53rd ISCEP Ten Day International Teaching Seminar, Jetwing Colombo 07 I October 13-24, 2024

Sunday 13	18 30 Onwards Inauguration ceremony			
Monday 14		Saturday 19		
08 30-09 30	AM1 Lecture CVD worldwide perspective/size of problem (DL)		AM1 Lecture Trials (AdS)	
09 30-10 30	AM2 Lecture Basic statistics 1 (SB)	09 30-10 30	AM2 Lecture Statistical modeling 3 (GH)	
10 30-11 00	Coffee	10 30-11 00	Coffee	
11 00-12 30	AM3 small groups Statistics exercise (SB)	11 00-12 30	AM3 small groups Trial paper	
12 30-13 30	Lunch	12 30-13 30	Lunch	
13 30-16 00	Free time	13 30-16 00	Social program	
16 00-16 30	Tea	16 00-16 30	"	
16 30-17 30	PM1 Lecture Patients and populations (KK)	16 30-17 30	"	
17 30-18 30	PM2 Lecture Association and causation (NP)	17 30-18 30	"	
		Sunday 20	Free day	
Tuesday 15		Monday 21		
08 30-09 30	AM1 Lecture Rates/Risks (KK)	08 30-09 30	AM1 Lecture CVD Life courses/early life (PP)	
09 30-10 30	AM2 Lecture Basic statistics 2 (SB)	09 30-10 30	AM2 Lecture Statistical modeling 4 (GH)	
10 30-11 00	Coffee	10 30-11 00	Coffee	
11 00-12 30	AM3 small groups BP risk exercises	11 00-12 30	AM3 small groups Protocol development	
12 30-13 30	Lunch	12 30-13 30	Lunch	
13 30-16 00	Free time	13 30-16 00	Free time	
16 00-16 30	Tea	16 00-16 30	Tea	
16 30-17 30	PM1 Lecture Measurement (KK)	16 30-17 30	PM1 Lecture World Heart Observatory (FP)	
17 30-18 30	PM2 Lecture Diet/Nutrition (DP)	17 30-18 30	PM2 Lecture Stroke (GH)	
Wednesday 1	6	Tuesday 22		
08 30-09 30	AM1 Lecture Cross sectional studies (PP)	08 30-09 30	AM1 Lacture Environment factors (nellution (DD)	
09 30-10 30	AM2 Lecture Basic statistics 3 (SB)		AM1 Lecture Environment factors/pollution (PP) AM2 Lecture Sample size	
10 30-11 00	Coffee	09 30-10 30	Coffee	
11 00-12 30	AM3 small groups Cross sectional paper	10 30-11 00		
12 30-13 30	Lunch	11 00-12 30	AM3 small groups protocol development	
13 30-16 00	Social program	12 30-13 30	Lunch	
16 00-16 30	"	13 30-16 00	Free time	
16 30-17 30	"	16 00-16 30	Tea	
17 30-18 30	"	16 30-17 30 17 30-18 30	PM1 Lecture Genetics and CVD/Precision medicine (BG) PM2 Lecture CVD prevention trials (FP)	
Thursday 17		Wednesday 23		
08 30-09 30	AM1 Lecture Case control studies (NP)	08 30-09 30	AM1 Lecture Health systems/Implementation (DP)	
09 30-10 30	AM2 Lecture Statistical modeling (GH)	09 30-10 30	AM2 Lecture Metanalysis and summary (SB)	
10 30-11 00	Coffee	10 30-11 00	Coffee	
11 00-12 30	AM3 small groups Case control paper	11 00-12 30	AM3 small groups Protocol development	
12 30-13 30	Lunch	12 30-13 30	Lunch	
13 30-16 00	Free time	13 30-16 00	Free time	
16 00-16 30	Tea	16 00-16 30	Tea	
16 30-17 30	PM1 Lecture Smoking (DP)	16 30-17 30	PM1 Lecture Population BD reduction: a worked example (DL/NP)	
17 30-18 30	PM2 Lecture Lipids (NP)	17 30-18 30	PM2 Lecture Global CVD policy and prevention (DL/NP)	
Friday 18		Thursday 24		
08 30-09 30	AM1 Lecture Longitudinal studies (KK)	08 30-09 30	Protocol presentation (Fellows)	
09 30-10 30	AM2 Lecture Statistical modelling 2 (GH)	09 30-10 30	Protocol presentation (Fellows)	
10 30-11 00	Coffee	10 30-11 00	Coffee	
11 00-12 30	AM3 small groups Cohort paper	11 00-12 30	Protocol presentation (Fellows)	
12 30-13 30	Lunch	12 30-13 30	Lunch	
13 30-16 00	Free time	13 30-16 00	Free time	
16 00-16 30	Tea	16 00-16 30	Tea	
16 30-17 30	PM1 Lecture Blood pressure (NP)	16 30-17 30	Discussion (Faculty)	
17 30-18 30	PM2 Lecture Diabetes / Obesity (DP)	17 30-18 30	Evaluation and Graduation	

