

## AllerGen NCE Receives \$36.5 million for Allergy, Genes and Environment Research to 2019

On March 23, 2012, the Honourable Gary Goodyear, Minister of State for Science and Technology, announced that AllerGen will receive \$36.5 million over seven years to continue its work. Minister Goodyear noted that "this investment will support the application and development of world-

class excellence in the knowledge and people necessary to provide relief to the millions of Canadians suffering from the complications of allergic diseases."

The Minister went on to say that "the Government of Canada is committed to improving the lives of all Canadians. While we believe that prevention and health care promotion will help keep health costs down and improve our quality of life, we also understand that investing in science and technology will

not only achieve these objectives, but will also contribute to economic growth."



The Honourable Gary Goodyear

Dr. Diana Royce, Managing Director and COO of AllerGen, acted as Master of Ceremonies for the event, which featured speeches by Dr. Patrick Deane, President and Vice-Chancellor of McMaster University, Mike Wallace, MP Burlington and Technology and Dr. Judah Denburg, Scientific Director and CEO of AllerGen.

In his remarks, Dr. Denburg noted that "over the next seven years, AllerGen aims to focus on commercialization and knowledge mobilization activities and remain dedicated to ongoing investments in training the next generation of allergists and clinical immunologists that will increase access to services for Canadians living with allergies, asthma and anaphylaxis."

Following the announcement, Dr. Denburg took Minister Goodyear on a tour of his lab, where he studied a cord blood sample and interacted with AllerGen HQP's - research technician Delia Heroux; undergraduate student, Sina Rusta Sallehy; and PhD student Claudia Hui.



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## AllerGen Students and New Professional Network (ASNPN)

In 2007, the AllerGen Students and New Professional Network (ASNPN) was launched as a student-led organization composed of AllerGen research trainees and new professionals from across the country in all fields of allergic and related immune disease research. The ASNPN aims to enhance research and professional development opportunities by:

- Fostering relationships through networking and regular communications among and between AllerGen students and new professionals;
- Facilitating professional information exchange among students and new professionals, other Network participants and partner organizations; and,
- Promoting excellence in research and professional skill development through the development and delivery of annual capacity building events.

Students and new professionals working on AllerGen-funded research projects automatically become ASNPN members. Those not directly involved in AllerGen research, but training or

working in the field of allergy, asthma and/or anaphylaxis and related immune disease research may apply for membership on an annual basis.

The ASNPN Executive Committee, nominated and elected by ASNPN members, is advisory to the AllerGen Advanced Education and Training Opportunities Advisory Committee (AETOAC), of which the ASNPN President is a member. The President also sits on AllerGen's Board of Directors, while the Vice-President is a member of the Research Management Committee.

Benefits of ASNPN membership include networking and eligibility to apply for a range of capacity building opportunities, including the AllerGen:

- Trainee Symposium
- Research Conference
- Research Conference Poster Competition
- Undergraduate Summer Studentships
- Internships, and
- International Trainee Exchanges.



### Current ASNPN Executive

The 2012-2013 ASNPN Executive took office during the AllerGen Annual Research Conference on February 5, 2012. Their term of office ends June 30, 2013.

2012-2013 ASNPN Executive Committee:

*Position, Name, Current level of study, Institution, Supervisor*

President, **Lianne Soller, MSc**, McGill, Dr. Ann Clarke

Vice President, **Pia Reece, PhD (c)**, McMaster, Dr. Judah Denburg

Secretary/Treasurer, **Elaine Fuertes, PhD (c)** UBC, Drs Chris Carlsten and Michael Brauer

Events & Communications Director, **Luisa Giles, PhD (c)**, UBC, Dr. Chris Carlsten

Pacific Director (BC), **Jeremy Hirota, PDF**, UBC, Dr. Darryl Knight

West-Central Director (AB, SK, MB), **Meghan Azad, PDF**, Alberta, Dr. Anita Kozyrskyj

Ontario Director, **Claudia Hui, PhD (c)**, McMaster, Dr. Judah Denburg

Quebec/Atlantic Director, **Yuka Asai, MD, MSc**, McGill, Dr. Ann Clarke



Photos in order of Executive Roles listed

## 7th Annual Trainee Symposium

This month's Trainee Symposium takes place in Calgary, Alberta from May 27 to May 29, 2012 at the Ramada Downtown Hotel.

This event has reached its maximum capacity of 50 registrants and AllerGen is pleased to report a 13% registration increase over last year. Registration is currently closed.

