

AIRWAYS

HQP News

DECEMBER 2016

allergen-nce.ca

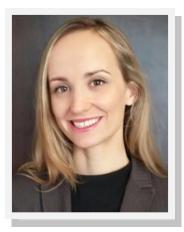
@AllerGen_NCE

AllerGen awards \$250,000 for advanced allergy research to Harvard-trained pediatric immunologist

AllerGen is pleased to announce that Dr. Catherine Biggs has been awarded the prestigious AllerGen *Emerging Clinician-Scientist Research Fellowship*.

During the two-year Fellowship, Dr. Biggs will train under the supervision and mentorship of AllerGen investigator Dr. Stuart Turvey, a pediatric immunologist and director of clinical research at BC Children's Hospital, and a professor at The University of British Columbia (UBC).

Dr. Turvey's research team has identified a Canadian family with a rare mutation in the Janus kinase 1 (JAK1) gene that causes severe atopic dermatitis, asthma, and strikingly elevated levels of eosinophils. Working with this family, Dr. Biggs will study the impact of the JAK1 mutation on eosinophil levels and the immune system.



Dr. Catherine Biggs, University of British Columbia

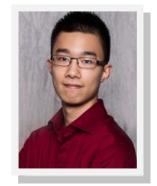
Dr. Biggs, a graduate of McGill University and UBC, completed a pediatrics residency and a specialty in clinical immunology and allergy at Harvard Medical School and Boston Children's Hospital, where she conducted both clinical and basic science research, and used cutting-edge technology based on CRISPR DNA targeting.

This is the fourth such fellowship that AllerGen has awarded since 2011.

Read the press release

New member-at-large appointed to ASNPN Executive

Congratulations to **Mark Tenn** on his appointment to the ASNPN Executive Committee. Mark is a Master of Science candidate at Queen's University supervised by AllerGen investigator Dr. Anne Ellis. His research interests include immunology, allergic airway diseases, and food allergies, particularly peanut-induced anaphylaxis. Mark joined the ASNPN in 2014, during his undergraduate studies at McMaster University. While at McMaster, Mark worked in the laboratories of Drs Mark Larché and Gail Gauvreau.



Mark Tenn, Queen's University

Carlsten lab wins HQP Video Competition

"The Phthalates Song," created by Evelyn Gunawan, Min Hyung Ryu and Agnes Yuen, received top ranking and a \$1000 cash award in the 2016 AllerGen HQP Video Competition. These trainees are members of the Chris Carlsten research team at The University of British Columbia's Chan-Yeung Centre for Occupational and Environmental Respiratory Disease (COERD).

Zhaoyun (Jack) Zhang, Shawn Khan and Abi Kirubarajan, members of Dr. Gail Gauvreau's lab at McMaster University, placed second in the competition for their video "AIC Model in Allergic Asthma."

The HQP Video Competition challenges ASNPN members to create short videos highlighting important findings in allergic disease research in a manner that is accessible to a lay audience.

"One of the biggest challenges during the production of this video was ensuring that we could translate our research in a way that is understandable by the public. The process itself was the most rewarding part; joining the competition made us understand the 'disconnect' that often exists between the public and he scientific community."

Evelyn Gunawan
Chris Carlsten lab



Winners of the 2016 HQP Video Competition, L to R: Min Hyung Ryu, Agnes Yuen and Evelyn Gunawan



SUBMISSION DEADLINE June 30, 2017



2017ALLERGEN HQP VIDEO COMPETITION

Bring your research to life!

Create a short, original knowledge translation video that will increase awareness and understanding of your allergic disease research among a non-scientific audience.

11th AllerGen Trainee Symposium



The 11th AllerGen Trainee Symposium will be held from **May 3-5, 2017**, at the Waterfront Hotel, **Burlington, ON**. The Symposium will provide Network trainees and ASNPN members with a capacity-building opportunity to enhance their career development and complement their academic and scientific training. In addition, the event aims to foster networking and collaboration amongst trainees and young professionals with a shared interest in allergic disease research.

Registration is limited. Applications will be reviewed through a competitive process.

Deadline to apply: February 10, 2017 (Applications received after February 10, 2017, will be placed on a waiting list.)

NEW IN 2017! AllerGen Research SKETCHES

Share your research BEYOND the readers of peer-reviewed journals.

AllerGen Research SKETCHES

Short lay summaries of peer-reviewed single research studies that answer:

- what is the research about?
- what did the researchers do?
- what did they find?
- how can the research be used?

