



## The 3<sup>rd</sup> New Zealand-China Non-Communicable Disease Research Cooperation Forum

(Online) 5-6 July 2022

### Bios

#### **PROFESSOR MICHAEL BAKER**

**Title: NCD under COVID**



Michael Baker is a Public Health Medicine Specialist and Professor in the Department of Public Health at the University of Otago, Wellington. He is passionate about opportunities to organise society in ways that promote health, equity, and sustainability.

Michael's work during 2020-22 has been dominated by assisting with the New Zealand Covid-19 pandemic response. He is a member of the Ministry of Health's Covid-19 Technical Advisory Group and was a leading advocate for the Covid-19 elimination strategy. Michael established a programme of research on the epidemiology, prevention, and control of Covid-19 (Co-Search) with support from the Health Research Council (HRC) and has published widely on this subject.

Michael has a wide range of public health research interests, with a focus on infectious diseases, environmental health, and improving housing conditions. He is leading a 5-year HRC Programme investigating the relationship between infectious diseases, long-term health conditions, and social determinants (SYMBOTIC) and research to identify improved ways to prevent rheumatic fever.

Michael has a strong interest in science communication. He is a member of the Advisory Board of the Science Media Centre and is in the process of establishing a new Public Health Communication Centre. Michael has worked internationally with the World Health Organisation (WHO) on a range of global health projects including helping to establish the International Health Regulations (IHR 2005) and disease elimination and eradication efforts.

His work on public health, and the Covid-19 response in particular, was recognised by a number of recent awards including: the Critic and Conscience of Society Award (from Universities NZ), the Public Health Champion award (from the Public Health Association of NZ), being made a Member of the NZ Order of Merit (MNZM), his selection as the 2020 Wellingtonian of the Year, and the Prime Minister's Science Communication Prize in 2021.

## **PROFESSOR YU WANG**

**Title: Prevention and Control of NCD under Covid**



Wang Yu, MD, PhD, is the president of Chinese Foundation for Hepatitis Prevention and Control. He was appointed as the expert consultant of Global Health Forum of Boao Forum for Asia (2020). He served as Director General of Chinese Center for Disease Control and Prevention for 13 years (2004-2017).

In academic field, Dr. Wang Yu had long been dedicating to the research on hepatitis viruses and hepatology. He did research and clinical practice in People's Hospital, and became the director of the Institute of Hepatology, Peking Medical University. Late he was appointed vice president of Peking Medical University, and then as deputy director of Health Science Center of Peking University. Then he transferred to the Ministry of Science and Technology as the deputy director of China National Center for Biotechnology Development (CNCBD), in charge of the project management of China biotechnology research and development.

Wang Yu participated the response against SARS outbreak, and led the national response to the emerging infectious diseases and public health emergencies, such as H1N1 Flu pandemic, Wenchuan post-earthquake disease prevention. He led and promoted national disease surveillance and reporting system, to initiative investigation and intervention of the areas with higher cancer prevalence. Internationally, he led and participated the response to the Ebola outbreak in West Africa and had actively involved in the initiative of the Africa CDC. Dr. Wang Yu was invited to join the CEO Roundtable on Cancer in 2016, and later serve as the president of Shanghai TuoXin Health Promotion Center which is a Shanghai based non-profit focused on the chronic disease prevention and education in workplace.

Dr. Wang is the Executive board of the Chinese Medical Association. Internationally, he had years of experience as adviser of Pandemic Influenza Preparedness and International Health Regulation (2005) in WHO. Now he serves as the member of the WHO Regional Commission for the Certification of Poliomyelitis Eradication in the Western Pacific.

In recent years, Dr. Wang Yu has published several research articles at the New England Journal of Medicine, the Lancet. He was awarded The Special Prize, First Prize of the State Scientific and Technological Progress Award.

## Room 1, A Better Start

Tuesday 5 July 2022

Room 1, NZ speaker 1

### **PROFESSOR WAYNE CUTFIELD**

**Title: A Better Start overview**



Dr Wayne Cutfield is Professor in Paediatric Endocrinology at the Liggins Institute, University of Auckland and practising paediatric endocrinologist at Starship Children's Hospital a national referral centre. He is currently Director of A Better Start National Science Challenge, one of 11 large scale government research initiatives that focuses on the health and well-being of children. Previously he was Director of the Liggins Institute, the University of Auckland's largest large scale research institutes with a focus on the developmental origins of health and disease.

He is a former President of the Asia Pacific Paediatric Endocrine Society.

He has published more than 280 peer reviewed manuscripts in leading journals that include the New England Journal of Medicine and the Lancet. He was featured in the perspectives section of the Lancet in 2015.

He is a clinical researcher who leads research teams currently addressing the role of the microbiome in determining weight gain, metabolism and well-being, and the early prevention of childhood obesity.

Room 1, CN speaker 1

### **PROFESSOR JIE MI**

**Title: Health of Chinese children**



Professor in cardiovascular pediatric epidemiology, child & adolescent health care. The honorary director of Center for Non-communicable Disease Management, Beijing Children's Hospital, Capital Medical University, National Center for Children's Health.

Professor Mi received a MD degree in medicine from Harbin Medical University, and got a PhD in Epidemiology from Chinese Academy of Medical Sciences & Peking Union Medical College. She did post-doctoral training under guidance of Professor David Barker, who was the founder of DOHaD, in Environmental Epidemiology Unit of Medical Research Council (MRC) in Southampton, UK during 1997-2000.

Professor Mi's research interest is fetal and childhood origins of adult chronic diseases. As a leading expert in studying childhood obesity, hypertension and bone mineral health in China, she has directed several large cohort studies tracking CVD risk factors beginning in childhood on lifelong health outcomes. She has made important contributions to prevent CVD risks in young people in China through developing national guidelines for prevention and treatment of obesity and hypertension in children and adolescents. She directed the development of the widely used Chinese age-sex-height-specific blood pressure percentiles for classifying childhood hypertension in China, and also the latest development of body composition (adiposity, muscle, bone mineral density) reference standards for children aged 3 to 18 years. She has published 355 papers in peer-reviewed journals. She is serving on a number of national and international expert panels and review committees, and also on the editorial boards for more than ten peer-reviewed journals.

Room 1, NZ speaker 2

**PROFESSOR RACHAEL TAYLOR**

**Title: Improving healthy weight in children: where to from here?**



Professor Rachael Taylor is Head of the Department of Medicine at the University of Otago, and Director of the Edgar Centre for Diabetes and Obesity Research. She holds one of the Leading Thinkers Chairs at Otago University, the Karitane Chair in Early Childhood Obesity and is leader of the Healthy Weight theme of E Tipu Rea (A Better Start) National Science Challenge. A nutritionist by training, Rachael is interested how diet, activity, sleep and sedentary time influence health and wellbeing throughout the life cycle but particularly during growth. She leads or co-leads many large observational and interventional trials examining different approaches to improving health, including studies designed to improve the measurement of important lifestyle behaviours such as screen time, mechanistic studies aiming to determine how inadequate sleep increases the risk of weight gain, observational studies measuring nutritional health, and interventions aiming to improve sleep and wellbeing in pēpi and tamariki.

Room 1, CN speaker 2

## **PROFESSOR JUN-FEN FU**

**Title: Obesity and diabetes in children**



Professor Jun-fen Fu, female, born in 1968, chief Physician, doctor of medicine and vice president of Children's Hospital of Zhejiang University School of Medicine, second-level professor, doctoral supervisor and Qiushi Distinguished Physician of Zhejiang University, young and middle-aged expert who has made outstanding contributions to national health, is currently the secretary general of APPE (Asia Pacific Pediatric Endocrine Society), the vice president of National Clinical Research Center for Child Health and National Children's Regional Medical Center, the president of Endocrine Genetic Metabolism Group, Pediatric

Society of Chinese Medical Association, the vice president of Children's Disease and Health Society of China Maternal and Child Health Association (CMCHA), and the deputy head of Chinese Children Diabetes Collaboration Group. She has studied in Japan, the United Kingdom and the United States. Besides, she is associate editor of BMC Pediatrics and council member of International Federation of Pediatric Endocrine (ICPE).

