CURRICULUM VITAE

PERSONAL DETAILS

Name: Edwin MICHAEL
Marital Status: Married with one daughter
Citizenship: British

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Languages: French, Bahasa Malaysia

HIGHER EDUCATION AND QUALIFICATIONS:

1982	B.Sc. Zoology	1st ClassMadras Christian College, Madras University
1984	M.Sc. Zoology	1st ClassMadras Christian College, Madras University
1990	PhD. Parasite Epidemiology	Imperial College of Science, Technology & Medicine, London.

APPOINTMENTS:

Jul 2020 - Aug 2017 –	**Professor**, College of Public Health, University of South Florida, Tampa **Adjunct Faculty**, Simon A. Levin Mathematical, Computational and Modelling Sciences Center, Arizona State University, Tempe, AZ
Jan 2011 – Jul 2020	**Professor**, Department of Biological Sciences, University of Notre Dame, Notre Dame
Aug 2019- Jul 2020	**Affiliate Faculty Member**, Center for Network and Data Science, University of Notre Dame
Sept 2013 – Jul 2020	**Affiliate Faculty Member**, ND-GAIN, University of Notre Dame Global Adaptation Index
Jun 2013 – Jul 2020	**Fellow**, The Institute for Asia and Asian Studies, University of Notre Dame
Aug 2012 – Jul 2020	**Fellow**, Kellogg Institute for International Studies, University of Notre Dame
Oct 2010 – Dec 2011	**Honorary Senior Lecturer**, Department of Infectious Disease Epidemiology, Imperial College Medical School, Imperial College London
Oct 2004 – Sep 2010	**Senior Lecturer in Infectious Disease Epidemiology & Head of Undergraduate Teaching,** Department of Infectious Disease Epidemiology, Imperial College Medical School. Imperial College London
Jan 2001 – Sept 2004	**Lecturer in Infectious Disease Epidemiology,** Department of Infectious Disease Epidemiology, Imperial College Medical School, Imperial College London
Oct 1997 – Dec 2000	**MRC Postdoctoral & Senior Research Fellow,** The Wellcome Trust Centre for the Epidemiology of Infectious Disease, University of Oxford. *Transmission heterogeneities and the immunoepidemiology of lymphatic filariasis*. Description*:* Combined field, laboratory and theoretical studies to quantify the effect of exposure heterogeneities to the immunology and spatio-epidemiology of lymphatic filariasis at the individual host, household and community levels.
June 1996 - Sept 1997	**Post-doctoral Research Associate (WHO/Wellcome Trust),** The Wellcome Trust Centre for the Epidemiology of Infectious Disease,University of Oxford. *Geographical epidemiology of lymphatic filariasis*. Description: Use of epidemiological modelling techniques and GIS tools to investigate the geographical distribution and epidemiology of lymphatic filariasis.
1993 - May 1996	**Postdoctoral Research Associate (Wellcome Trust),** University of Cambridge. *Immunoepidemiology of lymphatic filariasis.* Description: Modelling of lymphatic filariasis epidemiologicaland immunological data, and PCR-based analysis of mosquito and human blood samples.
1990 - 1993	**Postdoctoral Research Associate (Wellcome Trust),** University of Cambridge. *Epidemiology of lymphatic filariasis*. Description: Data analysis and

	mathematical modelling of the population dynamics and epidemiology of lymphatic filariasis.
1984 - 1985	**Research Assistant**. Human Helminth Control Project (Imperial College, London) at Pulicat, South India. Description*:* Sample processing, microscopy, data processing and analysis, and community health work.

TEACHING:

1. *Undergraduate*

Aug 2011 – Jul 2020	***Course Organizer and Lecturer*** on Modern Infectious Disease Epidemiology, Dept of Biological Sciences, University of Notre Dame
May 2000 – May 2019	***Visiting lecturer*** on Natural Sciences Tripos: Part II Pathology, University of Cambridge.
Feb 2008 – Feb 2010	***Visiting Lecturer*** on Ecology of Human Diseases Course, Dept of Biological Anthropology, University of Cambridge
Feb 2008 – Feb 2010	***Module Organizer and Lecturer*** on Global and International Health, 4th year BSc Course for Medical Students, Imperial College
Feb 2003 – Feb 2010	***Lecturer*** on BSc Modern Parasite Epidemiology Course, Imperial College
Jan 2002 – Jan 2005	***Module Organizer and Lecturer*** on Applied Epidemiology, BSc in Social Medicine Course, Imperial College.
Dec 2002 – Dec 2005	***Module Organizer and Lecturer*** on Public Health, 1st Year Foundations of Clinical Practice Course, Imperial College.
1997- 2000	***Lecturer*** on Animal Disease Course, Department of Zoology, University of Oxford.
1996 –2000	***Lecturer*** on Epidemiology of Infectious Disease Course, Department of Zoology, University of Oxford.
1994 - 1995	***Demonstrator***, Part II. Quantitative Biology Course, University of Cambridge.
1990 - 1993	***Demonstrator,*** Undergraduate Statistics, University of Cambridge.
1992 - 1995	Supervision of 2-term 3rd Year projects, University of Cambridge.

2. *Postgraduate*

Mar 2006 - present	***Visiting Lecturer*** on MSc Information Technology for Development Course, London School of Economics
Feb 2019 - present	***Visiting Lecturer*** on Qualitative and Mixed Methods in International Health Research, Institute of Tropical Medicine Antwerp, Belgium
Aug 2013 – Jul 2020	***Course Organizer*** R for Epidemiology Boot Camp, University of Notre Dame
Aug 2011 – Jul 2020	***Course Organizer and Lecturer*** on Topics in Global Health, Dept of Biological Sciences, University of Notre Dame
Sep 2003 – Sept 2010	***Lecturer*** on the Postgraduate Epidemiology of Infectious Disease Short Course, Imperial College.
Oct 2001- Oct 2009	***Module organizer and Lecturer*** on MSc Modern Epidemiology Course, Imperial College Medical School.
23 Mar 2001	***Visiting Lecturer*** on the public health burden of nematode infections, Diploma Course in Tropical Medicine & Hygiene, London School of Hygiene and Tropical Medicine.
Nov. 1999	***Visiting lecturer*** on Control of Infectious Disease Course, MSc Epidemiology, London School of Hygiene and Tropical Medicine.
1997 – 2000	***Lecturer*** on MSc Modern Approaches to the Epidemiology and Control of Infectious Diseases External Course, University of Oxford.
1993 – 1996	***Lecturer*** on Advanced Vector Control Course, Silwood Park, Imperial College
10 Mar 1995	***Visiting Lecturer*** on Lymphatic filariasis epidemiology, MSc Clinical Tropical Medicine, London School of Hygiene and Tropical Medicine.