Organised by









Teaching faculty 2024



Professor Shrikant Bangdiwala (SB)
Department of Health Research
Methods, Evidence and Impact
Faculty of Health Sciences, McMaster
University, Canada



Professor H Asita De Silva (AdS) Clinical Trials Unit Department of Pharmacology Faculty of Medicine, University of Kelaniya, Sri Lanka



Professor George Howard (GH)
Department of Biostatistics, University of Alabama at Birmingham, USA



Professor Kay-Tee Khaw (KK) Emeritus Professor of Clinical Gerontology University of Cambridge, United Kingdom



Professor Darwin Labarthe (DL)
Professor of Preventive Medicine
Feinberg School of Medicine, Northwestern
University, USA



Professor Fausto J Pinto (FP)
Professor of Cardiology,
Santa Maria University Hospital
Lisbon School of Medicine, University of Lisbon,
Portugal



Professor Neil Poulter (NP)
Professor of Preventive Cardiovascular
Medicine, Imperial College London,
United Kingdom



Professor Dorairaj Prabhakaran (DP) Executive Director, CCDC, India Distinguished Professor, Public Health Foundation of India, New Delhi, India



Dr Bamba Gaye Department of Medical Physiology Cheikh Anta Diop University Dakar, Senegal



Professor Poornima Prabhakaran (PP_ Deputy Director & Senior Research Scientist, CCDC, New Delhi, India

53rd ISCEP Ten Day International Teaching Seminar Teaching faculty 2024



Professor Shrikant I. Bangdiwala
Department of Health Research Methods, Evidence and Impact
Faculty of Health Sciences
McMaster University
Canada

Dr Bangdiwala is currently Director of Statistics at the Population Health Research Institute (PHRI), and Professor in the Department of Health Research Methods, Evidence and Impact at McMaster University. He is *Professor Emeritus* of the Department of Biostatistics, Gillings School of Global Public Health, University of North Carolina at Chapel Hill. He holds adjunct faculty appointments at Universidad de Chile (Santiago), University of South Africa (Pretoria), Christian Medical College (Vellore, India), and Indian Institute of Technology (Delhi). He is an elected member of the International Statistical Institute.

Dr Bangdiwala focuses his expertise on the statistical aspects of longitudinal multiple-centre experimental and observational studies. As lead statistician on several NIH (USA) and CIHR (Canada) funded randomized controlled trials and longitudinal cohort studies for over 43 years, he has had the experience of collaborating with other scientists in designing, conducting, analysing and interpreting epidemiologic and clinical studies.

His main clinical areas of application are in gastrointestinal (GI) and cardiovascular (CV) diseases. He has unique experience in studying cardiometabolic risk factors as they change in children and adolescents through puberty, in studying functional GI disorders in adults, and in injury and trauma research. As Director of Statistics at PHRI, he currently oversees over 30 ongoing large randomized controlled trials of cardiovascular diseases in adults.

His statistical research has focused on methods for assessing agreement, and on understanding the sources of heterogeneity in research data. He is known as the creator of the "agreement chart" for displaying categorical discordance and concordance information. He also is well known for his international teaching of statistical concepts to non-statisticians.



Professor H Asita De Silva Department of Pharmacology Faculty of Medicine, University of Kelaniya Sri Lanka

Professor De Silva is a Clinical Pharmacologist and has held many positions in academic medicine over the last 30 years. At present, he is the Senior Professor of Pharmacology in the University of Kelaniya. He also heads the Clinical Trials Unit he founded in the same institution in collaboration with the Clinical Trial Service Unit, University of Oxford. He is a clinical trialist with over 20 years of research experience, especially in cardiovascular research and multi-country randomized trials including community-based hypertension trials. He has provided academic leadership to numerous international randomized trials in hypertension and stroke including TRIUMPH, COBRA-BPS and TRIDENT and serves on many trial steering committees. In addition, he has designed and conducted many studies on important healthcare problems in Sri Lanka including snakebite and poisoning to develop inexpensive treatment strategies.

