



LAYLA DINH,
SICKKIDS PATIENT
AMBASSADOR

SAFER AND MORE ACCESSIBLE TREATMENTS FOR KIDS WITH FOOD ALLERGIES

SICKKIDS FOOD ALLERGY AND ANAPHYLAXIS PROGRAM

2022 PROGRESS REPORT

SickKids



FoodAllergy

FAAP'S NEW (DOUBLE) DOCTOR

During his PhD program in immunology and microbiology at the University of British Columbia, Dennis Wong discovered he wanted to focus on translational research. That's the challenging yet crucial sweet spot of taking key findings from basic science or a research lab and moving them into a clinical setting to support individuals.

In medical school at the University of Toronto, Dr. Wong trained in the adult stream of care but had the opportunity to support allergy patients both young and old. He also worked with Dr. Gordon Sussman at St. Michael's Hospital and met with Dr. Julia Upton to discuss different research ideas and opportunities at SickKids. "Ultimately, I found immunology and allergy to be the area where I really wanted to explore," says Dr. Wong.

Dr. Wong only recently joined the FAAP, but he's already supporting a clinical trial that uses oral immunotherapy and the medication omalizumab to see if this approach may help children reach treatment goals more quickly than without this medication. In due time, he adds, the team may be able to extend some of their findings to help other patients, such as adolescents or even adults. "The work that we are doing is trying to help kids alleviate anxiety so that they know if they're exposed to a small amount of food, they're not going to go into an anaphylactic reaction," says Dr. Wong. "That can really, really help their social interactions and even simple things like going out to restaurants, which might not be possible now."

"THE WORK THAT WE ARE DOING IS TRYING TO HELP KIDS ALLEVIATE ANXIETY SO THAT THEY KNOW IF THEY'RE EXPOSED TO A SMALL AMOUNT OF FOOD, THEY'RE NOT GOING TO GO INTO AN ANAPHYLACTIC REACTION."



PEOPLE: OUR GROWING TEAM

- **FAAP Co-Directors:**
Dr. Eyal Grunebaum & Dr. Julia Upton
- **Full-Time Clinicians:**
Dr. Julia Upton, Dr. Eyal Grunebaum, Dr. Adelle Atkinson, Dr. Vy Kim
- **Part-Time Clinicians:**
In 2021, Dr. Audrey Segal and Dr. Lucy Duan joined Dr. Maria Asper, Dr. David Hummel
- **Clinical Support Staff:**
Sydney Arnold (registered nurse) has joined Anna Kasprzak (registered nurse), Alana Galper (registered dietician)
- **Scientist:**
Dr. Thomas Eiwegger
- **Research Support Staff:**
Dr. Dennis Wong (senior research associate) has joined Alireza Berenji (research coordinator), Molly Dorran (research nurse who joined in 2021)
- **Partners Leading Studies:**
Dr. Gordon Sussman (St. Michael's Hospital), Dr. Peter Vadas (St. Michael's Hospital)

‘A TRUE CHAMPION OF THE FOOD ALLERGY COMMUNITY’

The Robyn Allen Leadership Award is a prestigious honour named in memory of Robyn Allen, a young girl who sadly passed away from an allergic reaction. Although a peanut allergy triggered the response, it was lack of awareness that led to her death. The Allen family now gives this award in appreciation to individuals who champion anaphylaxis-related causes through building awareness and influencing change that impacts quality of life through improved policies, research, education and advocacy.

We are pleased to share that the 2022 recipient of the Robyn Allen Leadership Award is Dr. Julia Upton, who calls this “a highlight of my life. It was very moving,” Dr. Upton says.

Food Allergy Canada [recently spoke here](#) with Dr. Upton about this incredible accolade and praised her “tremendous dedication to advancing food allergy awareness and education of patients, families, and the public, while also increasing allergy awareness among medical colleagues. She is actively involved in research focused on food desensitization therapies, allergy diagnostics and the recognition and treatment of immunodeficiencies. She has also exhibited exceptional leadership through her involvement with our organization, as a valued member of our healthcare advisory board, an expert guest in numerous educational webinars, a medical reviewer, and as a contributor to our ‘Ask the allergist’ newsletter series. Her accomplishments are many and she is a true champion of the food allergy community.”



Dr. Julia Upton

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SCIENCE: THE PERSONALIZED MEDICINE APPROACH

Each patient and family impacted by food allergy is unique, and they deserve different approaches and treatments to find the solution most suited for them. Our research and clinical care aims to provide safer as well as more convenient options.

RECENT RESEARCH HIGHLIGHTS:



- A breakthrough study lead by Dr. Eiwegger describes a new disease (first mutation of a gene coding for IL-33, which is one of the most important proteins in allergic disease and plays an important role in autoimmunity). Published in the esteemed journal Gastroenterology in April 2022, it exemplifies strong cross-subdiscipline collaboration at SickKids among specialists in gastroenterology, rheumatology, genetics, dermatology and other fields.



- Dr. Upton, Dr. Eiwegger, Dr. Grunebaum and Dr. Vadas, with assistance from SickKids Emergency Department and key laboratory personnel Dr. Leon-Ponte, reported in the prestigious journal Allergy the role of the platelet-activating factor (PAF) pathway in paediatric patients with anaphylaxis. They found that decreased serum activity of the enzyme, which inactivates PAF, is a biomarker of severe anaphylaxis. This study may lead to providing an additional tool to identify children that at the highest risk for severe anaphylaxis. Moreover, recognizing the role of PAF in anaphylaxis may provide a unique therapeutic opportunity to stop anaphylaxis from happening.



- Dr. Eiwegger led a team of international researchers to provide new insights on the impact of a common asthma medication (omalizumab) on peanut and allergen specific antibody placental transfer, published in Allergy. This work may help understand how fetuses are impacted by certain therapies that a mother receives for allergies.

CLINICAL TRIAL UPDATES:



- We have continued to move forward with the BOOM trial, a key study to generate a safe multi-oral immunotherapy (OIT) that uses the asthma medication omalizumab. This trial is nearing the milestone of being half-way enrolled.



- In our dosing studies, we recently had our last patient visit for the low dose multi-OIT trial, and we are fully enrolled in a study that compares different doses of OIT.



- The dosing studies are helping us determine how little of an allergen may protect children from accidental exposure. This research is anticipated to open possibilities in the way we deliver OIT.



- One of the studies examining the peanut patch has been completed.



- The Cross Canada Anaphylaxis study continues enrolling to collect important trends in anaphylaxis triggers and management.

ON OUR HORIZON:



- We will continue to expand allergy treatment options that could be provided to a greater number of children who need them.



- We are exploring the molecular basis for cross-reactivity between foods—an important step in the development of a potential treatment for multi-nut allergies.



- Our team is supporting a forthcoming mass media and marketing campaign from SickKids Foundation to raise awareness about allergy among the public.



- The 2023 SickKids Paediatric Update Conference, which provides up-to-date information on pressing issues in paediatrics, is scheduled to feature allergy as the chosen subspecialty day. We look forward to members of our team speaking and presenting next year.

10

- FAAP is on the cusp of marking a 10-year anniversary, and we look forward to celebrating this milestone with you.



THANK YOU FOR SUPPORTING LEGENDS LIKE CODY

“The study that we’re part of (Peanut and Tree-Nut Desensitization: How Low Can We Go?) is only one piece of the gigantic puzzle that will solve the peanut allergy dilemma. It’s a long journey with so many questions that need answers. But every research study counts, and we’re happy to be part of it.” –CODY SU’S MOTHER, LIJEANNE

