

North America

Immunopaedia Ambassadors - North America

Our Ambassadors from across Northern America.



What is your name?

Avid Mohammadi

What is your current position?

PhD candidate

Which institute and country do you work in?

University of Toronto

What is your home country?

Canada

What are your research interests?

Mucosal immunology, HIV, The role of microbiota in modulating immune responses

Tell us about yourself and your research interests:

I hold a Master degree in Virology from Iran University of Medical Sciences, Tehran, Iran. I have worked for two years in the field of HIV in Keyvan virology lab which is the reference virology lab in Tehran. During this period, I had the opportunity to understand the burdens of reducing HIV transmission in Iran. As a graduate student involved with HIV/AIDS issues, I was always concerned about finding prevention strategies to reduce HIV transmission. In Iran, drug injection and sexual transmission are two main routes of HIV transmission. However, it was difficult to study how HIV-sexual transmission could be reduced, since sex and HIV sexual transmission is a stigma in the Iranian community. This was the main reason that I joined Dr. Kaul's lab, University of Toronto as a PhD student in 2015, where the main focus is the genital immune correlates of HIV-transmission and susceptibility. Dr. Kaul has extensive experience on HIV transmission and immune correlates of HIV susceptibility, studying for more than 20 years in Canada, Uganda and Kenya. Since joining his lab, I

enhanced my knowledge on HIV, Immunology, how to perform clinical trials, the ethics in research and new techniques such as flow cytometry.

What are your online profiles?

[ResearchGate](#)

Immunology Keywords: Inflammation, Th17 cells, neutrophils



What is your name?

Sohail Hassan Mahmood

What is your current position?

Director & CEO, Living In Silico Inc.

Which institute and country do you work in?

Sheridan College, Canada

What is your home country?

Canada

What are your research interests?

Simulations, drug discovery, ILCs

Tell us about yourself and your research interests:

We (Living in Silico Inc.) are interested in determining novel drugs using protein-protein simulation. We are building an immunological identity with drug production that allows for specific immunotherapies based on specific immune cell behaviour in disease states. One aspect would be polarization of cells, based on various stimuli, innate immune cells can orchestrate later adaptive responses. If a specific APC becomes differentiated to prevent influx of cells it would be anti-inflammatory and if promoting inflammation it would be inflammatory.

We would like to extend the idea further of APC polarization and the behavioural changes leading to massive changes in immune responses to alter responses to stimuli such as in tumour microenvironment where vascular changes diminishing can lead to tumour size decreases. We hope to achieve these goals by understanding the mechanisms of the microenvironment to maintain

growth and cancerous growth and target specific behaviours rather than general chemo and immunotherapies.

What are your online profiles?

LinkedIn: [Sohail Hassan Mahmood](#)

Immunology Keywords: Immunotherapies, Simulations, ILCs



What is your name?

Lucinda del Carmen Puebla Clark

What is your current position?

PhD student

Which institute and country do you work in?

I am currently a student at Universidad de Sonora in Mexico in the program « Doctorado en Ciencias (Químico Biológicas y de la Salud) »

What is your home country?

Mexico

What are your research interests?

Dendritic cells, Innate response to viruses, Veterinary immunology

Tell us about yourself and your research interests:

I am currently working with porcine dendritic cells and their response to the Porcine Reproductive and Respiratory Syndrome Virus. During the time we have been working with porcine dendritic cells, we have learned that porcine and human immune cells are quite alike, a personal interest for me is to actually search for similarities between species and see if porcine dendritic cells could be used in cell therapy treatments.

What are your online profiles?

LinkedIn -[Lucinda Puebla Clark](#)

ResearchGate- [Lucinda Puebla-Clark](#)

Immunology Keywords: Dendritic cells, Virus, Swine



What is your name?

Bryan Gascon

What is your current position?

Undergraduate Researcher

Which institute and country do you work in?

University of Toronto, Canada

What is your home country?

Philippines and Canada

What are your research interests?