His research interests have focused on neglected tropical diseases and non-communicable diseases with a major focus on developing cost-effective and scalable therapeutic interventions. Prof. de Silva has more than 80 publications in scientific journals such as the New England Journal of Medicine, The Lancet, Nature Medicine and JAMA. He is a recipient of many research awards including President's awards for scientific publication on numerous occasions. He is also a member of the editorial board of the Journal of the American Heart Association. In 2019, he was awarded the titular honour 'Vidya Jyothi', Sri Lanka's highest award for science.



Professor George Howard
Department of Biostatistics
University of Alabama at Birmingham
Alabama, USA

Dr. George Howard is an Emeritus Distinguished Professor of Biostatistics at the University of Alabama at Birmingham. He received his training in biostatistics from the University of North Carolina at Chapel Hill. His career has a dual focus of observational studies in cardiovascular epidemiology (with recent emphasis on understanding and reducing disparities in stroke) and in coordinating centers for multicenter randomized clinical trials.

He was the initial Principal Investigator for 19 years and remains one of several for the Reasons for Geographic And Racial Differences in Stroke (REGARDS) project, a U.S. national study which developed a cohort of 30,239 people to provide insights about excess stroke mortality among African Americans and Southerners.

Regarding clinical trials, he was the initial PI of the Statistical and Data Management Center for the Carotid Revascularization for Primary Prevention of Stroke Trial (CREST-2), a pair of randomized trials, each with an anticipated sample size of 1,240 that assess the difference: A) between carotid endarterectomy versus intensive medical management and B) between carotid stenting and intensive medical management. He is also the initial PI of the Statistical and Data Coordinating Center for the Coordinated, Collaborative, Comprehensive, Family-based, Integrated, and Technology-enabled Care (C3FIT), a cluster-randomized trial assessing the efficacy coordination of post-stroke care.



Professor Kay-Tee Khaw Emeritus Professor of Clinical Gerontology University of Cambridge United Kingdom

Kay-Tee Khaw trained in medicine in Girton College, University of Cambridge, and St. Mary's Hospital (now Imperial College) and in epidemiology at the London School of Hygiene and Tropical Medicine, with subsequent clinical and academic posts in the University of London and University of California San Diego. She is Life Fellow at Gonville and Caius College, University of Cambridge and Emeritus Professor of Clinical Gerontology, School of Clinical Medicine, University of Cambridge UK.

Her research interests are the maintenance of health in later life and the causes and prevention of chronic diseases including cancer and cardiovascular disease with a focus on nutrition and hormones. She was principal investigator in the European Prospective Investigation in Cancer in Norfolk, part of a te- country half million participant research collaboration over three decades. She has >1400 peer reviewed publications, H Index 174 and is a highly cited researcher (https://research.com/u/kay-tee-khaw). She has chaired or been a member of scientific panels and committees in the UK for the MRC, Wellcome Trust and Cancer Research UK and internationally for the Academy of Finland, Swiss National Science Foundation, Netherlands Organisation for Health Retencountry World Economic Forum Global Council on Challenges of Ageing. She has served as Trustee for Age UK (now Age UK), British Heart Foundation and Kennedy Memorial Trust and is past Chair of the International Society for Cardiovascular Disease Epidemiology and prevention. She is a fellow of the Academy of Medical Sciences UK, member of Academia Europaea and was awarded Commander of the British Empire for contributions to medicine.



Professor Darwin Labarthe Professor of Preventive Medicine Feinberg School of Medicine Northwestern University, Chicago, Illinois, USA.

