

In search of ways to help Canadians breathe easier

Nearly three million Canadians have asthma¹ and an estimated six percent of Canadian children and four percent of adults have food allergies.²

Sadly, the number of people affected by asthma and many types of allergies appears to be growing. These conditions range from mild intolerances to severe or even fatal reactions to triggers such as foods, pollen, dust mites, molds, chemicals and pollutants.

As a researcher and a mother, Dr. Marianna Kulka is eagerly studying ways to protect children and adults alike from allergies, asthma and other diseases affecting immune health, including immune responses related to wound healing and cancer.

Dr. Kulka's research in Charlottetown, Prince Edward Island, explores how bioactive compounds found in nature may positively affect human health. Her team researches potential therapeutic and preventative solutions for immune disease.

Beyond her primary research, Dr. Kulka collaborates with industry clients, academic partners and colleagues from other research and health organizations within Canada and across North America. Her innovative research has earned her grants, awards and pilot funds from the American Academy of Allergy Asthma and Immunology, Becton Dickson, the U.S. National Institute of Allergy and Infectious Diseases, the Canadian Institutes of Health Research, the Canadian Breast Cancer Foundation – Atlantic Region, the Alberta Heritage Foundation for Medical Research, Merck Frosst Canada, and PEI's Department of Innovation and Advanced Learning.

Originally from Calgary, Dr. Kulka holds a PhD in Immunology (University of Alberta) and a BSc in Cellular, Molecular and Microbial Biology (University of Calgary). She was also a Postdoctoral Fellow in Allergic Disease at the National Institutes of Health in the United States and a Postdoctoral Fellow in Pulmonary Research at the University of Alberta.

Dr. Kulka moved from Chicago back to Canada to join the National Research Council (NRC) and to raise her family in what she believes to be a safer environment in Atlantic Canada. Not only is she a federal research officer at the NRC Institute for Nutrisciences and Health in Charlottetown, Dr. Kulka is also an adjunct professor at two post-secondary institutions: the Atlantic Veterinary College's Department of Biomedical Sciences (affiliated with the University of PEI) and Dalhousie University's Department of Microbiology and Immunology in Halifax, Nova Scotia.

Aside from dedication to her research projects, Dr. Kulka is generous with her time and her expertise in helping future generations of potential scientists. She participates in science outreach activities, serving as an advisor for undergraduate, graduate and post-doctorate students. As well she acts as a presenter and mentor in programs such as the Canadian Biology Educators Conference, the Sanofi-Aventis BioTalent Challenge, Holland College's biotechnician on-the-job training program, and CIHR's DreamCatcher and Synapse programs.

¹ Asthma Society of Canada <http://www.asthma.ca/adults/about/whoGetsAsthma.php>

² Health Canada <http://www.hc-sc.gc.ca/fn-an/securit/allerg/index-eng.php>