Medical Microbiology, Cancer Immunotherapy, Health Services Research

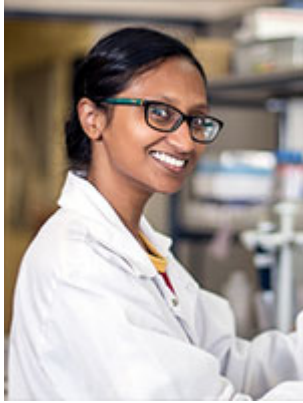
Tell us about yourself and your research interests:

I just finished my Honours Bachelor of Science degree at the University of Toronto, in which I double majored in Immunology and Global Health and minored in Cell and Systems Biology. Through the academic rigors of my program, I gained a deep appreciation for how the human body keeps us alive everyday. As a result, I pursued opportunities in a variety of labs related to key cornerstones of immunology - from medical microbiology to cancer research - throughout my undergraduate career. Similar to an undifferentiated stem cell, my research interests are very broad, but translation in nature: HIV immunology, gut microbiome, the detection of antibiotic resistance, cancer immunotherapy, and health services research. Currently, as a Queen Elizabeth Scholar in the Clive Lab, we're looking at the immune mechanisms underlying adverse birth outcomes of HIV-positive women. Outside of academia, I enjoy going to the gym and spending time outdoors.

What are your online profiles?

LinkedIn - [Bryan Gascon](#)

Immunology Keywords: HIV, Regulatory T Cells, Flow Cytometry



What is your name?

Jinal Nomathemba Bhiman

What is your current position?

Postdoctoral Research Associate

Which institute and country do you work in?

The Scripps Research Institute, La Jolla, USA

What is your home country?

South Africa

What are your research interests?

HIV vaccine research, host-pathogen interactions, B cell development

Tell us about yourself and your research interests:

I began my scientific career as a student at the National Institute for Communicable Diseases in Johannesburg, South Africa. This was the first time I was exposed to “real” research with aims that were both descriptive and hypothesis-driven and with outcomes that were unknown and intriguing. This foray into host-pathogens interactions in the context of HIV-1 infection, initiated my interest in HIV vaccine design. Since then I completed my MSc and PhD degrees in South Africa and am currently a postdoc at The Scripps Research Institute in La Jolla, USA.

My PhD research investigated how viral evolution during HIV infection can lead to the initiation and maturation of broadly neutralizing antibodies, which are the antibodies likely needed for a preventative HIV vaccine. My postdoctoral research is translating the basic immunology hypotheses generated from my PhD through immunogen design and development of immunization strategies. In addition, I am also keen on defining the sites of immunodominance on the soluble HIV envelope trimer constructs that we are using as immunogens.

Upon completion of my postdoctoral training, I hope to return to my home country to continue my academic career and to pay it forward by training the next generation of African scientists.

What are your online profiles?

LinkedIn - [Jinal Bhiman](#)

ResearchGate - [Jinal Bhiman](#)

Immunology Keywords: HIV, immunogens, vaccines



What is your name?

Sergey Yegorov

What is your current position?

PhD candidate

Which institute and country do you work in?

University of Toronto, Faculty of Medicine, Department of Immunology, Toronto, Canada

What is your home country?

Kazakhstan and Canada

What are your research interests?

Immunology and epidemiology of schistosomiasis, HIV and malaria

Tell us about yourself and your research interests:

I'm a PhD student in Dr. Rupert Kaul's laboratory at the University of Toronto. My current research explores the impact of schistosomiasis and malaria on mucosal immunology and HIV susceptibility in a clinical trial based in Central Uganda, and in a mouse model. Outside of academia, I have a passion for martial arts and I love spending time in nature with friends and family.

What are your online profiles?

ResearchGate - [Sergey Yegorov](#)

LinkedIn - [Sergey Yegorov](#)

Impactstory - [Sergey Yegorov](#)

Immunology Keywords: Mucosal immunity, HIV, schistosomiasis



What is your name?

Laura Cook

What is your current position?

Postdoctoral Research Fellow

Which institute and country do you work in?

BC Children's Hospital Research Institute, University of British Columbia, Vancouver, Canada

What is your home country?

Australia

What are your research interests?