Her research is focused on major chronic non-communicable diseases in children, especially in childhood obesity, non-alcoholic fatty liver disease, metabolic syndrome, childhood diabetes, and childhood growth and development and adolescence-related diseases. She has presided over 23 projects including those supported by the National Key Research and Development Program, the National Natural Science Foundation, the National Science and Technology Support Program, and Zhejiang Province Key Scientific and Technological project. She has led 12 national multi-center clinical studies and 5 GCP clinical drug trials. A total of 285 papers have been published, of which 117 are included in SCI, including papers published on JCEM and JAMA OpenNetwork, which are top journals in the field of pediatric endocrinology. Through industry-university-research cooperation, she contributed to the launch of the first domestic artificial intelligence bone age evaluation system, the world's first micro-radiation movable bone age instrument, and the construction of an intelligent diagnosis and treatment management platform for children's growth and development, which were awarded as an excellent case of clinical application and R&D of artificial intelligence in 2020. She led the formulation of 9 Chinese expert consensus and participated in the revision of 5 international guidelines, including the 2014, 2018 and 2022 ISPAD guidelines for the diagnosis and treatment of diabetes in children and adolescents. She was the only Chinese expert who formulated the 2016 Global Nutritional Rickets Prevention and Control Consensus. She won the second prize of National Science and Technology Progress Award (7/10), the second prize of Chinese Medical Science and Technology Award (1/10), the second prize of National Maternal and Child Health Science and Technology Achievement Award (1/13), the first prize of Zhejiang Science and Technology Progress Award (1/13), second prize of Zhejiang Science and Technology Progress Award twice (2/8, 5/13), the first prize of Zhejiang Medicine and Health Science and Technology Innovation Award twice (1/13, 2/13).

Professor Junfen Fu has actively carried out international cooperation and exchanges over these years. As a representative of Children's Hospital of Zhejiang University School of Medicine, she signed a China-New Zealand cooperation agreement on chronic non-infectious diseases, and started substantive cooperation with the University of Auckland, New Zealand. Till now, 6 research papers have been jointly published. At the same time, her team cooperated with the McGill University Fellows team in Canada to conduct precision diagnosis research on single-gene diabetes, and established International Center for Precise Diagnosis and Treatment of Childhood Diabetes. She has been invited to write expert reviews of international magazines twice, and has been invited many times to important international conferences (APPE, ESPE, ISPAD, IMPE, etc.) as a plenary speaker or symposium speaker, which shows that she has a high international influence in the fields of childhood obesity and diabetes prevention and treatment.

**Wednesday 6 July 2022**

Room 1, NZ speaker 3

**ASSOCIATE PROFESSOR BARRY MILNE**

**Title: The value of population-level data for life-course research**



Associate Professor Barry Milne is Director of the Centre of Methods and Policy Application in the Social Sciences (COMPASS) at the University of Auckland and leads the Big Data theme for A Better Start National Science Challenge. He is also a principal investigator for the Lifecourse project, a collaboration with Healthier Lives and Ageing Well National Science Challenges. Professor Milne focuses his research on whole population data analysis of human development across the life-course. He has a background in longitudinal studies in New Zealand and the United Kingdom, particularly in the area of mental health. His areas of expertise include micro-simulation, administrative data, longitudinal studies, socio-economic and ethnic inequalities and child development.

Room 1, CN speaker 3

**PROFESSOR Yi ZHENG**

**Title: Mental Health of Children and Strategies in China**



Full Name: Yi Zheng  
Job Title: Professor, Chief-Child Psychiatrist  
Department: Beijing Anding Hospital  
University: Capital Medical University  
Postal Address: Beijing Anding Hospital Beijing 100088  
Country: P.R.China  
E-mail: [yizheng@ccmu.edu.cn](mailto:yizheng@ccmu.edu.cn)

Counselor, Former Vice-President, International Association for Child and Adolescent Psychiatry and Allied Professions (IACAPAP).

Former President, Asian Society for Child and Adolescent Psychiatry and Allied Professions (ASCAPAP).

President, Asian Federation of ADHD.

President, Chinese Society of Child and Adolescent Psychiatry.

Room 1, NZ speaker 4

**ASSOCIATE PROFESSOR SARAH HETRICK**

**Title: Apps to support mental health of children and adolescents**



Assoc Prof Sarah Hetrick is a clinical psychologist and the Associate Professor of Youth Mental Health, University of Auckland, New Zealand. Her research focuses on youth depression and suicide and self-harm prevention. She is a coordinating editor for the Cochrane Common Mental Disorders Group and an international reputation in evidence synthesis and implementation. She is the Acting Director of the Suicide Prevention Office for the New Zealand Governments Ministry of Health.

Room 1, CN speaker 4

**PROFESSOR WEIHUA YUE**

**Title: Mental health of children**



Professor Weihua Yue is Deputy Director of Institute of Mental Health, Sixth Hospital, Peking University. She got her Medicine Degree in 2003 from Central South University, China. Now she is the Professor of Psychiatry, Institute of Mental Health, Peking University. She was supported by the National Nature Science Foundation of China (NSFC) for Distinguished Young Scholars in 2018. She also works as the editors of Biological Psychiatry, Frontiers in Psychiatry, and so on. She majors in the molecular genetics of common mental disorders (schizophrenia, autism, major depressive disorders, etc.). Professor Yue has co-authored more than 100 original articles in peer-review journals, such as Nature Genetics, Lancet Psychiatry, Molecular Psychiatry, Cell Discovery, etc. She also is a peer reviewer for the New England Journal of Medicine, Molecular Psychiatry, etc. As the principal investigator (PI), she has taken charge of programs supported by the National Nature Science Foundation of China (NSFC), the National Key R&D Program of China, and the National High-tech R&D Program ("863" Program) program.

Room 1, NZ speaker 5

**DR TANIA CARGO**

**Title: Digital interventions for youth mental health: Progress and challenges**



Dr Tania Cargo (Ngāti Maru, Ngāti Manu, Ngāpuhi) is a clinical psychologist with over 20 years of clinical experience in Māori mental health services in Auckland. She has significant kaupapa Māori research expertise and leads a number of projects in the area of parenting interventions, youth mental health and suicide and self-harm prevention. She is the co-theme lead of the Resilient Teens theme of 'A Better Start, E Tipu E Rea' National Science Challenge with Dr Sarah Hetrick.

Room 1, CN speaker 5

**DR JIJUN WANG**

**Title: Mental health of children**



Dr. Jijun Wang is a psychiatrist at Shanghai Mental Health Center, Director of Department of Clinical Electrophysiology, a PhD supervisor at Shanghai Jiao Tong University, and a visiting researcher at the Center for Excellence in Brain Science and Intelligence Technology (CEBSIT) of Chinese Academy of Science. He also is a committee member of Basic and Clinical Branch of Psychiatry of the Neuroscience Society of China (CSNP), the Shanghai Pujiang talent, and an excellent academic leader in Shanghai. He has joined the editorial board of Schizophrenia Research, Asian J Psychiatry, etc.

Over the years, he has focused on the early identification and intervention of psychosis, by carrying out research on EEG, magnetic resonance signals of prodromal psychosis and schizophrenia, and by exploring new neuromodulation technologies, including transcranial magnetic stimulation, transcranial ultrasound stimulation and cognition enhancement. In addition, he has served as a principal investigator for Shanghai At Risk for Psychosis Extended (SHARP-Extended) project and multiple projects, including Chinese National Key Research Development Project (2016YFC1306800), National Natural Science Foundation projects. Dr. Wang has participated multiple NIH/FNIH funded projects on prodromal psychosis. More recently, his team was selected to participate as one of the acquisition sites of the NIH/FNIH funded Accelerated Medicines Partnership – Schizophrenia (AMP-SCZ) study, as part of the ProNet network. Dr. Wang has publications in JAMA Psychiatry, The American Journal of Psychiatry and Molecular Psychiatry.



