

## 17 Activities of Training and Extension Division

### Section highlights

#### *Organised the training programmes :*

- Organise the visit of Honb'le Health Minister of Health and Family Welfare, Govt. of India, Mrs. Sushma Swaraj
- Five training Programmes on Immunization Strengthening Project for mid level managers of the districts of Eastern States
- JICA-NICED Domestic Training Programme on Molecular Epidemiology of Diarrhoeal Diseases with special reference to cholera organized by NICED and Japanese International Cooperation Agency (JICA)
- Oration Lecture of Indian National Science Academy (INSA) on 30<sup>th</sup> July 2003
- Seminar of Immunology Study Group; West Bengal
- Training Programme for the Students of National Institute of Homeopathy
- Pre-Conference CME Workshop on molecular techniques useful in identification and characterization of Enteric Pathogens for APCON 2003
- Third country Training Programme on Molecular epidemiology of diarrhoeal diseases with special reference to cholera organized by NICED and Japanese International Cooperation Agency (JICA)
- Organise the Guest lectures
- Organised training for the students of the University of Kolkata i) BHMS; ii) MD (Microbiology)
- Organised training for: i) M.Sc. students of Kalyani University,
- Organised weekly Institutional seminars





## 17. Activities of Training and Extension Division

### 17.1. Organise the visit of Ms. Sushma Swaraj, Hon'ble Minister of Health and Family Welfare, Govt. of India, on June 1, 2003

Hon'ble Health Minister of Health and Family Welfare, Govt. of India, Mrs. Sushma Swaraj, visited this Institute on June 1, 2003. In that occasion, Hon'ble Minister of Health and Family Welfare, Govt. of West Bengal, Dr. Surya Kanta Mishra also accompanied. Dr. S.K. Bhattacharya, Director of this Institute welcomed Hon'ble Ministers and other delegates. Prof. N.K. Ganguly, Director General, ICMR, delivered a lecture on overview of the activities of the Institute. Hon'ble Minister visited the laboratories of the Institutes.

### 17.2 Training Programme on Immunization Strengthening Project for mid level managers of the districts of 11 Eastern States

Immunization is one of the most effective public health interventions to reduce childhood mortality and morbidity due to vaccine preventable diseases. It is also very cost effective. Mid level managers are responsible for effective implementation and supervision of various activities of this programme in our country. They must be there fore, up dated their knowledge, in line with the recent vaccines in this field. Their updated knowledge will equip them further to strengthen the immunization programme of this country. With this view in mind, Ministry of Health and Family Welfare, Govt. of India proposed to train all the district level officers under the programme on Immunization Strengthening Project.

Ministry of health & family welfare, Govt. of India selected 5 Institutes in different parts of India as nodal Institutes to train the midlevel officers. Our Institute is one of these Institutes and got the responsibility for conducting training programmes for 11 eastern states namely A&N Island, Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Orissa, Sikkim, Tripura and West Bengal.

During the year 2003 five training programmes were conducted. Dates of these meeting and the number of participants attended are mentioned in Table 14.1.1.

**Table 17.2.1 Dates and number of participants attended in these Training Programmes on Immunization Strengthening Project organised at NICED during 2003**

Dates	Nominated	Attended
21-26 July, 2003	39	17
4-9 August, 2003	35	9
18-23 August, 2003	34	21
8-15 September, 2003	29	10
22-27 September, 2003	38	16



**Table 17.2.2. State-wise candidates nominated and number of participants attended**

States	Number Nominated	Number attended
Arunachal Pradesh	14	8
Assam	40	13
Manipur	10	6
Orissa	80	37
West Bengal	31	9
<b>Total</b>	<b>175</b>	<b>73</b>

