Mark your calendars for AllerGen’s Sixth Annual Research Conference – Innovation from Cell to Society

Sunday, February 6 - Tuesday, February 8, 2011, Westin Bayshore, Vancouver, British Columbia

Registration is now open for AllerGen’s sixth annual research conference, which is taking place in Vancouver, British Columbia from Sunday, February 6 to Tuesday, February 8, 2011 at the Westin Bayshore hotel on the waterfront. The 2011 conference is slated to be a stimulating three-days, featuring leading research experts in allergy, asthma and related immune diseases.

AllerGen investigators and their research partners will share research results from across AllerGen’s three core research programmes: Gene-Environment Interactions, Diagnostics and Therapeutics and Public Health, Ethics, Policy and Society.

Featured speakers include:
- Dr. Wesley Burks, Kiser-Arena Professor of Pediatrics and Chief of the Division of Pediatric Allergy and Immunology at Duke University Medical Center.
  - Presentation focus: Developing New Treatment Options for Food Allergy and Anaphylaxis
- Dr. Marc Rothenberg, Director of the Division of Allergy and Immunology at Cincinnati Children’s Hospital Medical Center, and a tenured Professor of Pediatrics at Cincinnati Children’s and the University of Cincinnati College of Medicine.
  - Presentation focus: Bench-to-bedside-to-community: eosinophilic disorders of the gastrointestinal tract
- Dr. Geoff Maksym, Associate Professor, School of Biomedical Engineering and Physics and Atmospheric Science at Dalhousie University.
  - Presentation focus: Lessons learned: biomedical research and commercialization from cell to patient.

The conference organizing committee anticipates attendance by over 200 delegates from a range of sectors - academic, industry, healthcare, government, not-for profit organizations as well as clinicians, patients and members of the general public. For information regarding the preliminary conference programme, registration and submitting a poster abstract (trainees only), please visit the AllerGen website at: http://www.allergen-nce.ca/Events/2011_Conference_Vancouver_BC.html.

Those interested in becoming a conference sponsor can contact the AllerGen Administrative Centre at info@allergen-nce.ca or (905) 525-9140 ext. 26502.
Trainees Receive $325,500 from AllerGen’s Canadian Allergy and Immune Diseases Advanced Training Initiative (CAIDATI) Research Fellowship Program, Promoting Allergic and Related Immune Disease Research

AllerGen’s CAIDATI Awards provide new training opportunities for undergraduate summer students and students pursuing MD, Masters and PhD degrees as well as post-doctoral fellows specializing in research relevant to biomedical, health, social and/or natural sciences and engineering research in the area of allergy, asthma and related immune/inflammatory processes and disease.

AllerGen’s investment of $162,750 through the 2010 CAIDATI awards was matched by partner organizations for a total investment of $325,500 and will support research that aims to train future allergy, asthma and anaphylaxis researchers.

The awards are intended to contribute to a significant increase in Canada’s research capacity in allergy, asthma and related immune diseases/inflammatory processes through joint funding of new fellowships in partnership with other programmes across Canada.

After peer review by AllerGen’s Advanced Education and Opportunities Advisory Committee (AETOAC), fourteen outstanding students (2 Undergraduates, 6 MSc, 1 MD, 3 PhD and 2 Postdoctoral Fellows) from six academic institutions across Canada were selected for funding.

AllerGen’s Focus on Knowledge Translation (KT) – Café Scientifique and KT Workshop

Knowledge translation (KT) is defined as a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products and strengthen the health care system. AllerGen is fully committed to KT and hosted a Café Scientifique, The Allergy and Asthma Epidemic – Can We Prevent or Cure it?, earlier this year in Burlington, Ontario to provide members of the general public who have an interest in allergy, asthma and related immune diseases with access to leading disease experts and the latest clinical and basic research.

Sixty-five members of the general public attended, allowing AllerGen to successfully establish a unique, accessible, informal forum within which the public could explore and ask questions about the Canadian allergy epidemic.