## Room 2, Healthier Lives

Tuesday 5 July 2022

Room 2, NZ speaker 1

### **PROFESSOR SIR JIM MANN**

**Title: Healthier Lives Overview**



Jim Mann has been Professor in Medicine and Human Nutrition at the University of Otago and Consultant Physician (Endocrinology) in Dunedin Hospital for the past 29 years. Previously he lectured at the University of Oxford and was a Physician in the Radcliffe Infirmary. He is Director of the New Zealand-China Non Communicable Diseases Research Collaboration Centre, the 'Healthier Lives' National Science Challenge, the World Health Organisation (WHO) Collaborating Centre for Human Nutrition and Co-Director of the Edgar Diabetes and Obesity Research Centre (EDOR). He is principal investigator for the Riddet Institute, a national Centre of Research Excellence at Massey University. He has been involved with national and international, government and non-governmental organisations (including the WHO, the European Association for the Study of Diabetes and the World Cancer Research Fund) in guideline development relating to diabetes, cardiovascular disease, cancer and nutrition. He is a Fellow of the Royal Society of New Zealand and has been awarded the Hercus Medal of the Royal Society and the University of Otago Distinguished Research Medal. He was appointed a Companion of New Zealand Order of Merit for services to Medicine and medical research. His clinical work has mainly been in the field of diabetes and cardiovascular disease. His research has principally related to epidemiological and nutritional aspects. He has been author and co-author of over 300 publications and has written and edited textbooks and popular books.

Room 2, CN speaker 1

### **DR JING WU**

**Title: Attack and prevention of chronic disease in China**



Jing WU, PhD, MD, MPH, is the Director of the National Center for Chronic and Non-communicable Disease Control and Prevention (NCNCD), the Chinese Center for Disease Control and Prevention (China CDC). She obtained her PhD in epidemiology and biostatistics in the Health Center, Peking University and completed post-doctoral training at Harvard University. Dr. Wu is a member of the WHO special working group on Chronic Disease Control and Prevention, an expert member of the Disease Control and Prevention Expert Committee, a member of the Basic Public Health Services Committee, the National Health Commission, China; an expert member of the Life Science and Human Health Expert Committee, and she sits on the China Association for Science and Technology United Nations Consultative Board. She also takes important roles in some academic institutions, including the Chinese Preventive Medicine Association, and the Chinese Health Information Association. Dr. Wu has hosted and engaged many important research projects. She has published more than 200 papers and monographs.

Room 2, NZ speaker 2

**PROFESSOR GREG JONES**

**Title: DNA Methylation scores as risk assessment tools in chronic vascular disease**



My research interests include developing improved and equitable cardiovascular disease screening strategies, identifying circulating biomarkers to improve disease risk prediction and the genetic and epigenetic basis of cardiovascular diseases. My research group has a specific focus on aneurysms, peripheral and coronary artery disease and chronic venous disease. I am a leading member of the International Aneurysm Consortium, a grouping of all the major international investigators examining the genetics of aortic aneurysms.

I am currently the principal investigator for projects funded by the Health Research Council of New Zealand (a randomized clinical trial to determine if metformin can improve aneurysm related outcomes), Genomics Aotearoa (developing an on-line epigenome-wide association study analysis toolbox) and the Healthier Lives- He Oranga Hauora National Science Challenge (Identifying epigenetic markers as a precision medicine tool for equitable prediction of cardiovascular disease).

I've published over 125 peer reviewed papers, including in journals such as Nature, Nature Genetics, the New England Journal of Medicine, Circulation, Circulation Research and the British Journal of Surgery. Collectively these have over 12,000 citations.

Selected publications

1. Bhat B, Jones GT 2022. Data Analysis of DNA Methylation Epigenome-Wide Association Studies (EWAS): A Guide to the Principles of Best Practice. In: Horsfield J., Marsman J. (eds) Chromatin. Methods in Molecular Biology, vol 2458. Humana, New York, NY. [https://doi.org/10.1007/978-1-0716-2140-0\\_2](https://doi.org/10.1007/978-1-0716-2140-0_2)
2. Morris DR, Jones GT, Holmes MV, Bown MJ, Bulbulia R, Golledge J 2021. Genetic predisposition to diabetes and abdominal aortic aneurysm: A two-stage Mendelian randomization study. *Euro J Vasc and Endovasc Surg*, PMID: 34916110
3. Jones GT *et al.* 2020 DNA methylation profiling identifies a high effect genetic variant for lipoprotein(a) levels. *Epigenetics*, 15(9):949-958 PMID: 32237968
4. Pinard A, Jones GT, Milewicz DM 2019. Compendium: Genetics of thoracic and abdominal aortic disease: Aneurysms, Dissections and Ruptures. *Circulation Research*, 124: 588-606 PMID: 30763214
5. Jones GT *et al.* 2017. Meta-Analysis of Genome-Wide Association Studies for Abdominal Aortic Aneurysm Identifies Four New Disease-Specific Risk Loci. *Circulation Research*, 120:341-353. PMID: 27899403

Room 2, CN speaker 2

**PROFESSOR YILONG WANG**

**Title: Research on cerebrovascular disease and progress in clinical diagnosis and treatment**



MD, PhD, MPH

Professor, Chief Scientist, Department of Neurology, Capital Medical University, Beijing, China

Associate President, Beijing Tiantan Hospital, Beijing, China

Associate Director, Department of Clinical Trial and Clinical Research, Capital Medical University, Beijing, China

Special Professor, Chinese Institute for Brain Research (CIBR)

Dr. Yilong Wang got his MD and Ph.D degrees at Capital Medical University in 2007 and finished post-doctoral fellowship at University of California San Francisco (UCSF) in 2009. Dr. Wang is a neurologist serving patients with cerebral small vessel diseases (cSVD), stroke, and vascular dementia in Beijing Tiantan Hospital affiliated to Capital Medical University. Dr. Wang's research focuses on using clinical research methodology to address both clinical and pathogenetic questions of cSVD and stroke.

Dr. Wang has received many awards and honors, including the "National Science Fund for Excellent Young Scholars" in 2013, the "National Science Fund for Distinguished Young Scholars" in 2019, the "Leader of Beijing Top Research Team" in 2016, the "Ten-Thousand Talent Plan" award supported by the Organization Department of the Central Committee of the CPC in 2017, the "Youth Beijing Scholar Program" and the "Young Changjiang Scholar" in 2019, "Shu-Lan Medicine Prize - Young Scholar Program" in 2020 and "Beijing Outstanding Young Scientist Program" in 2020. Furthermore, Dr. Wang had received lots of Prizes for science and technology. Dr. Wang also receives special allowance of the State Council.

Over the years, Dr. Wang has contributed to research that has quantified stroke burden in China, identified traditional and recent risk factors related to stroke; verified therapeutic approaches including efficacy and safety of combined use of clopidogrel and aspirin in high-risk TIA and minor ischemic stroke; studied quality improvement for acute ischemic stroke care; as well as explored targeted genetics of stroke. Some studies have changed guidelines for how to treat patients with stroke all over the world.

As the first or corresponding author, Dr. Wang has published more than 100 scientific articles in journals with high impact factor, including JAMA, BMJ, Circulation, and JAMA Neurology (total IF>1000). He had six patents right including one international patent.

Besides positions in Capital Medical University, Dr. Wang serves as the Associate Director of Cerebral Small Vessel Disease Society of China Stroke Association, the Director of Youth-Council of China Stroke Association, the Associate Director of Young Committee of Neurology Society of Chinese Medical Association, the Associate Director of Young Committee of Neurologist Society of Chinese Medical Doctor Association.

**Wednesday 6 July 2022**

Room 2, CN speaker 3

**PROFESSOR GUANG NING**

**Title: Diabetes**



Guang Ning is Academicians of Chinese Academy of Engineering, tenure Professor of Ruijin Hospital. President of Ruijin Hospital, Shanghai Jiaotong University, School of Medicine. Director, Shanghai Institute of Endocrine & Metabolic Diseases.