The program is packed with capacity building sessions, allowing trainees new skill development and capacity building opportunities not normally available through regular academic curricula and laboratory work.

### Program:

- An IP Primer – Protecting your Intellectual Property
- In Support of Student Learning - A Guide to Effective Feedback
- Effective Interviewing Techniques
- Business Etiquette and Networking for Success
- Platform for Success - Writing Effective Grants and Journal Abstracts
- Knowledge Translation: What does it mean for trainees and early-stage investigators in basic science and clinical research?
- Case Report - An Orphan in the Cold
- AllerGen HQP Strategic Initiatives 2012-2019
- Hot off the Press - Dealing with the Media
- Networking: Team Building Activity, Networking for Success Dinner and networking social.

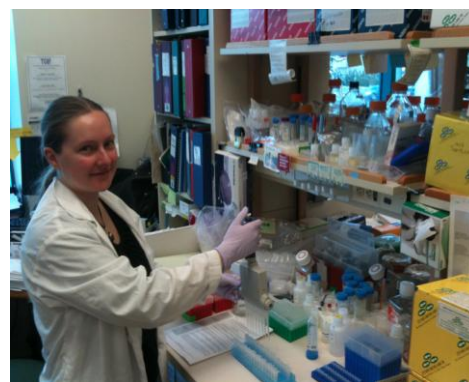
## Lab Exchange Builds Capacity in Ground-Breaking Field of Epigenetics



University of British Columbia. She learned about

In January 2012, with support from an AllerGen funded Lab Exchange Award, Dr. Michelle North, a postdoctoral fellow at Queen's University, supervised by AllerGen Investigator Dr. Anne Ellis, visited the lab of Dr. Michael Kobor at the Centre for Molecular Medicine and Therapeutics at the

new techniques in the ground-breaking field of epigenetics, where Dr. Kobor's laboratory is among a select few labs in Canada currently using



*Dr. Michelle North*

epigenetic microarray technologies. The exchange focused on pyrosequencing and the Illumina 450K Methylation BeadChip microarray.

During the lab exchange, Dr. North performed bisulfite conversion of DNA on over 100 samples using a kit from Zymo Technologies. She also gained hands-on experience with pyrosequencing and learned how this epigenetic analysis technique differs from bisulfite sequencing. She participated in genome-wide DNA methylation analysis using the Illumina 450 Methylation BeadChip microarray with assistance from Dr. Kobor's highly trained staff. Dr. Kobor's staff also demonstrated how the raw microarray data undergoes quality control and normalization using GenomeStudio from Illumina and differential CpG methylation analysis using Matlab.

The laboratory exchange offered Dr. North a unique opportunity to learn new techniques and work with technologies that are not currently available at Queen's University, and indeed only available at select centres in Canada. This exchange was relevant to her postdoctoral project, which focuses on epigenetic changes that occur in allergic individuals when challenged with an allergen. The laboratory exchange not only provided the opportunity to build capacity with new technologies but also promoted collaboration between Dr. Ellis' laboratory and Dr. Kobor, who has agreed to lend his expertise to Dr. North's project.

For more information on how to apply for an AllerGen Lab Exchange contact Michelle Harkness at [michelleharkness@allergen-nce.ca](mailto:michelleharkness@allergen-nce.ca) or visit the AllerGen website to download the application form.



## AllerGen Trainee Wins a Research Assistantship and Admission to PhD Program in Sweden



Huan Shu and Dr. Tim Takaro

One of AllerGen's Trainees, supervised by Network Investigator Dr. Tim Takaro, Associate Professor, Faculty of Health Sciences, Simon Fraser University, won a Research Assistantship competition and admission to the PhD program at Karlstad University in Sweden. Huan Shu has finished her Masters of Science degree and she'll be working with prolific phthalate investigator Dr. Carl Bornhag to gain valuable experience and knowledge. Even though she will be missed at Simon Fraser University, this is a fantastic opportunity to not only work with Dr. Bornhag and gain international expertise but also further enhance connections between Sweden, AllerGen and The CHILD Study.

## AllerGen Awards Ten Undergraduate Summer Studentships

The *AllerGen Undergraduate Allergy, Asthma and Anaphylaxis Summer Studentships Research Training Awards* program provides capacity building opportunities for students specializing in biomedical, health, social and/or natural science and engineering research relevant to allergy, asthma and related immune/inflammatory processes and diseases. The Summer Studentships are intended to foster interest in allergic and related immune disease research among students at the undergraduate level of study by recruiting the top undergraduate students to work with established AllerGen research teams. It is hoped that this experience will spark an enduring interest in allergic disease research and clinical practice among these students, which will ultimately lead them to pursue advanced studies in these areas.

