

**The Institute for Health Metrics and Evaluation (IHME) research team** represents an unparalleled concentration of quantitative skills. It includes University of Washington (UW) faculty members, researchers, visiting professors, and a talented group of research fellows. Here are some of our leading experts and their fields of research.

## Institute Director



**Christopher J.L. Murray, MD, DPhil**, is a physician and health economist. His work has led to a range of new methods and evidence to strengthen health measurement, gauge the performance of health systems, and assess the cost effectiveness of health technologies. Dr. Murray worked at the World Health Organization (WHO), where he served as the Executive Director of the Evidence and Information for Policy Cluster. He also served as the Director of the Harvard Initiative for Global Health and the Harvard Center for Population and Development Studies. Dr. Murray developed the concept of the disability-adjusted life year (DALY), a metric to compare death and disability from various diseases across countries.

## IHME researchers



**Lalit Dandona, MPH, MD**, divides his time between IHME and the Public Health Foundation of India in New Delhi. Dr. Dandona and his research teams have carried out research in India for 15 years on HIV/AIDS, blindness, population health measurement, intervention evaluation, and research capacity. Several of these research projects included multicountry collaborations. He received the 2006 BioMed Central Research Award in Medicine for public health research on HIV in India. Dr. Dandona has served as a technical expert in public health for governments, universities, and international organizations.



**Herbert Chad Duber, MD, MPH**, is a visiting faculty member at IHME from the Division of Emergency Medicine at UW. His research interests include health systems development, program monitoring and evaluation, and health in low- and middle-income countries. For IHME, Dr. Duber is involved in a large-scale antiretroviral therapy costing study in Zambia, Uganda, Kenya, and India.



**Abraham Flaxman, PhD**, is the primary architect of a software tool known as DisMod III that IHME is using to estimate the Global Burden of Disease. Dr. Flaxman and other researchers use the tool to fill in gaps in incomplete data from government records and surveys on stroke, malaria, depression, and other diseases and conditions and to correct for inconsistencies. Prior to being named Assistant Professor, Dr. Flaxman was a Post-Graduate Fellow at IHME. He previously was a post-doctoral fellow at Microsoft Research.



**Emmanuela Gakidou, MSc, PhD**, is IHME's Director of Education and Training. She studies impact evaluation and methods development for analytical challenges in global health. Her research projects include the development of a time series of educational attainment for all countries from 1960 to present and the measurement of economic status through health surveys. Dr. Gakidou was a research associate at the Harvard Initiative for Global Health and a health economist at WHO, where she led the work on health inequality measurement.



**Michael Hanlon, PhD**, is an IHME Lecturer researching the cost structures of different health service delivery systems. Dr. Hanlon has developed an empirically based topology of national health systems and conducted analyses of the costs of care in the United States and Lebanon. His research of economically inefficient behaviors within households guides his approach to identifying inefficiencies in health systems. Prior to his academic career, Dr. Hanlon was one of Amazon.com's first employees, working as a software developer among a variety of roles. At IHME, he uses his experience in developing software for a series of projects that incorporate machine learning techniques.



**Bernardo Hernández Prado, DSc, MS**, in collaboration with the Inter-American Development Bank Division of Social Protection and Health, is researching ways to improve health system performance and build capacity in Mexico and Central America. Dr. Hernández Prado has worked with the Population Health Metrics Research Consortium project for the validation of verbal autopsy and chronic disease diagnosis questionnaires. Prior to his work with IHME, Dr. Hernández Prado had a long and distinguished career on the faculty of the National Institute of Public Health in Cuernavaca, Mexico, where he most recently directed the program for reproductive health.



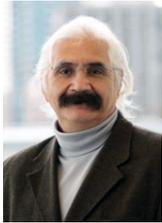
**Nicholas Kassebaum, MD**, is a visiting faculty member at IHME from the Department of Anesthesiology & Pain Medicine at UW. With the Burden of Disease and Cost Effectiveness research teams, he is studying the burden and effectiveness of interventions for specific conditions as well as the cost effectiveness of health care facilities around the world. As a visiting fellow at IHME, he researched dental and respiratory diseases, hemoglobin disorders, and anemia. His clinical practice is in pediatric anesthesiology at Seattle Children's Hospital.



**Santosh Kumar, PhD**, is an IHME Lecturer focusing on global health economics. An applied micro-economist by training, Dr. Kumar is part of the Impact Evaluations and Health Service Delivery Constraints research teams, where he identifies the supply-side and demand-side barriers to effective health care in developing countries. Dr. Kumar was a David E. Bell post-doctoral research fellow at the Harvard Center for Population and Development Studies. At Harvard, he evaluated the impacts of infrastructure projects such as sanitation, rural roads, and rural electrification in developing countries.



**Stephen Lim, PhD**, leads IHME's work on monitoring the effective coverage of interventions and health systems, including tracking immunizations and insecticide-treated bed nets. Prior to joining IHME, Dr. Lim was a senior research fellow at the University of Queensland and was based at the Ministry of Public Health in Thailand. There, he led a project on capacity building in health information systems with a focus on burden of disease and cost effectiveness analysis. At WHO, Dr. Lim was a key member of the Choosing Interventions that are Cost-Effective (CHOICE) project.