He was the Chair of Chinese Society for Clinical Endocrinologists (2013-2019), president of Chinese Endocrine Society (2008-2012). He is Chief Editor of the Journal of Chinese Endocrinology and Journal of Diabetes. He is “Changjiang” Professor, chief scientist of "973" project.

He has been working in the field of endocrine & metabolic diseases for years and mainly achieved in endocrine tumor and diabetes. He has published over 500 papers in peer-reviewed journals, including Science, JAMA, Nat Cell Biol, JACC, Nat Med. He was winner of the National Science and Technical Progress Awards (2nd class) in 2008, 2010, 2012 and 2017 respectively (two rank first place and one rank second place). He was winner of Shulan Medicine Award (2017), Chinese Physician Award (2014), Wu Jieping Medicine Innovation Prize, Bai Qiu'en like doctor, International Endocrinology Award from American Association of Clinical Endocrinologists, Lifetime Achievement Award from Israel Diabetes Association and Ministry of Health, Yutaka Seino outstanding leadership award from The Asian Association for the Study of Diabetes and Honorary Fellowship Award from American College of Cardiology.

Room 2, NZ speaker 3

### **DR ANDREW REYNOLDS**

**Title: The dietary management of diabetes**



Andrew Reynolds is a Senior Research Fellow interested in lifestyle risk factors such as what we eat and when we move, and their repercussions on health. Andrew has a particular interest in fibre-containing foods such as whole grains, vegetables, legumes, and whole fruit, and the management of non-communicable disease such as type 2 diabetes and cardiovascular disease. He conducts randomised controlled trials to generate new knowledge or systematic reviews and meta analyses to synthesise current knowledge. Since 2016 Andrew has worked as a technical adviser to the WHO Nutrition Guidance Expert Advisory

Group, and on the Dietary Guideline Development Group for the European Association for the Study of Diabetes.

### **Recent relevant publications**

Reynolds, A. N., Akerman, A., Kumar, S., Diep Pham, H. T., Coffey, S., & Mann, J. (2022). Dietary fibre in hypertension and cardiovascular disease management: Systematic review and meta-analyses. *BMC Medicine*, 20, 139. doi: 10.1186/s12916-022-02328-x

Churuangsuk, C., Hall, J., Reynolds, A., Griffin, S. J., Combet, E., & Lean, M. E. J. (2021). Diets for weight management in adults with type 2 diabetes: An umbrella review of published meta-analyses and systematic review of trials for diabetes remission. *Diabetologia*. Advance online publication. doi: 10.1007/s00125-021-05577-2

Schwab, U., Reynolds, A. N., Sallinen, T., Rivellese, A. A., & Risérus, U. (2021). Dietary fat intakes and cardiovascular disease risk in adults with type 2 diabetes: A systematic review and meta-analysis. *European Journal of Nutrition*. Advance online publication. doi: 10.1007/s00394-021-02507-1

Åberg, S., Mann, J., Neumann, S., Ross, A. B., & Reynolds, A. (2020). Whole-grain processing and glycemic control in type 2 diabetes: A randomized crossover trial. *Diabetes Care*, 43, 1717-1723. doi: 10.2337/dc20-0263

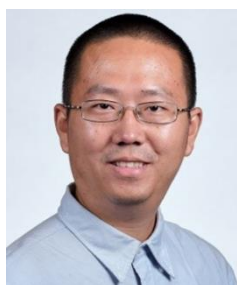
Reynolds, A. N., Akerman, A. P., & Mann, J. (2020). Dietary fibre and whole grains in diabetes management: Systematic review and meta-analyses. *PLoS Medicine*, 17(3), e1003053. doi: 10.1371/journal.pmed.1003053

Reynolds, A., Mann, J., Cummings, J., Winter, N., Mete, E., & Te Morenga, L. (2019). Carbohydrate quality and human health: A series of systematic reviews and meta-analyses. *Lancet*, 393, 434-445. doi: 10.1016/S0140-6736(18)31809-9

Room 2, CN speaker 4

**DR BO HAN**

**Title: Traditional medicine**



Dr. Bo Han has served as dean of the School of Pharmacy since 2021 and is currently a professor at Chengdu University of Traditional Chinese Medicine (TCM). In 2017, Dr. Bo Han moved to the RNA Institute of the State University of New York as a visiting scholar, where he worked with Dr. Jia Shen. He has received numerous academic awards during his careers, such as the Expert of the National Special Support Program for High-level Talents, the Young Scholar of National Administration of TCM, the Academic Leader of Sichuan Province, the Academic Leader of the Provincial Administration of TCM, National 100

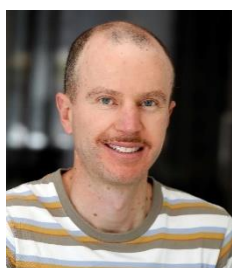
Outstanding Doctoral Dissertation Award, the First Prize of Sichuan Provincial Science and Technology Progress Award, the Sichuan Provincial Outstanding Youth Science and Technology Innovation Award, and the Sichuan Provincial Youth Science and Technology Award.

Dr. Bo Han worked in the field of the structure optimization of TCM substances, molecular network mechanisms, and the discovery of innovative drugs and was funded by national or provincial-level scientific research funds, including the National Natural Science Foundation of China, the Ministry of Science and Technology of China, etc. At present, he has contributed more than 80 articles in academic publications (such as *Chem. Soc. Rev.*; *Angew. Chem., Int. Ed.*; *J. Hematol. Oncol.*; *Acta Pharm. Sin. B.*; *Chem. Sci.*; *Org. Lett.*; *Chem. Commun.*) as the first or corresponding author, as well as contributions of thirteen granted patents; seven issued books and one international standard for medicinal herbs.

Room 2, NZ speaker 4

**DR ALLAN GAMBLE**

**Title: Stimuli-responsive linkers for prodrugs and drug delivery systems**



Allan received his PhD in organic chemistry in 2008 from the University of Wollongong, Australia (supervisor Prof. Paul Keller). He then moved to Canberra to take up a postdoctoral position in the Research School of Chemistry at the Australian National University with Prof. Chris Easton. Here he worked on peptide hormone regulation in cancer until late 2010. In 2011 he was awarded a Sir Keith Murdoch Postdoctoral Fellowship through the American-Australian Association to work with Prof. Paul Wender at Stanford University in the area of drug delivery. In May 2012 he took up the position of Lecturer in Medicinal Chemistry and Biopharmaceutical Science in the School of Pharmacy at the University of Otago, and is now a Senior Lecturer. His research interests are in the areas of bioorganic and medicinal chemistry, and drug delivery. In recognition of his early career success, Allan was recently awarded the University of Otago Early Career Award for Distinction in Research.

Paterson, D.A.; Fong, W-K.; Hook, S.; Gamble, A.B.\* Hydrogen sulfide-responsive bicontinuous nanospheres, *Biomacromolecules* **2021**, 22, 11, 4770-4782.

Fairhall, J.M.; Camilli, J.; Gibson, B.; Hook, S.; Gamble, A.B.\* EGFR-targeted prodrug activation using bioorthogonal alkene-azide click-and-release chemistry, *Bioorg. Med. Chem.* **2021**, 46, 116361.

Fairhall, J. M.; Murayasu, M.; Dadhwal, S.; Hook, S.; Gamble A.B.\* Tuning activation and self-immolative properties of the bioorthogonal alkene-azide click-and-release strategy, *Org. Biomol. Chem.*, **2020**, 18, 4754-4762.

Li, X.; Ren, B.; Xie, X.; Tian, Z.; Chen, F-Y.; Gamble, A. B.\*; Han, B.\* Regiodivergent synthesis of aza-quaternary carbon derivatives from pyrazolinone ketimines and 1,2-dihydroquinolines, *Tetrahedron Lett.*, **2020**, 61 (26), 152055.