**Table 17.2.3. Name of the faculties involved in ISP training programmes at this Institute**

Sl.No.	Name of the Institute/ Medical Colleges	Name of the Faculties
1	National Institute of Cholera & Enteric Diseases	1. Dr. S.K. Bhattacharya 2. Dr. P. Dutta 3. Dr. D.N Gupta 4. Dr. S.K Mondal 5. Dr. D. Sur 6. Dr. S. Ghosh 7. Dr. U. Mitra 8. Dr. K. Sarkar
1.	Calcutta Medical College (Dept. of Community Medicine)	1. Dr. S.P. Mitra
2.	R.G. Kar Medical College (Dept. of Community Medicine)	1. Dr. R. Mishra
3.	N.R.S. Medical College (Dept. of Community Medicine)	1. Dr. S. Dasgupta 2. Dr. A. Mondal
4.	P.G. Hospital (Dept. of Community Medicine)	1. Dr.D. Chattopadhyay
5.	Dr. B.C. Roy Memorial Hospital for Children	1. Prof. M. Basak 2. Prof. S.B. Pal
6.	National Polio Surveillance Project, World Health Organisation	1. Dr. Arindam Roy
7.	Govt. of West Bengal, Dept. Health & Family Welfare	1. Mr. S.S. Chowdhury





### **17.3 National Technology Day Celebration on 14th May 2003**

National Technology Day was celebrated on 14th May 2003 at the auditorium of the Institute. Prof. Biswajit Ghosh, School of Energy Studies, Jadavpur University, Kolkata delivered a talk on Non Conventional Energy Sources. Prof. Ghosh is involved in the field of Advance Materials and Solar Energy Technologies, coating technologies and technologies for Power Generation from Gasification of Biomass. He described his experience about the village electrification at the Sundarban area of West Bengal by using solar energy and biomass. He showed many photographs. All the staffs of this Institute attended and actively participated in this programme.

### **17.4 Seminar of Immunology Study Group; West Bengal on 25th July 2003**

Seminar was organized jointly by this Institute and Immunology Study Group; West Bengal. Two scientists delivered lectures on that occasion. All the scientists and research fellows attended the meeting along with the scientists of other research organizations.

### **17.5 Oration Lecture of Indian National Science Academy (INSA) on 30th July 2003**

On behalf of Indian National Science Academy (INSA), a seminar was organized at this institute. Dr. YP Subra Row memorial lecture of INSA was delivered by Prof. Sandip K Basu, Director, National Institute of Immunology, New Delhi. Title of his talk was "Intracellular delivery of drugs through receptor mediated endocytosis: An emerging frontier of molecular medicine". Prof AB Chowdhury chaired the session. Scientists of this Institute and other Institutes attended the meeting.

### **17.6 Training for M.Sc Biotechnology students of Visva Bharati University on 13th August, 2003**

A batch of M.Sc Biotechnology students of Visva-Bharati University attended a training programme at this institute on 13th August, 2003. They spent a full day at different laboratories. They learnt the application of different sophisticated instruments available in this institute.

### **17.7 Training Programme for the Students of National Institute of Homeopathy on 29th October, 2003**

Forty BHMS students of the National Institute of Homeopathy visited the Institute on 29th October, 2003 to acquaint themselves with different facets of diarrhoeal diseases and its management. They also apprised the present situation of AIDS in our country. Lectures on respective topics were delivered by Dr. S. Chakrabarti, Dr. P. Dutta, Deputy Directors (Senior Grade), Dr. DN Gupta, Dr. SK Mondal, Dr. D Sur, Deputy Directors, Dr. S. Ghosh Astt. Director, Dr. U Mitra, Assistant Director.

### **17.8 Pre-Conference CME Workshop on molecular techniques useful in identification and characterization of Enteric Pathogens for APCON 2003 on 10th December 2003**



**17.9 Training programme for WHO Fellows.**

Name	Training Programme	Designation	Duration
Dr. Gouranga Kanti Rakhit,	Hybridoma technique for raising monoclonal antibodies	Demonstrator, Dept. Nuclear Medicine, IPGMER & SSKM Hospital, Kolkata	April 21st - June 20th, 2003
Dr. Amitava Bandopadhyaya	Hybridoma technique for raising monoclonal antibodies	Senior Medical Officer, CGHS Patna Dispensary, Patna, Bihar	April 21st - June 20th, 2003
Dr. Devendra Prakash Singh	Clinical case management of acute diarrhoea	Emergency Medical Officer, District Hospital, Pauri Garhwal, Uttaranchal	July 21st - 30th 2003

**17.10 JICA-NICED Domestic Training Programme on Molecular Epidemiology of Diarrhoeal Diseases with special reference to cholera organized by NICED and Japanese International Cooperation Agency (JICA) during 3rd to 12th November, 2003**