Watch for full application guidelines in January 2017

Open to ASNPN members who:

 have co-authored a published, peer-reviewed paper from an AllerGen-funded research study

Aims to: Make AllerGen research accessible to a broader audience and highlight novel, high-impact findings.

An HQP whose paper is selected as a *SKETCH* will be trained in clear language writing principles and receive a \$500 award upon completion.

AllerGen trainees take top honours in CSACI/AllerGen Poster Competition



Six AllerGen trainees took top honours across three categories of the 2016 CSACI/AllerGen Poster Competition. For the fourth consecutive year, the Competition was held in conjunction with the Scientific Meeting of AllerGen's legacy partner, the CSACI, from September 29 to October 2, 2016, in Montreal, QC.



AllerGen Poster Winners L to R: Michelle North, Elizabeth Simms, Rishma Chooniedass, Keely Loewen, John Paul Oliveria, Bassel Dawod

Place	Category	Name	Institution	ution Abstract Title	
1 st	Allergic Rhinitis & Asthma	Michelle North	University of Toronto	Kingston Allergy Birth Cohort (KABC); exposome characteristics and parentally-reported respiratory outcomes to age 2	
2 nd	Allergic Rhinitis & Asthma	Keely Loewen	University of Manitoba	Prenatal antibiotic exposure and childhood asthma: A population-based study	
1 st	Food Allergy & Anaphylaxis	Rishma Chooniedass	University of Manitoba	Reflections on the use of epinephrine for anaphylaxis	
2 nd	Food Allergy & Anaphylaxis	Elizabeth Simms	McMaster University	Ara h 1 peptide immunotherapy protects against severe peanut-induced anaphylaxis and induces PD-1+ CD4+ T cells	
1 st	Immunology	Bassel Dawod	Dalhousie University	Examining the role of soluble TLR2 in regulating the development of food allergy	
2 nd	Immunology	John Paul Oliveria	McMaster University	IgE+ memory B cells subsets are higher in the airways of mild allergic asthmatics compared to healthy controls	

Snapshots

71st Canadian Society of Allergy and Clinical Immunology Science Meeting



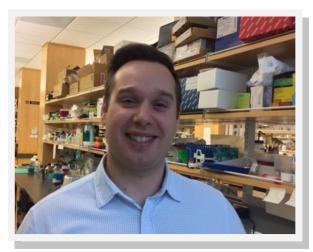
CSACI Dinner and Awards

Awards fund research visits to Stanford and Karolinska

Two trainees have received funding from AllerGen's *International Trainee Research Visit Program* to advance their training in RNA sequencing and flow cytometry.

Dr. Chris Rudulier, a postdoctoral fellow supervised at the University of Saskatchewan by Dr. John Gordon, will visit Stanford University to work with Dr. Kari Nadeau at the Sean N. Parker Center for Allergy & Asthma Research. This visit will facilitate a three-way collaboration between the laboratories of John Gordon (University of Saskatchewan), Mark Larché (McMaster), and Kari Nadeau (Stanford), in which T cells induced by three distinct forms of immunotherapy will be simultaneously analyzed. The aim is to compare the efficacy and mechanisms of action of three distinct and cutting-edge therapeutic approaches, and the effects of these three approaches on inflammatory T cells. The proposal involves comparing the RNA-seg profile of T cells cultured by DCregs to those of T cells generated by oral and peptide immunotherapies.

Bernard Lo, a PhD candidate at The University of British Columbia supervised by Dr. Kelly McNagny, will spend three months working with Dr. Jenny Mjösberg at the Center for Infectious Medicine located at the Karolinska University Hospital in Huddinge, Sweden. The aim of the research visit is to apply insights gained in mouse models of inflammatory diseases to the development of clinically relevant therapeutic strategies. Bernard intends to test the therapeutic potential of $ROR\alpha$ suppression through the use of small molecule inhibitors as part of *in vitro* human ILC assays in conjunction with single-cell-RNA sequencing (scRNA-seq) technology.



Dr. Chris Rudulier, University of Saskatchewan



Bernard Lo, The University of British Columbia

Through a competitive process, the *International Trainee Research Visit Program* offers funding for AllerGen trainees to spend from six weeks to six months outside of Canada working on research projects with international investigators and their research teams.



2017 application deadlines:

- January 13, 2017
- April 14, 2017
- September 15, 2017

Learn more about the program



AllerGen Undergraduate Summer Studentships

fostering interest in allergic disease research









Amrit Singh graduated from The University of British Columbia (UBC) on November 25, 2016, with a PhD in Experimental Medicine. Amrit is currently a Postdoctoral Research Fellow at the PROOF (Prevention of Organ Failure) Centre of Excellence. As a Postdoctoral Teaching Fellow, Amrit will teach Statistics in High Dimensional Biology (STAT540) at UBC from January - April 2017.



