reAction August 2017

AllerGen reAction

August 2017

RESEARCH HIGHLIGHTS

What saliva says about stress

A salivary gland protein is an effective biological marker of human stress, according to new research led by **Dr. Dean Befus**, an AllerGen Research Leader and a professor of Pulmonary Medicine at the University of Alberta.

The research, published in June 2017, provides the first evidence that the protein known as calcium-binding protein spermatid specific 1 (CABS1) is readily detectable in human saliva and that its levels are influenced by acute psychological stress and feelings of negative mood or emotional distress. These findings may help to identify new ways to predict, diagnose and eventually treat stress-related conditions.

"We predicted that CABS1 levels would be elevated during stress, so we analyzed its concentrations in humans both in the laboratory and in stressful situations, such as university final exams," says Dr. Befus, who is also the AstraZeneca Canada Inc. Chair in Asthma Research.

"Saliva contains a vast array of proteins and bioactive molecules. Typically, the hormone cortisol is used as an indicator of stress but we found that CABS1 is also a stresssensitive marker of acute stress, negative mood and inflammation."

The study was done in collaboration with psychologist Dr. Thomas Ritz (Southern Methodist University, Dallas, Texas).

The study found that levels of CABS1 were increased in the saliva of those participants who self-reported negative mood and acute stress, and of those with higher depressive and anxious mood in the preceding week. CABS1 was also associated with markers of inflammatory activity. Certain variants of CABS1 may be markers of resilience to stress in some individuals.

Dr. Befus and his colleagues are currently developing a non-invasive CABS1-based saliva test that may have therapeutic applications in acute and chronic stress, post-traumatic stress syndrome, and acute respiratory distress syndrome.



AllerGen investigators contribute to breakthrough Treg discovery

A recent discovery from the Research Institute of the McGill University Health Centre (RI-MUHC) suggests autoimmune and chronic inflammatory diseases may be linked to mutations in a critical gene. The discovery also sheds new light on the function of Regulatory T Cells (Tregs) in the regulation of the immune system.

Tregs play a key role in preventing excessive immune responses. They prevent the body's immune cells from attacking its own tissues in the presence of non-pathogenic agents and microbes such as dust, pollen and food. The FOXP3 gene, in turn, plays a crucial role in the development and function of Tregs.

AllerGen investigators Drs Moshe Ben-Shoshan, Bruce Mazer and Ciriaco Piccirillo collaborated in the discovery of how a specific mutation in FOXP3 disrupts the ability of Tregs to suppress overreactions by the immune system.

"This discovery gives us key insights on how Treg cells are born and how they can be regulated," says Dr. Piccirillo, the study's lead author, in the McGill news release.

The findings, **published** in the June 2017 issue of *Science Immunology*, reveal that the FOXP3 mutation disrupts Treg function in individuals with a rare immune

disorder called IPEX (immunedysregulation polyendocrinopathy enteropathy X-linked syndrome).

The researchers also found that this disruption can be corrected using allosteric modifiers that enhance FOXP3's functions—suggesting a potential therapeutic target for other conditions where Treg activity is similarly disrupted.

The discovery was made by analyzing a few drops of blood collected from a five-week-old infant who died in 2009 from IPEX.

"What was unique about this case of IPEX was that the patient's Treg cells were fully functional apart from one crucial element: their ability to shut down the inflammatory response," comments Dr. Piccirillo.

The discovery may have implications for other autoimmune and chronic inflammatory and diseases, including asthma and allergies, that may similarly be associated with alterations in FOXP3 functions.

"Our goal is to increase the activity of these Treg cells in certain settings [to treat disease]," further notes Dr. Piccirillo.

"With this discovery, we are taking a big step in the right direction."



Quality of mothers' care in early life linked to atopic dermatitis in infants

Until recently, little was known about the association between the mother-child relationship early in life and the development of atopic dermatitis (AD), a childhood skin disease that is often the first step in the "atopic march" toward allergic rhinitis and ultimately asthma.

Now, new research led by Dr. Nicole Letourneau, a researcher within AllerGen's Gene-Environment Interactions Enabling Platform, has shown that low maternal sensitivity increases the risk for AD, which may contribute to the development of childhood asthma later on.