Matikonda, S. S., Orsi, D. L., Staudacher, V., Jenkins, I. A., Fiedler, F., Chen, J., & Gamble, A. B.\* Bioorthogonal prodrug activation driven by a strain-promoted 1,3-dipolar cycloaddition. *Chemical Science* **2015**, 6, 1212-1218. [doi: 10.1039/c4sc02574a](https://doi.org/10.1039/c4sc02574a)

Room 2, CN speaker 5

**DR CHEN WAN-QING**

**Title: Early diagnosis of cancer**



Chen Wan-qing, Director, Office of Cancer Screening, National Cancer Center, China. Dr. Chen had worked as radiotherapist for 5 years since graduated from faculty of clinical medicine, Bethune University of Medical Sciences in 1995. He obtained Master's Degree of International Public Health (Honor) in 2004 from School of Public Health, the University of Sydney. Dr. Chen used to work as a researcher in Cancer Council, NSW and Cancer Institute NSW in areas of cancer registration, cancer epidemiology and biostatistics. In 2014, he successfully obtained Ph.D from Sydney University.

Dr. Chen has theoretical basis and practical experience in cancer epidemiology area. He is PI of some nationwide studies.

1. National programs of cancer registry and follow-up, National health and family planning commission;
2. Cancer screening program of esophageal, stomach and liver cancer in Huaihe River Region, National health and family planning commission;
3. Cancer Atlas---Basic scientific research grant, Ministry of and science Technology
4. Prospective evaluation Cohort study on Upper digestive tract cancer screening---Special funds for public welfare projects on Health scientific research, National health and family planning commission.
5. Development and Evaluation of Screening and Intervention Techniques for Upper Gastrointestinal Cancer---The National Key Research and Development Program of China

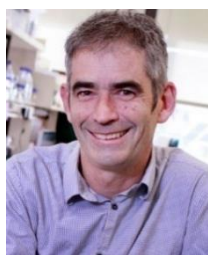
He is the chairman, Branch of Cancer Screening and Early Detection, Anti-Cancer Association of China; The standing committee member of Chinese Preventive Medicine Association, Branch of Prevention and Control for Chronic Non-Communicable Disease; The member of Anti-Cancer Association of China; The member of Chinese Preventive Medicine Association; Editorial Director, vice Editor in Chief of Journal of China Cancer; Associate Editor of Journal of Epidemiology; Associate Editor of Journal of Epidemiology; Associate Editor of Chinese Journal of Cancer Research; Editorial Board Member of Thoracic Cancer, Chinese Journal of Cancer, Thoracic Disease, Journal of Epidemiology et al. The standing committee member of Asian Network of Cancer Registry.

He has published more than 300 scientific articles and 11 monographs.



## PROFESSOR PARRY GUILFORD

**Title: Development of circulating tumour DNA technology for the better management of cancer**



Parry Guilford is a Professor of Cancer Genetics at the University of Otago, Dunedin, Aotearoa New Zealand. He completed his MSc at Otago in 1983, and his PhD at Cambridge University in 1989. He is a co-founder of the cancer diagnostics company Pacific Edge Ltd and a board member of the New Zealand Health Research Council. His research interests include both the management of inherited cancer syndromes and the reduction of inequities in healthcare through the development and implementation of genomics-based cancer diagnostic tools.

### Selected publications:

Telford, B., Chen, A., Beetham, H., Frick, J., Brew, T., Gould, C., Single, A., Godwin, T., Simpson, K. and Guilford, P. (2015). Synthetic lethal screens identify vulnerabilities in GPCR signalling and cytoskeletal organization in E-cadherin-deficient cells. *Mol Cancer Ther.* 14, 1213-1223.

Guilford, P., Hopkins, J., Harraway, J., McLeod, M., McLeod, N., Harawira, P., Taite, H., Scoular, R., Miller, A. and Reeve, A.E. E-cadherin mutations in familial gastric cancer. *Nature*, 392, 402-405 (1998).

Hakkaart, C., Ellison-Loschmann, L., Day, R., Sporle, A., Koea, J., Harawira, P., ... Guilford, P. (2018). Germline *CDH1* mutations are a significant contributor to the high frequency of early-onset diffuse gastric cancer cases in New Zealand Māori. *Familial Cancer*. Advance online publication. doi: [10.1007/s10689-018-0080-8](https://doi.org/10.1007/s10689-018-0080-8)

Ellison-Loschmann, L., Sporle, A., Corbin, M., Cheng, S., Harawira, P., Gray, M., ... Guilford, P., ... Pearce, N. (2017). Risk of stomach cancer in Aotearoa/New Zealand: A Māori population based case-control study. *PLoS ONE*, 12(7), e0181581. doi: [10.1371/journal.pone.0181581](https://doi.org/10.1371/journal.pone.0181581)

McInnes, T., Zou, D., Rao, D. S., Munro, F. M., Phillips, V. L., McCall, J. L., Black, M. A., Reeve, A. E., & Guilford, P. J. (2017). Genome-wide methylation analysis identifies a core set of hypermethylated genes in CIMP-H colorectal cancer. *BMC Cancer*, 17, 228. doi: [10.1186/s12885-017-3226-4](https://doi.org/10.1186/s12885-017-3226-4)

Lotan, Y., O'Sullivan, P., Raman, J. D., Shariat, S. F., Kavalieris, L., Frampton, C., Guilford, P., ... Darling, D. (2017). Clinical comparison of noninvasive urine tests for ruling out recurrent urothelial carcinoma. *Urologic Oncology*, 35(8), 513.e15-513.e22. doi: [10.1016/j.urolonc.2017.03.008](https://doi.org/10.1016/j.urolonc.2017.03.008)

Hoeksema, K., Wee, R., Macdonald, A., Guilford, P., Wall, J., & Cornwall, J. (2017). Where to from here? Posthumous healthcare data, digital e(lectronic)-mortality and New Zealand's healthcare future. *New Zealand Medical Journal*, 130(1459), 64-70. Retrieved from <http://www.nzma.org.nz/journal>

## Room 3, Ageing Well

Tuesday 5 July 2022

Room 3, NZ speaker 1

**PROFESSOR DAVID BAXTER**

**Title: Ageing Well Overview**



Professor David Baxter's research expertise spans the fields of rehabilitation, low back pain, complementary and alternative medicine, as well as laser medicine.

Professor Baxter TD is Co-Director of the Ageing Well National Science Challenge. He is a Visiting Professor at Ulster University (UK), and previously led the University of Otago's multidisciplinary Research Theme on Rehabilitation and Disability (2007–2011).

Professor Baxter has authored or co-authored over 200 peer-reviewed research papers in high-impact peer-reviewed journals, and contributed to various textbooks including DeLisa's Physical Medicine and Rehabilitation (5th edition). He is the Editor in Chief of Physical Therapy Reviews, and a member of the editorial boards of a number of other international peer-reviewed journals. He has been recognised as a Fellow of the Royal Academy of Medicine in Ireland, and the American Society for Lasers in Medicine and Surgery.

Room 3, CN speaker 1

**PROFESSOR BIAO CHEN**

**Title: Overall of healthy aging in China**



Biao CHEN (Piu Chan) is the Professor of Neurology and Geriatrics, and Director of National Clinical Research Center for Geriatric Disorders and Chairman of the Faculty of Geriatrics of Capital Medical University. Prof Chen is the head of the Clinical and Research Center for Parkinson's disease which is part of the Key Laboratory of Ministry of Education on Neurodegenerative Disorders. He was the principal investigator to establish the Beijing Longitudinal Study on Aging II cohort and has published a larger number of papers on frailty, Parkinson's disease and dementia. Prof Chen has found the China Parkinson

Alliance with more than 2000+ neurologists from 550 medical centers, and established the Virtual Hospital on geriatric neurodegenerative diseases. He has been awarded by the China Ministry of Sciences and Technology to establish the National Consortium and Big Data Platform for Parkinson and Alzheimer's diseases. He is a member of the Telemedicine committee of the International Parkinson and Movement Disorders Society (MDS). He has directed about 40 Phase I-IV clinical trials and is an ad hoc consultant for the State Food and Drug Administration of China. He has published more than 300 SCI and 250 Chinese papers with a citation of 25000, and served as editorial members of more than 15 international journals.