**Rafael Lozano, MSc, MD**, directs IHME's research into causes of death and national health information systems. Dr. Lozano, formerly the General Director of Health Information at the Ministry of Health in Mexico, played a critical role in using systematic evidence to reform Mexico's health system. He has advised countries on health sector strengthening and burden of disease studies, including Chile, Uruguay, Spain, and Colombia. He has served on advisory committees for the Global Burden of Disease 2005 Study, WHO's Health Metrics Network, and the Pan American Health Organization.



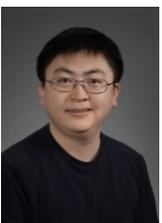
**Ali Mokdad, PhD**, leads IHME's work on health surveys. At the Centers for Disease Control and Prevention, he served in numerous positions and published groundbreaking studies on obesity, which have been cited more than 5,000 times. Dr. Mokdad managed and directed the Behavioral Risk Factor Surveillance System, the world's largest standardized telephone survey. He has received several awards, including the Global Health Achievement Award for his work in Indonesia after the 2004 tsunami and the Department of Health and Human Services Honor Award for his work on flu monitoring.



**Mohsen Naghavi, MPH, MD, PhD**, teaches at IHME in the fields of mortality, causes of death analysis, burden of disease, health systems performance assessment, and effective coverage. Dr. Naghavi spent most of his career at the Ministry of Health and Medical Education in Iran, where he headed up the Applied Research Center for Health and was in charge of disease control. He helped guide a major transformation of the country's health information system and has published influential papers on inequality in infant deaths, misclassification of cardiovascular disease mortality, and road traffic injuries.



**Gregory Roth, MD, MPH**, is an acting instructor at IHME from the Division of Cardiology at UW, where he is a senior fellow. For IHME, he studies research programs relating to US health disparities, the global burden of cardiovascular disease, and development of integrated health surveillance systems. Dr. Roth trained in internal medicine at UW and served as an attending physician in the emergency department at Harborview Medical Center, Seattle, and as a consultant physician at Whakatane Hospital, New Zealand.



**Haidong Wang, MA, PhD**, is developing an updated model life table system, which will be used to estimate deaths in every age group by sex for countries worldwide going back to 1950. The work is advancing IHME's research into child and adult mortality, and it is part of the foundation for the ambitious Global Burden of Disease 2010 Study. Prior to joining IHME, Dr. Wang worked on identifying how risk factors such as smoking are affecting long-term mortality trends in women and men.

## Affiliate faculty



**Samath D. Dharmaratne, MBBS, MSc, MD**, is the Head and Associate Professor in Community Medicine, University of Peradeniya, Sri Lanka. He was an IHME Post-Graduate Fellow. His research focuses on injury prevention, health care costing, analysis of cause of death data, noncommunicable disease prevention, and nutritional assessment. The recipient of a senior fellowship at the Postgraduate Institute of Medicine, University of Colombo, Dr. Dharmaratne was an honorary research fellow at the Institute for International Health (affiliated with the University of Sydney) and worked as a Public Health Consultant at the World Bank in Sri Lanka.



**Majid Ezzati, MEng, PhD**, is Chair in Global Environmental Health at Imperial College London. His research focuses on air pollution sources, exposure, health effects, and interventions in developing countries; risk assessment; and population health metrics methods and applications. He also conducts field research projects on air pollution and health in sub-Saharan Africa and Asia. Dr. Ezzati worked as Lead Scientist at WHO for the Comparative Risk Assessment Project, which was part of the *World Health Report 2002: Reducing Risks, Promoting Healthy Life*. Dr. Ezzati is a member of a number of expert and advisory groups in global health and global environmental health.



**Alan Lopez, MS, PhD, FAFPHM (Hon)**, leads the School of Population Health at the University of Queensland in Australia. Previously, Dr. Lopez worked at WHO in a series of technical and senior managerial posts, including Chief Epidemiologist in WHO's Tobacco Control Program and Senior Science Advisor to the Director-General. Dr. Lopez is the co-author, with Sir Richard Peto, of the Peto-Lopez method, which is widely used to estimate tobacco-attributable mortality to support policy action, and he co-authored with Dr. Christopher Murray the Global Burden of Disease Study.



**Felix Masiye, Msc, PhD**, is Head of the Department of Economics at the University of Zambia. Dr. Masiye has extensive knowledge of health systems in sub-Saharan Africa and serves on technical committees in health care financing and monitoring and evaluation at the Ministry of Health in Zambia. Dr. Masiye is a co-investigator on the Malaria Control Policy Assessment project, a collaborative project between IHME and the University of Zambia. He is also working on the IHME project Access, Bottlenecks, Costs, and Equity (ABCE) in Zambia.



**M. Nathan Nair, MPH, MD**, is a neurosurgeon at Georgetown University Hospital and a former IHME Post-Graduate Fellow. Dr. Nair was Specialist Senior Registrar of Neurological Surgery at St. George's Hospital, University of London. As a neurosurgeon, he has a special interest in traumatic injuries and diseases of the brain and spine. As a Post-Graduate Fellow, Dr. Nair studied functional health status and assisted IHME in creating health state severity weights to help generate new country-by-country estimates for the Global Burden of Disease 2010 Study.