Based on the success of AllerGen’s inaugural Café Scientifique, AllerGen is hosting a second Café Scientifique following the sixth annual research conference in Vancouver, British Columbia.

As part of AllerGen’s International Partnership Initiative (IPI) collaboration with the Karolinska Institute in Stockholm, Sweden and building on AllerGen’s commitment to KT, a workshop was held in Quebec City in May 2010, by AllerGen investigator Dr. Louis-Philippe Boulet, the Laval University Chair on Knowledge Transfer in Respiratory and Cardiovascular Health, to explore Knowledge Transfer in Primary Care: The Model of Allergic Respiratory Diseases A Canada/Sweden Symposium on Guidelines Implementation.

The workshop was organized by Dr. Boulet in collaboration with the Karolinska Institute, AllerGen NCE Inc. and the Réseau en santé respiratoire du Fonds de recherche en santé du Québec (RSR-FRSQ).

The main objectives of the symposium were to review barriers and facilitators of knowledge translation and guidelines implementation for primary care; to discuss current status and recent initiatives in regard to allergy and asthma guideline implementation in Canada and Sweden; to elaborate on how to improve guideline implementation at the patient level, for example, using shared-decision interventions, and finally, to suggest models of evaluation of KT and implementation programs.

The symposium hosted experts in the field of KT who provided an overview of prevalence trends in allergy and asthma, future opportunities for research, translation and knowledge mobilization in Canada and globally, and presented their ideas in hopes of bringing useful information to the attention of all those interested in KT and to promote new initiatives. The keynote presenter at the symposium was AllerGen Managing Director, Dr. Diana Royce whose presentation discussed KT opportunities in allergic disease and asthma and highlighted AllerGen’s publicly available KT planning tool, Knowledge Translation Planning Tools for Allergic Disease Researchers. This tool, available at www.allergen-nce.ca, was provided to all symposium participants and acts as a guide for researchers, their stakeholders and partners to collaboratively develop translational strategies and tactics that will help accelerate the rate of dissemination, uptake and application of allergy, asthma and related immune disease research. The hope is that this tool will assist researchers and their partner organizations to undertake research and disseminate new knowledge in ways that will improve the quality of life for patients, facilitate optimal care by health providers and reduce the economic drag resulting from the burden of these diseases.

Overall the KT symposium was an excellent opportunity for leading KT experts to discuss their ideas and findings, in particular in relation to allergy and asthma guideline implementation and to discuss ways to use guidelines more effectively to improve patient outcomes.
AllerGen Researcher Accomplishments

AllerGen Researcher, Dr. Ryan Allen, Wins Prestigious Young Scientist Award

Dr. Ryan Allen, AllerGen Investigator and Assistant Professor in the Faculty of Health Sciences at Simon Fraser University, was awarded The Joan M. Daisey Outstanding Young Scientist Award at the annual International Society of Exposure Science (ISES) meeting in Seoul South Korea on August 28 to September 1, 2010. This prestigious, international award is given in recognition of outstanding contributions to the science of human exposure analysis by a young scientist.

Dr. Allen has a Master's degree in Environmental Engineering and a PhD in Environmental Health from the University of Washington in Seattle. His doctoral research focused on air pollution exposure assessment among susceptible populations and the development of techniques for modeling the infiltration of outdoor air pollution into residences. His current research interests include the cardiovascular health effects of residential woodsmoke, evaluation of new methods for assessing chronic exposure to traffic-related air pollution, community noise exposure and health effects, and environmental determinants of childhood asthma. Dr. Allen is currently a co-investigator on a Gene-Environment Interactions (Programme A) AllerGen funded research project entitled “Traffic-related air pollution as a risk factor for the development of childhood asthma.”