3. *Postgraduate (by thesis)*

PhD thesis

Aug 2018-present	***Thesis Committee*** Mugdha A. Thakur. The role of treatment coverage, access and adherence to the spread and control of neglected tropical diseases, Arizona State University, PhD
Aug 2015-present	***Supervisor*** Rose Donohue. Social epidemiology of Neglected Tropical Disease transmission and control, University of Notre Dame, PhD
Aug 2015 – present	***Supervisor*** Morgan Smith. Population dynamics and control of Onchocerciasis and Lymphatic Filariasis, University of Notre Dame, PhD
Oct 2012 – Nov 2017	***Co-Supervisor*** Upendo Mwingira. Evaluation of the health impact of integrated helminths control by preventive mass chemotherapy, University of Munich, Germany
Jan 2011 - June 2017	***Supervisor*** B.K. Mayala. Impact of climate variability and change on malaria prevalence in Tanzania, University of Notre Dame PhD
Oct 2008 - June 2012	***Supervisor*** H. Slater. Geographic epidemiology and integrated control of vector-borne infectious diseases, Imperial College London PhD
Oct 2007 – Oct 2012	***Co-Supervisor*** A.A. Anifalaje. Information Systems for Improving Public Health in Developing Countries, London School of Economics/Imperial College London PhD
Jul 2003 – Feb 2005	**Thesis Committee** D. Tisch. The epidemiologic analysis of lymphatic filariasis control. Case Western Reserve University PhD
Dec 2000 Mar 2004	***Supervisor*** L. Snow. Transmission dynamics of lymphatic filariasis. MRC Research Studentship, University of London PhD
June 1999 – June 2004	***Co-supervisor*** R. Rwegoshora: Within-village transmission patterns of bancroftian filariasis. EC Framework IV, University of Copenhagen PhD
July 1999 –2003	***Co-Supervisor*** E. King. Immunoepidemiology of human ascariasis and trichuriasis. University of Oxford DPhil
July 1999 – Oct 2000	***Co-Supervisor*** S. Brooker: Spatial epidemiology of helminths. Wellcome Trust Prize Studentship, University of Oxford DPhil
June 1998 –2002	***Co-supervisor*** W. Jaoko: Studies on the immunoepidemiology of bancroftian filariasis in East Africa. EC Framework IV, University of Kenya PhD
Jan 1995 – Jan 1999	***Co-supervisor*** M. Chambers: Vector spatial dynamics and the epidemiology of lymphatic filariasis. NERC, University of Cambridge DPhil

Masters thesis

Jan – July 2018	***Supervisor*** Makayla L. Schmitt. Cluster analysis and vulnerability index for dengue fever in Kedah, Malaysia. University of Notre Dame, MSc Global Health
Jan – July 2017	***Supervisor*** Tiffany Huwe. Interactions between parasitic infections and the human gut microbiome in Odisha, India. University of Notre Dame, MSc Global Health
Jan – July 2016	***Supervisor*** Cassandra Sundaram. Systems modelling of diabetes incidence in India. University of Notre Dame, MSc Global Health
Jan – July 2014	***Supervisor*** A.C. Gomez. An assessment of Stunting at a Tribal School in Biligriranga Hills, Karnataka, India. University of Notre Dame, MSc Global Health
Jan – July 2014	***Supervisor***

	G. Quintana. Investigating potential relationships between gut microbiota and soil-transmitted helminthic infections among children in Bhubaneswar, Odisha, India. University of Notre Dame, MSc Global Health
Jan – July 2014	***Supervisor*** K. VandenBerg. Comparison of culturable gut-associated bacteria isolated from field-collected *Anopheles* vector and non-vector species in Orissa, India. University of Notre Dame, MSc Global Health
Jan – July 2014	***Supervisor*** M. Salkowski. Estimating the Burden of Type 2 Diabetes Mellitus in Chennai, India. University of Notre Dame, MSc Global Health
Jan – July 2014	***Supervisor*** M. Smith. Mathematical Modelling of the Elimination of Lymphatic Filariasis in Uganda. University of Notre Dame, MSc Global Health
Jan – July 2014	***Supervisor*** G. Triska. Mathematical Modelling of Onchocerciasis: Transmission and Elimination Dynamics in Uganda. University of Notre Dame, MSc Global Health
Jan – July 2014	***Supervisor*** R. Donohue. Determinants of Schistosomiasis among Schoolchildren in Tanzania: Implications for Control Programs. University of Notre Dame, MSc Global Health
May – July 2014	***Supervisor*** M. Hinson. Transmission heterogeneities of Onchocerciasis and its elimination in Uganda. University of Notre Dame, MSc Global Health
May – July 2014	***Supervisor*** T. Ulsby. The impact of globalization on nutrition, KAP, and health of Type II diabetics in Chennai, Southern India. University of Notre Dame, MSc Global Health
May – July 2013	***Supervisor*** G. Austen. Malaria and Helminth Co-Infection: Measuring Impact on Anemia, University of Notre Dame, MSc Global Health
May – July 2013	***Supervisor*** A. Billow. The Impact of the Diabetes Epidemic in India: Establishing the Prevalence and Clinical Profile of Metabolic Syndrome in Type 1 Diabetes Patients in Chennai, University of Notre Dame, MSc Global Health
May – July 2013	***Supervisor*** B. Bush. Retrospective Analysis of the National Colorectal Patient Registry for Kedah, Perlis, and Seberang Jaya, Malaysia, University of Notre Dame, MSc Global Health
May – July 2013	***Supervisor*** M. Dome. Modeling the Impact of Mass Drug Treatments on Lymphatic Filariasis Morbidity, University of Notre Dame, MSc Global Health
May – July 2013	***Supervisor*** O. Madukoma. Relative Efficiency of Healthcare Facilities in the Federal Capital Territory of Nigeria: DEA analysis as a Tool for Healthcare Management, University of Notre Dame, MSc Global Health
May – July 2013	***Supervisor*** A. Polcari. Sex-Biased Parasitism in Soil-Transmitted Helminth Infections, University of Notre Dame, MSc Global Health
May – July 2013	Co-***Supervisor*** B. Ockenfens. Meta-analysis of the effects of insect vector saliva on the host immune response and progression of disease, University of Notre Dame, MSc Global Health
May – July 2012	**Co-*Supervisor*** A. Nanigian. An assessment of community monitoring for evaluating the performance of primary health care centers in the state of Karnataka, India, University of Notre Dame, MSc Global Health
May – July 2012	***Supervisor*** C. Marous. Prevalence, risk factors, and clinical epidemiology of hepatitis C: an emerging infectious disease in the Alor Setar region of Kedah, Malaysia, University of Notre Dame, MSc Global Health
May – July 2012	***Supervisor*** C. Wynkoop. Understanding cholera disease dynamics and seasonal variations in Kolkata, India, using mathematical modeling, University of Notre Dame, MSc Global Health
May – July 2012	***Supervisor***

