



**MARK E. COOPER AO, MB BS, PhD, FRACP, FAHMS**

**Chief Scientific Officer, Baker IDI Heart & Diabetes Institute, Melbourne, Australia**  
**Director, JDRF Centre for Diabetes Complications, Melbourne, Australia**

Mark Cooper is the inaugural Head of the Department of Diabetes, Central Clinical School, Monash University.

He was previously the Chief Scientific Officer of the Baker IDI Heart & Diabetes Institute as well as the Director of the Juvenile Diabetes Research Foundation Centre (JDRF) for Diabetes Complications. He is a trained endocrinologist with an appointment at the co-located Alfred Hospital. Dr Cooper studied medicine at the University of Melbourne and then completed his physicians training at the Austin Hospital as well as his PhD under Dr George Jerums and Professor Austin Doyle in the University of Melbourne, Department of Medicine, Austin Hospital. Dr Cooper has successfully competed for a large number of peer reviewed grants over the last 15 years from a range of organizations including not only JDRF but also the National Health & Medical Research Council of Australia, National Institutes of Health, National Heart Foundation of Australia, Diabetes Australia and Kidney Health Australia. In 1999, Dr Cooper was awarded the Eric Susman prize from the Royal Australasian College of Physicians for his research in the field of renal and vascular complications of diabetes. In 2005, he was awarded the Australian Diabetes Society (ADS) Kellion Award for outstanding contribution to diabetes research in Australia. In 1999, he was awarded a Centre Grant from JDRF which was subsequently renewed in 2003. He is a previous recipient of a scholars award from the JDRF. This work was further supported by a 5 year Australia Fellowship awarded by NHMRC in 2009. Dr Cooper is currently Co-Chair of the JDRF Medical Science Review Committee (Complications Panel). He is regularly invited to international meetings and has over 500 peer reviewed publications. Dr Cooper was the 2016 recipient of the Claude Bernard Award from the European Association for the Study of Diabetes and in 2017 the Edwin Bierman Award from the American Diabetes Association. He received an Order of Australia (Officer) in 2017



Professor Kyung Mook Choi, M.D.

Office Address: Division of Endocrinology and Metabolism,  
Korea University Guro Hospital,  
148, Gurodong-Ro, Guro-Gu, Seoul, 152-703, South Korea

Research field: Diabetes, obesity (adipokines), and sarcopenia

Career	2004-2009.2	Associate professor, Korea University
	2005.8-2006.8	Research fellow of University of Texas
	2008.9-	Chief of division of Endocrinology and Metabolism
	2009.3-	Professor, Korea University

Award	2005	Young Investigator Award (Korean Diabetes Association)
	2007	Principal Research Award (Korean Endocrine Society)
	2009	Munsuk Research Award (Korean Society for the Study of Obesity)
	2015	Numgok Research Award (Korea Endocrine Society)

Former Chief Editor of “Journal of Obesity and Metabolic Syndrome”  
(Official journal of Korean Society for the Study of Obesity: KSSO)  
Former Associate Editor of “Diabetes Metabolism Journal”  
(Official journal of Korean Diabetes Association: KDA)



**Professor Lee-Ming Chuang**

POSITION TITLE: Distinguished Professor, National Taiwan University, Taipei, Taiwan;  
Attending Physician, Department of Internal Medicine, National Taiwan University  
Hospital, Taipei, Taiwan

**A. PERSONAL STATEMENT:**

**1. Education and Professional Background**

I am a physician scientist by training with both MD and PhD degree from the National Taiwan University College of Medicine in 1978 and 1987 respectively. After clinical training in Internal Medicine and endocrinology fellowship training in the National Taiwan University Hospital, I started my thesis work in elucidating the molecular mechanism of insulin action in an insulin sensitive hepatoma cell line J-5. I studied with Dr. Ronald Kahn at the Department of Cellular Physiology, Joslin Diabetes Center and the Harvard Medical School as visiting scholar and visiting lecturer. At Joslin Diabetes Center, I published extensively together with Dr. Ronald Kahn in the fields of insulin action and signal transduction by using *Xenopus* oocytes as a model system. I was recruited by National Taiwan University College of Medicine in 1988 as an Associate Professor and promoted to full Professor in 1995. With active research activities and achievement, I was appointed as a Distinguished Professor at the National Taiwan University College of Medicine since in 2007.