Dr. Labarthe and was named Professor in Preventive Medicine at the Feinberg School of Medicine at Northwestern University after retiring in July 2011 from his position as Director of the Division of Heart Disease and Stroke Prevention with the Centers for Disease Control and Prevention He received the AB degree in history from Princeton University in 1961; the MD degree from the College of Physicians and Surgeons, Columbia University, in 1965; and the MPH and PhD degrees in epidemiology from the School of Public Health, University of California, Berkeley, in 1967 and 1974, respectively. His postgraduate medical training was in internal medicine (Washington University, St. Louis) and general preventive medicine (Berkeley), in which he was certified by the American Board of Preventive Medicine in 1970. His professional activities over three decades were based primarily in the University of Texas School of Public Health, Houston (1970–1973 and 1977–1999). In January 2000 he joined the Centers for Disease Control and Prevention. There he led the development and implementation of the long-range public health strategic plan, A Public Health Action Plan to Prevent Heart Disease and Stroke.

Dr. Labarthe's research and teaching activities have been primarily in the area of cardiovascular diseases and their prevention, especially the early development of the cardiovascular risk factors in childhood, adolescence, and early adulthood. He was founder and for 25 years directed the U.S. Ten-Day Seminars on the Epidemiology and Prevention of Cardiovascular Diseases and is Co-Director of the International Ten-Day Teaching Seminars on Epidemiology and Prevention of Cardiovascular Diseases, now in its 46th year. He has published more than 175 research articles and book chapters, as well as the textbook, Epidemiology and Prevention of Cardiovascular Diseases: A Global Challenge, 2nd Ed (Jones & Bartlett Publishers, 2011). Dr. Labarthe was recognized with the National Forum for Heart Disease and Stroke Prevention's "Heart Healthy Stroke Free" award. The award is presented annually to an individual and group in the field of public health whose work embodies the recommendations of the Action Plan. "Anyone who has been active in the cardiovascular and stroke prevention community knows the name Darwin Labarthe," said Thomas Pearson, MD, MPH, PhD, and Past Chairman of the National Forum's Board of Directors. "For years, Dr. Labarthe has served as a voice for heart disease and stroke prevention. Regardless of the job he holds, he has kept heart disease and stroke prevention firmly in the forefront."



Professor Fausto J Pinto Professor of Cardiology, Santa Maria University Hospital Lisbon School of Medicine, University of Lisbon Lisbon, Portugal

Professor Pinto received his MD and PhD from the Lisbon University Medical School and completed fellowships at Santa Maria University Hospital (Lisbon, Portugal), and Stanford University Medical School (CA, USA), where he was also Clinical Attending in the Echocardiography laboratory.

He is Full Professor of Cardiology/Medicine alongside serving as the Head of the Cardiovascular Department of Santa Maria University Hospital and President of Cardiovascular Center of University of Lisbon (CCUL). He was the Dean of the Faculty of Medicine of the University of Lisbon (2015-22) as well as National Coordinator of the Medical Schools Council (2018-2020), President of the Executive Board of the Lisbon Academic Medical Centre (2019-21).

Professor Pinto was the President and founder of the European Association of Echocardiography (2003-2004), President of the European Society of Cardiology (2014-2016) and President of the World Heart Federation (2021-22). He is a Fellow and Gold Medal of the European Society of Cardiology (FESC), European Association of Cardiovascular Imaging (FEACVI), American College of Cardiology (FACC), American Society of Angiology (FASA), Society for Cardiac Angiography and Interventions (FSCAI) and the American Society of Echocardiography (FASE) and honorary member of several international societies and academies.

Prof. Pinto has published over 700 papers. He was the Editor in Chief of the Portuguese Journal of Cardiology and is currently Consulting Editor and Member of the Advisory and Editorial Board of several peer-reviewed journals. Main areas of interest are global health, digital health, ischemic heart disease, heart failure, anticoagulation, and cardiovascular imaging, with particular interest in the use of ultrasound in cardiology and has pioneered the use of intravascular ultrasound in the study of graft atherosclerosis.



Professor Neil Poulter
Professor of Preventive Cardiovascular Medicine
Imperial College London,
London, United Kingdom

Professor Neil Poulter qualified at St Mary's Hospital, London, in 1974, following which he trained in General Medicine. He then spent 5 years in Kenya co-ordinating a collaborative hypertension research programme at the Wellcome Trust Research Laboratories in Nairobi.

On his return to the UK in 1985 he gained an MSc in Epidemiology with distinction at the London School of Hygiene and Tropical Medicine. Following this he was Co-PI of the WHO Oral Contraceptive case-control Study at University College London Medical School.