Regulatory CD4+ T cells, Infectious Disease, Autoimmune Disease

Tell us about yourself and your research interests:

I have been conducting research in the field of human immunology since 2009. I completed my PhD in 2014 which focused on the role of regulatory T cells (Tregs) in chronic infectious diseases and celiac disease. I then commenced a postdoctoral fellowship in Megan Leving's lab in Vancouver, Canada where I am currently undertaking two main research projects. The first project is investigating whether toxin-specific CD4+ T cells can predict clinical outcome in patients with C. difficile infection. The second is optimising cell therapy for inflammatory bowel disease. I am assessing which Treg cell population will be most suitable for cell therapy by comparing peripheral blood FOXP3+ Tregs against the IL-10 producing Treg subset, obtained by a novel isolation method, or Tregs generated using a parasite-derived TGFbeta-mimic molecule.

What are your online profiles?

LinkedIn - [Laura Cook](#)

Immunology Keywords: Flow Cytometry, Regulatory T cells, CD4+ T cells



What is your name?

Jennifer Enciso García

What is your current position?

PhD Student, Biochemical Sciences

Which institute and country do you work in?

CIBIOR, Mexican Institute for Social Security, National Autonomous University of Mexico (UNAM), Mexico City, Mexico

What is your home country?

Mexico

What are your research interests?

Systems Immunology, Acute lymphoblastic leukemia, Tumor microenvironment

Tell us about yourself and your research interests:

I received my B.Sc. and M.Sc. from the National Autonomous University of Mexico in 2013 and 2015. I am currently pursuing my Ph.D in Biochemistry with a focus in systems biology applied on hematological diseases, more specifically acute lymphoblastic leukemia (ALL). Since my Masters project I've been working in the development of a computational discrete model representing some of the main intercellular communication pathways between hematopoietic primitive cells and the bone marrow niche cells in order to understand how they are involved in leukemia maintenance and progression. I am dedicated to the study of bone marrow microenvironment remodeling in ALL towards a proinflammatory state and its participation in the establishment of feedback loops among different sub-systems (eg. Inflammatory cues, stromal cells, leukemic cells and normal hematopoietic cells). The pro-inflammatory microenvironment may be the key factor which "tilt the balance" in the competition between normal and cancer cell populations in the leukemic bone marrow. On the other hand, through the discrete model I also want to probe the hypothesis about the role of inflammatory

hits in the initial stages of B-ALL development perturbing the proliferation-differentiation balance.

What are your online profiles?

LinkedIn - [Jennifer Enciso Garcia](#)

ResearchGate - [Jennifer Enciso](#)

Immunology Keywords: Cytokines, TLRs, RAG



What is your name?

Cristina Artaza Irigaray

What is your current position?

PhD Student- Biomedical Sciences/ Immunology PhD

Which institute and country do you work in?

Immunology department at Centro de Investigación Biomédica de Occidente (CIBO),

Mexican Institute of Social Security, Guadalajara, Mexico

What is your home country?

Spain

What are your research interests?

Virology, Molecular Biology, Oncoimmunology

Tell us about yourself and your research interests:

I studied Biotechnology at the *Universidad de León* (Spain) and I did my Masters in Biomedical Sciences at the *Universidad Autónoma de Madrid* (Spain). I am currently doing my last semester of PhD at *Universidad de Guadalajara* (Mexico) and I carry out my research project at the Mexican Institute of Social Security (CIBO-IMSS). My research focuses on cervical cancer immunology, particularly on how human papillomavirus oncoproteins affect cytokine release by keratinocytes. I am very interested on learning more about oncoimmunology and meeting scientists in the field to share

our knowledge and passion for science.

What are your online profiles?

LinkedIn - [Cristina Artaza Irigaray](#)

ResearchGate - [Cristina Artaza-Irigaray](#)

Immunology Keywords: Oncoimmunology, Cytokines, Innate Immunity



What is your name?

Juan Carlos Balandrán Juárez

What is your current position?

PhD Student, Molecular Biomedicine

Which institute and country do you work in?

Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional, Mexico City, Mexico

What is your home country?

Mexico

What are your research interests?