Room 3, NZ speaker 2

## RESEARCHER CHARLES WALDEGRAVE

**Title: Measuring loneliness developed from the co-created research with non-Western cultural groups.**



Charles Waldegrave is a psychologist and social policy researcher. He leads the Family Centre Social Policy Research Unit in Lower Hutt, Wellington, New Zealand. Charles is a joint leader of the New Zealand Poverty Measurement Project and the New Zealand Longitudinal Study of Ageing. He also co-leads 4 National Science Challenge (NSC) research projects: Three in Ageing Well NSC on topics that include loneliness, social isolation, quality of life, ageing and Māori and ageing and Pacific people. The other is in Building Better Homes Towns and Cities NSC on intergenerational housing trajectories.

He and colleagues are also regularly contracted by most social Ministries of Government to carry out independent social and economic research and evaluation projects. They have provided the evidence base for housing, income and other social policy changes that have reduced poverty in NZ. He collaborates extensively with international research partners and is an international member of the European research collaboration ROSEnet (Reducing Old-age Social Exclusion network) in their COST Action - (CA 15122 - Cooperation in Science and Technology in Europe).

Last year, he became a founder member of another international research collaboration PAAR (Participatory Approaches in Ageing Research) and has authored two chapters for their initial book publication, the 'Routledge International Handbook of Participatory Approaches in Ageing Research', which is currently in print. This focusses on his current co-created research which identifies the limitations of Western European and North American measures of key social indicators like loneliness, wellbeing and social connection. It involves co-created research with non-Western ethnic groups where extended family and more collectivist processes are common, and has led to the development of ethnic specific measures that have proved to have both statistical reliability and validity.

His proposed presentation for the NCD CRCC Online Symposium would outline findings on measuring loneliness developed from the co-created research with non-Western cultural groups. Charles publishes regularly in peer reviewed journals and accessible public reports.

**Waldegrave, C.,** Aartsen, M., Lowenstein, A., Seppänen, M., Niemi, M., Melchiorre, M. G., and Lamura, G. (2021) "Conflicting Relations, Abuse and Discrimination Experienced by Older Adults". In: Walsh, K., Scharf, T., Van Regenmortel, S., Wanka, A. (Eds.) *Social Exclusion in Later Life: Interdisciplinary and Policy Perspectives. International Perspectives on Aging*, Volume 28. Springer. DOI: 10.1007/978-3-030-51406-8.

Myck, M., **Waldegrave, C.** and Dahlberg, L. (2021). Two dimensions of social exclusion: economic deprivation and dynamics of loneliness during later life in Europe. In: Walsh, K., Scharf, T., Van Regenmortel, S., Wanka, A. (Eds.) *Social Exclusion in Later Life: Interdisciplinary and Policy Perspectives. International Perspectives on Aging*, Volume 28. Springer. DOI: 10.1007/978-3-030-51406-8.

Morgan, D., Dahlberg, L., **Waldegrave, C.**, Mikulionienė, S., Rapolienė, G., Lamura, G. and Aartsen, M. (2021). Revisiting loneliness: Individual and country-level changes. In: Walsh, K., Scharf, T., Van Regenmortel, S., Wanka, A. (Eds.) *Social Exclusion in Later Life: Interdisciplinary and Policy Perspectives. International Perspectives on Aging*, Volume 28. Springer. DOI: 10.1007/978-3-030-51406-8.

**Waldegrave, C** (2019) "A Universal Pension and Subsidised Housing: Is it a Panacea for an Older Population? New Zealand, A case study in relation to European outcomes", *Retraite et société* (Retirement and Society published in French and English) No 81, pp.143-163.

Burholt, V., Winter, B., Aartsen, M., Constantinou, C., Dahlberg, L., Feliciano, V., Gierveld, J., Van Regenmortel, S. and **Waldegrave, C.** (2019) "A critical review and development of a conceptual model of exclusion from social relations of older people" *European Journal of Ageing*, <https://doi.org/10.1007/s10433-019-00506-0>

Room 3, CN speaker 2

**PROFESSOR JUN WANG**

**Title: Research on Aging of social psychology**



Dr. Jun Wang is vice dean of the Faculty of Psychology, and deputy director of the IDG/McGovern Institute for Brain Research at the National Key Laboratory of Cognitive Neuroscience and Learning, Beijing Normal University. She received her BS from Dalian Medical College, MS from the University of Science and Technology, and PhD degree in Bioengineering from the University of Illinois at Chicago. Her research mainly focuses on cognitive rehabilitation after brain disorders, especially the structural and functional networks of the human brain using multi-modality imaging techniques in AD, MCI patients and aging people.

She is currently involved in several national and international projects, and served as members of ISMRM, OHBM & SFN, grant reviewer of National Natural Science Foundation of China, reviewers of *Alzheimer's & Dementia: The Journal of the Alzheimer's Association*, *Experimental Brain Research*, *Journal of Advances in Psychological Science*, *Acta Psychologica Sinica*, *Acta Electronica Sinica* and associate editor for *Journal of Alzheimer's Disease*.

**ASSOCIATE PROFESSOR RITA KRISHNAMURTHI**

**Title: Health and Wellness Coaching for chronic conditions**



Rita is a public health researcher and the Deputy Director of the National Institute for Stroke and Applied Neurosciences at AUT. Rita is currently involved in a number of research projects focused on stroke and dementia epidemiology. She is a co-director of the Auckland Regional Community Stroke studies as well as a member of the Global Burden of Disease Project Stroke expert panel. She is currently an AI and coordinator of several projects including the Aging Well National Science Challenge-funded randomised clinical trial to test the effectiveness of Health and Wellness Coaching, the Brain Research New Zealand Centre for Research Excellence (Brain CoRE)-funded Effectiveness of the stroke Riskometer Pro for improving stroke awareness and modifiable behaviour for stroke prevention, the Brain CoRE-funded Survey of Stroke and Dementia awareness in the community, and the RIBURST study, a mobile app-based international study on stroke prevention, and an investigator in the NHMRC funded study investigating ways to reduce risk of stroke in the community. She is a Research Leader in the Living with Dementia in Aotearoa (LiDiA) study and in the HRC funded study: “Is a dementia study feasible in NZ?”. Her special interest areas are prevention of cerebrovascular diseases, and Pacific and Asian health and well-being. Rita currently supervises a number of PhD students.

**Krishnamurthi, R.,** George, A., Merkin, A., Bhattacharjee, R., Feigin, V.L. (2022). Can we stop the stroke tsunami? Mitigating the barriers, amplifying the facilitators. *Journal of the Royal Society of New Zealand.* 52(2):109-128.

Feigin, V.L, Stark, B.A., Johnson, C.O., Roth, G.A., Bisignano, C., Abady, G.G., et al. (2021). Global, regional, and national burden of stroke and its risk factors, 1990–2019: A systematic analysis for the Global Burden of Disease Study 2019. *The Lancet Neurology.* 20(10):795-820.

**Krishnamurthi, R.V.,** Barker-Collo, S., Barber, P.A., Tippett, L.J., Dalrymple-Alford, J.C., et al. (2021). Community knowledge and awareness of stroke in New Zealand. *Journal of Stroke and Cerebrovascular Diseases.* 29(3).

**Krishnamurthi, R.V.,** Ikeda, T., Feigin, V.L. (2020). Global, regional and country-specific burden of ischaemic stroke, intracerebral haemorrhage and subarachnoid haemorrhage: A systematic analysis of the Global Burden of Disease Study 2017. *Neuroepidemiology.* 54(2).

**Krishnamurthi, R.,** Feigin, V. (2022). Global burden of stroke. In: Grotta, J.C., Albers, G.W., Broderick, J.P., Kasner, S.E., Lo, E.H., Sacco, R.L., Wong, L.K.S., Day, A.L. (Eds.) *Stroke pathophysiology, diagnosis, and management.* 163-178. Elsevier.

