



CSI BULLETIN

**JANUARY - DECEMBER
2023**



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PRESIDENT'S REPORT 2023

Dear fellow immunologists,

Greetings!

It has been my honor and a privilege to serve as the CSI president since June 2023. In this capacity, I have been fortunate enough to work with many inspiring individuals within and outside the CSI Council with a shared interest in promoting Canadian immunology through different mechanisms and initiatives.

Our annual meeting in Orford, QC, was a huge success, thanks to the meeting's local organizing committee led by Manu Rangachari, to Shaina Scrimgeour and Bobbi Hoffman from Gemstone Event Management, and to our very capable Trainee Engagement Committee (TEC) members, among other colleagues. A highlight of this event was a Joint Clinical Immunology Network-Canada (CINC) & CSI Translational Immunology Symposium featuring several fundamental and clinical immunologists, and with an eye to the future in bringing research findings from the cagetop/benchtop to the bedside (and back). Our Michael Gold Early Career Investigators (ECI) Webinar Series also continues to help us stay in touch in between our annual meetings and to celebrate recent additions to our community of scholars. Efforts are now underway to secure sponsorship for this important series, and I wish to renew our call, on behalf of our ECI Webinars Committee led by Sheela Ramanathan, for new nominations.

We have strived to strengthen our ties with other immunology societies and journals and to form new partnerships. We secured publication discounts for new submissions to the British Society for Immunology flagship journals, as well as poster awards sponsored by *Immunology & Cell Biology* (ICB, a flagship journal of the Australian and New Zealand Society for Immunology), *Mucosal Immunology* (the official publication of the Society of Mucosal Immunology), and *Pathogens and Immunity*. It is noteworthy that *Mucosal Immunology* will also graciously sponsor an Equity, Diversity and Inclusion (EDI) session in our upcoming annual meeting in Banff. In addition, the idea of holding a "Meet-the-Editor" session with Adrian Liston, the Editor-in-Chief of *ICB*, is being entertained. We continue to be a sought-after society for contributions to various journals. For instance, our 2022 CSI-in-FOCIS guest symposium on "Unconventional T Cells in Chronic Disease and as Targets of Therapy" inspired the production of a review series that was guest-edited by Kelly McNagny and published in July 2023 in *Clinical & Experimental Immunology*. Furthermore, following our recent publications in *ICB* (<https://pubmed.ncbi.nlm.nih.gov/35708169/>) and <https://pubmed.ncbi.nlm.nih.gov/37393193/>), we now have an open invitation from this journal to contribute another manuscript focused on Canadian immunology. Therefore, we are seeking ideas and proposals to the CSI Council for future submissions. By the same token, we will be delighted to



explore the possibility of highlighting our members' newsworthy activities and success stories in the International Union of Immunological Societies (IUIS) newsletters.

Our EDI committee, chaired by Yanet Valdez, continues to shine as their efforts have placed us at the forefront of research on EDI. These are perhaps best exemplified by several publications on the subject, organizing fruitful EDI workshops at our annual meetings, and creating an internal EDI survey to help us better understand the fabric and the needs of our society. We take pride in our TEC's splendid work in promoting Canadian immunology through social media, for instance by increasing awareness about scientific investigations led by many amazing women immunologists within our community. I urge everyone to stay connected with CSI through our X account ([@CdnImmunol](#)), which is run by our TEC members. I am also pleased to state that to promote accessibility to and participation in our annual meetings, childcare bursaries will be offered for the foreseeable future, including for our 2024 spring meeting in Banff. In addition, we will soon begin to accept applications for funding in support of local/regional immunology meetings from coast to coast to coast, an initiative spearheaded by Mani Larijani. Another new development is a proposal and ongoing conversations within our Awards Committee, led by Aaron Marshall, to establish a CSI Mentorship Award with gender equity in mind. Please stay tuned for details!

One of the major challenges that we currently face is the dire need for increased funding to maintain Canada's competitiveness in the global arena and to address our trainees' financial struggles. Without any doubts, our scientists-in-training are the driving forces of research leading to game-changing discoveries, inventions, innovations and interventions, and deserve much better living conditions. With significant input from Tania Watts and Kelly McNaghy, we participated in a letter writing campaign in July 2023 to approach the federal government for a much needed and long-overdue increase in CIHR funding. To this end, letter templates in both official languages were distributed among our members with directions to address local Member(s) of Parliament, the honorable Prime Minister of Canada, and the honorable Ministers of Health and Finance. Kudos to all CSI members who added their voice, loud and clear, to this important campaign! We are also grateful to Eleanor Fish who recently gave a presentation on the impact of our members' research on SARS-CoV-2 and COVID-19 at a recent "Leading behind the Scenes" Research Canada event before the federal government's Parliamentary Health Research Caucus. Finally, it is my pleasure to report the formation of an *ad hoc* Advocacy & Public Engagement (APE) committee, which is led by Jennifer Gommerman and Craig Jenne. We look forward to witnessing how this committee will evolve and the impacts it will have on increasing our visibility while engaging the general public, mass media, politicians and policymakers.