A total of 26 applications were received for 10 available awards totaling \$30,000, representing a significant increase in the number of applications

over previous years. Recipients and their respective projects are shown in order of highest to lowest ranking, with the last two obtaining an equal score, thus tying for ninth place.

**Juliana Xie**, McMaster University, supervised by Dr. Manel Jordana  
*Impact of iLC depletion on PN Allergy and Anaphylaxis*

**Janet Xu**, University of British Columbia, supervised by Dr. Delbert Dorscheid  
*Expression and Modulation of Surfactant Protein D in the Airway Epithelium of Asthmatics*

**Ting-I (Tina) Wang**, University of British Columbia, supervised by Dr. Stuart Turvey  
*Role of RIG-I in Respiratory Syncytial Virus Infection*

**Madelaine Yona**, McGill University, supervised by Dr. Bruce Mazer  
*Ability of CD8a+ CD11c+DCs in Potentiating the Recruitment of Treg*

**Sina Rusta-Sallehy**, McMaster University, supervised by Dr. Judah Denburg  
*Identify the Mechanisms Involved in Increasing Eosinophil Lineage Commitment of CD34+ HP in Response to TSLF Stimulation in the Presence of the Hemopoietic Cytokine IL-5*

**Nicole Tsao**, University of British Columbia, supervised by Dr. Larry Lynd  
*Health Care Utilization and Costs Associated with Asthma Management in British Columbia*

**Valérie Gagné-Ouellet**, Université du Québec à Chicoutimi, supervised by Dr. Catherine Laprise  
*Role of 1L1R2 in Allergic Asthma*

**Kiho Son**, University of Alberta, supervised by Dr. Dean Befus  
*Evaluation of mRNA Expression in the Lung*

**Tin-Shan (Tim) Chung**, University of Alberta, supervised by Dr. Brian Rowe  
*Acute Management of Anaphylaxis*

**Danielle Tougas**, University of Alberta, supervised by Dr. Dean Befus  
*The Roaring Adventures of Puff Knowledge Translation Project*

**Congratulations to all!**

## AllerGen Trainees Take Centre Stage during the Annual Research Conference

The Annual Poster Competition is an important component of AllerGen's research conference. This year, 54 trainees and new professionals representing 14 universities and affiliated institutions participated in AllerGen's Annual Poster Competition. In total, \$2,800 in cash prizes was awarded to top poster winners in each research program area as well as to the top two undergraduate posters.



From left: K. Carson, M. Azad, L. Soller, H. Shu, J. Yang, M. Alton and B. Lo

For the first time, an HQP dinner meeting was organized and members of the ASNPN had the opportunity to network and mingle with their colleagues across the country. Also, during the dinner, the New ASNPN Executive Committee was announced and goodbyes and thanks were expressed to the outgoing ASNPN Executive who extended their terms to help support preparations for AllerGen's renewal bid. Following the dinner, all delegates were invited to join the students and new professionals at a special networking reception on the 19th floor of the Royal York Hotel.



Dr. Teresa To, Dr. Sharon Dell, Dr. Judah Denburg and Bonnie Chow

### Undergraduate (Top Two Scores)

**Megan Alton**, McGill University, supervised by Dr. Anita Kozyrskyj

**Kaitlyn Carson**, Dalhousie University, supervised by Dr. Jean Marshall

### Programme A: Gene-Environment Interactions

1st Place - **Meghan Azad**, University of Alberta, supervised by Dr. Anita Kozyrskyj

2nd Place - **Huan Shu**, Simon Fraser University, supervised by Dr. Tim Takaro

### Programme B: Diagnostics and Therapeutics

1st Place - **Jasemine Yang**, University of British Columbia, supervised by Dr. Delbert Dorscheid

2nd Place - **Bernard Lo**, University of British Columbia, supervised by Dr. Kelly McNagny

### Programme C: Public Health, Ethics, Policy and Society

1st Place - **Lianne Soller**, McGill University, supervised by Dr. Ann Clarke

2nd Place - **Bonnie Chow**, University of Waterloo, supervised by Dr. Susan Elliott



Dr. Joe Macri, Dr. Darryl Adamko and Dominik Nowak

## Allergen's Strategic Priorities to 2019

During the first phase of NCE funding, AllerGen moved from five research themes to three integrated programmes: Gene-Environment Interactions, Diagnostics and Therapeutics and Public Health, Ethics, Policy and Society. This has been the conceptual framework around which the research program operated to March 31, 2012.