**Krishnamurthi, R.,** Barker-Collo, S., Bhattacharjee, R., George, A.S., Arroll, B., Ranta, A., Walters, D., Wilson, D., Sandiford, P., Gall, S.L., Parmar, P., Bennett, D., & Feigin, V.L. (2018). Mobile technology for primary stroke prevention: A proof-of-concept randomised controlled trial – a brief report. *Stroke,* 50(1), 196-198

Room 3, CN speaker 3

**PROFESSOR LINGJING JIN**

**Title: Neuroscience rehabilitation**



Lingjing JIN, President, Shanghai Yangzhi Rehabilitation Hospital, School of Medicine, Tongji University.

As the chief scientist of national key research and development program, my research areas focus on movement disorders and neurorehabilitation technique, especially botulinum toxin therapy.

The first part of my research is on the full-process management of Parkinson's disease. We have developed new technique for movement pattern analysis based on artificial intelligence. We have designed individualized rehabilitation training programs, such as simplified Taichi and multimodal core strength training, to improve patients' balance ability. We have also studied the mechanism of dopamine neuron degeneration to discovery new targets for intervention. We found that MANF (Mesencephalic astrocyte-derived neurotrophic factor) was able to reverse the dopamine neuron degeneration induced by 6-OHDA (6-hydroxydopamine), and we then developed candidate gene therapy drug that can express MANF in a long-term, stable and controlled manner.

The second part of our research is dystonia. Botulinum toxin plays a very important role in the symptomatic treatment. We treated about 2000 patients per year in China. We have developed a series of new techniques, such as electrode connecting device and ultrasound guidance needle which could increase signal, to the target injection areas more accurately. We established the cervical muscles metabolism imaging technology with [99mTc] MIBI SPECT, to screen the overactive muscles in a non-invasive way. Using function Magnetic resonance imaging, we have proved that successful botulinum toxin injections can effectively reverse brain connectivity in patients with cervical dystonia.

Wednesday 6 July 2022

Room 3, NZ speaker 4

### PROFESSOR TIM ANDERSON

**Title: Parkinson's research at NZBRI: focus on biomarkers of cognitive and neuropsychiatric dysfunction**



Tim Anderson, Neurologist, is the Cas Van Der Veer Chair in Parkinson's and Movement Disorders at the University of Otago, Christchurch and member of the Directorate of Brain Research New Zealand CoRE (Centre of Research Excellence). He is Clinical Director of the New Zealand Brain Research Institute (<http://nzbri.org/People/anderson/>) and a member of Council of the Neurological Foundation of New Zealand. His clinical interests are in Movements Disorders, especially Parkinson's and Huntington's disease, and eye movements in neurological disease. Research interests are in epidemiology and biomarkers of cognitive impairment and progression in Parkinson's, and eye movements in health and neurodegenerative disorders - especially Parkinson's disease.

### Selected recent publications

- Melzer, T. R., Stark, M. R., Keenan, R. J., Myall, D. J., MacAskill, M. R., Pitcher, T. L., Livingston, L., Grenfell, S., Horne, K., Young, B., Pascoe, M., Almuqbel, M. A., Wang, J., Marsh, S., Miller, D. H., Dalrymple-Alford, J. C., **Anderson, T. J.** (2019). Beta amyloid deposition is not associated with cognitive impairment in Parkinson's disease. *Frontiers in Neurology*. doi: 10.3389/fneur.2019.00391
- Hoogland, J., Boel, J. A., de Bie, R. M. A., Schmand, B. A., Geskus, R. B., Dalrymple-Alford, J. C., **(Anderson TJ)**... on behalf of the MDS Study Group "Validation of Mild Cognitive Impairment in Parkinson Disease". (2019). Risk of Parkinson's disease dementia related to level I MDS PD-MCI. *Movement Disorders*. 10.1002/mds.27617
- Watanabe, M., Okada, K. I., Hamasaki, Y., Funamoto, M., Kobayashi, Y., MacAskill, M. R., **Anderson, T. J.** (2019). Ocular drift reflects volitional action preparation. *European Journal of Neuroscience*. 10.1111/ejn.14365
- Wu L, Liu FT, Ge JJ, Zhao J, Tang YL, Yu WB, Yu H, **Anderson T**, Zuo CT, Chen L, Wang J. (2018). Clinical characteristics of cognitive impairment in patients with Parkinson's disease and its related pattern in 18 F-FDG PET imaging. *Human brain mapping*,39(12):4652-4662.
- Pitcher, T. L., Myall, D. J., Pearson, J. F., Lacey, C. J., Dalrymple-Alford, J. C., **Anderson, T. J.**, MacAskill, M. R. (2018). Parkinson's disease across ethnicities: a nation-wide study in New Zealand. *Movement Disorders* 33(9):1440-1448.
- Blakemore, R. L., MacAskill, M. R., Shoorangiz, R., **Anderson, T. J.** (2018). Stress-evoking emotional stimuli exaggerate deficits in motor function in PD. *Neuropsychologia*, 112, 66-76. 10.1016/j.neuropsychologia.2018.03.006
- Pascoe, M. J., Alamri, Y., Dalrymple-Alford, J. C., **Anderson, T. J.**, MacAskill, M. R. (2018). The Symbol-Digit Modalities Test in mild cognitive impairment: evidence from Parkinson's disease patients. *European Neurology*, 79, 206-210.

Room 3, CN speaker 4

**PROFESSOR JIAN WANG**

**Title: Neuroscience**



Department of Neurology & National Clinical Research Center for Aging and Medicine

Huashan Hospital, Fudan University, Shanghai, China.

Email: wangjian\_hs@fudan.edu.cn

Dr. Wang is the Director of Center for Functional Neurological disorders in National Center of Neurological Disorders (NCND, Huashan), his team has been focused on elucidating the role of alpha-synuclein in pathogenesis of PD, developing biomarkers to diagnose Parkinsonian disorders at its early stage and with more accuracy especially by using PET molecular imaging, and exploring better intervention for those progressive neurodegenerative disorders.

Research interests

1. Molecular neuroimaging for Parkinsonian disorders as biomarkers
2. a-synuclein and its spreading in Pathogenesis of RBD and PD, and its interventions.
3. Long-term management of PD on mobile app platform.



Room 3, NZ speaker 5

**PROFESSOR RUSSELL SNELL and MR ANDREW JIANG**

**Title: Progress with Single cell RNAseq and modelling neurodegenerative conditions**



Professor Snell is a molecular geneticist based in the School of Biological Sciences and a member of the Centre for Brain Research at the University of Auckland. He has an international reputation for the discovery of genes and mutations in humans and in farm animals. He was part of the collaborative groups that discovered the genes for Huntington's disease myotonic dystrophy tuberous sclerosis and major genes involved in bovine milk production. His current research in human disease focuses on uncovering the molecular mechanisms for a wide range of conditions including Alzheimer's, and Huntington's disease, Fragile X autism and other neurodevelopmental disorders. In collaboration with Dr Linya You (Fudan) and a PhD student Andrew Jiang the group has recently reported the production of a software tool to help with a simplified analysis of single cell RNAseq analysis. Professor Snell led the team that made a sheep model for Huntington's disease and more recently two models for early onset Alzheimer's disease and Fragile X. These models are being used or will be used for drug discovery and further refining the understanding of pathogenic mechanisms.

**Selected publications**

Jiang A, Lehnert K, You L, Snell RG. ICARUS, an interactive web server for single cell RNA-seq analysis. *Nucleic Acids Res.* 2022 May 10;gkac322. doi: 10.1093/nar/gkac322. Epub ahead of print. PMID: 35536286.

Poquérusse J, Whitford W, Taylor J, Alburaikey S, Snell RG, Lehnert K, Jacobsen JC. Novel PRMT7 mutation in a rare case of dysmorphism and intellectual disability. *J Hum Genet.* 2022 Jan;67(1):19-26. doi: 10.1038/s10038-021-00955-5.

