CURRICULUM VITAE OF DR. C. RADHAKRISHNA PILLAI

Name : Dr. C.R. Pillai.

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Academic qualifications:

➤ B.Sc. (Zoology & Botany) University of Kerala, 1968.

M.Sc. (Zoology) University of Kerala, 1970.

➤ Ph.D. (Medical Microbiology) University of Delhi, 1989

Title of thesis "Immunological Studies on the Role of Macrophages in Experimental Malaria".

Particulars of membership/fellowship of professional societies:

- 1. Life Member and Fellow of the Indian Society for Malaria & Other Communicable Diseases, 22-Sham Nath Marg, Delhi-110054.
- 2. Life Member of Academy of Bio-medical scientists, 22-Sham Nath Marg, Delhi-110054.
- 3. Life Member of Indian Society for Parasitologists, Central Drug Research Institute, Lucknow.

Details of visits abroad:

- Visited INSERM, Paris, France in connection with Indo-French collaborative research project on Establishment of the culture system for exo-erythrocytic stage malarial parasites during 16.5.92 to 13.6.92.
- Visited INSERM, Paris, France in connection with Indo-French collaborative research project on Establishment of the culture system for exo-erythrocytic stage malarial parasites during 15.9.93 to 13.10.93.
- Visited London School of Hygiene and Tropical Medicine, London, U.K. during 13.10.93 to 16.10.93.

- Visited University of Khartoum, Sudan to help establish a Malaria Parasite Bank and *in vitro* screening of plant extracts for its anti-malarial activity for a period of one month from 15th May to 15th June 2005.
- Visited Sydney, Australia during Feb-April 2014

Particulars of training received

- 1. Operation and maintenance of Jet-Injector (for mass immunization) at National Institute of Communicable Diseases, Delhi. (from 13.11.1972 to 18.11.1972).
- 2. Training in Tissue Culture Techniques, Virology Laboratory (Microbiology Division), NICD, Delhi. (from 12.05.1975 to 31.05.1975).
- 3. Participated in the Workshop on "The Techniques & Application of Tissue Culture" held at National Institute of Virology, Pune. (from 11.9.1978 to 23.9.1978).
- 4. Attended the Hybridoma Workshop as an Observer at the All India Institute of Medical Sciences, New Delhi. (From 07.10.1980 to 17.10.1980).
- 5. Training Course on Entomology conducted by Malaria Research Centre, Delhi. (from 7.10.1987 to 17.10.1987).
- 6. Training Course on Epidemiology of Malaria Conducted by Malaria Research Centre, Delhi (from 7.12.1987 to 19.12.1987).
- 7. Training in "*In vitro* cultivation of Exo-erythrocytic stage Malarial Parasite" at INSERM, Paris, France (From 16.5.1992 to 13.6.1992).
- 8. Training on "*In vitro* cultivation of human bone marrow and liver cells" at National Facility for Animal Tissue and Cell Culture, Kothrud, Pune (From 31.7.91 to 5.8.91).
- 9. Training in "Cryogenic Engineering and its applications" at IIT Kharagpur (from 30.12.96 to 3.1.97).

Research experience:

Total about 46 years

- 1. At present working as Consultant (Parasitology) since 1st June 2011 at National Institute of Malaria Research, New Delhi
- 2. Worked as ICMR Emeritus Medical Scientist from 1st June 2006 to 31st May 2011. Mainly involved in the supervision of the activities of malaria parasite bank and shifting and reestablishing the laboratory in the new campus of NIMR I am also actively involved in imparting training as part of manpower development.
- 3. Worked as Deputy Director (Parasitology) from June 2002 to 31st May 2006. In addition to the assigned work on the establishment and maintenance of a Malaria Parasite Bank. I was engaged in collaborative research projects with ICGEB, Kerala University, DRDO

- Tezpur, DRDE Gwalior on discovering new antimalarials. Also actively involved in manpower development.
- 4. Worked as Assistant Director (Parasitology) since June 1997. In addition to the assigned work on the establishment and maintenance of a National Malaria Parasite Bank. I was engaged in a collaborative research project with International Center for Genetic Engineering and Biotechnology (ICGEB), New Delhi on "Molecular analysis of Cytoadhereance phenotype and invasion pathways of Indian isolates of *Plasmodium falciparum*.
- 5. Worked as Senior Research Officer (Parasitology) in MRC, Delhi, from 15th June, 1992 to June 1997 and the assigned work was establishment of a National Malaria Parasite Bank. Adapted *P.falciparum* isolates and a large number of non-human *plasmodial* species are available in the bank. An attempt to cultivate *P.vivax* is in progress and we were able to cultivate/maintain the parasite up to 52 days. Successfully established the cultivation of pre-erythrocytic stage malarial parasite, *P.vivax in vitro* in hepatoma cell line. The infected liver cells were harvested for immunobiological studies.
- 6. Worked as Research Officer in the Integrated Vector Control Project under Director, Malaria Research Centre, Delhi (from 1.1.1987 to 14.6.92).
- 7. Worked as Research Officer in the ICMR Research Scheme "Quality Control of *P.knowlesi* and *P.falciparum* antigens for sero epidemiology of malaria" at the NICD, Delhi. (from 5.11.1984 to 31.8.1986).
- 8. Worked as Assistant Research Officer in the ICMR research scheme entitled "Immuno-prophylaxis against Malaria" at the NICD, Delhi (from 5.7.1976 to 4.11.1984).