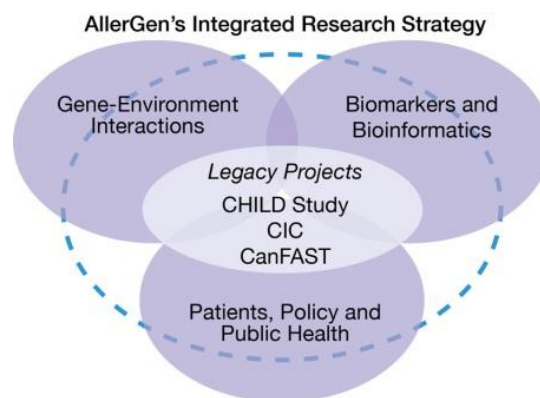
Implementation of AllerGen's *Strategic Plan 2012-2019* will focus Network research on three Legacy Projects, interacting with three Enabling Platforms as represented by the diagram.

### Legacy Projects:

**The Canadian Healthy Infant Longitudinal Development (CHILD) Study** led by Dr. Malcolm Sears, Professor, Department of Medicine, McMaster University, will generate important new data on maternal and infant health in Canada and will serve as a national resource for multiple research endeavours. The CHILD Study will enable and inform many scientific constituencies and stakeholders within and outside of AllerGen, in Canada and globally, for decades to come.

**The Clinical Investigator Collaborative (CIC)** is led by Dr. Paul O'Byrne, Professor and Chair, Department of Medicine, McMaster University, and will continue clinical trials in Canada as well as expand to add the capacity to undertake studies of Severe Asthma and Allergic Rhinitis. With new international sites launching in Sweden, the Netherlands and the UK, the CIC is a global resource for the development of novel diagnostics and therapeutics in allergy and asthma in Canada as well as internationally.

**The Canadian Food Allergy Strategic Team (CanFAST)** is a highly-innovative, cross-network approach to food allergy and anaphylaxis that incorporates biomedical, clinical, population and psychosocial information in order to translate understandings about food allergy into disease management and public health measures. This group's leaders are Dr. Jean Marshall, Professor and Head, Microbiology and Immunology, Dalhousie University, Dr. Ann Clarke, Professor, Department of Medicine, McGill University and Dr. Susan Elliott, Professor and Dean, Faculty of Applied Health Sciences, University of Waterloo. CanFAST will position Canada to develop a national food allergy strategy with key partners and stakeholder groups.



### Enabling Platforms:

**Gene-Environment Interactions** will involve well-established teams of AllerGen investigators working nationally and globally. These teams will apply genetic and environmental research for innovations and gather new knowledge on nature and nurture with respect to epigenetics, maternal-child interactions, lifestyle and stress. This group is led by Dr. Andrew Sandford, Associate Professor, Department of Medicine, University of British Columbia and Dr. Jeffrey Brook, Senior Scientist, Air Quality Research Branch for Environment Canada. Its twin goals are discovering novel therapies and diagnostics as well as implementing novel public health interventions and policies across AllerGen's Legacy Projects.

**Biomarkers and Bioinformatics** is led by Dr. Dean Befus, Professor, Department of Medicine, University of Alberta and by Dr. Kelly McNagny, Professor, Department of Medical Genetics, University of British Columbia. It will bring together successful members of AllerGen's diagnostics and biomarkers research, new partners with various 'omics' capabilities, biological sampling standard operating protocols (SOPs) and animal models to create an integrated, world-leading systems-biology and bioinformatics approach to developing and commercializing products across AllerGen's Legacy Projects.

**Patients, Policy and Public Health** will focus on benefits for patients, policy and public health across AllerGen's Legacy Projects. This team, led by Dr. Ann Clarke, Professor, Department of Medicine, McGill University and Dr. Susan Elliott, Professor and Dean, Faculty of Applied Health Sciences, University of Waterloo, integrates expertise in the social sciences, including psychology, sociology, medical geography, ethics, law and health economics to inform evidence-based public health policy.



## **AllerGen Funded 26 Travel Awards in Fiscal 2011-2012**

Travel awards are available to ASNP members to support attendance and participation in non-AllerGen events that are aligned with AllerGen's mission, vision and goals.