	S. Hurd. Determining the efficiency of government primary health care centers in southern Karnataka, India, using DEA analysis, University of Notre Dame, MSc Global Health
May – July 2012	***Supervisor*** H. Badani. Spatio-temporal analysis of diarrheal diseases in Dar es Salaam, Tanzania, University of Notre Dame, MSc Global Health
May – July 2012	***Supervisor*** Z. Cross. Meta-analysis of helminth polyparasitism: infection dynamics and morbidity, University of Notre Dame, MSc Global Health
July – Oct 2010	***Supervisor*** C.D. Christiansen-Jucht. Multiple parasitic infections and their dynamic interactions, Imperial College London MSc
July – Oct 2010	***Supervisor*** D. Ashworth. Investigating the relationship between malaria and climate over the twentieth century, Imperial College London MSc
July – Oct 2010	***Supervisor*** P. Jones. Mapping schistosomiasis in Africa using climate, environmental and demographic data, Imperial College London MSc
July – Oct 2010	***Supervisor*** D. Popple. Towards a semi-mechanistic model of the influence of climate on malaria transmission, Imperial College London MSc
Jan - July 2009	***Supervisor*** Kate Howell. Spatial epidemiology of filariasis transmission within an endemic community, Imperial College London MRes
July – Oct 2009	***Supervisor*** Rupal Shah. Measuring the Performance of Public Health Centres in rural Karnataka using Health and Facility data from the HISP system, Imperial College London MSc
July – Sept 2009	***Supervisor*** Elinor Godfrey. Epidemiology and transmission dynamics of Melioidosis, Imperial College London MSc
July – Sept 2009	***Supervisor*** Hannah Clapham. Discrete-time Malaria Modelling, Imperial College London MSc
July – Sept 2009	***Supervisor*** Kathleen Duclos. A Bayesian-kriging approach to modelling and mapping lymphatic filariasis distribution in Tanzania, Imperial College London MSc
July – Sept 2009	***Supervisor*** Christine Chow. Producing a programme theory for the Neglected Tropical Disease programme in Tanzania, Imperial College London MSc
May – Oct 2008	***Supervisor*** Y. Knight. Assessment of lymphatic filariasis endemicity and mapping of an integrated control programme in Lao People's Democratic Republic, Imperial College London NIHR Medical Research Fellowship
July – Sept 2007	***Supervisor*** W. Miranda. The effect of host immune responses on human infection and morbidity, Imperial College MSc
Feb –Nov 2005	***Supervisor*** C.R. Weerasinghe. Clinical epidemiology of lymphatic filariasis in Sri Lanka. Post-MD training in Microbiology / Parasitology, University of Colombo/Imperial College

<u>PhD examination</u>

Nov 2010	***External Examiner***, University of Edinburgh, Candidate: Ms Kate M. Mitchell, Supervisor: Dr. F. Mutapi Thesis title: An analysis of the dynamics of protective immune responses in human populations with endemic schistosome infection
Nov 2008	***Internal examiner,*** University of London, PhD Candidate: Ms. A.I.D.O. Franco, Supervisor: Dr. P. Coleman Thesis title: Evaluation of insecticide treatment of cattle as a tool for malaria control.
June 2008	***External Examiner***, University of Cambridge, PhD Candidate: Ms Angela Pinot de Moira, Supervisor: Prof D. Dunne Thesis title: The micro-epidemiology of *Schistosoma mansoni* within a Ugandan

	fishing community: behavioural, environmental and immunological aspects of infection
Dec 2007	***Internal examiner,*** Imperial College London, PhD Candidate: Ms P.H.L. Lamberton, Supervisor: Prof. J. Webster Thesis title: Adaptation and evolution of Schistosoma mansoni under chemotherapeutic pressure
Sept 2006	***Internal examiner,*** University of London, PhD Candidate: Mr. P. Manrique Saide, Supervisor: Dr. C. Davies Thesis title: Evaluating surveillance and control strategies for *Aedes aegypti* in Mexico.
Jan 2005	***External Examiner***, University of Cambridge, MD Candidate: Ms T. McPherson Thesis title: A study of skin pathology and its association with acute attacks in lymphoedema patients in Guyana.
Feb 2004	***External Examiner***, Case Western Reserve University, USA, PhD Candidate: Mr. D. Titsch, Supervisor: Prof. J.W. Kazura Thesis title: The epidemiologic analysis of lymphatic filariasis control.
Nov 2002	***Internal examiner,*** University of London, PhD Candidate: Ms. Katrin G. Kuhn, Supervisor: Dr. C. Davies Thesis title: Environmental determinants of malaria risk in Europe: past, present and future.
Dec 2000	***Internal examiner***, University of Oxford, DPhil Candidate: Mr. A.B. Bennett, Supervisor: Prof. D.A.P. Bundy Thesis title: Genotypic analysis of anthelmintic resistance in the human intestinal nematode *Trichuris trichuira*.
Nov 1999	***External examiner***, University of Copenhagen PhD Candidate: Mr. S.K. Dunyo, Supervisor: Dr. P.E. Simonsen Thesis title: Studies on the epidemiology and control of lymphatic filariasis on the coast of Ghana.
June 1997	***External examiner***, University of London PhD Candidate: Mr. R.O. Agwanda, Supervsor: Dr. R.F. Sturrock Thesis title: The epidemiology of *Schistosoma mansoni* in Machakos/Makueni districts of Kenya: exploratory analysis of factors affecting transmission of the parasite.

4. Academic Course Development Committees (incl. setting exam papers and marking & running courses):

2011 – present	**Member**, Masters in Global Health Course Committee, University of Notre Dame
2005 - 2007	**Chairman**, BSc School D Executive Committee, Imperial College London
2002-2010	**Member**, Divisional Undergraduate Teaching Committee, Imperial College London
2002-2005	**Member**, BSc School D Executive Committee, Imperial College London
2002-2004	**Member**, The Foundations of Clinical Practice Course Committee, Imperial College London
1997 – 2000	**Member**, MSc in Epidemiology, Evolution and Control of Infectious Disease, University of Oxford
1999 – 2001	**Member**, MSc in Vector Borne Disease Epidemiology, Vector Control Research Centre, Pondicherry, India

PROFESSIONAL ACTIVITIES:

1. Technical Advisor

Aug 2013 – present	Member, Uganda Ochocerciasis Elimination Expert Advisory Committee.
Mar 2011- May 2014	Temporary Advisor, Regional Programme Review Group (PPRG) for Elimination of LF, SEARO region, WHO

2. Consultancies:

Feb 2008 – present	Technical Advisor to Integrated Tropical Disease Control Programme of the Republic of Tanzania.
Nov 2005 – Oct 2006	Consultant, World Bank Project on Integrated Disease Surveillance, New Delhi, India.
Aug – Dec 1999	Short-term consultant on Filariasis in the Pacific, WHO Regional Office for the Pacific (WPRO), Manila, Philippines.
1999 – 2001	Consultant on Parasite Control Programming, Placer Dome Centre For International Health, Aitkenvale, Australia.

3. Research Review Panels:

Oct 2018	Reviewer, Special Emphasis Panel, NIH/NIGMS MIDAS Program
Feb 2013 – Feb 2018	Member, NIH Vector Biology Study Section.
Aug/Oct 2016	Reviewer, NIH Tropical Medicine Research Centers Program
Aug 2015	Reviewer, Austrian Science Fund (FWF), Austria.
Feb 2015	Reviewer, Strategic Environmental Research and Development Program (SERDP), Department of Defense, USA
Oct 2013 – Mar 2014	Reviewer, Special Emphasis Panel, NIH/NIGMS MIDAS Program
Mar 2012 – present	Reviewer, Annual Carter Center River Blindness/Malaria Program Review
Dec 2011- present	External Reviewer, NIH Infectious Disease, Reproductive Health, Asthma and Pulmonary Conditions (IRAP) Study Section.
Feb 2011 – Jan 2013	External Reviewer, NIH Vector Biology Study Section.
Jan 2011	Member, Peer Review Panel, Netherlands Organization for Scientific Research, Department Earth and Life Sciences (NWO-ALW) Innovational Research Incentives Program.
Dec 2009	Member of Peer Review Panel for the German Federal Ministry of Education and Research (BMBF) call on Junior Researchers for Neglected Tropical Diseases.
Jan 2009 – present	Reviewer, Wellcome Trust UK
June 2007 - present	Member of the Scientific Advisory Committee on the Integrated Tropical Disease Control Programme of the Republic of Tanzania.
Nov 2005 - present	Member, Systems Biology Development Working Committee, Department of Biotechnology, Govt. of India.
Dec 2004	Epidemiology Projects Evaluation Panel, Science and Technology Foundation, Portugal
Nov 2001 - present	Subject Advisors College, The British Council Higher Education Links Programme
2000 – present	Review Panel, Medical Research Council, UK
1995 - 2000	Cochrane Collaboration Parasitic Diseases Group. Reviewer for Lymphatic filariasis.