Dr. John Bienenstock to be inducted into the Canadian Medical Hall of Fame

Dr. John Bienenstock, AllerGen investigator in Diagnostics and Therapeutics (Programme B), is being inducted into the Canadian Medical Hall of Fame, which honours medical heroes who have made a major contribution to health care in Canada and around the world. The formal ceremony will take place in April 2011 in London, Ontario.

Dr. Bienenstock is internationally renowned for his work in allergy and as the pioneer of the concept of the common mucosal system - the means by which the body's different mucosal surfaces, such as the respiratory tract and the reproductive system, share information to fight infection. His landmark studies have led to new approaches in immunization, and also to a better understanding of the structural and physiological links between the brain, nervous and immune systems in health and disease. He holds a position as a distinguished university professor at McMaster University and is also Director of the University’s Brain-Body Institute at St. Joseph’s Healthcare Hamilton.

Dr. Paul O’Byrne Honoured by the Royal Society of Canada

AllerGen investigator and Leader of Diagnostics and Therapeutics (Programme B), Dr. Paul O’Byrne has been elected a Fellow of the prestigious Royal Society of Canada in recognition of his lifelong contributions towards improving the lives of asthmatics around the world. Fellowship in the 128-year-old society is considered the top academic accomplishment in Canada.

Dr. O’Byrne is professor and chair of the Department of Medicine in the Michael G. DeGroote School of Medicine at McMaster University and director of the Firestone Institute for Respiratory Health at St. Joseph’s Hospital. As a world-leading asthma expert, Dr. O’Byrne is internationally recognized for his seminal contributions to understanding the causes and treatment of asthma, including the first studies of the central role of airway inflammation. His studies have influenced treatment guidelines worldwide.

Dr. Allan Becker Inducted into the Canadian Academy of Health Science (CAHS)

Election to Fellowship in the CAHS is considered one of the highest honours for individuals in the Canadian health sciences community. AllerGen investigator and former Leader of Public Health, Ethics, Policy and Society (Programme C), Dr. Allan Becker was elected by his peers in recognition of outstanding career accomplishments and exceptional leadership, creativity and commitment to advancing academic health sciences.

Dr. Becker is among Canada’s premier academic pediatric allergists and is widely recognized for pioneering studies in, and active practice of, pediatric medicine, with a focus on early childhood asthma and allergies. Dr. Becker has made significant contributions to allergy and asthma research and education, including the completion of an influential asthma education program across Canada, and highly cited gene-environment interactions research. His accomplishments have positively impacted the scientific community, health educators and most importantly, patients and their families.
Going Global Germany

A successful Going Global application made through the Department of Foreign Affairs and International Trade (DFAIT) enabled seven AllerGen investigators along with AllerGen’s Scientific Director and Managing Director to travel to Germany in October 2010 to meet with leading German investigators regarding the establishment of a Canada-Germany allergic diseases and asthma network. This network would enable collaboration on research and development projects generating social and economic benefits and create new capacity building opportunities for Canadian and German research trainees.

The mandate of the Going Global program is to promote and enhance Canada’s international innovation efforts by supporting Canadian companies and/or researchers in pursuing international research and development (R&D) collaborative opportunities through the development of partnerships with key players in other countries/economies.

Objectives of the AllerGen Canadian-German collaboration were to:

- Share research portfolios among leading academics in allergy and asthma, highlighting potential commercial and health benefits;
- Flesh out new Canada-Germany research initiatives in the area of allergic diseases and asthma focusing on the genetics of allergy and asthma, development of allergy and asthma in early life and early intervention studies to target environmental triggers of allergy and asthma; and
- Establish formal research project/program collaborations between AllerGen and leading German academics and their commercial associates in Germany.