As you are aware, efforts are underway to create a digital CSI archive. As a first step, we made all [CSI bulletins](#) since 1969 publicly available. Additionally, we identified all [CSI presidents](#) since 1966 while a complete list of our previous vice-presidents, treasurers, secretaries, and council members, among other documents, is work in progress. This kind of information will help recognize important contributions made by many Canadian scholars to the CSI and should enable research on the rich



history of our tight-knit society, including but not limited to studies on EDI among past CSI executives and councilors. I would like to thank all CSI members and friends who have generously shared items of historical value with us. I also wish to acknowledge the hard work of two dedicated undergraduate students from Western University, Mina Hatami and Thu Pham, who have been instrumental to what we have accomplished so far. This will be an ongoing project, and new submissions for archiving will always be welcomed and appreciated.

This report would be incomplete without expressing our gratitude towards Lori Coulthurst for her continued support and for her efforts in producing this issue of the CSI bulletin.

The local organizing committee for [CSI 2024](#), led by Troy Baldwin, has put together an exciting program, which promises to be one of our best to date!

I wish you all a successful year and look very much forward to seeing you in April!

Sincerely,
Mansour Haeryfar



1. CSI EXECUTIVES & COUNCIL MEMBERS 2023

CSI council members are nominated and elected from within the CSI community and volunteer their time to lead the core functions of the Society. These include planning conferences (in conjunction with local organizing committees), scientific programming, awards, collaborations with related scientific societies, oversight of CSI member-led sub-committees and global advocacy for our discipline.



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2. 2023-2024 EDI AND TEC COMMITTEES

EDI Committee 2023 – 2024:

In our quest to mold the CSI into a model of equity, diversity, and inclusion, the EDI committee has engaged in various initiatives over recent years. Collaborating closely with the CSI council, we've crafted a comprehensive EDI strategic plan, heightened awareness about pertinent issues, and tried to foster an inclusive environment valuing diverse perspectives. Since the establishment of the EDI committee, our ongoing efforts aim to recognize and address vital matters within our society through innovative initiatives.

These proactive initiatives encompass a variety of activities. We've organized an Equity, Diversity, and Inclusion (EDI) training workshop during the 2022 CSI meeting, initiated childcare support for symposium participants from 2023 onward, invited role model speakers for the 2023 CSI meeting, and launched an internal EDI survey in 2024. Moreover, by meticulously collecting, analyzing, and interpreting the provided data, we have gained a better understanding of society equity in leadership, membership and gender representation over the past few decades. These efforts represent just a segment of the ongoing EDI team endeavor, highlighting our proactive and data-driven approach to fashioning an environment that addresses the diverse needs of our members.

We are hopeful that our past activities have successfully addressed some of the pressing issues within our society. Through our efforts, we aspire to have opened new avenues for future activities, paving the way for continued progress and impactful endeavors. Together, we endeavor to build a more inclusive and supportive community for all CSI members, fostering an environment where every voice is heard and valued.



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TEC Committee 2023 – 2024:

The CSI trainee engagement committee (TEC) has two main goals: (1) Social media management to engage the immunology and general community to promote awareness of immunology and provide a reliable and professional resource for information on research and immunology-related news. (2) Trainee engagement at the annual CSI conference – organizing sessions/activities at the Spring meetings that will foster meaningful connections between immunology trainees from across Canada that will extend beyond the scientific meeting.

During 2023, the Trainee Engagement Committee (TEC) worked hard to provide CSI trainees with opportunities for networking and career development. At the annual spring conference, the TEC organized a Coffee Social and Trainee Mixer to encourage connections between trainees from across Canada. The TEC also hosted a Career Development Lunch for trainees to have an informal setting to ask academic and industry professionals about career paths and advice, as well as a Trainee Networking Lunch with a new ‘speed networking’ format to spark future collaborations or possible



job opportunities. A post-conference survey showed extremely positive feedback regarding all the trainee events. TEC will therefore carry the same activity format into the 2024 Banff meeting, with planning already underway.

The TEC has also continued to manage CSI social media to promote immunology awareness, community engagement, and access to reliable information on research and immunology. This year, X (formerly Twitter) campaigns were run to highlight the Day of Immunology, Women's History Month, and accomplishments by Canadian researchers for 2023 in a December Wrap Up. To stay updated on society and immunology news and join CSI social discussions, follow [@CdnImmunol](https://twitter.com/CdnImmunol) on X.