"Maternal sensitivity refers to a mother's ability to interpret and respond to her infant's needs based on behavioural signals, such as crying and fussing, or other cues that indicate need," says Dr. Letourneau, a University of Calgary nursing professor and the Alberta Children's Hospital Foundation Chair in Parent-Infant Mental Health.

"Based on observations of mothers with their infants during a typical play session, we found that almost 25% of infants developed AD by 18 months of age when their mothers exhibited low sensitivity compared to less than 1% of infants developing AD when their mothers were highly sensitive."

Similarly, the researchers found that 20% to 25% of children had AD when their mothers were very unresponsive or

controlling—concepts that are contrary to sensitivity—during play.

The research was **published** in the May 2017 issue of *Allergy, Asthma and Clinical Immunology*. AllerGen investigator Dr. Anita Kozyrskyj and AllerGen trainee Nela Cosic are study co-authors.

Dr. Letourneau's team examined data from 242 women and their children involved in the Alberta Pregnancy Outcomes and Nutrition (APrON) birth cohort. The researchers used observational videos to evaluate the quality of the mother-infant interactions at six months of age and assessed the presence of AD in the babies at 18 months, based on mothers' reports of physician diagnosis.

"We also examined other factors known to contribute to AD, such as maternal asthma status, depression, anxiety and stress," adds Dr. Letourneau. "We found that the association between the maternal-infant relationship and AD is independent of these other factors, which tells us how important a mother's interactions with her baby are."

The study's findings are consistent with earlier evidence linking maternal-infant relationship quality and child allergic disease, according to Dr. Letourneau.

"Our results suggest that interventions that improve the quality of this relationship can reduce the risk of AD and possibly forestall the development of childhood asthma."



CHILD Study: Immune status "shifts" during healthy pregnancy

A recent CHILD Study publication sheds new light on an old question: What changes occur in a woman's immune system during a healthy pregnancy?

Much work has been done on problems of pregnancy, but surprisingly little is known about the immune system during healthy pregnancies that lead to successful deliveries. Research to date, usually in small pilot studies, has produced contradictory findings. Some data suggest that the immune system skews towards an inflammatory response, presumably to better protect against infection. In contrast, other studies indicate that the maternal immune system is suppressed to prevent rejection of the baby.

The CHILD Study findings reveal that the maternal immune system shifts towards an actively anti-inflammatory status and that this change becomes increasingly pronounced during the last two trimesters of pregnancy. The study is the largest performed to date on the immune system of women during healthy pregnancies.

Using data from more than 250 women participating in the CHILD Study, the researchers found that most proinflammatory proteins were reduced during pregnancy compared to levels seen one or three years after giving birth. Conversely, anti-inflammatory proteins were found to be temporarily elevated during pregnancy, then reduced in number post-partum.

"The immunological changes that take place during a normal pregnancy are poorly understood," says Dr. Kent HayGlass, the CHILD Study investigator who led the research. "Our work shows that there are increasingly pronounced changes in immune balance as a healthy pregnancy progresses. For us to better understand and help women who experience difficult pregnancies, we need to first properly understand what a normal, healthy pregnancy should look like."

Dr. HayGlass is a professor in the Departments of Immunology, Medical Microbiology, Pediatrics and Child Health at the University of Manitoba and a Canada Research Chair in Immune Regulation.

"Using a matched study design such as this, which follows the same individuals during and after pregnancy, and involving such a large number of women, is logistically challenging but highly important," adds Dr. HayGlass.

"The contribution made by these CHILD Study participants has provided us with a much clearer picture of how the immune system changes during a healthy pregnancy. This will ultimately help us and others to better investigate and understand the mechanisms that underlie difficult or unsuccessful pregnancies."



CHILD data support new CIHR research projects





Child lung health

A research team at the Hospital for Sick Children in Toronto was awarded with \$75,000 to use CHILD Study data to help develop tools that will predict and monitor lung diseases in young children.

CIHR announced on June 28, 2017, its support for the project, which will be led by Dr. Teresa To and count on the participation of Drs Wendy Lou and Padmaja Subbarao.

The funding is part of a \$1.85 million investment from the CIHR Institute of Human Development, Child and Youth Health (IHDCYH) to improve reproductive, maternal and child health outcomes across Canada.