Following a research priorities brainstorming workshop attended by 12 German and nine Canadian investigators on Monday, October 11, 2010 at The Charité Hospital in Berlin, the AllerGen delegation broke into teams of two and fanned out across the country to meet with German collaborators at their home institutions to flesh out the details of potential research collaborations that could be undertaken by joint Canadian-German research teams. Two days later, on October 14, 2010, the AllerGen delegation, comprising nine Canadian and eight German leading researchers reunited at the Embassy of Canada in Berlin for a meeting with German funding organizations - the Alexander von Humboldt Foundation (AvH), German Science Foundation (DFG), German Academic Exchange Service (DAAD) and the Federal Ministry for Education and Research (BMBF) - to present the proposed collaborative research projects to German funders from whom funding was requested. Proposed projects arose readily from the common research platforms and interests of the Canadian and German delegations, e.g., - genome wide association studies, birth cohorts and biological materials, environmental exposures (stress, pollutants, microbiota), animal models for validation of targets and determination of mechanisms, therapeutic strategies and clinical practice and public policy.

The following collaborative research projects were proposed in the context of a new Canadian – German network titled Allergy Prevention, Tolerance and Treatment (APT) Network - Advantage 2020:

i. Genetics of Allergy and Asthma: from genome to epidemiology to mechanisms

Strategic focus: Functional genetics, peanut allergy genetics, maternal (parent-of-origin) genetics and genetics of atopic dermatitis

Collaborating members: AllerGen NCE, Munich University of Technology (TUM)/ZAUM Centre for Allergy and Environment (Munich), Charite (Berlin) and global consortia partners

ii. Development of Allergy and Asthma in Early Life: from epidemiology and environment to mechanisms

Strategic focus: Birth cohort studies (experience, data and personnel sharing/exchange), urban hygiene (dust sampling and analyses, DNA, endotoxin, microbiota inside and outside), and environmental triggers and exposures (nanoparticles, air pollution, maternal stress, lifestyle)

Collaborating members: AllerGen NCE, Charite (Berlin), ZAUM and Helmholtz, Ludwig Maximilian University (LMU), GCOH, Marburg, Leipzig

AllerGen NCE Welcomes Letters of Support

AllerGen is currently preparing the document to support its 2012 Networks of Centres of Excellence (NCE) renewal application which, if successful, would provide AllerGen with a second and final funding cycle for the period of 2012-2019. As a part of the renewal process, AllerGen is required to include letters of support that confirm the Network’s expected new incremental contributions, participation by potential Network partners, and/or impact anticipated by the user sector.

Network partners can expect to be contacted by AllerGen’s Manager of Research and Partnerships, Mark Mitchell, in the near future for letters of support. Letters of support should speak to the value and impact AllerGen’s network has made in the discovery, development, networking, capacity building, commercialization and knowledge translation as well as expected future contributions that contribute to reducing the impact of allergic and related immune diseases.

In the interim, should you be interested in providing a letter of support for AllerGen, please contact Mark Mitchell at mitchemd@mcmaster.ca or (905) 525-9140 ext. 26092.
International Partnership Initiative (IPI)

As a highly integrated national research network, AllerGen has established strong ties with international organizations and academic institutions. This has been possible through AllerGen’s successful implementation of an International Partnership Initiative (IPI) program, supported by NCE-IPI and International Development Research Council grants totalling over one million dollars.

Five specific objectives were associated with the overall performance of the IPI program, all of which were met, and in many instances, exceeded by the participation of AllerGen in this initiative.

The five objectives of the IPI were:

- Raise Canada’s profile on the world stage and ensure that Canada is part of international cutting-edge initiatives;
- Provide a richer training environment to develop highly qualified people with skills and awareness critical to Canadian productivity, economic growth, public policy and quality of life;
- Stimulate or reinforce partnerships with foreign organizations to develop large coordinated and concerted efforts leading to economic and social impact;
- Enhance the sharing and dissemination of knowledge, resources and technology to Canada; and
- Appropriate management of the initiative.

