palm ▪ Techniques for environmental control in oil palm micropropagation ▪ A preliminary experiment in oil palm micropropagation
F-3	*In vitro* Culture in Oil Palm: Revised Protocol for Improvement in Growth and Development	▪ Preparation of medium and chemical preparation ▪ Sterilization techniques ▪ Somatic embryogenesis in oil palm ▪ Acclimatization of plantlet
F-4	Leaf Litter Fungi	▪ Material collection ▪ Fungal isolation ▪ Fungal identification ▪ Fungal preservation
F-5	Screening and Characterization for Lignocellulosic Degrading Enzymes from Leaf-litter Fungi	▪ Screening for linocellulosic degrading enzyme from Thai leaf-litter fungi ▪ Biochemical characterization
F-6	Ultrasensitive Detection of DNA Hybridization Based on Nanoparticle-Assisted Signal Amplication	▪ Nanobiotechnology ▪ Biosensors and diagnostics ▪ Biochemistry and molecular biology ▪ Chemistry of materials
F-7	Identification and Validation of Drug Targets in Plasmodium Parasites	▪ The study involves techniques in bioinformatics (genome search, comparative genomics) ▪ Molecular biology (PCR, molecular cloning, southern blotting) and cell culture
Advanced Course (6 months)		
A-1	Production of Insecticidal Protein from *B. subtilis*	▪ Construction of vector for protein expression and secretion from *B. subtilis* ▪ Protein extraction & purification ▪ Biochemical characterization & biological activity assay
A-2	Isolation of Yeasts in Beetle Guts	▪ Collections of beetles from different habitats ▪ Isolation of yeasts ▪ Preparation of necessary media for isolation ▪ Biochemical tests

Application Procedure

Each applicant should submit a completed application form along with an English university-transcript, full Curriculum Vitae, certificate of health and copy of passport (if any) to BIOTEC. The deadline for receipt of application is 15 March 2010. Selected applicant will be notified by 15 April 2010. For application submission and further inquiries, please contact:

International Cooperation Division
c/o Ms. Udomrat Vatanakun
National Center for Genetic Engineering and Biotechnology (BIOTEC)
113 Thailand Science Park, Phahonyothin Road
Klong 1, Klong Luang, Pathumthani 12120 Thailand
Tel: (66) 2 564 6700 ext.3515 Fax: (66) 2 564 6705
E-mail: udomrat.vat@biotec.or.th