***4. Referee Panels*:**

Acta Tropica
Annals of Tropical Medicine and Parasitology
American Journal Tropical Medicine and Hygiene
Bulletin of the World Health Organization
International Journal for Parasitology
Journal of Epidemiology and Community Health
Journal of Helminthology
Journal of Theoretical Biology
Lancet
Microbes and Infection
Parasite Immunology
Parasitology
PloS Neglected Tropical Diseases
PloS One
Advances in Parasitology
Transactions of the Royal Society of Tropical Medicine and Hygiene
Tropical Medicine and International Health

5. Memberships:

1987 - 2011	British Society for Parasitology
1987- 1990	British Society for Immunology

7. Service/Outreach:

Academic Promotions Committee

Feb 2020	Dr. Justin Remais, School of Public Health, University of California, Berkeley, California, USA
Aug 2019	Dr Elizabeth Carlton, Colorado School of Public Health, University of Colorado, Colorado, USA
Feb 2014	Dr. Lynn Meurs, Institute of Tropical Medicine, Antwerp, Belgium
Sept 2013	Dr. Julie Kapp, Dept of Educational Psychology, University of Missouri-St Louis, USA
Aug 2012	Dr Benjain Ridenhour, University of Notre Dame, Indiana, USA
Nov 2012	Dr. Justin Remais, Emory Rollins School of Public Health, Emory University, Atlanta, Georgia, USA
Nov 2011	Dr. Tom Streit, University of Notre Dame, Indiana, USA

International Research Co-ordination

July 2009 – 2012	Co-PI, British Council Delphe Project on Developing analytical frameworks and tools for designing, monitoring and evaluating Neglected Tropical Disease Control in Tanzania: National Institute for Medical Research, Tanzania/Imperial College London/London School of Economics
Sept 2007 – 2010	Co-PI, British Council Delphe Project on IT for improving Public Health Systems in rural Karnataka, India: Indian Institute of Management, Bangalore/London School of Economics/Imperial College London
2001 - 2004	Co-ordinator, British Council Higher Education Link Programme: National Institute for Medical Research, Tanzania/Imperial College, UK.
1999 - 2001	Co-ordinator, British Council Higher Education Link Programme: Vector Control Research Centre, Pondicherry, India/University of Oxford, UK.

International Courses and Training

17-21 July 2017	Epidemiological Research using R Workshop, Clinical Research Centre, Hospital Sultanah Bahiyah, Alor Setar, Kedah, Malaysia.
14 July 2017	2017 SIAM Annual meeting, Pittsburgh, Pennsylvania, USA. Organizer: Modelling Transmission Dynamics and Vector-Host Ecologies for Controlling Tropical Vector-Borne Infectious Diseases.
15 Mar – 19 Mar 2010	Fifth Joint ICMR - CRI Indo – US/UK Workshop on Research Methodology for Undergraduate Medical Students and Young Faculty, Bhubaneswar, India
30 Mar – 3 Apr 2009	Scientific Publication Workshop for NIMR scientists, Dar es Salaam, Tanzania. (Organizer and Workshop facilitator)
30 July – 3 Aug 2007	Fourth Joint ICMR - CRI Indo – US/UK Workshop on Research Methodology for Undergraduate Medical Students and Young Faculty, Chennai, India
14 – 16 July 2006	Third Joint ICMR - CRI Indo – US/UK Workshop on Research Methodology for Undergraduate Medical Students and Young Faculty, Chennai, India
14 – 18 Nov 2005	Second Joint ICMR - CRI Indo – US/UK Workshop on Research Methodology

	for Undergraduate Medical Students and Young Faculty, Mumbai, India
21 – 25 Mar 2005	Joint ICMR-Ellison Foundation Workshop on Research Methodology for Undergraduate Medical Students, New Delhi, India
16 Aug – 20 Aug 2004:	ICMR/Ellison Foundation Training Course on Research methods for community-based studies and clinical investigations, Bhubaneswar, India (Lectures on Randomized Clinical Trials (RCTs) and Evidenced Based Medicine in clinical research, and facilitator on the development of research protocols)
Oct 2003	Staff training course on the use of informatics-based epidemiological tools, including mathematical models and geographic information systems (GIS), in the design, management and monitoring of national-level parasite control programmes, National Institute for Medical Research and National Lymphatic Filariasis Elimination Programme, Dar es Salaam, Tanzania
28 April – 2 May 2003	National Institute for Medical Research, Tanzania/Danish Bilharziasis Laboratory Post-experience International Course on Filariasis Research in East Africa, Tanga, Tanzania. (Development and design of lectures and practical modules on the use of GPS/GIS for mapping parasitic infection and the use of mathematical models for planning and monitoring national-level filariasis control)

<u>Overseas Field Research</u>

Oct 2010 – 2013	Danida Research Project. Co-PI. Operational research to support and enhance lymphatic filariasis control efforts in Eastern and Southern Africa. Filariasis field study design and management from locations in Tanzania and Zambia.
Sept 2009 – 2012	British Coluncil Delphe Project: Developing analytical frameworks and tools for designing, monitoring and evaluating Neglected Tropical Disease Control in Tanzania. Monitoring and evaluation program design, implementation and abnalysis of field data from Tanzania.
Mar 2006 – 2014:	NIH /NIAID Research project. Principal Investigator (PI). Modeling lymphatic filariasis transmission and eradication in Papua New Guinea. Designed, supervised and analyzed field studies in Papua New Guinea, Tanzania and India.
Sept 2007- Mar 2011:	British Coluncil Delphe Project: IT for improving Public Health Systems in rural Karnataka, India. Collation and analysis of health data from primary health care centres in Karnataka, South India.
Oct 1999 – Feb 2005:	NIH /NIAID Research project. Spatial ecology of parasite transmission, worm population genetics, and heterogeneity of infection and lymphatic pathology in bancroftian. Principal Investigator (PI). Designed, supervised and analyzed field studies in Papua New Guinea.
Mar 2001 – Feb 2004:	British Council, Tanzania. Higher Education Link Programme Epidemiological tools for the control of lymphatic Filariasis. Co-PI. Development, implementation and analysis of a GIS-based Data Management and Analysis Tool for supporting the control of lymphatic filariasis in East Africa (Tanzania, Kenya and Uganda).
Oct 1997 – Mar 2002:	MRC Career Development Project. Transmission heterogeneities and the immunoepidemiology of lymphatic filariasis in India and Tanzania. PI. Designed, surpervised and analyzed field studies in collaboration with the Indian Council of Medical Research (ICMR), India, and the National Institute for Medical Research, Tanzania.
Jan 1998- Aug 2002:	European Commission Framework Programme IV Project. Bancroftian filariasis transmission, immunology and epidemiology before and after intervention in East Africa. (with P.E. Simonsen, DBL, Denmark). Co-PI. Designed, supervised and analyzed field studies in Tanzania and Kenya.