Diarrhoeal disease is still a major problem in several parts of India. Use of molecular biological tools will provide comprehensive information at the gene level, which are highly reliable, reproducible and also helps in tracing the origin/reservoirs of the pathogens. Hence, it is very important to study the genetic relatedness between the strains using various molecular epidemiological tools to differentiate the isolates from epidemiologically unrelated strains. This domestic training programme organized by JICA- NICED and ICMR from 3rd -12th November, 2003 helped several researchers to initiate molecular epidemiological studies related with diarrhoeal disease in India. The major objective of this programme is to train the Indian scientists in molecular typing methods using standard techniques. The data generated by the scientists in their respective centers after undertaking the training is expected to participate in the national database program on cholera epidemiology.

Dr. S. Yamasaki, Professor, Osaka Prefecture University, Osaka, Japan acted as external expert. Dr. S.K. Bhattacharya, Director, Dr. S. Chakrabarti, Deputy Director (Senior Grade), Dr. P. Dutta, Deputy Director (Senior Grade), Dr. D Sur, Deputy Director, Dr. T. Rammurthy, Assistant Director, Dr. R. Nandy, Senior Research Officer, Dr. A. Mukhopadhyaya, Research Officer of this Institute were also acted as experts. Thirteen research fellows of this Institute acted as instructors.



**Table 17.10.1. Name of the candidates and nominated Institutes of NICED-JICA Domestic training Programme**

Name of the Candidates	Nominated Institute
Dr. SA Mullan	Govt. Medical college, Surat, Gujrat
Dr. PK Mukhopadhy	NRS Medical College, Kolkata, West Bengal
Dr. S Basu	School of Tropical Medicine, Kolkata, West Bengal
Dr. Amita Jain	King George Medical College, Lucknow, Uttar pradesh
Dr. Jayanta Agarwal	King George Medical College, Lucknow, Uttar pradesh
Dr. Gomoti Sekhar	Tuberculosis Research Center (ICMR), Chennai, Tamil Nadu
Dr. Indu Sukla	JM Medical college, Aligarh, Uttar Pradesh
Dr. Banojini Parida	SCB Medical college, Kattack, Orissa
Dr. Gitangali Sarangi	SCB Medical college, Kattack, Orissa
Smt. Radhika M	Defence Food Research Laboratory, Mysore. Karnataka
Wg. Cdr. AN Ghosh	Armed Force Medical College, Pune, Maharasta
Dr. Asok Kumar	ICARI Research Complex for NER, UMIAM, Meghalaya
Dr. Doljit Chapra	College of Vetenary Science & Animal Husbandery, MHOW, Madhya Pradesh
Dr. Suresh Prasad Singh	College of Vetenary & Animal Sciences, Pant Nagar, Uttaranchal
Dr. Jayanta Bikash Dey	R G Kar Medical college, Kolkata, West Bengal

### 17.11 3rd Country JICA-NICED Training Programme on Molecular Epidemiology of Diarrhoeal Diseases with special reference to cholera organized by NICED and Japanese International Cooperation Agency (JICA) during 13th to 26th January 2004

The JICA-NICED Third country training Programme on “Molecular Epidemiology of Diarrhoeal Diseases with Special Reference to Cholera” was conducted between January 13th and 26th, 2004. The following twelve participants were selected as forwarded by the JICA India office, New Delhi through proper diplomatic channel:



**Table-17.11.1 List of participants of NICED-JICA 3rd country training programme**

Name of the participants	Country
Dr. Charles Kuria Najguna	Kenya
Mr. Abdikher Md Dahie	Kenya
Dr. Harris Chandanakumara Pathirage	Sri Lanka
Dr. Hasitha Tissera	Sri Lanka
Mr. Isaac Anim Baidoo	Ghana
Mr. Chimmi Dorji	Bhutan
Dr. Md. Tariqul Islam	Bangladesh
Dr. Md, Imadul Haque	Bangladesh
Dr. Md Amirul Islam	Bangladesh
Dr. Lenny Syukriati Asmir	Jakarta
Dr. Suman Thapa	Nepal
Ms. Jane Mata	Lusaka
Dr. Pongsri Tongtawe (Special Invitee)	Thiland

This course was inaugurated on January 13th, 2004 by Mr. Toshifumi Sakai, Resident Representative, JICA India Office, New Delhi, amidst the presence of Mr. Kenji Shimuzu, Consul General, Consulate General of Japan, Kolkata; Prof. Shinji Yamasaki, Osaka Prefecture University, Osaka, Japan and Dr. S. K. Bhattacharya, Director of the Institute.