AllerGen invested IPI funds with the following five international counterpart centres or networks of excellence abroad:


1. Global Allergy and Asthma European Network (GA2LEN), hosted in Belgium, which is a pan-European network, to ensure excellence in, and better coordination of, allergy research, and that brings together over 500 leading scientists, researchers, clinicians and clinical institutions.
2. Karolinska Institute Centre for Allergy Research, which is Sweden’s largest centre for medical training and research to support and develop world-class allergy research.
3. Global Alliance against chronic Respiratory Diseases (GARD) and the Allergic Rhinitis and its Impact on Asthma (ARIA) Study Group – both World Health Organization (WHO) initiatives hosted in France and Switzerland, and internationally networked partners engaged in the WHO’s work to prevent, control and reduce chronic respiratory diseases worldwide.
4. International Union Against Tuberculosis and Lung Disease (IUATLD), hosted in France, with activities in El Salvador and Mexico brings research, expertise and support to address challenges of TB, lung health, tobacco control in low- and middle-income populations.
5. Institute of Population Health and Clinical Research of the St. John’s Research Institute (SJRI), India. Located in Bangalore, India, SJRI is one of eleven international “collaborating centres of excellence” with a mandate to prevent and control chronic diseases in developing countries.

Through the development of these five international collaborations, opportunities to spin-off two new international collaborations, positioning Canadian researchers as global leaders in genome-wide association studies (GABRIEL) and international respiratory disease surveillance (The Respiratory GReAT Network) were leveraged. GABRIEL has resulted in a major publication list for the Network and the GReAT Network program has been accepted as a graduate module by the Institute of Medical Science (IMS), University of Toronto. The program will run from November 9, 2010 to March 29, 2011 and has a total of 29 registered participants. Of these participants, 10 graduate students of IMS and 2 Ontario certified respiratory therapists will be attending classes in person. The other 17 respiratory clinicians are international trainees from 10 countries (Argentina, Bangladesh, Brazil, Ecuador, Mexico, Nigeria, Pakistan, Syria, Tanzania and Thailand) and they will be participating via live web conference.

Overall, the IPI has transformed AllerGen’s research and capacity building opportunities in allergic and related immune diseases. AllerGen’s Managing Director, Diana Royce states, “Applying the experience it gained in the IPI program, AllerGen is now providing strong leadership to the identification, development and management of new international collaborations with leading research and development centres whose activities are aligned with AllerGen’s vision and goals.”

AllerGen’s 5th Annual Trainee Symposium, Training for Excellence in Science and Society, Toronto, ON, June 6-8, 2010

Over 40 AllerGen trainees gathered at the Chestnut Conference Centre at the University of Toronto from June 6 to 8, 2010 to participate in AllerGen’s 5th Annual Trainee Symposium. The event was organized by the AllerGen Students and New Professionals Network (ASNPN) with administrative support from the AllerGen Administrative Centre.

The symposium featured talks by experts in several fields of interest to researchers-in-training including knowledge translation, research ethics, engaging the media, research funding, oral presentation skills, and careers outside academe. Symposium participants learned about ASNPN President Jennifer Protudjer’s experience at the Karolinska Institute as part of the AllerGen – Karolinska Exchange Program and were encouraged to get involved in exchange programs. Participants also had an opportunity to attend a Clinical Workshop for Non-Clinicians that was held at The Hospital for Sick Children on June 9th, 2010. Twenty AllerGen trainees also visited the Gage Occupational and Environmental Health Unit at The Hospital for Sick Children where they toured the air pollution exposure facility and saw two demonstrations – methacholine challenge testing and skin prick testing.

Presentation slides from the Trainee Symposium are available on the AllerGen website, http://www.allergen.ca/Events/Past_Events/2010_Trainee_Symposium.html.