Mears ER, Handley RR, Grant MJ, Reid SJ, Day BT, Rudiger SR, McLaughlan CJ, Verma PJ, Bawden SC, Patassini S, Unwin RD, Cooper GJS, Gusella JF, MacDonald ME, Brauning R, Maclean P, Pearson JF, Waldvogel HJ, Faull RLM, Snell RG. A Multi-Omic Huntington's Disease Transgenic Sheep-Model Database for Investigating Disease Pathogenesis. *J Huntingtons Dis.* 2021;10(4):423-434. doi: 10.3233/JHD-210482.

Mckean NE, Handley RR, Snell RG. A Review of the Current Mammalian Models of Alzheimer's Disease and Challenges That Need to Be Overcome. *Int J Mol Sci.* 2021 Dec 6;22(23):13168. doi: 10.3390/ijms222313168

Sugrue VJ, Zoller JA, Narayan P, Lu AT, Ortega-Recalde OJ, Grant MJ, Bawden CS, Rudiger SR, Haghani A, Bond DM, Hore RR, Garratt M, Sears KE, Wang N, Yang XW, Snell RG, Hore TA, Horvath S. Castration delays epigenetic aging and feminizes DNA methylation at androgen-regulated loci. *Elife.* 2021 Jul 6;10:e64932. doi: 10.7554/eLife.64932

McLean ZL, Appleby SJ, Wei J, Snell RG, Oback B. Testes of DAZL null neonatal sheep lack prospermatogonia but maintain normal somatic cell morphology and marker expression. *Mol Reprod Dev.* 2021 Jan;88(1):3-14. doi: 10.1002/mrd.23443.

Lu AT, Narayan P, Grant MJ, Langfelder P, Wang N, Kwak S, Wilkinson H, Chen RZ, Chen J, Simon Bawden C, Rudiger SR, Ciosi M, Chatzi A, Maxwell A, Hore TA, Aaronson J, Rosinski J, Preiss A, Vogt TF, Coppola G, Monckton D, Snell RG, William Yang X, Horvath S. DNA methylation study of Huntington's disease and motor progression in patients and in animal models. *Nat Commun.* 2020 Sep

Room 3, CN speaker 5

**DR LINYA YOU**

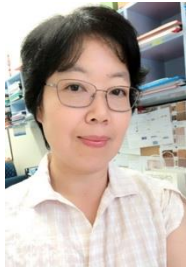
**Title: Neuroscience**

Dr. Linya You's main research focus is acetylation regulation of neurodevelopmental disorders, and interpretation of human brain functions and brain diseases using single cell omics. Dr. You has a publication record of more than 20 articles in top journals such as J Clin Invest, Nucleic Acids Res, and PLoS Genet with a total impact factor of 112, citations of 575 and an h-index of 14. Besides, Dr. You took main roles in several CIHR and NIH projects. Currently, she is the PI of one foreign scholar project funded by Shanghai Association of Science and Technology, one general grant funded by National Natural Science Foundation of China (NSFC), two talent grants funded by Fudan University, and also as the project leader of Science Innovation 2030 - Brain Science and Brain-Inspired Intelligence Technology Major Project and National Key Research and Development Program from the Ministry of Science and Technology, China (MOST). In addition, Dr. You plays academic roles in Front Cell Dev Biol as topic editor and in Front Genet as review editor.

Room 3, NZ speaker 6

## PROFESSOR PING LIU

**Title: Arginine metabolism and neurodegenerative and psychiatric disorders**



Professor Ping Liu is a neuroscientist based in the School of Biomedical Sciences, University of Otago, New Zealand. She graduated from Anhui Medical University (China), had 8 years clinical working experience in geriatrics, and received her PhD in Psychology (Neuroscience) at the University of Otago. Her research interests are the neurobiological basis, biomarker discovery and intervention of age-related cognitive decline, neurodegenerative diseases and psychiatric disorders with a focus on arginine metabolism and its inter-related urea cycle. Currently, her research is focused on Alzheimer's disease (AD), frontotemporal dementia and Parkinson's disease using human brain tissue and biofluids and various transgenic animal models. She is particularly interested in the role of cerebrovascular dysfunction in the development of sporadic late-onset AD, and the preventive and therapeutic potential of arginine metabolite(s) for age-related cognitive decline and AD. Another line of her research is on schizophrenia, which entails both human research and animal work such as the maternal immune activation (MIA) model. The current COVID-19 pandemic caused by the SARS-CoV-2 virus has resulted in over 500 million infections worldwide (including pregnant women). Given the well-known link between MIA and offspring neuropsychiatric illness risk, her research may enhance the development of preventive/therapeutic strategies for SARS-CoV-2 infected pregnant women and their offspring.

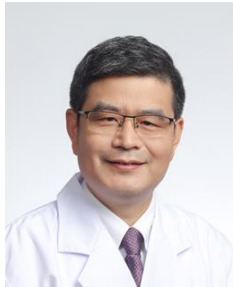
### Selected Publications

- Li ZX, Zhang TH, Xu LH, Wei YY, Cui HR, Tang YY, Liu XH, Qian ZY, Zhang H, **Liu P**, Li CB, Wang JJ. (2022) Plasma metabolic alterations and potential biomarkers in individuals at clinical high risk for psychosis. *Schizophrenia Research*, 239:19-28.
- Ahmad F, Mein H, Jing Y, Zhang H, **Liu P**. (2021). Behavioral functions and cerebral blood flow in a P301S tauopathy mouse model: a time-course study. *International Journal of Molecular Sciences*, 22:9727.
- Vemula P, Jing Y, Cicolini J, Mockett BG, Zhang H, Abraham WC, **Liu P**. (2020) Altered brain arginine metabolism with age in the APP<sub>swe</sub>/PSEN1<sub>dE9</sub> mouse model of Alzheimer's disease. *Neurochemistry International*. 140:104798.
- Hariharan A, Jing Y, Collie ND, Zhang H, **Liu P**. (2019) Altered neurovascular coupling and brain arginine metabolism in endothelial nitric oxide synthase deficient mice. *Nitric Oxide*, 87:60-72.
- Bergin DH, Yu J, Mockett BG, Zhang H, Abraham WC, **Liu P**. (2018) Altered plasma arginine metabolome precedes behavioural and brain arginine metabolomic profile changes in the APP<sub>swe</sub>/PS1 $\Delta$ E9 mouse model of Alzheimer's disease. *Translational Psychiatry*, 8:108.
- Zhang J, Jing Y, Zhang H, Bilkey DK, **Liu P**. (2018) Maternal immune activation altered microglial immunoreactivity in the brain of postnatal day 2 rat offspring. *Synapse*, 26:e22072.
- Liu P**, Jing Y, Collie ND, Dean B, Bilkey DK, Zhang H. (2016). Altered brain arginine metabolism in schizophrenia. *Translational Psychiatry*, 6:e871.

Room 3, CN speaker 6

**PROFESSOR LI CHUNBO**

**Title: Neuroscience**



Chunbo Li M.D., Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine

Vice President, Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine; Vice President, Institute of Psychology and Behavioral Science, Shanghai Jiao Tong University; PI, Shanghai Key Laboratory of Psychotic Disorders, Shanghai Institute of Mental Health.

Dr. Chunbo Li obtained his M.D. at Shanghai Second Medical University. He works as a psychiatrist and as a researcher in Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine. He is the president or committee member of several Chinese academic associations (Vice President, Geriatric Psychology Branch, Chinese Psychological Society; Committee Member, Neuroimage Branch, Chinese Neuroscience Society; President, Shanghai Association of Behavioral Medicine; President, Shanghai Association of Psychiatrist. etc.). He is also an editor of Cochrane Schizophrenia Group, The Cochrane Library. His research interests include new intervention for psychotic disorders, the plasticity of cognitive aging brain and evidence-based psychiatry. He has published over 400 peer-reviewed academic papers.