<u>Software tools</u>

Oct 2016 – present	Development of a decision support tool for policy making in tropical disease management. Funded by IBM Research.
Mar 2013 – Dec 2015	Development of a **Malaria mHealth** application to track malaria fevers in individuals from endemic communities. Funded by the Center for Rare and

Neglected Diseases, University of Notre Dame.

Mar 2011- Dec 2014 — Development of **NTD-MIS**, a multi-platform information system to capture, manage, analyze and report data on the impact of the integrated NTD program in Tanzania. Funded variously by British Council, SCI, UK and RTI, USA.

Jan 2006 – present: — Development of **QEpifil**, a stochastic mathematical model-based decision support software tool for designing and monitoring the elimination of lymphatic filariasis

Oct 1999 – 2005: — Development of **LYMFILSYS** a web-based data management, analysis, reporting and mapping software application for supporting the design and monitoring of national-level filariasis control programmes. System currently being piloted in Tanzania and re-designed for Kenya and Uganda. Funded partially via a British Council Higher Education Link Programme.

Jan 1998 – July 1999: — Development of **EPIFIL**, a dynamic simulation software tool, for predicting the effects of community-based interventions on lymphatic filariasis epidemiology. Funded by Wellcome Trust/WHO.

ACADEMIC AWARDS:

1997 – 2001: **MRC Career Development Fellowship**.
Medical Research Council, UK.

1986 - 1990: **Inlaks Scholarship** awarded by the Inlaks Foundation, London.
Overseas Research Students' ORS Award (U.K.).

1986: **Junior Research Fellowship.**
University Grants Commission, India.

1986: **Junior Research Fellowship**.
Council of Scientific and Industrial Research (CSIR), India.

PUBLICATIONS AND MANUSCRIPTS:

A. <u>Books</u>

1. Simonsen, P.E., Michael, E., Malecela, M.N. & McKenzie, C. (eds.) (2008) *Lymphatic Filariasis in East and Southern Africa* DBL/NIMR./MU/IC publication: Copenhagen.
2. Michael, E. & Spear, R. (eds.) (2010) *Modelling Parasite Transmission and Control* Landes Bioscience and Springer: New York, USA.
3. Parham, P.E., Joanna, W., Christophides, G. & Michael, E. (eds.) (2015) *Climate Change and Vector-Borne Diseases of Humans* Royal Society, London, UK. *Phil Trans R Soc Lond B Biol Sci,* **370**.
4. Michael, E. & Mubayi, A. (eds.) (2017) *Special Issue: Population Ecology, Epidemiology, and Control of Neglected Tropical Diseases In: Tropical Medicine and Infectious Disease* (ISSN 2414-6366).

B. <u>Book Chapters</u>

5. Michael, E. (2000). The population dynamics and epidemiology of lymphatic filariasis. In: *Tropical Medicine: Science and Practice* (eds. S. Hoffman & G. Pasvol), pp 41-81, Imperial College Press: New York.
6. Bundy, D.A.P., Guyatt, H.L. and Michael, E. (2001) Epidemiology and Control of Nematode Infection and Disease in Humans. In: *Biology of Nematodes* (ed. D. Lee), pp 595-613, Harwood Academic Publishers: London.
7. Bundy, D.A.P. & Michael, E. (2001). Population biology of human helminth infections. In: *Principles and Practice of Clinical Parasitology* (ed. S. Gillespie), pp 21-52, Academic Press: New York.
8. Bundy, D.A.P. & Michael, E. (2001). Epidemiology of helminthiases in the tropics. In: *Helminthology* (eds. N. Chowdhury & I. Tada), pp 179-223, Science Publishers Inc., NH, USA.
9. Michael, E. (2002). The epidemiology of lymphatic filariasis control. In: *World Class Parasites: The Filariae* (eds. T.V. Rajan & T. Klei), pp 59-74. Kluwer Academic Publishers: Amsterdam.
10. Michael, E., Bundy, D.A.P., Ottesen, E. & Ramachandran, C.P. (2003). The global burden of lymphatic filariasis disease. In: *The Burden of Diseases: Global and Regional Estimates for 1990* (eds. C.J.L. Murray & A.D. Lopez), World Health Organization: Geneva.
11. Simonsen, P.E. & Michael, E. (2008). Lymphatic filariasis bibliography for Eastern and Southern Africa. In: *Lymphatic Filariasis in East and Southern Africa* (eds. P.E. Simonsen, P.E., E. Michael, M.N. Malecela &

C. McKenzie), pp 126-153, DBL/NIMR./MU/IC publication: Copenhagen.
12. Michael, E. & Gambhir, M. (2010). Vector transmission heterogeneity and the population dynamics and control of lymphatic filariasis. In: *Modelling Parasite Transmission and Control* (eds. E. Michael & R. Spear), pp 13-31, Landes Bioscience and Springer: New York, USA.
13. Parham, P.E. & Michael, E. (2010). Modelling climate change and malaria transmission. In: *Modelling Parasite Transmission and Control* (eds. E. Michael & R. Spear), pp 184-199, Landes Bioscience and Springer: New York, USA.
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D. <u>Reports, Outreach, and Book Reviews</u>

161. Michael, E. & Botting, E. (2020). COVID-19 Mirror on the wall – who's the bravest college of them all? Public Seminar. Sept 16, 2020.
162. Michael, E., Botting, E.H., Hachen, D., Toroczkai, Z. & McKibben, S. (2020). Viewpoint: listen to

faculty who can calculate risks to public health. The Observer. Aug 28, 2020.
163. Botting, E.H. & Michael, E. (2020). The pandemic has revealed the driving values of American Higher Education. Public Seminar. Aug 24, 2020.
164. Botting, E.H. & Michael, E. (2020) Commentary: Online or in-person teaching? With COVID-19 risk, let the faculty decide. Chicago Tribune. June 29, 2020.
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171. Esterre, P., Michael, E., Nguyen, N.L. & Bundy, D.A.P. (1998) Global surveillance of parasitic diseases with GIS systems. Colloque Scientifique du Centenaire de L'institute Pasteur de Madagascar, Antananarivo, 4-5 November.
172. WHO/DBL-Centre for Health Research and Development (2006). The role of polymerase chain reaction techniques for assessing lymphatic filariasis transnmission. WHO/HTM/NTD/PCT/2009.1
173. WHO/TDR (2005). Report of the Scientific Working Group meeting on Lymphatic Filariasis, Geneva, 10-12 May, 2005.
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CONFERENCES, WORKSHOPS AND SEMINARS: (invited participation)

