

Allergen-Supported Research

Allergen has three programmes of research spanning six themes:

Programme A: Gene-Environment Interactions

Mini-CHILD

Recruitment

T Kollmann, University of British Columbia
S Turvey, University of British Columbia

Development of objective measurement of airway inflammation and lung function in infants

P Subbarao, Hospital for Sick Children

Genetics: AllerChip: Development, validation and implementation of a microarray genotyping tool for allergy and asthma research

S Tebbutt, University of British Columbia

Psycho-social assessment

E Chen, University of British Columbia
M Kobor, University of British Columbia
G Miller, University of British Columbia

Environmental assessment of home environment in mini-CHILD participants

T Takaro, Simon Fraser University

Environmental assessment of land use regression models for NO² exposure

R Allen, Simon Fraser University
M Brauer, University of British Columbia

Environmental assessment molecular genetic characterization of microbes in outdoor and indoor air and dust

James Scott, University of Toronto

Develop and implement an allergen-gene environment database resource

D Daley, University of British Columbia

Identification of genetic predictors of peanut allergy

C Laprise, Université du Québec à Chicoutimi
A Sandford, University of British Columbia

Development of a microarray genotyping chip for clinical trials

S Tebbutt, University of British Columbia

Environmental effects on allergic airway disease

Jeremy Scott, University of Toronto

Postpartum distress and childhood asthma (*formerly Maternal stress in early childhood and the development of asthma*)

A Kozyrskyj, University of Manitoba

Planning a Canadian longitudinal birth cohort study of asthma and allergy in childhood

M Sears, McMaster University



Programme A Gene-Environment Interactions Funding Completed

Theme I Genes and Early-Life Determinants

Validation of genetic associations in asthma and allergy in Canadian families

T Hudson, McGill University
P Pare, University of British Columbia

Theme II Environments, Populations and Society

Gender-related biologic and sociologic impact of obesity

A Becker, University of Manitoba

Is the prevalence of peanut allergy increasing? A five-year follow-up study on the prevalence of peanut allergy in Montreal school children, aged 5-9

A Clarke, McGill University

A feasibility study to develop an exposure model for indoor air contaminants and to collect genetic data on an asthmatic cohort

C Infante-Rivard, Ste-Justine Hospital

Cardiopulmonary consequences of air pollution in a murine model of allergic asthma

Jeremy Scott, University of Toronto

Allergic asthma: Air pollution and allergen interactions

F Silverman, St. Michael's Hospital

Strategic Initiative: Moving forward with birth cohort research in Canada: The legal and ethical foundations for CHILD Study

T Caulfield, University of Alberta

Strategic Initiative: Expansion of existing capacity of immunology platform to support Canadian Healthy Infant Longitudinal Development study (birth cohort)

S Turvey, University of British Columbia

Antenatal steroid therapy for fetal lung maturation: Is there an association with childhood asthma

C Mustard, University of Toronto



Programme B Diagnostics and Therapeutics

Theme III Mechanisms and Biomarkers

Biomarkers

Development of an adaptive immune phenotyping platform for identification of biomarkers correlating with the development of allergic disease and clinical efficacy following therapeutic intervention

M Larché, McMaster University

Ontogeny and genetic polymorphisms of the innate immune system intersecting in atopy

T Kollmann, University of British Columbia

S Turvey, University of British Columbia

Hemopoietic stem cells as biomarkers of atopy, airways inflammation, and sources of 'epigenetic' memory (formerly Progenitors in atopy development)

J Denburg, McMaster University

Non-invasive diagnostics: Metabolics for the various phenotypes of asthma

(formerly Diagnosing the various phenotypes of asthma: The use of urine NMR)

D Adamko, University of Alberta

The Mind-Body of Allergic Disease

Perinatal stress and programming of allergic responses

J Bienenstock, McMaster University

P Arck, McMaster University

Psycho-social assessment and epigenetics: Mini-CHILD

E Chen, University of British Columbia

M Kobor, University of British Columbia

G Miller, University of British Columbia

Neuroendocrine regulation of allergic reactions in animal models: Translation to humans

D Befus, University of Alberta

Neuroimaging and environmental suggestibility in asthma

G McQueen, McMaster University

Canadian Group on Food and Allergy Research (CanGoFar)

J Marshall, Dalhousie University

Regulation of lung mucosal immune responses by heterologous exposure to multiple infectious and allergic agents

Z Xing, McMaster University

Environmental impact on the epithelial immune barrier in asthma

T Bai, University of British Columbia

Role of mast cells and eosinophils in allergic inflammation and fibrosis of the lung

K McNagny, University of British Columbia

Study of the pathogenesis and reversibility of airway damage and repair during chronic mucosal immune responses to environmental allergies

J-P Lavoie, Université de Montréal



Theme IV Therapeutics and Drug Discovery

Clinical Investigator Collaborative

P O'Byrne, McMaster University
L-P Boulet, Université Laval
D Cockcroft, University of Saskatchewan
M Fitzgerald, University of British Columbia
I Mayers, University of Alberta

Programme B Diagnostics and Therapeutics Funding Completed

Theme III Mechanisms and Biomarkers

Effects of probiotics on murine model of asthma

J Bienenstock, McMaster University

The link between upper and lower airway inflammation

L-P Boulet, Université Laval

TLR function in human neonates

K HayGlass, University of Manitoba

Modulation of exocytosis in allergic inflammation

P Lacy, University of Alberta

Functional consequences of innate immune receptor polymorphisms

J Marshall, Dalhousie University

IDO, glutamate receptors and allergic inflammation

R Moqbel, University of Alberta

Predicting peanut allergy

S Wasserman, McMaster University

Host environment interaction: Educating TLR-4+lymphocytes in childhood

Q Hamid, McGill University



Programme C: Public Health, Ethics, Policy and Society

Theme V Food Allergy and Anaphylaxis

Evaluation of the implementation and effectiveness of statutory and regulatory school-based policies for anaphylaxis risk reduction

L Cicutto, University of Toronto

Surveying Canadians to assess the prevalence of common food allergies and attitudes towards food labelling and risk

A Clarke, McGill University Health Centre

Building continuity of support for allergic children with asthma and/or anaphylaxis and their families

M Stewart, University of Alberta

The Roaring Adventures of Puff: A school-based asthma education program

A Becker, University of Manitoba

The development, implementation and evaluation of strategies to promote well-being of children and youth with allergies and/or asthma

A Clarke, McGill University Health Centre

Theme VI Work-Related Allergy and Asthma

Changing practice for prevention and early detection of occupational asthma and allergic diseases in the primary care setting

D Lougheed, Queens University

Stress allostatic load and risk of allergies and asthma in children of immigrants

C Soares, McMaster University

Stress, asthma and atopy socio-spatial investigations

A Kozyrskyj, University of Manitoba

Programme C Public Health, Ethics, Policy and Society Funding Completed

Theme V Food Allergy and Anaphylaxis

Financial barriers to medication use in children with asthma: Effect on health outcomes

W Ungar, Hospital for Sick Children

Strategic Initiative: Knowledge transfer feasibility study national asthma and allergy strategy

D Befus, University of Alberta

Theme VI Work-Related Allergy and Asthma

Surveillance of occupational asthma

N Cherry, University of Alberta

Workplace sensitizers: skin and lung exposure, responses and prevention

L Holness, St. Michael's Hospital

Asthma and BC workers

M Koehoorn, University of British Columbia