The team will also compare CHILD Study data to environmental exposures information from the Ministry of the Environment and Climate Change, to evaluate how air quality in and around a child's home may affect his or her lung health.

Read the press release.

Prenatal artificial sweetener consumption and infant weight

Another CIHR award also announced on June 28, 2017, will allow a CHILD Study team, led by Drs Meghan Azad and Marie-Claire Arrieta, to investigate how a mother's consumption of artificial sweeteners during pregnancy affects her infant's microbiome and metabolism.

The project is one of the 25 across the country in which the CIHR's IHDCYH will invest.

The study's findings could help explain the increased risk of obesity observed by the same team in a previous study.

"Childhood obesity rates have doubled since 1970, with nearly one in three children classified as overweight or obese," says Dr. Arrieta.

"We are delighted that the CIHR is investing in the opportunity to leverage CHILD Study data to improve our understanding of how the maternal diet influences infant weight."

Read the press release.



New CHILD Study findings on timing of food introduction and development of food sensitization

Delaying the introduction of potentially allergenic foods until after a baby's first year may increase the likelihood of a food allergy later, according to new CHILD Study findings.

The research, published in *Pediatric Allergy and Immunology*, found that infants who avoided cow's milk products, egg and peanut during the first year of life were more likely to be sensitized to these foods at age one.

"Food sensitization early in life is associated with an increased risk of wheeze, asthma, eczema and allergic rhinitis in later childhood," said Dr. Malcolm Sears, Founding Director of the CHILD Study and a professor of medicine at McMaster University.

"While not all food-sensitized infants become food allergic, sensitization is an important step on the pathway," he added.

Using data from more than 2,100
Canadian children, the researchers found that infants who avoided cow's milk products in their first year were **nearly four times as likely** to be sensitized to cow's milk compared to infants who consumed cow's milk products before 12 months of age. Similarly, infants who avoided egg or peanut in their first year were **nearly twice as likely** to be

sensitized to those foods compared to infants who consumed them before 12 months of age.

"Early introduction of eggs before one year of age seemed to be especially beneficial, as it significantly reduced the odds of developing sensitization to any of the three food allergens," says the study's first author, Maxwell Tran, a BHSc graduate from McMaster University and an AllerGen trainee.

The study also revealed that most Canadian parents delay the introduction of potentially allergenic foods, particularly egg and peanut: only 3% of parents introduced egg before six months of age, while just 1% of parents introduced peanut to their infants before six months of age and 63% of parents avoided feeding peanut entirely during the first year of life.

"Our findings support infant feeding guidelines that promote the introduction of foods such as cow's milk products, egg and peanut between four to six months of age," says Mr. Tran. "This is an important shift in thinking away from avoidance of potentially allergenic foods, toward their early introduction to reduce the risk of food allergy later on."

Read the AllerGen Research SKETCH



AllerGen researchers find potential biomarker for occupational asthma

AllerGen investigators Drs Chris Carlsten and Scott Tebbutt may have found a blood biomarker that can be used to diagnose an occupational asthma associated with the BC forestry industry.

For a decade, Dr. Carlsten and his team have been diagnosing western red cedar asthma at the Vancouver General Hospital. The conventional diagnostic test takes two to three days to complete and requires that the patient inhale plicatic acid, a costly procedure that can be uncomfortable for the patient.

Plicatic acid naturally occurs in western red cedar trees and is released into the surrounding environment when the wood is cut or milled. Exposure to the acid has led to asthma in approximately 5% of the workers who regularly inhale it.

As part of the testing procedure, Dr. Carlsten routinely collects blood samples from the patients.

When Dr. Carlsten told Dr. Tebbutt—a biomarker expert always on the lookout for groups of people with a shared allergic response to an environmental trigger—about his collection of forestry workers' blood, Dr. Tebbutt and his graduate student, AllerGen trainee Yolanda Yang, proposed a joint project that would use the samples to find a blood-based biomarker for western red cedar asthma.

"[The] idea was to use blood as a surrogate for what is going on in the lungs," Dr. Carlsten explained in a University of British Columbia (UBC) press release.