**2. Research Focus**

As a physician scientist, I conducted both basic and clinical studies primarily involving research to understand the pathophysiology of obesity and related metabolic diseases, including diabetes, hypertension and atherosclerotic disorders. To explore a pandemic health issue of obesity and diabetes, I hypothesized that the growing of diabetes in our population would stem from our youth when exposed to both genetic susceptibility and environmental factors. We, for the first time, conducted a nation-wide mass urine

survey to search for diabetes in near 3 million school children aged 6-18 every year during 1993-1999. After 3 years of follow-up, we confirmed the classification of diabetes in children. We are among the first to show incident diabetes in this age is type 2 diabetes rather than type 1 diabetes as previously thought. The most important risk factors are obesity and a positive family history. Based on this study finding, our lab devoted to study a wide variety of molecular genetic studies, clinical pathophysiological studies, and translational studies of obesity, insulin resistance and diabetes. We also systemically evaluated the different mode of treatment for obesity/diabetes, in terms of development of a new resistance starch fiber food, potential new therapeutic targets, and weight-reducing surgery for helping people suffering from these metabolic disorders. Being recognized with more than 200 publications, I received many awards including the most prestigious awards from the National Science Council and Ministry of Education in Taiwan.

#### **B. POSITIONS AND HONORS:**

1988-1995 Associate Professor, Department of Internal Medicine, National Taiwan University College of Medicine, Taipei, Taiwan

1995- Present Professor, Department of Internal Medicine, National Taiwan University College of Medicine, Taipei, Taiwan

2007- Present Distinguished Professor, National Taiwan University College of Medicine, Taipei, Taiwan

1998 Outstanding Research Awards of the Endocrinology Association of the R.O.C.

1999-2001 Outstanding Research Awards, National Science Council, Taiwan

2002-2004 Outstanding Research Awards, National Science Council, Taiwan

2004 Y.Z. Hsu Scientific Chair Professor (Biotechnology Category), Taiwan

2005 Outstanding Research Award for Excellence in Medical Research, National Taiwan University Hospital, Taipei, Taiwan

2006 The 16<sup>th</sup> Wang Ming-Ning Outstanding Award for Health, Taiwan

2007 Excellent Technology Transfer Award, National Science Council, Taiwan

2010-2012 Outstanding Research Awards, National Science Council, Taiwan

2011 Outstanding Research Award, National Taiwan University, Taiwan

2012 Outstanding Research Award, National Taiwan University, Taiwan

2012 The 56<sup>th</sup> Academia Award of Biology, Agriculture and Medicine, Ministry of Education, Executive Yuan, Taiwan

2012 Elected Fellow, North American Association for the Study of Obesity (NAASO)

2015 National Chair Professorship for Biology, Agriculture and Medicine, Ministry of Education,

Executive Yuan, Taiwan

2015 Chair Professor, National Taiwan University

## **C. Contributions to Science**

### **1. Clinical epidemiology of Obesity and type 2 diabetes in childhood**

My earlier work on nation-wide mass urine survey leading to national surveillance of type 2 diabetes contributed to our scientific community a lot about the early onset of childhood obesity together with a strong genetic disposition lead to onset of type 2 diabetes, once considered an adult onset disease. I continued my interest in characterizing the risk factors of childhood obesity, insulin resistance, type 2 diabetes, metabolic syndrome, and cardiovascular diseases.

### **2. Genetic studies of obesity, diabetes, and coronary artery disease**

We had been successfully employed candidate gene, and genome-wide linkage and genome-wide association study (GWAS) to elucidate the genetic architecture of phenotypic traits and metabolic diseases, including obesity and diabetes related traits. In genome-wide linkage studies, we had identify a hot region on chr 20 in Han Chinese where many of the metabolic traits showed significant linkage. Further work after linkage, we also took one step further to identify responsible gene (such as previously stated RYR3 in adiponectin level in *Endocrinology* 2013). We also conducted validation and replication studies for the SNPs and genes discovered from the GWAS. We also joined many national and international consortia to expand our capacity in molecular genetic studies in field of obesity and type 2 diabetes by using GWAS approach. I played a role in the SAPPHIRe and the TaiChi consortium studies based in Taiwan, and the Asian Genetic Epidemiology Network Type 2 Diabetes (AGEN-T2D) Consortium.

### **3. Surgical Intervention of morbid obesity to understand effect and mechanism of pathophysiology of obesity and related metabolic dysfunctions**

We are among the first to study metabolic effects of Roux-en-Y gastric bypass (RYGB) surgery on metabolic outcomes. In 2001 we publish the results showing body weight reduction following surgery was associated with an improvement in systemic insulin sensitivity (a high citation paper *J Clin Endocr Metab* 86:3815-3819 with a total cite of 746). Since then, we conducted a series of clinical trials, in either domestic trial or

international collaborative trial (the Diabetes Surgery Study), to compare different types of weight reducing surgeries on metabolic outcomes. We also identified variables that predicts clinical outcomes after surgery. We also documented a clinical beneficial effect of RYGB while notifying an increased in some risk of nutritional defect and surgical complications. Thus, weight-reducing surgery remains a useful approach for a subset of obese type 2 diabetes individuals.