Congratulations to **Cynthia Kanagaratham** on successfully completing her PhD. Cynthia trained in Dr. Danuta Radzioch's lab at McGill University, where she investigated the genetic dissection of allergic asthma phenotypes and fenretinide as a novel treatment for asthma.



Congratulations to **David Ngan** on having his video, *Influenza: Why are asthmatics more susceptible to H1N1?*, published by the American Thoracic Society (ATS) as part of their Best of ATS Video Lecture Series. The video, which placed 2nd in the 2015 AllerGen HQP Video Competition, is featured on the ATS website and YouTube channel. A research technician at the Centre for Heart Lung Innovation, David recently received the Fraser Health *Above and Beyond Hero Award*. David was recognized for volunteering more than 1000 hours in the emergency department of Abbotsford Regional Hospital and Cancer Centre.



Matthew Gold, a Postdoctoral Fellow at the Princess Margaret Cancer Centre, has been named a 2016 Banting Postdoctoral Fellow (September 2016). This Fellowship will facilitate Matt's work on the molecular regulation of dendritic cell homeostasis. Matt completed his PhD in Experimental Medicine under the supervision of AllerGen investigator Dr. Kelly McNagny at The University of British Columbia in 2016.

Congratulations to **Jyoti Balhara** on successfully defending her thesis on November 2, 2016. Earlier this year, Jyoti received a 2016 *Emerging Leader Award* from the University of Manitoba. This award recognizes outstanding contributions to the University and the Winnipeg community. Jyoti's paper, *Pentraxin 3 deficiency aggravates OVA-induced inflammation through a Th17-dominant phenotype*, was published in the July 2016 *Journal of Allergy and Clinical Immunology*. Jyoti is currently a Postdoctoral Research Fellow in Dr. Judah Denburg's lab at McMaster University.



PhD Thesis Committee L to R: Drs Afshin Raouf, Francis Amara, Abdel Soussi Gounni, Harissios Vliagoftis, **Jyoti Balhara**, Neeloffer Mookherjee, Jude Uzonna, Preshen Chelikani



Bernard Lo's paper on *The orphan nuclear receptor RORα* and group 3 innate lymphoid cells drive fibrosis in a mouse model of Crohn's disease was published in the September 2016 issue of Science Immunology. Bernard, with colleagues in the Kelly McNagny lab at The University of British Columbia, found that a group of immune cells known as Group 3 innate lymphoid cells (ILC3) could be the key to the development of fibrosis in a mouse model of Crohn's disease. The discovery may be applicable to fibrosis in other types of tissue, and could eventually lead to the development of a treatment for fibrotic complications of Crohn's disease.



Congratulations to **Mark Tenn** on the publication of his paper, *The clinical relevance of filaggrin mutations: Effect on allergic disease*, in the November 2016 issue of *The Annals of Allergy, Asthma & Immunology*. Mark is a Master of Science candidate at Queen's University supervised by AllerGen investigator Dr. Anne Ellis.

AllerGen welcomes NEW ASNPN Members

Trainees and new professionals working on AllerGen-funded research automatically become ASNPN members. Students and new professionals not directly involved in AllerGen research, but training or working in the field of allergic disease research, may apply for membership.

1,443
Highly Qualified
Personnel (HQP)
participants in the
Network since 2005

Name	Supervisor	Category	Institution
Dhuha Al-Sajee	Gail Gauvreau	Postdoctoral Fellow	McMaster University
Khadija Alzahrani	Harissios Vliagoftis	MSc candidate	University of Alberta
Matthew Boroditsky	Gail Gauvreau	Undergraduate	McMaster University
Sara Johnson	Roberta L. Woodgate	PhD candidate	University of Manitoba
Annika Klopp	Meghan Azad	Pediatric Resident	University of Manitoba
Garthika Navaranjan	Jeff Brook	PhD candidate	University of Toronto
Hadeesha Piyadasa	Neeloffer Mookherjee	PhD candidate	University of Manitoba
Marta Ponce	Thomas Eiwegger	PhD candidate	The Hospital for Sick Children
Javeria Raheem	Dean Befus	Undergraduate	University of Alberta
Eduardo Reyes-Serratos	Dean Befus	MSc candidate	University of Alberta
Herman Tam	Elinor Simons	Pediatric Resident	University of Manitoba
Oleyna Strigul	Judah Denburg	MSc candidate	McMaster University
Sarah Svenningsen	Parameswaran Nair	Postdoctoral Fellow	McMaster University