A biomarker would make diagnosis much simpler, and could facilitate identifying the disease at an earlier stage, allowing workers to take preventative measures by limiting exposure, wearing safety equipment, or changing occupations.

Dr. Tebbutt focused his search on patterns unique to the RNA of white blood cells from patients who tested positive during the plicatic acid inhalation test.

He found higher levels of specific RNA molecules in the blood of six of seven patients whom Dr. Carlsten had diagnosed with occupational asthma. These molecules are produced by two genes and, in turn, produce proteins known to affect inflammation and stress responses.

According to the UBC press release, this biomarker discovery will constitute a breakthrough for the diagnosis of occupational asthma, once validated by further testing with a larger sample size. It could also lead to the identification of asthma triggers in other occupations.



Phase III trial shows new drug can help patients with severe asthma reduce oral steroids

A clinical trial led by an AllerGen investigator has shown promising results for a new medicine to help patients suffering from severe asthma.

The study demonstrates that a new injectable drug, benralizumab, has successfully targeted the receptor of the immune system protein interleukin-5 (IL-5), allowing patients with hard-to-control asthma associated with blood or sputum eosinophils to reduce or discontinue oral steroids while maintaining asthma control and lung function.

The study was led by Dr. Parameswaran Nair, Research Leader for the Severe Asthma arm of AllerGen's Clinical Investigator Collaborative (CIC) Legacy Project.

The research was published in the *New England Journal of Medicine* and
presented at the American Thoracic

Society (ATS) 2017 International Congress in Washington, DC.

The study concluded that patients treated with benralizumab were more than four times as likely to reduce their dose of prednisone, compared to those in a placebo group.

Benralizumab, manufactured by AstraZeneca, has not yet been approved for clinical use.

"Longer-term studies with this drug are necessary to be absolutely certain of the safety of this treatment strategy," Dr. Nair commented in a McMaster University press release.

Dr. Nair is the Frederick E. Hargreave Teva Innovation Chair in Airway Diseases and Professor of Medicine in the Division of Respirology at McMaster University, and a researcher at the Firestone Institute for Respiratory Health.



Dr. Parameswaran Nair



AWARDS & HONOURS

Teresa To recieves Research Excellence Award

AllerGen investigator Dr. Teresa To, a professor at the University of Toronto and senior scientist at the Hospital for Sick Children, is the recipient of the 2017 Anthony Miller Research Excellence Award.

This faculty award, granted by the University of Toronto's Dalla Lana School of Public Health, recognizes outstanding contributions to research, as well as commitment to the dissemination of research findings and their application in community and practice settings.

Dr. Teresa To is currently the principal investigator of four research projects examining and quantifying the impacts of childhood asthma.

Peter Paré honoured by ATS

In recognition of his significant lifetime contribution to pulmonary research, AllerGen investigator Dr. Peter Paré was named the 2017 Amberson Lecturer by the American Thoracic Society (ATS).

Dr. Paré delivered the Amberson Lecture, entitled "The Smoking Gun: Genetics and Genomics Reveal Causal Pathways for COPD," in May 2017 at the 2017 ATS Conference in Washington, DC.

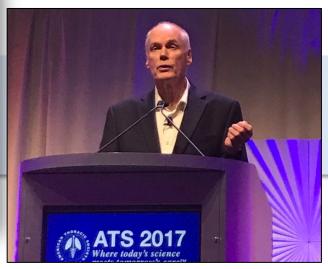
The Amberson Lecture is given in honor of James Burns Amberson, an international authority on chest disease.

Dr. Paré is an emeritus professor of Respiratory Medicine and Pathology at The University of British Columbia and a clinician-scientist at St. Paul's Hospital.





Dr. Teresa To (L) with Dr. Michael Escobar, Associate Dean of Faculty Affairs (photo: Teresa To)



Dr. Peter Paré delivers the 2017 Amberson Lecture (photo: Centre for Heart Lung Innovation)



Timothy Caulfield wins Gold for Best Column

Professor Timothy Caulfield, an AllerGen investigator, was named the 2017 Digital Publishing Awards Gold Winner for Best Blog/Column for his column "The Cure," published in *Policy Options* magazine.

In his column, Prof. Caulfield regularly debunks and clarifies questionable "scientific" claims hyped by the media and celebrities.