These events must provide an opportunity for networking, research collaboration, knowledge exchange, or new skill development, while maximizing learning opportunities. Travel awards support a portion of related expenses including travel, accommodation and registration fees. Support is matched 1:1 with partnered non-NCE funds to a maximum value determined by available AllerGen funding.

Over the past fiscal year, AllerGen funded 26 travel applications that supported 18 trainees to participate in 13 national and international events. Examples of the events attended include:

### **American Academy of Allergy, Asthma and Immunology (AAAAI)**

**(March 2-6) in San Francisco, CA**

McMaster University - Delia Heroux, Pia-Lauren Reece, Steven Smith, Claudia Hui  
Queens University - Michelle North

### **American Thoracic Society Annual General Meeting (May 13-18) in Denver, CO**

McMaster University - Alba Llop  
University of Alberta - Meghan Azad  
University of British Columbia - Jianqing He, Sarah Kam

### **Anaphylaxis Canada Spring Conference (May 7) in Toronto, ON**

McMaster University - Bonnie Chow

### **Association of Clinical Research Professionals Annual Conference (April 30-May 3) in Seattle, WA**

McMaster University - Heather Campbell, Karen Howie

### **Canadian Association of Geographers Annual Meeting (May 31-June 4) in Calgary, AB**

McMaster University - Daniel Harrington

### **Canadian Respiratory Conference (April 28-30) in Niagara Falls, ON**

University of Toronto - Michelle North

### **Injury and Repair Mechanisms in Chronic Airways Disease International Conference (April 6-8) in London, UK**

University of Manitoba - Pawan Sharma

### **International Eosinophil Society Research Symposium (June 21-25) in Quebec City, QC**

McMaster University - Claudia Hui, Steven Smith, Gail Gauvreau, Pia-Lauren Reece  
University of British Columbia - Steven Maltby

### **International Human Microbiome Congress (March 19-21) in Paris, France**

University of Toronto - Tedd Konya

### **International Medical Geographers Symposium (July 10-15) in Durham, UK**

McMaster University - Bonnie Chow, Daniel Harrington

### **International Society for Environmental Epidemiology Conference (September 13-16) in Barcelona, Spain**

University of British Columbia - Elaine Fuertes

### **International Society for Exposure Science Annual Meeting (October 23-27) Baltimore, MD**

University of British Columbia - Rongrong Wang

### **Spring School of Population Genomics and Genetic Epidemiology (May 30-June 3) in Montreal, QC**

University of British Columbia - Elaine Fuertes

Travel Award applications are now being accepted on a first come, first serve basis. For further details, contact Michelle Harkness at [michelleharkness@allergen-nce.ca](mailto:michelleharkness@allergen-nce.ca) or visit the AllerGen website to download the application form.



Students and New Professionals Network  
Réseau des étudiants et des jeunes professionnels

## Industrial R&D Internship Program (IRDI)

The Industrial R&D Internship (IRDI) program, begun in 2007, is a federal program administered by the Networks of Centres of Excellence (NCE) and has provided over 1,000 internships across Canada in the past two years. Going forward, it's expected to support up to 1,000 internships annually.

The IRDI program aims to create opportunities for skilled graduate students and postdoctoral fellows to solve private-sector challenges and gain valuable industry experience by linking them with businesses that foster and use their talents. As a result, the program increases the science and technology capacity of businesses and creates new opportunities for highly qualified personnel.

Of the industry partners who participated in a project completion survey, 96% stated that the research advances, techniques or tools developed during these internships would be used by their organization. In fact, the outcomes of many of these internships directly resulted in commercialization of a product, service or process.

Targeting all academic disciplines, the program supports collaborative projects involving graduate students and postdoctoral fellows, their supervising professors, and industry partners. Companies share the cost of hosting interns, with additional funding obtained from provincial, academic, and other partners. Two of these programs are *Connect Canada* and *Mitacs Accelerate*.