A practical manual compiled and edited by Dr. T. Ramamurthy, Dr. R. K. Nandy and Dr. G.B. Nair specially made for this course was given to all the participants along with the training schedule. Dr. S. Yamasaki, Professor, Osaka Prefecture University, Osaka, Japan acted as an external expert. Dr. S.K. Bhattacharya, Director, Dr. S. Chakraborti, Dr. P. Dutta, Deputy Directors (Senior Grade), Dr. D. Sur, Deputy Director Dr. T. Ramamurthy, Assistant Director, Dr. R.K. Nandy, Senior Research Officer, and Dr. A. Mukhopadhyay, Research Officer of this Institute acted as course facilitators and they delivered talks on different subjects. Ph.D students of the Division of Microbiology acted as instructors by assisting the faculties to conduct the practical sessions. In the practical, different aspects composed of isolation and identification of *Vibrio cholerae* and *Vibrio parahaemolyticus*, *Escherichia coli* and *Shigella* spp; pulsed-field gel electrophoresis (PFGE) to determine the clonality of *V. cholerae*; simplex and multiplex polymerase chain reaction (PCR) to determine the specific genes among *V. cholerae* O1 and O139 serogroups, *V. parahaemolyticus*, diarrhoeagenic *Escherichia coli*; group-specific PCR for the detection of pandemic strains of





*V.parahaemolyticus*; extraction and analysis of chromosomal DNA from *V. cholerae*; extraction and analysis of plasmid DNA containing the r-RNA probe fragment; construction of dendrogram using PFGE profiles; ribotyping of *V. cholerae* O1 and O139 serogroups were covered under this programme. The participants visited the Infectious Diseases Hospital, Kolkata to have an idea on how the diarrhoeal patients are receiving the treatment and the symptoms based diagnosis of the disease.

All the participants presented their area of research interest during the special session in the programme. During the last day of the course, Dr. Y. Takeda, JICA Team Leader, gave away the certificates to the participants.

#### 17.12 Training for M.Sc Biotechnology students of Kalyani University on 5th- 6th January, 2004

A total of 10 students of M.Sc. Biotechnology, Kalyani University gained their experience to observe electron microscopic examination of biological materials.

#### 17.13 Training Programme for Laboratory Technicians

Sixty laboratory technicians from different hospitals of different states were trained for laboratory detection of HIV antibody. Scientist involved in HIV screening in this Institute delivered a talk on principles and operation of HIV screening. This training programme was organized at the request of Institute of Serology, Kolkata

#### 17.14 Organise the following Guest lectures for the Institute:

Name of Guest Lecturers & Designation	Date	Topic
Prof. Ronald K. Taaylor, Prof. of Microbiology & Immunology, Darpmouth Medical School, Hanover, New Hampshire, USA	19th November 2003	Molecular mechanisms of <i>Vibrio cholerae</i> virulence and environmental persistence
Dr Priyaranjan Bhakat, Karolinska Institute, Stockholm, Swedenon	18th November 2003	Microsomal Glutathione S- Transferase 1:3D structure at 4.5 resolution by Cryoelectron Microscope
Dr. Rupak Mitra, Post Doctoral Fellow, Dept. Molecular Biology & Genetics, Johns Hopkins University school of Medicine, Baltimore, Raryland, USA	13th November, 2003	Mobile DNA



Dr. Douglas E. Berg, Prof of Dept of Molecular Microbiology & Genetics, Washington University, School of Medicine, Saint louis, USA	15th December, 2003	Helicobacter pylori molecular genetics and evaluation
Dr. R. Maingon, Molecular Biologist, chemical Ecology Group, Centre for applied Entomology & Parasitology, School of life Sciences, Keele University, UK.	9th March 2004	Genetic differentiation within the Lutzomyia longipalpis species complex using microsatellite markers

### 17.15 Summer Training Programme conducted for the Students of the following Universities during April, 2003 to March, 2004

A total of 40 students of Microbiology and Biotechnology of different universities were trained in the Divisions of Microbiology, Virology, Immunology & Vaccine Development for a period of one to three months.