Digital Publishing Awards are issued by the National Media Awards Foundation, a Canadian not-for-profit which recognizes outstanding achievement in magazine journalism.

Prof. Caulfield is a professor in the Faculty of Law and the School of Public Health at the University of Alberta and a Canada Research Chair in Health Law and Policy.



Dr. Anne Ellis recognized for research excellence

AllerGen investigator Dr. Anne Ellis and her team in the Environmental Exposure Unit (EEU) at Kingston General Hospital have received the 2016-17 Mihran and Mary Basmajian Award for Excellence in Biomedical/Health Research.

The award is granted by the Faculty of Health Sciences of Queen's University to recognize the most meritorious contributions to health research by a faculty member during the previous year or several years.

Dr. Ellis and her colleagues use the specialized EEU facility to research allergies caused by airborn allergens. Her team's recent projects have investigated dust mite and grass allergies, and the respiratory effects on children of indoor air fresheners.

Read more



Dr. Ellis in the Environmental Exposure Unit (photo: Ian MacAlpine/The Whig-Standard)



PEOPLE & PARTNERS

New Director and Co-Director appointed to CHILD Study

On July 1, 2017, Dr. Padmaja Subbarao became the Director of the CHILD Study and Dr. Stuart Turvey the Study's Co-Director.

Dr. Subbarao takes over the position from the Study's Founding Director, Dr. Malcolm Sears.

"Without Malcolm, there would be no CHILD Study," comments Dr. Subbarao.

"It was Malcolm's vision that led to the creation of CHILD. It was his strong sense of collaboration and unity that brought together a diverse group of scientists across the country to work towards a common goal of exploring the root origins of asthma, forming a strong base upon which to build our understanding of the developmental origins of chronic diseases.

"Those concerned with children's health in Canada owe him a debt of gratitude, and I am deeply honoured to follow in his footsteps." Dr. Sears brought to CHILD decades of experience investigating the epidemiology and natural history of asthma, including his involvement for more than 30 years in the celebrated **Dunedin Study** in New Zealand.

He led the planning for the CHILD Study from initial discussions in 2004 and served as its Director from its inception in 2007. He remains involved in the CHILD Study, especially in the reviewing and editing of publications, and maintains an advisory role as a member of the Executive Committee.

Dr. Subbarao, a paediatric respirologist and an associate professor at The Hospital for Sick Children, McMaster University and the University of Toronto, is the Toronto site leader of the Study and was previously the CHILD Study's Co-Director.

Dr. Turvey, a pediatric immunologist at BC Children's Hospital and a professor at The University of British Columbia, is the Study's Vancouver site leader.



Dr. Padmaja Subbarao and Dr. Stuart Turvey



Dr. Malcolm Sears



Research Fellowship supports immune research in asthmatic women

The Canadian Allergy, Asthma and Immunology Foundation (CAAIF) and AllerGen are pleased to announce that Dr. Lauren Solomon has been awarded the 2017 CAAIF-AllerGen Research Fellowship, an award that supports the research of exceptional young scientists in the field of allergy and clinical immunology.

Valued at \$55,000, the 12-month research fellowship will allow Dr. Solomon to work with Dr. Lisa Cameron, an associate professor at Western University, to study molecular pathways regulating severe asthma in women.

T helper type 2 (Th2) immune cells are a type of cell involved in orchestrating the inflammation seen in asthma. Dr. Solomon will research how Th2 cells respond to inhaled steroids and hormone replacement therapy.

A better understanding of how these therapies affect Th2 levels may contribute to improved treatment options for women with severe asthma.

"I am honoured to receive the CAAIF-AllerGen Research Fellowship and I look forward to contributing towards CAAIF's and AllerGen's efforts to discover how the immune system is involved in asthma, and how specific immune cells can be targeted to improve patient care," says Dr. Solomon, who holds a PhD in biochemistry and has completed a postdoctoral fellowship in immune system genetics.

"I am excited to apply personalized genetic technologies to the way asthma is modelled in the lab, diagnosed, and eventually treated in the clinic."