Connect Canada is a national internship program that links graduate students and postdoctoral fellows with

industry's research needs within Canadian companies regardless of location or sector. Internships range in length from four to six months and cover all sectors and educational backgrounds. Each internship represents a research issue that has been vetted by a panel of industry and academic experts to ensure it offers a challenging and scientifically-rigorous opportunity. During the internship, a student will spend at least 50 percent of the time at the company and the remainder on campus. Companies receive a cost-effective way to conduct R&D, while interns gain relevant industry experience that enhances their graduate studies

and practical skills. *Connect Canada* operates on a matched funding system resulting in a total funding model of \$10,000 per internship. [Learn more](#)



In partnership with industry, government or universities across Canada, the *Mitacs Accelerate* internship training program provides graduate students and postdoctoral fellows with the opportunity to transfer their skills from theory to real-world applications. In return, companies, government departments or universities, gain a competitive advantage by accessing high-quality research expertise. Interns spend approximately half of their time onsite with the internship provider and the remainder of time at their university advancing research under the guidance of a faculty supervisor. Each four-month internship project receives \$15,000 in direct funding, with the partner organization and Mitacs each providing \$7,500. [Learn more](#)

## CHILD Study Achieves Major Milestone

To date 3,560 pregnant mothers have been recruited, representing over 10,000 participants (babies-to-be, mothers and fathers) in the CHILD Study birth cohort. The target of 5,000 pregnant mothers should be achieved by 2013.

Home visits at three months of age have been completed in well over 2,000 families, with collection of baby's urine, stool, and nasal swabs, dust from the bedroom and baby's bed, and breast milk samples, along with extensive questionnaire data. Over 1,000 study participants have reached the one year visit when skin allergy tests are performed and a full health review is undertaken.

## 2012-2013 ICRH Top Publication Award for Young Investigator

To recognize the excellence of research being done by Canadian graduate students (MA, MSc, and PhD) and postdoctoral fellows in the areas relevant to the Institute of Circulatory and Respiratory Health's (ICRH) mandate, the *Top Publication Award for Young Investigators* is presented to eight people per year (four awards per semi-annual competition). The maximum amount for a single award is \$500. For 2012, the application deadline is June 1st and December 1st. For more information and to apply visit <http://www.cihr-irsc.gc.ca/e/43100.html>



## AllerGen Trainees attend International Human Microbiome Congress

In March 2012, AllerGen trainees Tedd Konya and Dr. Meghan Azad travelled to the International Human Microbiome Congress in Paris, France. The conference provided them with an opportunity to learn from world leading scientists in Human Microbiome research, generating insights into the relationships between microbes and humans, and the effect of these microbes on overall health and wellbeing.

The CHILD Study and Synergy in Microbiota Research (SyMBIOTA) team are one of only a few groups worldwide studying infant microbiota, putting Canadian researchers in a very unique position to gather microbiome data unavailable to other teams. With the vacuum-collected dust samples, home environment questionnaire, and home assessment data available from the CHILD Study, the SyMBIOTA team of researchers have access to unique environmental data that can be used to determine the source of the microbial organisms that inhabit the infant gut. This data will help researchers better understand the effect that the indoor home environment has on gut microbiome and what combined role they play in early human health. The team stated that no one else at the conference was investigating the environment's interaction with the human microbiome, so Canadian researchers are well positioned to make novel discoveries and lead the world in this area of research.

Supervised by Dr. James Scott at the University of Toronto, Tedd is a MPH candidate researching the exposure of indoor house dust in infancy and the effect on the gut microbiome. Meghan, a member of the SyMBIOTA team, is completing her postdoctoral training with Dr. Anita Kozyskyj in the Department of Pediatrics at the University of Alberta.



Issue number 2862

Both Tedd and Meghan presented posters at this international congress. During this event, a reporter interviewed Tedd after noticing his poster and this interview resulted in an article about his research in the **New Scientist**, Magazine issue 2862, titled: *A dusty home may influence a baby's gut*. [Click Here](#) to read it.

## European Molecular Biology Organization's Scientific Report Features AllerGen HQP

Former ASNPN Executive member and AllerGen HQP, Matthew Gold, co-authored a recently published paper in the European Molecular Biology Organization's **Scientific Report**, EMBO reports advance online publication 16 March 2012; titled *Early life antibiotic-driven changes in microbiota enhance susceptibility to allergic asthma*. The publication reported that using relevant doses of antibiotics, the team found that neonatal, but not adult treatment with select antibiotics can have profound effects on susceptibility to experimental murine allergic asthma. While antibiotic treatment did not substantially deplete bacterial numbers, it resulted in profound shifts in microbial composition.

Matthew is a PhD candidate working under the supervision of AllerGen Investigator, Dr. Kelly McNagny at The Biomedical Research Centre at the University of British Columbia. The paper's lead author is newly joined ASNPN member, Shannon Russell, supervised by Dr. Brett Finlay at the University of British Columbia.