#### **4. Adipogenesis as a model to understand pathophysiology of obesity and related metabolic disorders**

Combining in vitro model systems, we demonstrated the genes that are differentially expressed during adipogenesis by using cultured 3T3-L1 adipocytes, indeed contributed to obesity and related metabolic diseases. To substantiate the role of the identified genes, we expand our studies in animal models and human subjects to provide biological validations through correlating tissue expression with clinical phenotypes and molecular genetic studies.

#### **Complete list of Published Work in MyBibliography:**

<http://www.ncbi.nlm.nih.gov/pubmed/?term=chuang%20lm>

#### **D. Research Support**

##### **Ongoing Research Support**

1. Characterization of metabolic phenotypes in the PGR2 knockout mice (from the National Science Council, Taiwan)
2. Characterization of metabolic phenotypes in the PGR3 knockout mice (from the National Science Council, Taiwan)
3. Characterization of metabolic phenotypes in the RRB1 knockout mice (from the National Science Council, Taiwan)
4. Characterization of metabolic phenotypes in the ALDH2 knockout (with rs671 knockin) mice (from the National Science Council, Taiwan)
5. Diabetes Surgery Study (a grant partially supported by the National Institute of Health, US)

##### **Completed Research Support**

1. Molecular genetics studies of type 2 diabetes mellitus
2. Translational studies of the RYR3 genes on adiponectin expression and systemic insulin sensitivity and inflammation
3. Functional genomics studies- focus on metabolic syndrome



**ELIZABETH PAZ-PACHECO, MD**

**Dr. Elizabeth Paz-Pacheco is Professor, University of the Philippines (UP) College of Medicine, Section of Endocrinology, Department of Medicine.**

**She did her Endocrine Fellowship training at the UP-PGH, Joslin Diabetes Center, Harvard Medical School in Boston, Massachusetts and at the Mount Sinai Medical Center, New York City.**

**She is the Past President of the Philippine Society of Endocrinology and Metabolism, the Philippine Association for the Study of Overweight and Obesity and the Philippine Lipid and Atherosclerosis Society.**

**She was awarded the Most Outstanding Researcher by the UP Medical Alumni Society, December 2016, the Most Distinguished Researcher by the Philippine College of Physicians for 2008-2009, the Faculty Centennial Grant by the University of the Philippines June 2009 and the Andres Cuyegkeng Professorial Chair of the University of the Philippines Manila in 2014 for exemplary training, service and teaching performance.**

**Her original researches, funded by the International Diabetes Federation BRIDGES, the Philippine Council for Health R&D, and the University of the Philippines, apply to diabetes education, prevention and management. Her collaborations include research on the genetics of diabetes. She continues to be principal investigator in major international drug trials. In both Philippine and Asian scene, she has been part of the technical working group for the National Nutrition and Health Survey, national guidelines, and Asian guidelines on diabetes, lipids, obesity and thyroid conditions. She is Faculty and Committee Member of the Molecular Diabetes in Asia (MDIA) founded for the Asian region, beginning 1999. She initiated and mentored researches at the Section of Endocrinology, Diabetes and Metabolism to encourage fellows and young graduates, and in national specialty organizations: Philippine Society of Endocrinology, Diabetes and Metabolism; Philippine Association for the Study of Overweight and Obesity; and Philippine Lipid and Atherosclerosis Society.**

**As the editor-in-chief of the Journal of the ASEAN Federation of Endocrine Societies for the recent five years she has led the Asian editorial team in reinvigorating JAFES into an indexed peer-reviewed journal. She is also a member of the Editorial board of Diabetes and Metabolism Journal (DMJ) and is a peer reviewer for Acta Medica Philippina.**

**She is an active consultant endocrinologist at The Medical City.**

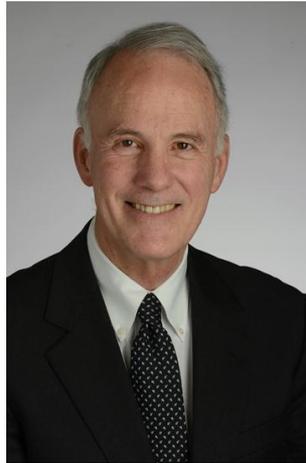


**Professor Paolo Pozzilli**

Prof Paolo Pozzilli is Full Professor of Endocrinology and Metabolism at University Campus Bio-Medico in Rome where he is Director of the Unit of Endocrinology & Diabetes and of the Post-Graduate School of Endocrinology & Metabolic Diseases. He is the coordinator of the PhD Program in Integrated Biomedical Sciences and Bioethics. He is also Professor of Diabetes at the Blizard Institute, St. Bartholomew's and the London School of Medicine, Queen Mary University of London.