"CAAIF, in partnership with AllerGen, is delighted to offer this Fellowship, which will raise awareness and contribute new knowledge for conditions such as asthma, allergies, anaphylaxis, immune deficiency, and other immunological diseases," adds CAAIF President Dr. Susan Waserman.

"Dr. Solomon's research, which will study Th2 cells in women, will help us understand how certain gender factors may influence the development of severe asthma."

This is the third CAAIF-AllerGen Research Fellowship award. Dr. Catherine Biggs (The University of British Columbia) and Dr. Nicholas Jendzjowsky (University of Calgary) received the Fellowship in 2016.



Dr. Lauren Solomon

A

KNOWLEDGE MOBILIZATION

The CHILD Study announces its new "baby"

On July 31, 2017, the CHILD Study launched its new website at childstudy.ca.

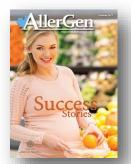
The new website provides easy access to a wealth of information about CHILD's community of researchers, administrative team, research foci, current projects, and its progress and discoveries to date.

The site contains databases of CHILDrelated grants and publications; a section for scientists outlining the data, biosamples and cohort tools available for research purposes; an overview of media coverage of CHILD-related discoveries; videos about the Study and its findings; and photos of many of the children and families participating in the Study.

Keep checking the website for the addition of new sections and for ongoing updates on developments in the CHILD community!



Inside Success Stories 11



The newest issue of Success Stories is now available in English and French.

Fruits of Their Labour: Mothers who consume more fruit while pregnant may give their babies a brain boost

Featuring: Dr. Piush Mandhane (University of Alberta)

Smart Cells: New research suggests our own cells may one day help us overcome asthma and allergies

Featuring: Dr. John Gordon (University of Saskatchewan)

How Sweet It Isn't: Can a mom's intake of artificial sweeteners while pregnant make her child obese?

Featuring: Dr. Meghan Azad (University of Manitoba)

Beware of Bunk: "Alternative facts" abound in the diagnosis and treatment of allergy and asthma

Featuring: Prof. Timothy Caulfield (University of Alberta)

HQP Profile—Diana Lefebvre: Taking care of CHILD—actually, more like 3,500 children

Featuring: Dr. Diana Lefebvre (Research Manager, CHILD Study)

Read the full issue

Two new AllerGen Research SKETCHES

Two new research lay summaries are now available from AllerGen's online Research SKETCHES database:



When should parents feed potentially allergenic foods to their infants?

(Maxwell Tran, Malcolm Sears)



Tweaking Immune Cells to Tackle Food Allergy

(Wojciech Dawicki, John Gordon)



Allergy Pals going strong



On August 11, 2017, student Benjamin Cruickshank and his mom, Allison, met with AllerGen staff to share how the Allergy Pals program for kids with food allergies has had an impact on their lives.

"I love Allergy Pals," says 11-year-old Benjamin. "It helped me to feel more confident in dealing with my allergies and with some of the social stuff that happens when you can't have what everyone else is eating."

Allergy Pals is a free, online peermentorship program offered by Food Allergy Canada for kids across the country. Program materials were adapted from AllerGen research led by Network investigator Dr. Miriam Stewart and her team at the University of Alberta.

Allergy Pals program coordinator Kyle Dine and Benjamin's peer mentor Giulia Cavaleri were also on hand to talk about the importance of mobilizing academic research to community organizations like Food Allergy Canada.

"Programs like this help kids with allergies to learn from others who have faced similar experiences and empower them tell their own stories," says Dine.



From L to R: Kim Wright (AllerGen), Kyle Dine, Benjamin Cruickshank, Giulia Cavaleri and Allison Cruickshank

Hear more about the success of Allergy Pals in a video feature of AllerGen's upcoming digital 2016-17 Annual Report.



Omni Awards for AllergyAware.ca

AllergyAware.ca has won two Gold Omni Awards for website excellence in the categories of Education and Health & Fitness.

AllergyAware.ca provides free access to online courses regarding anaphylaxis and allergy within the school environment, community and child care. The medically reviewed courses offer evidence-based training to help recognize, manage, and reduce potentially life-threatening allergic reactions.

The courses were developed by Food Allergy Canada and Leap Learning Technologies Inc., in collaboration with the Canadian Society of Allergy and Clinical Immunology. Research and evaluation assistance was provided by AllerGen.