## Past ASNPN President secures a postdoctoral fellowship in Sweden

Former ASNPN President and AllerGen HQP, Dr. Jennifer Projtuder is now a postdoctoral fellow at the Karolinska Institute in Stockholm, Sweden. Her project focuses on puberty and asthma in two national (Swedish) birth cohorts, one with twins and one with singletons. The aim is to study the association between puberty and asthma presence, persistence, remittance and incidence. Additionally, she aims to study the reverse causation, longitudinally, of the association between asthma and puberty. Dr. Protudjer developed her relationships at the Karolinska Institute during a trainee exchange made possible through AllerGen's International Partnership Initiative (IPI) funding, which was provided by a pilot project of the NCE program.



## 2012 Highly Qualified Personnel Capacity Building Programs at a Glance

The Strategic Plan 2012 to 2019 proposes robust capacity building programs for Network HQPs. Outlined below are continuing and new opportunities for Network trainees and investigators to 2019.

### Capacity Building Workshops (\$70,000/yr)

2012 Trainee Symposium, May 27-29, Calgary

- a) **Trainee Professional Development** – A two-day trainee workshop for ASNPN members. Skill development opportunities include public speaking and presentation skills, career planning, recruiting and effectively utilizing mentors, strategic planning, integrated knowledge translation, media relations, ethical approaches to research involving human subjects, negotiating employment contracts and research grant writing.
- b) **Specialized Equipment/Lab Transfer/Research Skills Acquisition** – This program supports workshops that enable sharing and development of unique technical and laboratory skills relevant to AllerGen researchers as well as offers practical professional development and capacity building opportunities.

### Poster Competition (\$50,000/yr)

The HQP research poster competition and oral presentations are central features of the AllerGen *Innovation from cell to society* research conference. This fund supports travel to the conference and cash awards for the top posters.

### AllerGen Emerging Clinician-Scientist Research Fellowship (\$250,000 for two years)

Next call opens October 2012

The goal of supporting Emerging Clinician-Scientists is to enable newly trained Canadian Clinical Immunologists and Allergists to pursue allergy, asthma and/or anaphylaxis academic research training immediately following their Clinical Immunology and Allergy sub-specialty training.

### Travel Awards (\$25,000/yr)

Applications are currently being accepted for travel between April 1, 2012 - March 31, 2013

This initiative supports a portion of travel and accommodation costs to enable AllerGen investigators, trainees and ASNPN members to

attend national and international conferences, symposia and workshops offered by non-Network organizations that contribute to their professional development. Awards of up to \$1,200 are available, subject to 1:1 matching funding provided from non-AllerGen sources.

### AllerGen and Fonds de la recherche du Québec Santé (FRQS) Partnership (\$30,000/yr)

Next competition closes October 2012

(Letter of Intent deadline is August 2012)

AllerGen and FRQS will jointly support up to two FRQS-AllerGen Clinical Research Scholars – Junior 1 Career Awards per year. These awards will be given to outstanding young clinical investigators who wish to pursue their research in the fields of allergic and related immune diseases.

### AllerGen and Michael Smith Foundation for Health Research (MSFHR) Partnership (\$30,000/yr)

Competition closed (Next call 2014)

AllerGen and MSFHR have signed an MOU to co-fund, on an equal basis, the highest ranking candidates working in allergic disease research within the MSFHR regular training grants competition. This initiative leverages provincial research funding in BC to support additional research trainees within the AllerGen Network.

### AllerGen Undergraduate Allergy, Asthma and Anaphylaxis Summer Studentships (\$30,000/yr)

NEW 2012 competition closed

(Next call opens mid-November 2012)

This new program supports 10 new Undergraduate Summer Studentships per year at up to \$3,000 per award invested by AllerGen and requiring a 1:1 match of non-AllerGen funding guaranteed by the AllerGen Supervisor.

### International Exchange Program (\$75,000/yr)

NEW

This program will match AllerGen trainees with the top allergy and asthma clinician-scientists and researchers in the world for short term exchanges. These exchanges will accelerate international knowledge exchange, capacity building and networking. Priority partners are the Karolinska Institute, Sweden; The University of Newcastle in Australia; and The Allergie - Centrum at Charité - Universitätsmedizin Berlin (Charité); and the Munich Allergy Research Center (MARC) in Germany., ...[Page 11](#)

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**Industry, Healthcare and Public Sector Internships** (Primary partners are *Mitacs Accelerate, Step and Connect Canada* programs) (\$30,000/yr) **NEW**

Mitacs offers national internships at graduate and postdoctoral levels in all disciplines, together with supervising professors and Canadian companies, to help ensure that the research innovations developed in Canadian universities are utilized by Canadian companies. Job shadowing opportunities are being developed with public sector and health partner organizations.