In 1997 he was appointed Professor of Preventive Cardiovascular Medicine at Imperial College London, where he is currently co-Director of the International Centre for Circulatory Health and Founding Director of the Imperial Clinical Trials Unit. He is an Honorary Consultant Physician and Epidemiologist at the Peart-Rose (CVD Prevention) Clinic based at Hammersmith Hospital, London, where he is actively involved in the treatment of patients with hypertension and related problems.

He was President of the British Hypertension Society from 2003-2005 and President of the International Society of Hypertension (2016-2018). In 2008, he was elected as one of the Inaugural Senior Investigators of the NIHR and also elected as a fellow of the Academy of Medical Sciences in 2009.

He has contributed chapters to several major textbooks and published over 650 papers in peer-reviewed medical journals, including co-authoring several sets of national and international guidelines. Professor Poulter was identified as being among the top 1% most cited academics in clinical medicine in 2014 (Thomson Reuters Highly Cited Researcher report) and among the top 0.1% most cited researcher between 2008-2018 (Web of Science Group Highly Cited Researcher 2019, 2020 and 2021 report).

He has played a senior management role in several international trials including the ASCOT, ADVANCE, EXSCEL, DEVOTE, LEADER and CREOLE trials; other research activities include the optimal investigation and management of essential hypertension and dyslipidaemia; the association between birth weight and various cardiovascular risk factors; the cardiovascular effects of exogenous oestrogen and progesterone; the prevention and aetiology of type 2 diabetes and abdominal aortic aneurism; and ethnic differences in cardiovascular disease. He is the Chief Investigator of the May Measurement Month, an annual global blood pressure screening campaign initiated by the International Society of Hypertension.



Professor Dorairaj Prabhakaran Executive Director, Centre for Chronic Disease Control, India Distinguished Professor, Public Health Foundation of India New Delhi, India

Professor Dorairaj Prabhakaran, educated at Bangalore Medical College (MBBS), the All-India Institute of Medical Sciences (MD: Internal Medicine and DM: Cardiology) and McMaster University Canada MSc: Health Research Methodology), is an eminent cardiologist, epidemiologist and academician of global repute. He is currently Executive Director, Centre for Chronic Disease Control, a WHO collaborating centre for the Southeast Asia region and an ICMR Collaborating Centre of Excellence. He is also a Distinguished Professor at the Public Health Foundation of India (PHFI) and holds professorships at London School of Hygiene & Tropical Medicine (LSHTM) and Emory University, Atlanta, USA. In addition, he is a Visiting Scientist at the Harvard School of Public Health and an International Fellow at the Population Research Institute, McMaster University.

Prof. Prabhakaran has more than 650 publications in scientific journals such as the New England Journal of Medicine, The Lancet, Circulation, British Medical Journal, Nature, JAMA, etc. and has an H-Index of 112. He has been listed as the topmost researcher in Medicine in India in terms of publications for the years 2009-2014 by Scopus and Department of Science & Technology, Government of India and recently listed among the top 2% of World's researchers by the Stanford University with a very high ranking in Medicine and Cardiology. Recognising his contribution to Indian Science, he was elected as a fellow of the Indian National Science Academy. He has won several awards and accolades, including the Quality Champion by the Quality Council of India. He was conferred the Doctor of Science (Honoris Causa) by the University of Glasgow recently.

Following a very active career involving patient care and teaching at the All-India Institute of Medical Sciences in New Delhi, he established large population-based research projects which have provided major insights in diverse domains. Briefly, his large body of work demonstrated: the relationship of air pollution to several chronic diseases in India using an innovative high-resolution exposure model technique involving machine learning and multiple data sources; the complex interplay of genetic and environmental drivers of chronic diseases in the rapidly urbanizing populations in India; and the higher risk of heart diseases among the poor and low- education groups underscoring the need to provide not just social safety nets but springboards for the poor to build a healthy India.

In addition, Prof Prabhakaran is leading several projects to develop low cost, context-specific solutions to enhance the quality of therapeutic and preventive care for chronic diseases in India. To enhance access to chronic disease care, he is spearheading research on low-cost, mobile-phone-based solutions to provide personalized patient management solutions. His work also involves improving quality of care and is evaluating several models of care, including simple audit/feedback loops to physicians and Yoga-care in cardiac rehabilitation, the trial of a cardiovascular polypill in secondary prevention and programs for building the capacity of primary care physicians in the field of chronic diseases. Prof Prabhakaran's contribution to capacity building in chronic disease health research and training is exemplary. He is an exceptional mentor of doctoral, post-doctoral and physician-scientists nationally and internationally, many of whom have become leaders in heart disease research.