Now open: *IHDCYH Talks* Video Competition

The *IHDCYH Talks* Video Competition is now open to researchers, HQP and knowledge users.

The competition invites the submission of short videos presenting clear, evidence-based messages to a lay audience, in order to have a positive impact on the health of children, youth and their families.

IHDCYH Talks promotes knowledge translation within the mandate of the CIHR's Institute for Human Development, Child and Youth Health (IHDCYH).

Videos selected for recognition will be posted on CIHR and IHDCYH social media and communication channels.

The submission deadline for the 2017 *IHDCYH Talks* Video Competition is **October 17, 2017**.



reAction August 2017

CHILD site coordinator blogs on engaging patients

The children participating in the CHILD Study and their families "are an integral part of important research and they are the heroes of tomorrow," observes Rishma Chooniedass, the Research Coordinator for the Manitoba site of the CHILD Study.

"I was privileged to be present at the births of some of these children, and was able to watch them grow over the years ... I am very grateful to be a part of CHILD research and for the many beautiful relationships I have made."

Rishma makes these observations in a guest blog she authored on the topic of engaging the public and patients in research, drawing from her years of experience with the CHILD Study, entitled "From Birthday Cards to Halloween Parties: Building Relationships is Crucial."

Rishma is an Assistant Professor at the University of Manitoba and a Certified Asthma Educator. She has served as the Manitoba site coordinator since the Study's inception, but will leave the position at the end of August 2017 to relocate with her

The Importance of

Relationship Building: Guest Blog with Rishma Chooniedass

hoto: Tony Nardella

family to BC.

Let CIHR celebrate your research for Canada 150

In recognition of Canada's 150th anniversary, the Canadian Institutes for Health Research (CIHR) is "celebrating health research" by sharing the stories of Canadian researchers and patients.

AllerGen encourages its Network researchers to submit a profile of their allergic diseases research for sharing on the CIHR website.

Read the details here.

The CIHR website already features the work of CHILD Study investigators **Dr**. **Meghan Azad** (University of Manitoba) and **Dr**. **Stuart Turvey** (The University of British Columbia).





HQP NEWS

New partnered award supports graduate research on asthma

Asthma Canada has established a new National Research Program to provide grants to young Canadian researchers involved in early- and late-onset asthma research. In partnership with AllerGen, the program will grant two awards in 2017 to Masters-level student researchers, and two to PhD-level student researchers.

"Asthma is the third most common chronic disease in Canada," said Vanessa Foran, President & CEO of Asthma Canada.

"By investing in young Canadian researchers and supporting their promising research, we ensure continued efforts to search for a cure for asthma, while making real strides toward better treatment options for the three million Canadians living with asthma."

The Goran Enhorning Graduate Student Research Awards support research for early-onset asthma, while the Bastable-Potts Graduate Student Research Awards support investigations into late-onset asthma.

Each partnered award includes one grant of \$10,000 for a Masters-level researcher and one grant of \$20,000 for a PhD-level researcher.

More information

CAAIF-AllerGen Emerging Clinician-Scientist Fellowship

RENEWED CALL FOR APPLICATIONS

The 2017 CAAIF-AllerGen *Emerging Clinician-Scientist Fellowship* call has been re-posted on the **AllerGen website**, with a **new submission date of October 1, 2017**.

Applicants who successfully completed Clinical Immunology and Allergy subspecialty training or PhD studies in 2015, 2016 or 2017 are eligible to apply.

Individuals completing such programs in 2018 or after are not eligible to apply, due to the anticipated conclusion of AllerGen NCE funding on March 31, 2019.

More information



reAction August 2017

Natalia Mykhaylova a Visionaries Prize finalist

AllerGen trainee Dr. Natalia Mykhaylova has been selected as one of six finalists in the Scientific and Technology Innovation category for the Lieutenant Governor's Visionaries Prize.

The prize was created to give Ontario's most creative thinkers a platform for tackling challenges that Ontarians will face over the next 50 years. The prize gives contestants a chance to present their findings to a panel of the province's top thought leaders.

Dr. Mykhaylova completed her PhD in Chemical Engineering at the University of Toronto. Her current work focuses on the development of novel devices and adaptable wireless networks for monitoring air pollution.