30 May 2019	London Centre for NTD Research Seminar Series, Imperial College London, London, UK (Speaker: Data-driven predictive modelling for managing the elimination of the Neglected Tropical Disease, Lymphatic Filariasis)
15-16 Apr 2019	WHO-Gates Foundation Meeting: Achieving NTD Control, Elimination and Eradication Targets Post-2020. Modelling Perspectives and Priorities, Geneva, Switzerland.
1 Apr 2019	Haiti MSPP NTD/ LF Partners Meeting, Task Force for Global Health, Atlanta, Georgia, USA (Speaker: Using DEC salt as social enterprise-based approach to eliminate LF: a financial and model-based cost-effectiveness analysis)
25-27 Mar 2019	The 23th Annual Carter Center River Blindness Elimination Program Review, Atlanta, USA.
15 Jan 2019	International Task Force for Disease Eradication (ITFDE), Atlanta, USA (Speaker: Mathematical models for evaluating parasite eliminability/eradicability)
7-9 Aug 2018	The 11th session of Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC) Meeting, Kampala, Uganda (Lecture on evaluating strategies for eliminating onchocerciasis in Uganda: a dynamic model-based cost-effectiveness analysis)
12 Apr 2018	Odum School of Ecology, University of Georgia (Lecture on Reconceptualizing modelling in global disease dynamics and control)
14-16 Mar 2018	The 22th Annual Carter Center River Blindness Elimination Program Review, Atlanta, USA (Evaluating transmission assessment survey (TAS) criteria using mathematical modelling)
22 Feb 2018	Simon A Levin Mathematical, Computational and Modeling Sciences Center, Arizona State University, Tempe, USA (lecture on data-model assimilation and the heterogeneous transmission dynamics and control of macroparasitic vector borne diseases)
30 Oct 2017	Global Health Institute, College of Public Health, University of Georgia (Lecture on Complexity, system science, and global disease dynamics and control)
8-10 Aug 2017	The 10th session of Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC) Meeting, Kampala, Uganda (Seminar on developing freedom from infection assessment protocols)

5 May 2017	LF Modelling Meeting, NTD Modelling Consortium, Erasmus University, The Nethelands.
27-29 Mar 2017	The 21th Annual Carter Center River Blindness Elimination Program Review, Atlanta, USA (Model-based Freedom from Infection Tool for guiding LF and Onchocerciasis elimination).
24 Feb 2017	Simon A Levin Mathematical, Computational and Modeling Sciences Center, Arizona State University, Tempe, USA (Seminar lecture on data-driven predictive modelling for managing the elimination of the Neglected Tropical Disease, lymphatic filariasis, in Sub-Saharan Africa)
2-4 Aug 2016	The 9th session of Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC) Meeting, Kampala, Uganda (Seminar on occupancy models and assessing disease extinction)
2-4 Mar 2016	The 20th Annual Carter Center River Blindness Elimination Program Review, Atlanta, USA (Modelling Onchocerciasis elimination using data and model discovery tools).
16 Dec 2015	Presentation on modelling the use of DEC salt as an endgame strategy in LF elimination programs in Haiti. Ministry of Health, Haiti.
3-5 Aug 2015	The 8th session of Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC) Meeting, Kampala, Uganda (Keynotes on Modelling Onchocerciasis and Lymphatic Filariasis Elimination in Uganda).
26 Mar, 2015	Probabilistic predictions of the impact of interventions on lymphatic filariasis elimination in Africa using ensemble-based Bayesian data-model melding at *Neglected Tropical Disease Modelling*, The University of Warwick, Coventry, United Kingdom.
24-26 Feb 2015	The 19th Annual Carter Center River Blindness Elimination Program Review, Atlanta, USA (Keynote on Data-Model Assimilation Frameworks for Modelling Onchocerciasis Elimination).
24-27 Nov 2014	ITM 56th International Colloquium, Antwerp, Belgium (Keynote on Managing Neglected Tropical Disease Control: Complexity, Uncertainty, and Governance
5-7 Aug 2014	The 7th session of Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC) Meeting, Kampala, Uganda (Keynote on Modelling Onchocerciasis Elimination using Bayesian Data-Model Assimilation Approaches).
3-5 Mar 2014	The 11th Annual Carter Center River Blindness Elimination and Malaria Control Program Review, Atlanta, USA (Keynotes on Modelling for Lymphatic Filariasis and Onchocerciasis Elimination).
28 Feb 2014	NRES Seminar Series, Natural Resources and Environmental Sciences, University of Illinois-Urbana Champaign, USA (Talk on Modelling Global Change on Vector Borne Infectious Diseases).
18-21 Feb 2014	Seminar series on Global Health and Development, London School of Economics, London, UK. Seminar on Health and Development.
22 Nov 2013	Data and Public Health Management in India: An analysis of Epidemiological and Social Science Studies from the State of Karnataka, Liu Institute for Asia and Asian Studies. Fellows Colloquium Series, University of Notre Dame, USA.
11-13 Nov 2013	NTD Modelling Consortium Meeting, Washington DC, USA. World Bank and Gates Foundation-sponsored Workshop to develop a consortium proposal for global modelling of NTD elimination.
6-8 Aug 2013	6th Session of Uganda Onchocerciasis Elimination Expert Advisory Committee (UOEEAC) Meeting, Kampala, Uganda. (Observer and Talk on Lymphatic Filariasis Transmission and Elimination Dynamics)
10-11 July 2013	London School of Economics and Political Science, Institute of Tropical Medicine, Antwerp, and Brunel University Joint Workshop on Biosocial Approaches in Controlling Neglected Tropical Diseases, London, UK (Talk on Integrated Control of Neglected Tropical Diseases: Implications of Ecological Complexity and Uncertainty)
25 – 27 June 2013	Tenth Meeting of Regional Programme Review Group (RPRG) for Elimination of LF in SEAR, Dili, Timor Leste
5-8 Mar 2013	The 10th Annual Carter Center River Blindness Elimination and Malaria Control Program Review, Atlanta, USA (Keynote on Lymphatic Filariasis Transmission and Elimination Dynamics: Focus on Impact of Including Vector Control to MDA on Anopheline Filariasis Elimination).
21 July 2012	British Academy – Indian Institute of Management,Bangalore (IIMB) Workshop on Improving Systems of Accountability for Primary Health Care Delivery in rural