**Visiting Clinician-Scientist Professorships** (\$8,000/yr) **NEW**

In partnership with the CSACI, AllerGen will take a leadership role in organizing four half-day Visiting Clinical Scientist Professorships per year at medical schools across Canada to expose more medical students and internal and pediatric residents to the professional and research opportunities available to them in the field of allergy and clinical immunology.

### Clean Air Champions Launch New Educational Video

The Air Aware team is proud to present the launch of a short video that features the *Air Aware* message in one entertaining and fast-paced package. Air quality, active living and lung health, specifically asthma and allergy, are all interconnected and this video explains how and why. The video also provides information about what we can do to improve the quality of the air and our health.



[Air Aware Video English](#)

[Air Aware Video French](#)

### Former AllerGen HQP secures a postdoctoral fellowship in Australia

Former AllerGen trainee Steven Maltby obtained his PhD in late 2011 from the University of British Columbia under the supervision of AllerGen Program Leader and Investigator Dr. Kelly McNagny, Professor, Department of Medical Genetics. He recently moved from Vancouver to Australia to start the postdoctoral position with Professor Paul Foster at the University of

Newcastle. His work is being supported for the next three-plus years through a University of Newcastle Postdoctoral Research Fellowship and a Canadian Institutes of Health Research (CIHR) Postdoctoral Research Fellowship.



Professor Paul Foster is an internationally recognized researcher working in the Faculty of Health, School of Biomedical Sciences and Pharmacy, at the University of Newcastle. Professor Foster's research focuses on understanding the molecular and cellular basis of asthma, allergy, respiratory disorders and chronic inflammation. The ultimate aim is to use translational approaches for the development of novel anti-inflammatory therapies. Since 1995, Professor Foster's laboratory has focused on the biology of T-cells and granulocytes and the cytokine signalling involved in the regulation of lung inflammatory responses. In the last five years, the focus has been extended to understanding the relationship of infections (viruses, bacteria and microbial products), at various times through life on the subsequent development of adaptive immune cells and chronic inflammation in the lung. Recently, the role of microRNAs in the regulation of inflammation has also become a main focus, with an interest in targeting specific microRNAs as novel therapeutic targets in disease.

Dr. Maltby's current research plans are aimed at:

- 1) Characterizing bone marrow changes following allergic and infectious challenge in mouse models; and
- 2) Characterizing a role for microRNAs in the development and function of bone marrow subsets *in vitro* starting with cultured eosinophils.



## Upcoming Events

[American Thoracic Society International Conference](#), May 18-23, 2012 – San Francisco, CA  
[Symposium sur la Santé Respiratoire des Athlètes](#), May 25, 2012 – Montreal, QC  
[AllerGen Trainee Symposium](#), May 27-29, 2012 – Calgary, AB  
[22e Colloque de l'AQAA](#), June 2, 2012 – Montreal, QC  
[CIHR Young Investigator Forum](#), June 4-6, 2012 – Montreal, QC  
[Canadian Knowledge Mobilization Forum](#), June 19-20, 2012 – Ottawa, ON  
[Congress of the European Academy of Allergy and Clinical Immunology](#), (EAACI), June 16-20, 2012 – Geneva, Switzerland  
[XXI World Congress of Asthma](#), August 18-21, 2012 - Quebec, QC (**Visit the AllerGen booth**)

## Annual Report 2010-2011 Available

The 2010-2011 AllerGen Annual Report is available electronically in English and French on AllerGen's home page or [www.allergen-nce.ca](http://www.allergen-nce.ca)

The Annual Report 2010-11 highlights Network accomplishments, research results, capacity building program initiatives and commercialization and knowledge mobilization outcomes to March 31, 2011.



## AllerGen Success Stories

Four issues of AllerGen's Research *Success Stories* are now available in soft copy on the AllerGen website. These volumes are part of an ongoing series of publications intended for lay audiences. They highlight AllerGen research and development undertaken by teams across Canada. It is our hope that these publications offer people living with allergies, asthma, anaphylaxis and related immune diseases and their families and friends practical information about new, leading-edge research results. Please take time to read and share them with your colleagues.



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