Teaching experience:

Participated in the teaching and training programs of NIMR.

- for WHO Fellows on Malariology
- ➤ for Medical and Paramedical Officers from SARC Countries on Malariology
- ➤ WHO/NIMR/NVBDCP training on 'Malariology'
- Training to NIMR Staff on Parasitology, Malariology, Entomology, Epidemiology etc.
- > Training to researchers/students on *in vitro* cultivation of malaria parasites/ *in vitro* antimalarial sensitivity testing.
- > Training course for DDA Engineers on "Mosquito borne diseases".
- ➤ Guest lectures delivered on invitation from Institutes/Universities
- Training for Health Officers and Epidemiologist of Municipal Corporation of Delhi on Prevention and Control of vector Borne Diseases

- Training on Quality Assurance of RDT and Malaria Microscopy for Laboratory Technicians from MCD.
- Training Courses on Malariology for Laboratory Technicians from MCD.
- > Training course for Medical Officers, Biologists, Entomologists from Gujarat on Prevention and Control of Vector Borne Diseases
- > Training Courses for Technicians from Uttarakhand State on Malaria and other Vector Borne Diseases.

In addition to participating in various training courses / workshops being conducted by NIMR, a total of 500 scientists/students, including 37 foreign scientists, from different research organizations/universities were trained exclusively in malaria parasite bank on malaria parasitology, in vitro cultivation of malaria parasites, in vitro screening of anti-malarials, handling and maintenance of non-human plasmodia etc.

Guidance of research scholars for Ph. D. /M. Sc.:

- 1. Co-supervisor for the Ph.D. thesis work entitled "In vitro anti-malarial and anti-amoebic potential of plants of medicinal value present in the desert ecosystem A case study from Rajasthan" by Mrs. Poonam Sharma, under Dr. Jayashree Devi Sharma, School of Environmental Sciences, Jawaharlal Nehru University, New Delhi.
- 2. Consultancy service (Malaria Parasitologist) and biological materials provided for the Ph.D. thesis work entitled "Effect of chloroquine and prednisolone in cerebral malaria on the cerebellar purkinje cells in mice" by Mohammed Farahna Mohammed (From- Sudan), Department of Anatomy, Maulana Azad Medical College and Associated Hospitals, New Delhi.
- 3. Supervisor for the M.Sc. dissertation entitled "In vitro Screening of Antiplasmodial Activity of Momordica charantia L (Bitter melon) by Shehab Ali Yousif (From Sudan), School of Environment studies, Cochin University of Science and Technology.
- 4. Supervisor for the M.Sc. dissertation entitled "In vitro Screening of Antiplasmodial Activity of *Piper longum* and *Coleus aromaticus* by Ms. Jini Narayanan c/o Dr. Bright Singh, Cochin University, Kerala.
- 5. Supervisor for the M.Sc. dissertation entitled "*In vitro* Screening of Antiplasmodial Activity of *Michelia champaca and Olea dioica*" by Mr. Prabhakar c/o Dr. M. V. Joseph, HOD, Dept. of Bio-technology, Calicut University, Kerala.
- 6. Supervisor for the M.Sc. dissertation entitled "*In vitro* Screening of Antiplasmodial Activity of *Datura innoxia* and *Diospyros melanoxylon*" by Mr. Shiv Om Pratap c/o Dr. K. C. Nand, Sophia College, Gwalior.
- 7. Supervisor for the M.Sc. dissertation of Miss. Gurpreet, M.Sc. Student c/o Ayed Akhtar Hussain, Professor and Head, Dept. of Biosciences, Jamia Millia Islamia University, Delhi entitled "Identification and *in vitro* cultivation of malaria parasite *P. falciparum*."

Doctoral committee member for the following studies:

- 1. "Studies on a *Plasmodium falciparum* protein homologous to *Plasmodium vivax* heat shock protein bearing metalloprotease motif". By Ms. Neetu Sud, Under Dr. Y.D. Sharma, Department of Biotechnology, AIIMS, New Delhi.
- 2. "Production of species and group specific antibodies to *Plasmodium falciparum* for the development of an immuno diagnostic assay and its clinical evaluation in diagnosis of malaria" by Mr. Prakash Ghimire, under Prof. J.C. Samantaray, Dept. of Microbiology, AIIMS, New Delhi.
- 3. "Studies on putative. IspH (LutB) and IspG (GepE) of *Plasmodium falciparum* involved in non-mev alonate pathway of isoprenoid biosynthesis" by Sumiti Vinayak, under Dr. Y.D. Sharma, Professor and Head, Dept. of Biotechnology, AIIMS, New Delhi.

Also, evaluated Ph.D. thesis from different universities, research projects from different organizations for funding and research papers(MS) for its suitability for publication.

References:

Dr. V. M. Katoch	Dr. A. P. Dash
Secretary, Department of Health Research	Regional Advisor,
& Director General, ICMR	World Health Organizations (SEARO)
Ramalingaswami Bhawan	Indraprastha Estate,
Ansari Nagar,	Mahatma Gandhi Marg,
New Delhi – 110 029.	New Delhi - 110 002
Dr. Neena Valecha	Dr. Anup Anvikar
Director	Scientist – F
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