



# CAREER BOOSTING SHORT-TERM TRAINING COURSE ON RECENT TECHNIQUES IN INFECTIOUS DISEASE DIAGNOSIS FOR MID-CAREER DOCTORS/ SCIENTISTS



## OVERVIEW

North eastern region of India, comprising of 7 states, is a less advanced region, where avenues for better education, training and workplace are limited. In last 3 decades Government of India (GOI) has focused its attention on this region. The expert group discussed the issue and realized that there is an urgent need to impart hands-on training to local mid-career scientists. In that direction, North Eastern Region-Biotechnology Programme Management Cell (NER-BPMC) is a programme of the DBT, GOI, for development, coordination and monitoring of biotechnology programmes in the north eastern states of India and managed by the Biotech Consortium India Limited (BCIL), New Delhi.

## PURPOSE OF THE TRAINING

The main aim of this training programme is to develop trained manpower in the North-Eastern Region of India, who after training, can successfully apply molecular techniques for rapid and accurate diagnosis of human infectious diseases and guide and mentor biotechnology research and training programmes to local students and other colleagues.

❖ To impart theoretical and practical knowledge of recent advances in epidemiology and diagnosis of infectious diseases at global and regional level.

To achieve the above goal the DBT has recommended our laboratory setup (Division of Clinical Microbiology, Department of Laboratory Medicine, AIIMS, New Delhi-110029, India) as a training centre for this purpose. Hence this training is being organised on behalf of DBT to full fill the above global goal.

## WHAT IS INCLUDED IN THE TRAINING?

In this training the participants will learn the principles behind infectious disease diagnostics and various existing methods. The training curriculum has two sections. Basically, first part will be based on theory and it will help participants to understand the next session which is direct, hands-on experience on molecular techniques.

## WHO SHOULD PARTICIPATE IN TRAINING?

- ❖ Only residents of NER of India are eligible for this training.
- ❖ Only permanent faculty with MD/ PhD degree working in State/Central govt department will be eligible.
- ❖ Upper age Limit:45 Years

## NO TRAINING FEE

No training fee will be required. Free accommodation or TA/DA will be paid to the participants as per DBT guidelines by BCIL

## NUMBER OF SEATS

- ❖ Maximum 10 to 12 participants will be selected for each session. There will be reservation for SC/ST as per central reservation rules.
- ❖ The applications will be short listed on the basis of applicant's qualification and prior exposure to diagnostic work/ responsibilities

## HOW TO APPLY?

Download application form from AIIMS website:  
<http://www.aiims.edu/aiims/events/rcc4.htm>

Send completely filled application to:

Prof. Sarman Singh, Head, Division of Clinical Microbiology, Dept. of Lab. Medicine, AIIMS, New Delhi, Email: [sarman\\_singh@yahoo.com](mailto:sarman_singh@yahoo.com).

For any inquiries please feel free to contact us:

[parveenmicro02@gmail.com](mailto:parveenmicro02@gmail.com) ,

[anilgupta.51@gmail.com](mailto:anilgupta.51@gmail.com) , Phone: (91-11) 2659-

4977

## WHEN IS THE TRAINING CONDUCTED ?

Training is scheduled three times in a year (2012-13): **December-2012, April- 2013 and August-2013**

### TRAINING SUMMARY

DAYS	SESSION	TITLE
<b>Day-1</b> <b>(Monday)</b>	Forenoon	Introduction and inaugural session*
	Afternoon	Basic concepts to setting up a molecular laboratory
<b>Day-2</b> <b>(Tuesday)</b>	Forenoon	Quality control and Quality assurance in the laboratory*
	Afternoon	Emerging infectious diseases*
<b>Day-3</b> <b>(Wednesday)</b>	Forenoon	Sample processing for Mycobacteriosis diagnosis
	Afternoon	Microscopically diagnosis of Mycobacteriosis
<b>Day-4</b> <b>(Thursday)</b>	Forenoon	DNA extraction for molecular detection & speciation of Mycobacterium
	Afternoon	Cloning, expression & purification of recombinant proteins*
<b>Day-5</b> <b>(Friday)</b>	Forenoon	Detection & speciation of Mycobacterium by <b>M-PCR</b>
	Afternoon	Role of Microarray in diagnosis*
<b>Day-6</b> <b>(Saturday)</b>	Forenoon	Demonstration of <b>ELISA</b>
	Afternoon	Demonstration of automated ELISA
<b>Day-7 (Sunday)</b>		<b>Free day</b>
<b>Day-8</b> <b>(Monday)</b>	Forenoon	<b>Real Time PCR:</b> An influential tool in research and diagnostics
	Afternoon	Demonstration of Real Time PCR
<b>Day-9</b> <b>(Tuesday)</b>	Forenoon	<b>NASBA:</b> A potent advanced molecular method for detection of HIV
	Afternoon	Demonstration of NASBA
<b>Day-10</b> <b>(Wednesday)</b>	Forenoon	<b>Line probe Assay:</b> An authentic advance molecular method of detection of MDR/XDR M. tuberculosis
	Afternoon	Demonstration of LiPA
<b>Day-11</b> <b>(Thursday)</b>	Forenoon	<b>TaqMan:</b> An effective advance molecular method in diagnostic research
	Afternoon	Demonstration of TaqMan assay DNA sequencing & its role in diagnostics research*
<b>Day-12</b> <b>(Friday)</b>	Forenoon	Diagnosis of Leishmaniasis
	Afternoon	Diagnosis of toxoplasmosis
<b>Day-13</b> <b>(Saturday)</b>	Forenoon	Final review and closing the training course

\* Theory based classes



**APPLICATION FORM FOR SHORT TERM TRAINING COURSE**  
*on Recent Techniques in Infectious Disease Diagnosis*

**Division of Clinical Microbiology, Department of Laboratory Medicine,  
All India Institute of Medical Sciences, New Delhi-110029, India**

**Title:** Mr.  Ms.  Mrs.  Dr.  Prof.

**Name:**

**Middle Name:**

**Last Name:**

**Gender:** Male  Female

**Category:** Gen  OBC  SC  ST

**Organization:**

**Job title:**

**Contact address:**

**E-mail:**

**Phone/ Mobile No:**

**State:**

**Nationality:**

**Qualifications:** M.Sc.  PhD  MBBS  MD  Others

**Accommodation:** Required  Not Required

How did you find about the training: (Restrict to 100 words)

Describe your duty and job description: (Restrict to 300 words)

How will this training help you? (Restrict to 300 words)

**Full Name of Applicant**.....

**Date**..... **Signature**.....

**Remarks and Recommendations of the Host Organization/ Government/ DBT/ any other Organization:**

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**Date**.....

**Place**.....

**Signature**.....

**Name of Forwarding Authority**.....

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**Seal**.....