Bamba Gaye Research Scientist Department of Medical Physiology Cheikh Anta Diop University Dakar, Senegal

Bamba Gaye is a Research Scientist in preventive cardiology at the Department of Medical Physiology at Cheikh Anta Diop University in Dakar, Senegal. He is also an Adjunct professor at Biomedical Informatics, Emory School of Medicine in Atlanta, Georgia, USA.

He trained in biology and specialized in pharmacology and bioinformatics (MSc). He pursued advanced studies in epidemiology and biostatistics, focusing on genomic and genetic analysis, earning both an MPH from Paris-Saclay University, Paris, France and a PhD from the university University Paris Descartes, Paris, France. Thereafter, while pursuing his research carrier, he trained in medicine. Earning his Bachelor of Medicine/Bachelor of Surgery from the university University Paris Descartes, Paris, France and pursued MD from the Cheikh Anta Diop University, Dakar, Senegal.

His research interest lies in the genomic and biomarker revolution and its impact on cardiovascular epidemiology. His research work is focused on primordial prevention and precision prevention: providing personal advice on healthy living based on individuals' backgrounds and environments. In 2018, he co-founded a community of epidemiologists, cardiologists, pharmacologists, researchers, and statisticians from sub-Saharan Africa, France, and the United States.

In September 2023, he led and organized an international conference - The Dakar Call - to unite academia, global health organizations, funding bodies, higher education institutions, health ministries, and researchers to address the pressing challenges of non-communicable diseases (NCDs) in Africa.

Dr. Gaye is dedicated to developing the Alliance for Medical Research in Africa (AMedRA), a network of 33 countries aiming to build research capacity, promote innovative health solutions, and ensure that Africa's health research serves the needs of its people.



Professor Poornima Prabhakaran
Director of the Centre for Health Analytics Research and Trends (CHART)
Trivedi School of Biosciences, Ashoka University
Deputy Director and Senior Research Scientist,
Centre for Chronic Disease
New Delhi, India

Dr. Poornima Prabhakaran is Director of the Centre for Health Analytics Research and Trends (CHART) at the Trivedi School of Biosciences, Deputy Director and Senior Research Scientist, Centre for Chronic Disease Control. She was earlier Director, Centre for Environmental Health at the Public Health Foundation of India.

After graduating from Bangalore Medical College, she pursued her Master's in Epidemiology at the London School of Hygiene and Tropical Medicine and PhD in Social Medicine from the University of Bristol, UK. Her earlier research focused on a life course approach to chronic diseases and included research in the New Delhi Birth Cohort, Andhra Pradesh Children and Parents' Study and Consortium of Health Oriented Research in Transitioning Societies (COHORTS).

She has recently established a growing portfolio of work in environmental health research in India spanning epidemiological studies on air pollution, climate change, chemical exposures, water, sanitation and hygiene as well as children's environmental health. At the Centre for Chronic Disease Control, she also leads work on sustainable health care in India working closely with the Ministry of Health and Family Welfare, Government of India. Poornima has worked extensively with national and sub-national programs as well as with UN organisations including WHO, UNDP and UNEP and convenes a Consortium for Climate and Health (CONCH) in Southeast Asia.

President, Sri Lanka College of Cardiology



Dr Tanya Pereira Consultant Cardiologist Colombo South Teaching Hospital Sri Lanka

Dr Pereira is the current President of the Sri Lanka College of Cardiology. She graduated from the University of Colombo, Sri Lanka. She underwent cardiology training at the National Hospital of Sri Lanka and received the gold medal in 2004 for overall best performance in the MD programme. She subsequently completed an Interventional Fellowship in Cardiology at Alfred Hospital Melbourne and has been working as a specialist cardiologist since 2008. She has presented at many international conferences and been part of the faculty of EuroPCR, Singapore Live, APVIC, India Live, TCTAP and APSC ESC. She has also performed a live coronary intervention for Singapore Live 2024.

Her special interest are complex coronary interventions, IVUS, rotational atherectomy and peripheral interventions.