AllerGen trainees practice using professional voice and body language.
As of 30 September 2010, AllerGen investigators have recorded a total of 772 publications, which include refereed and non-refereed publications, presentations and posters. This represents an average of 172 publications per year over the 4.5 years of Network operations, showing significant productivity among AllerGen researchers. Recent publications of note that feature productivity among AllerGen researchers:

i. The New England Journal of Medicine (September 2010), A Large-Scale, Consortium-Based Genomewide Association Study of Asthma (Moffatt MF, Gut IG, Demenais F, Strachan DP, Bouzigon EM, Heath S, von Mutius E, Farrall M, Lathrop M, Cookson W, Gabriel Consortium);

ii. American Journal of Pathology (August 2010), CD34 is required for infiltration of eosinophils into the colon during DSS-induced ulcerative colitis (Maltby S, Wohlfarth C, Gold M, Zytbnuik L, Hughes MR, McNagny KM);

iii. The Journal of Allergy and Clinical Immunology (June 2010), A population-based study on peanut, tree nut, fish, shellfish, and sesame allergy prevalence in Canada (Ben-Shoshan M, Kagan R, Primeau M, Alizadehfar R, Verreault N, Yu J, Nicolas N, Joseph L, Turnbull E, Dufresne C, St Pierre Y, Clarke AE); and

iv. The Journal of Immunology (April 2010), MIP-2 is a Critical Mediator of Neutrophilia in Pulmonary Host Defence Against Heterologous Pathogens (Zavitz C, Gordon J Gaschler, Carla MT Bauer, Katie M Fraser, Cory M Hogaboam, and Martin R Stampfl).

AllerGen would like to highlight the aforementioned publication by Dr. Kelly McNagny and his then-PhD candidate Steven Maltby in the American Journal of Pathology. This publication was selected and evaluated by a Member of the Faculty of 1000 (F1000), which places this particular work in the F1000 library of the top 2% of published articles in biology and medicine. This inclusion in the F1000 library is quite prestigious and should increase the visibility of this publication. Of note, the work behind this publication also garnered Dr. Maltby the Programme B (Diagnostics & Therapeutics) poster competition award at the AllerGen Annual Conference in Quebec City earlier this year. Congratulations to both Dr. McNagny and Dr. Maltby on this tremendous achievement!

AllerGen Investigators’ Publications Appear in Health Law Review

AllerGen Programme C Investigator Tim Caulfield and his group of research associates’ work was recently published in the University of Alberta, Health Law Institute’s Health Law Review. This is an excellent example of recent AllerGen-funded research outputs and directly supports the current and ongoing research of the groups' AllerGen funded project titled “Evidence, Ethics and Health Policy Research.”

Of particular interest is the article by Robin Hyde-Lay, which presents results from a survey administered at AllerGen’s 2010 research conference: Innovation from Cell to Society to members in the AllerGen community. The survey, developed by Tim Caulfield and his project team members, asked questions about views of media representations of allergy and asthma issues, policy and research and the impact that these representations have on policy development, funding decisions and public opinion.

Results of this survey indicated that conference delegates expressed strong to moderate concern regarding the accuracy and quality of evidence used in media representations of asthma issues, policy and research. Results also indicated that there is a belief that such representations indeed impact politicians’ and the general public’s views on allergy and asthma, which can in turn affect policy development and implementation. Robin Hyde-Lay notes the current debate within the literature regarding the accuracy of media reports and suggests that a more comprehensive analysis exploring this issue would be beneficial.

Robin Hyde-Lay is a Research Associate at the Health Law Institute, University of Alberta and currently Project Manager on Tim Caulfield’s AllerGen project which is investigating the challenges associated with the use and production of evidence in allergy and asthma policy. Their work is seeking to identify and analyze the nature and source of evidence used in public policies, laws, and regulations relevant to allergy and asthma prevention and management and to make recommendations to improve the legal and ethical governance of health research, particularly multi-site research and longitudinal studies such as the CHILD birth cohort study.

AllerGen has established itself in the main stream media as an international authority on allergy and asthma. AllerGen-funded research projects and the Network name have recently been featured in Best Health Magazine (October 2010, The Globe and Mail (20 September 2010), Ming Pao (22 September 2010), The Vancouver Sun (15 October 2010) and CBC television (14 October 2010).