



**APrON  
CONFERENCE  
SPEAKER  
BIOGRAPHIES**



# Rhonda Bell

Dr. Rhonda Bell is a Professor of Human Nutrition in the Dept of Agricultural, Food and Nutritional Sciences, in the Faculty of ALES, at the University of Alberta and is the WCHRI Theme Lead for Pregnancy and Healthy Developmental Trajectories. She holds a PhD in Human Nutrition from Cornell University and completed a Postdoctoral Fellowship at the University of Alberta in Endocrinology and Metabolism in the Faculty of Medicine with a focus on prevention and treatment of diabetes. She has more than 100 peer-reviewed publications in this area, and in 2016 received the Earle McHenry Award for Distinguished Service in Human Nutrition from the Canadian Nutrition Society.

Dr. Bell's long-standing research interests centre around the Developmental Origins of Health and Disease, specifically investigating and promoting maternal-child long-term health through optimizing maternal dietary intake and nutritional status before, during and after pregnancy. She (has held) and holds federal grant funding for research that spans from animal models to human clinical and community-based studies.

Dr. Bell's contribution to the APrON Study is focused on much of the nutrition-related information about the women during and after pregnancy. Some of the areas she has published on include body weight, body composition, and dietary intake during pregnancy and postpartum, and infant feeding practices among the young children.



# Deborah Dewey

Dr. Dewey is a Professor of Pediatrics and Community Health Sciences at the University of Calgary and the co-lead on the Alberta Pregnancy and Nutrition (APrON) study. From 2006 to 2018, she was the Director of the Behavioural Research Unit, Alberta Children's Hospital. Her innovative and interdisciplinary research program examines maternal/child health issues in Canada and Sub-saharan Africa. Dr. Dewey's research interests focus on the effects of the prenatal environment on children's brains and behaviour, the impact of co-morbid neurodevelopmental disorders on children's brain structure and function, the effects of genetics and epigenetics on neurodevelopment, and behaviour and mental health outcomes in children with various health conditions. She has published over 180 peer-reviewed papers, and is sought after locally, nationally and internationally as a collaborator on various research projects. She co-edited the book *Developmental motor disorders: A neuropsychological perspective*, the pre-eminent text in the field and is an elected Fellow of the prestigious Association for Psychological Science and Canadian Psychological Association.

Dr. Dewey's research on the APrON study cohort focuses on investigating the effects of prenatal and early childhood exposures, including endocrine disrupting chemicals, heavy metals, maternal nutrition and maternal mental health, on children's brains, cognitive development, behaviour and mental health. In addition, she is examining the influence of prenatal exposure to endocrine disrupting chemicals and maternal nutrients on the developing epigenetic profile and the regulation of key genes involved in neurodevelopment.



# Gillian England-Mason

Gillian England-Mason is a Neurodevelopmental Disorders Postdoctoral Fellow with the Alberta Pregnancy Outcomes and Nutrition (APrON) study team at the University of Calgary.

Under the mentorship of Deborah Dewey, her postdoctoral program of research examines how early environmental factors, such as exposure to neurotoxicants and parental mental health problems, impact neurodevelopment in young children. More specifically, she is interested in the neurobiology and epigenetics of neuropsychological development and mental health disorders in Canadian families. Her current research focus is on understanding if exposure to parental mental health problems and/or neurotoxicants (e.g., endocrine disrupting chemicals such as BPA and phthalates) result in epigenetic variation in genes associated with neuropsychological development.



## Catherine Field

Catherine Field is a CRC Tier I professor of Human Nutrition and Metabolism at the University of Alberta. Her research program centers on the effect of nutrition on the immune system. Her current areas of research are: the role of polyunsaturated fats on the development of the infant's immune system, the use of specific fatty acids in the prevention and treatment of breast cancer and identifying the association between nutritional status and maternal mental health and infant neuro-physical development.

She is a co-PI of a large maternal infant cohort, APrON (Alberta Pregnancy Outcomes and Nutrition). She has published more than 270 peer reviewed publications, been invited to speak more than 100 times nationally and internationally and has trained over a 100 students, from high school to post-doctoral levels, in research. Dr. Field received the McCalla and Killam Professorships from the University of Alberta, the Earl Willard McHenry Award for Leadership in Nutrition from the Canadian Nutrition Society and the Mary Mitchell Award for service to the Dietetic Profession in Alberta. Dr. Field is a Past-President of the American Society for Nutrition, served on the International Life Sciences Board of Trustees, is a member of the CIHR advisory board for INMD and an Associate Editor for *Advances in Nutrition*. She was one of the co-founding Directors of the Cancer Research Institute of Northern Alberta in 2012 that brought together cancer researchers from 10 different Faculties at the University of Alberta.