Leukemia-initiating cells, tumor microenvironment, Oncoimmunology

Tell us about yourself and your research interests:

The major interest of the laboratory where I have been trained for the last years is the study of early hematopoietic differentiation of lymphoid cells in the pathogenesis of childhood acute lymphoblastic leukemia. My studies have focused on the role of the bone marrow (BM) microenvironment in the origin, maintenance and immunosurveillance of abnormal cell production using stromal cell 2-D co-culture systems. However, I have extended our findings to more natural architecture and developed novel three-dimensional organoid-like structures using human BM mesenchymal stromal cells and

leukemic cells derived from ALL patients, which better mimics the cellular interactions between hematopoietic cells and their niches. By using this powerful ex-vivo model, my major goal is to understand the pathobiology of the leukemic niche and the microenvironmental regulation of leukemic cell population dynamics within malignant BM. Of note, I have special in investigating the tumor microenvironment-associated drug resistance of primitive leukemia-initiating cells (LICs), for this proposal, I will bring in my expertise in human-human personalized 3D system construction, multiparameter flow cytometry, confocal microscopy and xenotransplantation modeling to develop a high-throughput system that will provide a unique way to discover new therapies that target LICs in the context of their supportive niche.

What are your online profiles?

LinkedIn - [JC Balandran](#)

Researchgate - [Juan Balandran](#)

Immunology Keywords: Leukemia, hematopoiesis, oncoimmunology



What is your name?

Rebecca Ng

What is your current position?

Undergraduate Researcher

Which institute and country do you work in?

University of Toronto, Toronto, Canada

What is your home country?

Canada

What are your research interests?

Microbiome and gut immunology, Child health and disease, Global health and inequities

Tell us about yourself and your research interests:

I am currently an undergraduate student studying at the University of Toronto. I am pursuing an Honours Bachelors of Science with a double major in Nutritional Sciences and Human Biology: Global Health. In my third year, I conducted a probiotic microbiology project in a microbiome research lab, where I evaluated the effect of vitamin D on a *Bacillus* probiotic and its gene expression. I am interested in learning about a wide variety of diseases and health challenges throughout the world. In the summer of 2017, I travelled to Cape Town, South Africa through the Canadian Queen Elizabeth Scholarship program to perform research in HIV immune regulation within the South African context. My research included investigating Langerhans cells, specialized cells implicated in HIV transmission, extracted from adult and newborn foreskin. Immunology is a crucial area of research, where our current knowledge has allowed several advancements within society. Further investment and dissemination of knowledge can empower fellow immunologists and policy makers to increase awareness and enact change.

Immunology Keywords: Microbiome, HIV, Langerhans cells



What is your name?

Maxwell Chan

What is your current position?

Undergraduate Researcher

Which institute and country do you work in?

University of Toronto, Toronto, Canada

What is your home country?

Canada

What are your research interests?

HIV, Allergy, Infectious disease

Tell us about yourself and your research interests:

I am currently pursuing a Honours Bachelor of Science degree at the University of Toronto with a double major in Physiology and Immunology. After being awarded the Queen Elizabeth Diamond Jubilee Scholarship, I interned at the University of Cape Town to conduct research on HIV. My research focused on T cells extracted from epidermal foreskin tissue. Using flow cytometry, I investigated the difference in immunophenotypes between T cells extracted with different protocols: spontaneous migration and enzyme digestion. As the main target of HIV, CD4+ T cells remain an important field of study in HIV treatment and prevention.

What are your online profiles?

LinkedIn - [Maxwell Chan](#)

Immunology Keywords: HIV, Flow cytometry, Autoimmune disease



What is your name?

José L. Maravillas-Montero

What is your current position?

Associate Professor

Which institute and country do you work in?

National Autonomous University of Mexico, Mexico City, Mexico

What is your home country?

Mexico

What are your research interests?

B cell biology, Tetraspanins, Autoimmune disease

Tell us about yourself and your research interests:

I was awarded with a PhD in molecular biomedicine in 2012 at the Center for Research and Advanced

Studies of the National Polytechnic Institute (CINVESTAV). I worked for a couple of years as a postdoctoral fellow at the Institute for Immunology from the University of California, Irvine, focusing on chemokines and its receptors. I am now an Associate Professor at the National Autonomous University of Mexico (UNAM) based at the National Institute of Medical Sciences and Nutrition "Salvador Zubirán", leading my own group with a special interest in human B cell molecular biology in health and disease.

What are your online profiles?

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ResearchGate - [Jose Maravillas Montero](#)

Red de Apoyo a la Investigacion - rai.unam.mx

Immunology Keywords: B cell, tetraspanin, cytoskeleton