	Karnataka, IIMB, Bangalore, India (Keynote on Epidemiological Data for Health Planning in India: Challenges and opportunities)
30 Apr – 1 May 2012	Ninth Meeting of Regional Programme Review Group (RPRG) for Elimination of LF in SEAR, Yangon, Myanmar
20 Apr 2012	National Institute for Medical Research (NIMR)/British Council Delphe Forum on Neglected Disease Control in Tanzania – Policy Challenges and Opportunities, Arusha, Tanzania (Keynote on Neglected Tropical Diseases Control: Integration complexities from an epidemiological point of view)
16-19 Apr	National Institute for Medical Research (NIMR) 26th Annual Joint Scientific Conference, Arusha, Tanzania (Keynote on Frontiers in Infectious Disease Epidemiological Research)
26-27 Aug 2011	Midwest Neglected Disease Meeting, University of Notre Dame, Notre Dame, USA (Key note lecture on Ecological complexity and the prospects for lymphatic filariasis elimination)
28-29 Apr 2011	Eight Meeting of Regional Programme Review Group (RPRG) for Elimination of LF in SEAR, Colombo, Sri Lanka
26-27 Apr 2011	Eight Meeting of Lymphatic Filariasis Programme Managers of South East Asia Region (SEAR), Colombo, Sri Lanka
23 Mar 2011	MECIT, 21-23 March 22-23rd, 2011, International Conference on Applied Information and Communications Technology, Muscat, Oman (Keynote on Health Information Systems and Data for Health Planning and Evaluation: Experiences from India and Tanzania).
5 Nov 2010	LSE Symposium on Health Information Systems and Development, LSE, London, UK (keynote on Critical Data Analysis for Health Planning)
13 -13 Feb 2009	Grantham Institute for Climate Change Conference on Climate Change and Malaria Transmission
12 May 2008	UKCDS Experts Committee on Climate Change Research for Development, UK
16-17 Jan 2008	42nd Annual Meeting of the US-Japan Parasitic Diseases Joint Panels, University of California, Davis, USA (Keynote lecture on complex infection dynamics and the control of lymphatic filariasis)
14 May & 18 June 2007	Programme for Monitoring and Evaluation of Neglected Tropical Diseases Scientific Workshop, Dar es Salaam, Tanzania (Keynote lectures on Conceptual frameworks for the design of integrated parasite control monitoring and evaluation plans)
7-10 Nov 2006	Danish Bilarziasis Laboratory/WHO International Meeting on Transmission Monitoring in Lymphatic Filariasis Control, Copenhagen, Denmark (Keynote lecture on the epidemiology of monitoring in parasite infection control)
3-5 April 2006	Meeting on Systems Biology: New Initiatives and Perspectives, Dept of Biotechnology, Govt of India, Gurgaon, India (Keynote lecture on Systems Biology: Its potential and challenges in infectious disease transmission and control)
10-12 May 2005	WHO TDR Scientific Working Group Meeting on Lymphatic Filariasis, Geneva.
19-21 April 2005	34th Meeting of the Mectizan Expert Committee, Atlanta, Georgia, USA. (Lecture on Modelling and the control of lymphatic filariasis)
14 April 2005	British Society for Parasitology Spring Meeting 2005, Nottingham, UK. (Keynote lecture on Controlling lymphatic filariasis: transmission dynamics, spatial epidemiology and worm population genetics).
23-25 Nov 2004	GeoHealth2004 Conference on GIS and Disease Surveillance and Intervention, Wellington, New Zealand. (Keynote lecture on Lymfil – a new tool for managing parasite control programmes)
7-10 Dec 2003	Forum on Research in support of the Global Programme to Eliminate Lymphatic Filariasis, Philadelphia, USA
12- 15 Feb 2003	ICMR-Ellison Foundation Workshop on Immunoparasitology, Regional Medical Research Centre, Bhubaneswar, Orissa, India. (Keynote lecture on Detecting and quantifying the epidemiological impact of acquired immunity in Lymphatic Filariasis: explorations using mathematical models)
9-11 Feb 2002	6th International Symposium on vectors and Vector borne Diseases, National Academy of Vector Borne Diseases, Bhubaneswar, Orissa, India. (Plenary lecture on Population dynamics of lymphatic filariasis control)
19-22 Sept 2001	Bernhard Nocht Institute for Tropical Medicine/WHO Conference on Filariasis, Hamburg, Germany. (Lecture on Filariasis immunoepidemiology and control)
7-9 May 2001	Tenth Annual Meeting of the NAID International Centers for Tropical Disease Research, National Insitute of Allergy and Infectious Diseases, Bethesda, USA. (Lecture on Quantifying individual host exposure rates in human

	filariasis)
22-25 April 2001	NATO Advanced Research Workshop on GIS for Emergency Preparedness and Health Risk Reduction, Budapest, Hungary. (Lecture on Disease mapping as a tool for understanding the epidemiology and control of lymphatic filariasis in Africa)
5-9 Mar 2001	Danish Bilarziasis Laboratory/University of Zambia Workshop on Human Helminth Infections – Future Research Foci, Lusaka, Zambia
2 Mar 2001	Joint Spring Symposium of the Danish Society of Tropical Medicine and International Health & the Danish Society for Parasitology, Copenhagen, Denmark (Keynote lecture on The role of transmission intensity in shaping patterns of infection and disease in lymphatic filariasis)
5-9 Feb 2001	SEAMEO/Tropmed/WHO workshop on mapping the distribution of lymphatic filariasis and developing an information network in the Mekong-plus countries, Bangkok, Thailand (Lecture on Filariasis distribution in Asia: existing data and gaps in information).
4-6 Oct 2000	Workshop Series on GIS in Health, Department of Informatics, University of Oslo, Oslo, Norway (Lectures on Developing GIS-based Management Information Systems for parasite control)
18-22 Sept 2000	Oxford2000 Conference on New Challenges in Tropical Medicine and Parasitology, Oxford, UK (Convenor, filariasis control session and Chairman, Plenary session on the emerging challenge of non-communicable disease for the developing world)
19-21 July 2000	International Conference on Vector Borne Disease Control, Vector Control Research Centre Silver Jubilee Celebrations, Pondicherry, India (Lecture on the development of a prototype epidemiology information system for the control of lymphatic filariasis)
20 Jan 2000	Royal Society of Tropical Medicine and Hygiene Meeting on Elimination of Lymphatic Filariasis as a Public Health Problem, London, UK (Lecture on the geographic distribution of lymphatic filariasis)
15-19 Nov 1999	Danish Bilharziasis Laboratory (DBL)/ Noguchi Memorial Institute for Medical Research (NMIMR) Ghana Workshop on Lymphatic Filariasis Research and Control in Africa, Accra, Ghana (Keynote lecture on the role of mathematical models in the control of lymphatic filariasis)
26 Sept – 5 Oct 1998	WHO/CTD Workshop on New Techniques for Surveillance, Treatment and Elimination of Lymphatic Filariasis, Guiyang, China (Temporary Advisor and Facilitator)
2-4 Sept 1998	WHO/CTD Workshop on the Development of Operational Criteria defining the Elimination of Lymphatic Filariasis, Centers for Disease Control (CDC), Atlanta, USA (Temporary Advisor)
28-29 May 1998	Spring Meeting of the Mectizan Expert Committee, Atlanta, USA (invited presentation on filariasis in Africa)
26-29 Jan 1998	Fourth European Commission Filariasis Contract Holders Meeting, Paris, France
22-25 July 1997	WHO/TDR Spatial Analysis Workshop on Lymphatic Filariasis, Townville, Queensland, Australia (Facilitator)
18-20 July 1997	Second International Meeting on the Control of Lymphatic Filariasis, Townsville, Queensland, Australia (Organizing Committee Member and Chairperson of Epidemiology session)
7-11 July 1997	WHO/TDR Protocol Development Meeting on Lymphatic Filariasis, New Delhi, India (Temporary adviser)
3-5 July 1997	WHO/TDR Rapid Assessment Meeting on Lymphatic Filariasis, New Delhi, India (Temporary Adviser)
14-18 April 1997	Danish Bilharziasis Laboratory (DBL)/ National Institute for Medical Research (NIMR) Tanzania Workshop on Lymphatic Filariasis Research and Control in Africa, Tanga, Tanzania (Keynote lecture on epidemiological modelling in lymphatic filariasis)
17-22 Mar 1996	WHO/TDR Workshop to Develop Protocols for Estimating the Economic/Financial Costs of Control Interventions for Lymphatic Filariasis, Pondicherry, India (WHO resource person)
14-16 Feb 1996	UNDP/World Bank/WHO Consultative Meeting on Application of Modelling to Control Strategies in Lymphatic Filariasis, Geneva, Switzerland
1-2 Dec 1994	WHO/TDR/ICMR Filariasis Research Review Meeting, Madras, India (WHO resource person for the analysis of drug trials data)
22-24 Aug 1994	WHO/CTD/TDR "Informal Consultation on New Strategies for Control of Lymphatic filariasis", Penang, Malaysia

4-8 Sept. 1993	3rd CEC Filariasis Network Meeting, Universidade Nova de Lisboa, Portugal
4-6 May 1993	AFRC/SERC workshop on the modelling of disease epidemiology, University of Warwick, UK

RESEARCH GRANTS AND CONTRACTS (Direct costs)