His main research activities include the study of the pathogenesis of type 1 diabetes and its complications, the introduction of novel treatments and the application of technology to the management of this condition. He participated in the design of algorithms for treatment of type 2 diabetes and is P.I. for Italy in several clinical trials in diabetes. For his research he is funded at present by the Juvenile Diabetes Research Foundation, the EASD Foundation, the Italian Ministry of University and the Italian Ministry of Health. He is the recipient of several awards including among others, the Andrew Cudworth Memorial Award by Diabetes UK, the GB Morgagni Young Investigator Award by the Society of Metabolism, the Marie Kugel Award by the Juvenile Diabetes Research Foundation International, the Celso Prize by the Italian Diabetes Society and the Joseph Hoet Memorial Award for his contribution to the field of type 1 diabetes prevention.

Currently Editor of Diabetes Metabolism Research & Review, he has published 454 papers (Pubmed) in the area of diabetes and related fields.



**JOHN M. MILES, MD**

Dr. Miles is Professor of Medicine, University of Kansas School of Medicine, Kansas City, Kansas. He is a practicing endocrinologist with interests in diabetes, obesity, lipid disorders and hospital nutrition support. His research focuses on lipid fuel metabolism; he is particularly interested in the role of hyperlipolysis in the pathogenesis of diabetes, hypertension, dyslipidemia and cardiovascular disease and also in mechanisms of storage of fatty acids from triglyceride-rich lipoproteins. He has a special expertise in the use of isotopes in metabolic research in humans. He is supported by grants from the National Institutes of Health and the pharmaceutical industry.



Professor Karen Lam is Chair Professor in Medicine, Faculty Board Chairman of Li Ka Shing Faculty of Medicine, HKU, Clinical Director of the State Key Lab of Pharmaceutical & Biotechnology, and Chairman of the Clinical Trial Centre at the University of Hong Kong. She is also the Chief of Endocrinology and Metabolism at the University Department of Medicine, Queen Mary Hospital.

Professor Lam was the Founding President of Diabetes Hongkong (Honorary President since 2014), a past president of the Hong Kong Society of Endocrinology, Metabolism and Reproduction, and past Chairman of two specialty boards of the HK College of Physicians – Advanced Internal Medicine and Endocrinology, Diabetes & Metabolism. She is currently the associate editor/editorial board member of several international peer-reviewed journals in diabetes and endocrinology.

Professor Lam has published extensively on clinical, basic and translational research in diabetes and endocrinology. Her current research focuses on the role of adipocyte derived hormones in diabetes and other obesity-related cardiometabolic disorders. Her team has established two large cohorts, the CRISPS and HKW Diabetes Registry, for prospective studies on the genetic and environmental determinants of diabetes and its related medical problems. More recently she has spearheaded the establishment of the HKU Phase 1 Clinical Trial Centre at the Queen Mary Hospital.



**Richard Donnelly**

**M.D, Ph.D, FRCP (Lon, Edin, Glas), FRACP, FBPhS**

Richard Donnelly is Professor of Medicine in the University of Nottingham, UK, and Hon Consultant Physician in the Derby Teaching Hospitals NHS Foundation trust (DHFT). He was Associate Dean (2002-2007) and Head of School (2007-2014) responsible for establishing Nottingham's 4-year Graduate-Entry Medicine (GEM) programme. He recently completed a 3-year term as Divisional Medical Director (Medicine & Cancer) in the 1200-bed teaching hospital in Derby. He is currently a Member of College Council at the Royal College of Physicians of Edinburgh, and was recently elected a Fellow of the British Pharmacological Society. His clinical and research interests are in Cardiovascular endocrinology, in particular the vascular complications of diabetes and the evidence-base informing treatments and guidelines for Endocrine and Metabolic disorders. RD is Editor-in-chief of *Diabetes, Obesity and Metabolism*, which is primarily a pharmacology & therapeutics journal and currently ranked 13<sup>th</sup> out of 133 journals (ISI rankings) in the Endocrine category. DOM has an Impact Factor (2015) of 6.2.