



Curriculum Vitae Professor Dr G. Balakrish Nair

Name: Gopinath Balakrish Nair

Date of birth: 5 January 1954

Research Priorities: Cholera, genome of the bacterium *Vibrio cholerae*, serogroups of the cholera pathogen, biotype El Tor, prevention strategies, vaccines against cholera

G. Balakrish Nair is an Indian microbiologist. He dedicated his scientific career to the study of cholera. He was involved in the discovery of various groups of cholera pathogens. On the basis of his research results, he developed prevention strategies and a new generation of vaccines.

Academic and Professional Career

- | | |
|-------------|---|
| since 2016 | Regional Advisor, Research Policy and Cooperation Unit, Communicable Diseases Department, World Health Organization (WHO) |
| 2011 - 2016 | Executive Director, Translational Health Science and Technology Institute (THSTI), Faridabad, India |
| 2007 - 2011 | Director, National Institute of Cholera and Enteric Diseases (NICED), Calcutta, India |
| 2001 - 2007 | Director, Laboratory Sciences Division, International Centre for Diarrhoeal Diseases |
| 1996 | Deputy Director, NICED, Calcutta, India |
| 1993 | Assistant Director, NICED, Calcutta, India |
| | Postdoctoral Stays, University of Maryland, College Park, USA and Children's Medical Centre, University of Tokyo Hospital, Tokyo, Japan |
| 1982 | PhD in Marine Biology, Focus on Marine Microbiology, Centre of Advanced Study in Marine Biology, Annamalai University, Chidambaram, India |
| 1981 - 2000 | Scientist, NICED, Calcutta, India |

- 1977 Master's Degree in Marine Biology, Centre of Advanced Study in Marine Biology, Annamalai University, Chidambaram, India
- Bachelor's Degree in Zoology, Chemistry and Botany, Loyola College, Madras University, Chennai, India

Functions in Scientific Societies and Committees

- 2011 - 2014 Member, National Advisory Committee, Multidisciplinary Advanced Research Centre (MARC), Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Puducherry, India
- since 2010 Adjunct Faculty Member, Medical Education Unit of I.D. & B.G. Hospital, Calcutta, India
- 2009 - 2011 Member, Sectional Committee-VIII, Indian National Science Academy, New Delhi, India
- 2008 - 2010 Member, Diarrhoeal and Enteric Advisory Committee (DEVAC), WHO
- since 2008 Member, Technical Advisory Board for Research on Vaccines and Infectious Diseases, Translational Health Science Technology Institute of DBT, New Delhi, India
- since 2008 Chairperson, Immunobiological Diagnostic kits Sectional Committee MHR-19, Bureau of Indian Standards, New Delhi, India
- 2008 - 2009 Member, Executive Board, Indian Council of Medical Research (ICMR), New Delhi, India
- 1994 - 1998 Member, International Union of Microbiological Societies (IUMS)
- Adjunct Faculty Member, Institute of Ayurveda and Integrative Medicine (IAIM), Bangalore, India
- Member, International Scientific Advisory Board, Global Health Enteric and Diarrheal Diseases (GH-EDD), Bill & Melinda Gates Foundation, Seattle, USA
- Member, Diarrhoeal Scientific Advisory Board, Institute for One World Health, San Francisco, USA

Honours and Awarded Memberships

- 2022 Best Microbiologist in India, Research.com
- since 2012 Fellow, Indian National Science Academy (INSA), India
- since 2011 Member, German National Academy of Sciences Leopoldina, Germany

2011	Prof. V. Ramalingaswami Memorial Lecture, Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalore, India
since 2010	Fellow, West Bengal Academy of Science and Technology (WAST), Calcutta, India
2009	Prof. J.V. Bhat Memorial Award, Manipal Life Sciences Centre, Manipal Academy of Higher Education, Karnataka, India
2009	J.B. Chatterjee Gold Medal, Calcutta School of Tropical Medicine, Calcutta, India
since 2009	Fellow, Association of Microbiologists of India (AMI), Calcutta, India
since 2009	Fellow, American Academy of Microbiology (AAM), USA
since 2004	Fellow, The World Academy of Sciences (TWAS)
since 2002	Fellow, INSA, India
since 2002	Foreign Member, National Academy of Sciences, USA
1999	Gold Medal, Indian Association of Medical Microbiologists, Calcutta School of Tropical Medicine, Calcutta, India
1998	Prof. S.C. Mahalanobis Memorial Award, Physiological Society of India, India
1998	Shanti Swarup Bhatnagar Prize for Science and Technology, Council of Scientific and Industrial Research (CSIR), India
since 1995	Fellow, National Academy of Sciences (NASc), Allahabad, India
1994	Certificate of Merit for Outstanding Contributions to Public Health Education for Cholera, Centers for Disease Control and Prevention (CDC), Atlanta, USA

Research Priorities

G. Balakrish Nair is an Indian microbiologist. He dedicated his scientific career to the study of cholera. He was involved in the discovery of various groups of cholera pathogens. On the basis of his research results, he developed prevention strategies and a new generation of vaccines.

Cholera is an infection of the human small intestine caused by the bacterium *Vibrio cholerae*. The primary symptoms are heavy, watery diarrhoea and vomiting. If left untreated, these symptoms can lead to dehydration and a quick death. The disease is mainly spread through contaminated drinking water or food. Balakrish Nair analysed the genome of the pathogen and contributed to the understanding of its molecular epidemiology.

The disease is predominantly triggered by two groups of pathogens (serogroups), namely serogroups O1 and O139. In 1993, Balakrish Nair's research led to the discovery of the cholera serogroup O139. In other work, he and his team identified and analysed a bacterial phylum of the O1 serogroup, known as biotype El Tor.

Balakrish Nair's interdisciplinary research lead to a new generation of cholera vaccines. He continues to search for subtle forms of the pathogen and develops prevention and management strategies including for urban slums. Additionally, he uses his position in committees to educate people about the social connotations of the disease. After all, cholera breaks out in places without clean drinking water and where there is a lack of sanitary facilities. In this context, Balakrish Nair also works to advocate for education and combat poverty.