# Gerald Giesbrecht

Dr. Giesbrecht is a registered Clinical Psychologist in the province of Alberta and Associate Professor in the Departments of Paediatrics and Community Health Sciences at the University of Calgary. His research program focuses on the psychobiology of stress, and especially on the effects of in utero and early life stress on child development.

He is currently studying the effects of risk and resilience factors, such as adverse childhood experiences, nutrition, temperament, and the gut microbiota on children's neurodevelopment and mental health outcomes. He is the lead investigator of the Fetal Programming study, a cohort of 294 women who have been followed since early pregnancy and with whom the lab has conducted intensive assessment of stress physiology. He is a co-investigator of the Alberta Pregnancy Outcomes and Nutrition (APrON) study, a longitudinal cohort of 2200 women and children that focuses on the effects of prenatal nutrition on maternal mental health and child neurodevelopment.

The overall objectives of his research program are: to identify the mechanisms by which early life exposure to stress becomes biologically embedded in children's development, to identify risk and resilience factors that modify the effects of early life stress exposure on children's development, and to develop effective intervention and prevention strategies to prevent or reduce the effects of early life stress exposure on children's development.



# Bonnie Kaplan

Bonnie J. Kaplan, PhD, is currently semi-retired, and is a Professor Emerita in the Cumming School of Medicine at the University of Calgary. She was the founding Principal Investigator of APrON. She has published widely on the biological basis of developmental disorders and mental health – particularly, the contribution of nutrition to brain development and brain function.

In 2017 she was named one of the top 150 'Difference Makers' in Canada for the area of Mental Health. In 2019 she was a nominee for top 7 over 70 award (for the Calgary area). And in September 2019 she was awarded the Dr. Rogers Prize for Career Contributions to Complementary and Alternative Medicine (for all of Canada).

Her book *The Better Brain* will be published in March 2021 by Houghton Mifflin Harcourt, with coauthor Julia Rucklidge. Other resources related to her work and the topic of Nutrition and Mental Health can be found on her webpage: [BonnieJKaplan.com](http://BonnieJKaplan.com)



## Catherine Lebel

Catherine Lebel is an Associate Professor of Radiology at the University of Calgary and the Canada Research Chair in Pediatric Imaging. She is a member of the Alberta Children's Hospital Research Institute and the Hotchkiss Brain Institute and leads ACHRI's Child Brain & Mental Health Program.

Dr. Lebel received her PhD in Biomedical Engineering from the University of Alberta and completed postdoctoral training in Neurology and Pediatrics at the University of California, Los Angeles. Her research uses MRI to study how brain structure and function change with age in typical children and those with neurodevelopmental disorders, including fetal alcohol spectrum disorder and learning disabilities. She also examines how brain structure and function are related to cognitive, behavioural and environmental factors, including the prenatal environment.



# Nicole Letourneau

Nicole Letourneau RN PhD FCAHS is Professor in the Faculty of Nursing and Cumming School of Medicine (Pediatrics, Psychiatry and Community Health Sciences) at the University of Calgary, where she holds the Alberta Children's Hospital Chair in Parent-Infant Mental Health and is Director of RESOLVE (Research and Education for Solutions to Violence) Alberta. Formerly, she was Canada Research Chair in Healthy Child Development. She is Principal Investigator (PI) of the Child Health Intervention and Longitudinal Development (CHILD) Studies Program ([www.CHILDStudies.ca](http://www.CHILDStudies.ca)), examining parenting and child health & development in the context of maternal depression, family violence and other toxic stressors and early adversity.

Importantly, she is Principal Investigator of APrON, the Alberta pregnancy cohort of 2200 families funded for follow-up to 12 years of child age, her research mainly focusing on predictors of and intersections between parental mental health, adversity and child behavioural development. She has attained ~\$60 million CDN in research funding. She is the author of two books including *Scientific Parenting* (2013) and *What Kind of Parent Am I?* (2018) by Dundurn, as well as 180+ peer reviewed papers. A regular contributor of opinion-editorials appearing in online/print media such as the HuffPost and Toronto Star, she is the most followed nurse on Twitter in the world. She has attained many honours including Canada's Top New CIHR Investigator in 2006, Canada's Top 40 Under 40 in 2007, Awards for Research Excellence from the College and Association of Registered Nurses of Alberta (CARNA) in 2015 and Canadian Association of Schools of Nursing in 2017, and the Excellence in Leadership Award from Canadian Association of Perinatal and Women's Health Nurses. She is also incoming President of CARNA and founder of the



# Brenda Leung

Brenda Leung is an Associate Professor, Faculty of Health Sciences, University of Lethbridge, and Adjunct Assistant Professor, Department of Community Health Sciences, University of Calgary. She currently holds the Emmy Droog Chair in Complementary and Alternative Healthcare.