Knowledge Translation for Research Success

An AllerGen webinar series



Getting to Impact: Why Knowledge Translation Matters for Researchers

Melanie Barwick SickKids Hospital February 14, 2017 1:00 - 2:00 pm EST



Knowledge Transfer to Support Evidence-informed Health Policy

Maureen Dobbins McMaster University February 28, 2017 2:00 - 3:00 pm EST



Integrating the Patient Voice in Health Research: The What, Why and How

Colleen McGavin
Patient Engagement Lead, BC SPOR SUPPORT Unit

March 8, 2017 1:00 - 2:00 pm EST



How to Effect a Societal Change: Working with the Media & Public

B. Brett Finlay & Marie-Claire Arrieta
The University of British Columbia &
University of Calgary

March 23, 2017 2:00 - 3:00 pm EDT



Topic TBD

Timothy Caulfield

Date & time TBD

HQP Capacity-Building Programs

AllerGen Trainee Symposium

AllerGen's annual capacity-building symposium provides a unique value-added professional development opportunity that allows for skill and knowledge acquisition to enhance career development and complement academic and scientific training. The event aims to foster networking and collaboration amongst trainees and young professionals with a shared interest in the field of allergy and asthma research and clinical practice. Workshop topics are varied and include: career planning, mentoring, interview skills, knowledge translation, media relations, ethics and grant writing. AllerGen pays for travel and accommodation costs.

Research Skills Awards

AllerGen funds workshops and individual training opportunities, including lab visits and equipment transfers, that enable sharing and development of specialized technical and laboratory skills relevant to AllerGen research. The award must be matched 1:1 with non-AllerGen funding.

Emerging Clinician-Scientist Research Fellowship

This fellowship enables Canadian allergists and clinical immunologists to pursue academic research training immediately following their sub-specialty training. An award of \$100,000 plus a \$25,000 research allowance is bestowed in each of the two years of this Fellowship. Eligible academic foci include basic and/or clinical research related to allergy, asthma and/or anaphylaxis.

AllerGen Undergraduate Summer Studentships

These studentships are intended to foster interest in allergic and related immune disease research. Ten awards of \$3,500 are issued annually, matched 1:1 with non-AllerGen partner funding for a total award value of \$7,000. To be eligible, students must be working with an AllerGen Investigator on research aligned with AllerGen's mission and vision.

Travel Awards

Travel Awards support attendance and participation in national and international conferences, symposia and workshops that are aligned with AllerGen's mission and vision. These events must provide an opportunity for networking, research collaboration, knowledge exchange, new skill development and learning opportunities. Awards of up to \$1,200 are available, subject to 1:1 matching funding provided by non-AllerGen sources.

Applications are accepted on a first-come basis and must be received at least four weeks prior to travel.

AllerGen and Fonds de recherche du Québec – Santé (FRQS) Clinical Research Scholars

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

AllerGen and Michael Smith Foundation for Health Research (MSFHR) Research Awards

AllerGen and MSFHR co-fund the highest ranking candidates working in allergic disease research within the MSFHR regular training grants competition.

International Research Visit Program

This program supports Canadian trainees working on AllerGen-funded projects who seek to train with the most innovative researchers/clinician-scientists at laboratories around the world for a period of between six weeks to six months. Research visits must provide the opportunity for networking, research collaboration, knowledge exchange and new skill development, and must be aligned with AllerGen's vision and mission.

Internships

AllerGen-funded internships provide opportunities for graduate students and postdoctoral fellows to gain valuable workplace experience in short term, sector-specific employment and career-related training experiences in industry, not-for-profit, healthcare or government organizations.

AllerGen Poster Competition

The trainee research poster competition and oral presentations are central features of AllerGen's HQP Capacity-Building Programs. AllerGen Poster Competitions are held in conjunction with the Canadian Society of Allergy and Clinical Immunology (CSACI) Annual Scientific Meeting and at AllerGen Research Conferences.

Visiting Professors Program

This program enhances AllerGen's efforts to recruit clinicians into the allergy and clinical immunology subspecialty and/or to the clinician-scientist career path. In collaboration with CSACI, AllerGen organizes halfday workshops at medical schools across Canada to expose medical students and internal medicine and pediatric residents to the professional and research opportunities available in the fields of allergy and clinical immunology.

ASNPNExecutive Committee





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The University of British Columbia



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