**Table 17.15.1 Name of the universities and the number of students attended the summer training programme.**

Universities	Number of Students
Calcutta University, Kolkata	10
Kalyani University, West Bengal	6
Vidyasagar University, West Bengal	5
Bangalore University, Karnataka	8
Jiwagi University, Gwalior, Madhya Pradesh	1
SMIMS Gangtok University, Sikkim	1
Kannur University, Kerala	2
Cochin University, Kerala	1
Jawaharlal Nehru University, New Delhi	3
Sambalpur University, Orissa	1
Jadavpur University, Kolkata	1
Tripura University, Tripura	2
Manipal University, Sikkim	1
Bharti Darsan University, Tamil Nadu	1

**17.16 Organise the Institutional seminars for the Scientists and fellows.**

Every Thursday, one of the scientist of the Institute delivers a talk on his/her field of work or common scientific topic. All the Scientists and research fellows attended the meeting.

**17.17 Supply of V.cholerae O1 and O139 antibodies****Table 17.17.1 Supply of *Vibrio cholerae* O1 and O139 monoclonal antibodies to different laboratories.**

No.	Name of the Institution	Monoclonal antibody	Quantity	Date of supply
1.	Department of Microbiology Govt. Medical College, Aurangabad	Polyvalent Ogawa O139	1 mlx3vials 1 mlx2vials 1.5mlx2vials	June 30, 2003
2.	District Public Health Laboratory, Yavatmal, Maharashtra	Polyvalent O139	1mlx5vials 1.5mlx5vials	June 30, 2003
3.	Regional Medical Research Center, North East Region, ICMR Dibrugarh, Assam	Polyvalent Ogawa O139	1 ml x 2 vials 1.5 ml x 2 vials 1 ml x 2 vials	October 18, 2003
4.	State Public Laboratory Pune, Maharashtra	Polyvalent Ogawa O139 1 ml x 2 vials	1 ml x 4 vials 1 ml x 2 vials	October 18, 2003
5.	Department of Microbiology, J.M. Medical College, AMU, Aligarh, Uttar Pradesh	Polyvalent Ogawa Inaba O139	1.5 ml 1.5 ml 1.5 ml 1.5 ml	November 12, 2003
6.	Defense Food Research Laboratory, Mysore, Karnataka	Polyvalent Ogawa Inaba O139	1.5 ml 1.5 ml 1.5 ml 1.5 ml	November 12, 2003
7.	Department of Microbiology, Armed forces Medical College, Maharashtra	Polyvalent Ogawa Inaba O139	1.5 ml 1.5 ml 1.5 ml 1.5 ml	November 12, 2003



No.	Name of the Institution	Monoclonal antibody	Quantity	Date of supply
8.	Department of Bacteriology, School of Tropical Medicine, Kolkata	O139	1.5 ml	November 12, 2003
9.	King George's Medical College, CSM Medical University, Lucknow	Polyvalent Ogawa Inaba O139	1.5 ml 1.5 ml 1.5 ml 1.5 ml	November 12, 2003
10.	Public Health Laboratory Ministry of Health Thimphu, Bhutan	Polyvalent Ogawa Inaba O139 1.5 ml	1.5 ml 1.5 ml 1.5 ml	January 26, 2004
11.	Lusaka DNMT Lusaka, Zambia	Polyvalent Ogawa Inaba O139	1.5 ml 1.5 ml 1.5 ml 1.5 ml	January 26, 2004
12.	Department of Microbiology, Burdwan Medical College, Burdwan	Polyvalent Ogawa Inaba O139	1.5 ml 1.5 ml 1.5 ml 1 ml	February 23, 2004
13.	Directorate of Health services, Pune, Maharashtra	Polyvalent Ogawa Inaba O139	1.5ml x 2vials 1.5ml x 10vials 1.5ml x 2vials 1ml x 2vials	March 1, 2004