Her research in maternal mental health and child development includes nutritional treatments for children with ADHD, metabolomics profiling of metabolic function in pregnant women, mental healthcare needs of children in Alberta, and nutrient status of women with gestational diabetes and perinatal depression.

Dr. Leung has been involved with the Alberta Pregnancy Outcomes and Nutrition (APrON) study since its inception, which started as part of her doctoral proposal to explore the role of nutrition on postpartum depression. Since then she has secured funding for sub-studies within the APrON study, including: metabolomics profiling of metabolic disorders in pregnant women; nutrient status in gestational diabetes and perinatal depression; KT Initiative for policymakers on the Importance of cohort research; and nutrient intake and status during pregnancy as predictors of maternal mental health. She is the lead author of a number of APrON publications on maternal mood and have presented at national and international conferences on nutrition and mental health for clinical and public health audiences.



# Meredith O'Connor

Dr. Meredith O'Connor is a long-time researcher on the Australian Temperament Project (ATP), with which she has collaborated for over a decade. Her current work with the Melbourne Children's LifeCourse platform explores how the ATP can be brought together in powerful combination with other national and international cohorts to generate robust, replicable insights into development over the life course. A particular area of focus for her research is on the development of optimal mental health. This includes both mental health challenges, and the mental health strengths and assets that allow individuals to thrive.



# Padmaja Subbarao

Padmaja Subbarao MD, MSc, FRCP(C) is a Senior Scientist and Pediatric Respiriologist at the Hospital for Sick Children. She is the Director of the Canadian Healthy Infant Longitudinal Development (CHILD) Study. She is an Associate Professor in the Departments of Paediatrics and Physiology at the University of Toronto.

She has held a New Investigator Award from CIHR for clinical research and her lab has been continuously funded by CIHR and AllerGen NCE since 2005. Dr. Subbarao is a co-Principal investigator with Drs. Turvey (lead), Finlay and Kobor on a multi-million dollar grant Genome Canada to investigate the role of the microbiome in asthma. More recently, this year, she along with co-PI, Dr. Meghan Azad lead a grant targeted towards improving our understanding of the role of breastmilk on modifying the effect of early life exposures and microbiome in the development of asthma.

Her expertise is in phenotyping and characterizing asthma from infancy; this includes the studying lung function measurements from infancy to improve diagnostics and phenotyping of asthma. She hopes to understand the developmental origins of chronic obstructive lung disease and factors related to persistence and remission through studying the role of environmental exposures.



# Nicholas Timpson

Nic's research concerns the contribution of genetic factors to complex traits and the use of genetic data within frameworks of epidemiological analysis allowing causal inference.

Since 2011 he has had major roles in genetic association studies for BMI, overweight and obesity, birthweight, lipid profile, adiponectin, bone health, cortisol, thyroid function, allergic sensitization, educational attainment, and pigmentation. Alongside this, assessment of the causal impact of BMI on important health outcomes, such as ischaemic heart disease has been a key focus including development of new analytical methods. He has used longitudinal resources and appropriate analyses to assess the differential contribution of BMI loci through the lifecourse and have been part of the multi-omic enrichment of the Avon Longitudinal Study of Parents and Children (ALSPAC).

Nic is currently the PI for ALSPAC ([www.bris.ac.uk/alspac](http://www.bris.ac.uk/alspac)) and having led a programme within the MRC Integrative Epidemiology Unit (IEU) focused on the development and application of Recall by Genotype (RbG) studies is now a Wellcome Trust Investigator. His current work realises a continuing research focus on understanding body mass index (BMI) as a risk factor. With this, Nic co-leads a work package applying RbG to questions pertinent to the aetiology of cancer risk and progression in the CRUK supported Integrative Cancer Epidemiology Programme (ICEP) and is part of the cardiovascular and translational work streams in the Bristol Biomedical Research Centre (NIHR). Nic is also jointly responsible for running the Wellcome Trust funded Molecular, Genetic and Lifecourse Epidemiology 4 year PhD programme - recently renewed in 2019/20 for a further 5 years of student recruitment ([www.bristol.ac.uk/mgl-epidemiology/](http://www.bristol.ac.uk/mgl-epidemiology/))



# Suzanne Tough

Dr. Tough, PhD, is a professor in the Cumming School of Medicine's departments of Paediatrics and Community Health Sciences. She holds a Senior Policy Fellow with the Max Bell Foundation and Burns Memorial Fund. She is the Principal Investigator of the All Our Families cohort, a cohort which has been gathering data for the last ten years with over 3,000 Alberta families participating. The cohort and the many studies which have resulted from it endeavor to better understand how early experiences in life can influence later behaviours and school success. Her collaborative approach has seen data from the All Our Families cohort shared with more than 50 other investigators. Dr. Tough was recently recognized by the United Nations on International Women's Day for her leadership in innovation, science and mentorship.