The Visionaries Prize reception for Scientific and Technological Innovation will be held in Toronto on October 2nd, 2017, at the Isabel Bader Theatre.

CIHR: New Investigator Awards in Circulatory and Respiratory Health

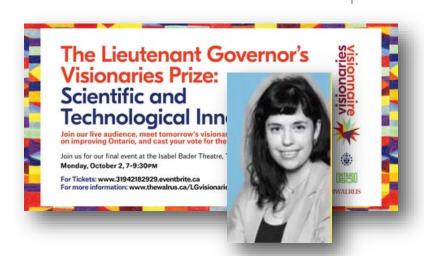
The CIHR has pre-announced the launch of a new funding opportunity: the New Investigator Awards in Circulatory and Respiratory Health.

The awards will provide new investigators with the opportunity to conduct research in the area of circulatory and/or respiratory health.

They are jointly funded by CIHR's Institutes of Circulatory and Respiratory Health, of Aboriginal Peoples' Health, and of Nutrition, Metabolism and Diabetes, as well as Hypertension Canada and AstraZeneca Canada.

Funds currently total \$1,725,000 for distribution among five awards. The maximum for each award is \$115,000 per year for up to three years, for a total of \$345,000 per award.

More information

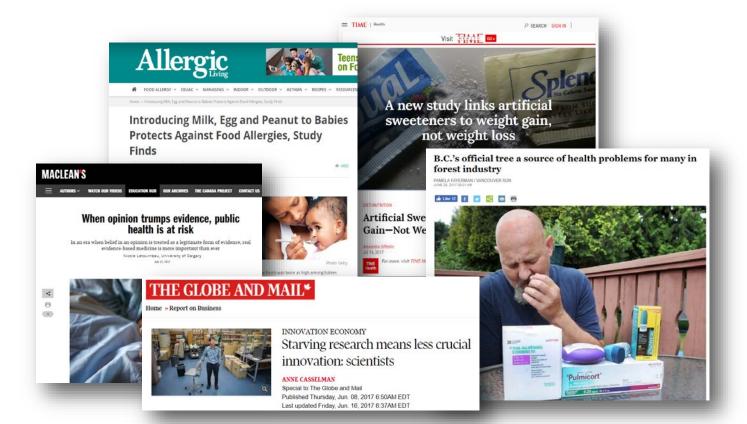






MEDIA

AllerGen Researchers in the News



Dr. Meghan Azad

 Fox, Science Daily, Forbes, CBS, Globe & Mail, ABC, Washington Times, Business Insider, Global News, Toronto Star, TIME

Prof. Timothy Caulfield

 Wired, Washington Post, CBC, Hamilton Spectator, Globe and Mail, Buzzfeed, Daily Mail, Metro

Dr. Michael Brauer

Huffington Post, Metro

Dr. Malcolm Sears

 Allergic Living, Hamilton Spectator, Mirror (UK), Mail Online, Science Daily

Dr. Nicole Letourneau

UToday, Maclean's, Global News

Dr. Kelly McNagny

Globe and Mail

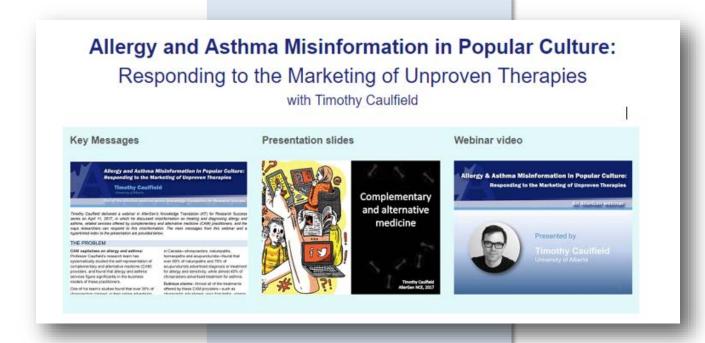
Drs Chris Carlsten & Scott Tebbutt

UBC News, Victoria Times-Colonist



EVENTS

Resources are available for this AllerGen webinar you may have missed...



Send newsletter enquiries and comments to:

Marshall Beck, Digital Initiatives Manager