Start Date	*Source & Title*	*Value*
Oct 1990-Sep 1992	**Leverhulme Trust**	
(24 mo.)	Parasites and nutrition	
	(with D.A.P. Bundy)	£59,250
Mar 1993-Feb 1994	**MRC Small Project Grant**	
(12 mo.)	Filariasis transmission in Zanzibar	
	(with C.A. Maxwell & D.A.P. Bundy)	£30,628
Jun 1996 – Aug 1996	**WHO**	
(3 mo.)	Atlas of lymphatic filariasis	
	(with D.A.P. Bundy)	$10,000
Mar 1997- Aug 1997	**MRC Small Project Grant**	
(6 mo.)	DNA fingerprinting of mosquito bloodmeals	
	(with D.A.P. Bundy)	£27,336
Oct 1997- Sept 2001	**MRC Career Development Award**	
(48 mo.)	Transmission heterogeneities and the	
	immunoepidemiology of lymphatic filariasis.	£313,290
Jan 1998 – May 2001	**European Commission Framework Programme IV**	
(41 mo.)	Bancroftian filariasis transmission, immunology	
	and epidemiology before and after intervention.	
	(with P.E. Simonsen, DBL, Denmark)	ECU500,000
Feb 1999- Jan 2000	**WHO**	
(12 mo.)	Atlas of lymphatic filariasis: geographical	
	distribution of infection and populations at risk	
	in endemic countries	£25,721
Apr 1999-Mar 2001	**British Council**	
(24 mo.)	Higher Education Link Programme	
	Vector-Borne Disease Epidemiology	£20,000
May 1999	**Department of Biotechnology, Govt. of India**	
	Overseas Fellowship (to Dr. S.L. Hoti)	
	Isolating microsatellite markers for the genetic	
	analysis of *Wuchereria bancrofti*	£9,000
Mar 2000- Feb 2005	**NIH /NIAID**	
(60 mo.)	Spatial ecology of parasite transmission, worm	
	population genetics, and heterogeneity of infection	
	and lymphatic pathology in bancroftian	
	filariasis	$545,706
Feb 2000	**MRC**	
	1999/2000 Equipment Competition	£25,000
May 2000 – Apr 2001	**World Bank**	
(12 mo.)	Development of an internet-based geographic	
	metadata system for the human helminthiases	£38,654
Oct 2001- Mar 2002	**MRC**	
(6 mo.)	Supplement to MRC Career Development Award	£36,000
Oct 2000	**Wellcome Trust Fellowship** (to Dr. S. Brooker)	
(18 mo.)	Predicting the geographical distribution of human	
	Helminths infection in Africa	£59,352
Dec 2000	**MRC PhD Research Studentship** (to Ms. L.C. Snow)	
(36 mo.)	Transmission dynamics of lymphatic filariasis	
Mar 2001- Feb 2004	**British Council**	
(36 mo.)	Higher Education Link Programme	
	Epidemiological tools for the control of lymphatic Filariasis	£33,000
Jan 2002 – Jun 2004	**World Bank**	
(18 mo.)	The effect of ivermectin alone and in combination	
	with albendazole on *Wuchereria bancrofti* infection	
	in schoolchildren in coastal Tanzania	$50,000

April 2007- Mar 2014	**NIH**	
(84 mo.)	Modeling lymphatic filariasis transmission and eradication in Papua New Guinea	$727,387
Sept 2007-Aug 2010	**British Council**	
(36 mo.)	Delphe Project: IT for improving Public Health Systems in rural Karnataka, India	£75,000
Sep 2007	**MRC-ESRC PhD Research Studentship** (to Mr A.A. Anifalaje)	
(36 mo.)	Information Systems for Improving Public Health in Developing Countries	
Sep 2008	**NERC-ESRC PhD Research Studentship** (to Ms H. Slatter)	
(36 mo.)	Spatial epidemiology and the integrated control of vector-borne infectious diseases in Africa	
Sep 2008	**Grantham Institute for Climate Change Post-doctoral Fellowship**	
(36 mo.)	(to Dr. P. Parham) Climate change and biocomplexity of infectious disease transmission	
Sept 2009-Aug 2012	**British Council**	
(36 mo.)	Delphe Project: Developing analytical frameworks and tools for designing, monitoring and evaluating Neglected Tropical Disease Control in Tanzania	£70,000
Mar 2010 – Feb 2015	**Danida**	
(48 mo)	Operational research to support and enhance lymphatic filariasis control efforts in Eastern and Southern Africa.	£145,000
Mar 2013 – May 2014	**Center for Rare and Neglected Diseases, University of Notre Dame**	
	Pilot project on developing a malarial mHealth application to track fevers and malarial clinical disease from individuals in Northern Tanzanian endemic communities.	$100,000
Nov 2013 – Oct 2015	**Eck Institute for Global Health/OVPR, University of Notre Dame**	
(24 mo)	Analysis and modeling complex global health interventions	$250,000
Sep 2013 – Oct 2013	**American Association for the Advancement of Science (AAAS) BMENA Scientific Exchange Award** (to Bilel Chalghaf)	
	Ensemble-based ecological niche modeling of leishmania vector distributions in the Mediterranean.	
Sept 2013 - Sept 2015	**Millenium Challenge Corporation (MCC)**	
	PI: Ghana Services Water Supply Infrastructure Impact Evaluation	$375,000
Dec 2013 – April 2015	**PCI Global**	
	PI: Post-project Sustainability Study of the Child Health Opportunities Integrated with Community Empowerment (CHOICE) Project, Indonesia (2003-2007)	$65,750
Aug 2014 – Aug 2015	**The Task Force for Global Health, Inc**	
	PI: Modelling to support Lymphatic filariasis (LF) elimination programs: Estimating expected post-MDA LF prevalence	$83,095
Nov 2014 – Apr 2016	**Gates Grand Challenges**	
	Co-PI: Enhanced Integrated Delivery of NTD and WASH Programs	$100,000
Nov 2014 – Feb 2018	**Gates NTD Modelling Consortium**	
	PI: Modelling for LF elimination	$500,000
Nov 2015 – Feb 2020	**IBM**	
	PI: Cognitive Systems for predicting and eliminating transmission of neglected filarial diseases in Africa	$60,000
June 2016 – Dec 2019	**Gates NTD Modelling Consortium**	
	PI: Modelling timelines to lymphatic filariasis elimination across Ethiopia using a spatio-temporal Bayesian data-modelling framework	$129,000
Dec 2016 – Nov 2021	**NIH**	
	Co-PI: Community-directed vector control to enhance mass drug administration for onchocerciasis elimination in Africa	$752,950
Mar 2018 – Feb 2021	**Gates NTD Modelling Consortium**	
	PI: Lymphatic filariasis transmission and elimination modelling to guide policy making	$487,669
Sept 2020- Aug 2021	**Florida Blue Foundation**	
	PI: Modelling for COVID-19	$100,000

Pending

PA16-160 NIH $2,157,387 07/01/20-06/30/24
PI: Developing an automated iterative data-driven spatio-temporal forecasting system for predicting urban dengue outbreaks and control in Malaysia

PA16-160 NIH $561,395 11/01/20-04/31/25
Co-PI: A spatially explicit data-driven predictive system to support area-wide Schistosomiasis control and elimination in Africa

PA16-160 NIH $3,001,859 12/01/20-06/30/25
PI: Epidemiological modelling, surveillance and socio-ecological studies for enhancing lymphatic filariasis elimination in Kenya