Quebec 2023 Local Organizing Committee



Vanessa de Carvalho Oliveira
Macdonald Lab, University of Sherbrooke



Stefanie Valbon
Melichar Lab, University of Montreal



Miranda Yu
Quail Lab, McGill University



Alberta 2024 Local Organizing Committee



Kasia Dzierlega
Clemente-Casares Lab, University of Alberta



Shae Komant
Baldwin Lab, University of Alberta



Isla Skalosky
Geuking Lab, University of Calgary



Quebec (Gatineau) 2025 Local Organizing Committee



Simin Ahmadvand
Lee Lab, University of Ottawa



Natasha Norton
Reynolds Lab, University of Victoria



Sophia Stegeman
Gee Lab, Queen's University



3. MINUTES OF THE 35TH AGM 2023

2023 CSI Annual General Meeting
Thursday, June 8, 12:30 to 1:30pm

Meeting called to order at 12:30 pm and those present welcomed by Aaron Marshall.

1. **Approval of the Agenda**

No additions to the agenda

Motion to approve agenda – (Moved: Juan Carlos Zúñiga-Pflücker; Seconded: Kelly McNaghy) – Motion carried.

2. **Approval of Minutes from June 19, 2022 meeting**

No additions or corrections

Motion to approve agenda – (Moved: Michael Ratcliffe; Seconded: Eleanor Fish) – Motion carried.

3. **President's Report — Aaron Marshall**

- Review statement of purpose of CSI as a not-for-profit organization
- Toronto IUIS Congress 2028 – Juan Carlos Zúñiga-Pflücker's proposal was a success.
- Early Career Investigator Webinar series – increased social media presence. Tremendous thank you to TEC and the ECR Webinar Committee for their work.
- Partnerships with other organizations – CINC, Australia and New Zealand Society for Immunology and British Society for Immunology. It is important to continue acting on behalf of Canada via these international societies.
- Equity, Diversity and Inclusiveness – this is the first year the Conference has taken place during the week and has offered childcare bursaries.

Discussion initiated by Carl Richards regarding the Statement of Priorities and how it should be posted as a working document.

A thank you to Aaron Marshall was given for his time served as President of the CSI Council.

4. **Approval of New members**

- Secretary and Treasurer role has been divided into two positions (as is permitted per the articles of incorporation).

Motion to approve new members – (Moved: Manu Rangachari; Seconded: Juan Carlos Zúñiga-Pflücker) – Motion carried.

5. **Election Results**

- Thanks to all who stood for the election. There were two Vice-President candidates and 7 councilor candidates for 3 different positions.
- 85 CSI members voted



President: Mansour Haeryfar (Western University)
Vice-President: Sheela Ramanathan (Universite de Sherbrooke)
Secretary: Brent Johnston (Dalhousie)
Treasurer: Colin Anderson (University of Alberta)
New Councilors: Hélène Decaluwe (Universite de Montreal/CHU Ste Justine)
Jen Gommerman (University of Toronto); Lee-Hwa Tai (Universite de Sherbrooke)
Returning Councilors: Craig Jenne (University of Calgary); Mani Larijani (Simon Fraser University);
Lisa Osborne (U of British Columbia); Bebhinn Treanor (U of Toronto)
Outgoing Councilors: Heather Melichar, Colin Anderson

6. Meeting Reports:

CSI 2022 – Halifax, NS – Brent Johnston (on behalf of Andrew Makrigiannis)

He reported there were a total of 240 attendees.

Revenue – \$279,065 (about \$93K Sponsors & Exhibits / \$185K Registration)

Expenditures – \$295,329

Profit - \$1,592 with the tax rebate

CSI 2023 – Orford, QC – Manu Rangachari

He highlighted the Organizing Committee, Event/Society Management and TEC.

There were approximately 301 registrants and 193 abstracts submitted.

For the first time, applicants were requested to indicate, in check-box format, subjects and techniques of interest.

Male/Female demographics were reported as follows: LOC members: M 3 F 3, TEC members: M 0 F 4, Plenary speakers: M 8 F 10, Workshop speakers: M 8 F 18, Plenary and workshop session Chairs: M 8 F 8

International Speakers were outlined.

New initiatives: Social Activity (Cherry Marsh), Post-Doctorate Poster Award, CIHR-funded Award for consideration of sex and gender variables in research, joint CINC-CSI Translational Symposium (2nd year) and in Memoria at the banquet dinner for James Carlyle and John Bienenstock (with video).

The Conference was during the week in response to feedback of not wanting to have a work meeting over the weekend.

Additional poster session during the Welcome Reception to accommodate the lack of space.

CSI 2024 – Banff, AB – Troy Baldwin

He reported that the Local Organizing Committee is currently brainstorming the keynote speaker and finalizing details.

The dates are April 22-25, 2024 at the Banff Centre.

Discussion initiated by Eleanor Fish around future Conference dates and ensuring that holidays are avoided as the 2024 dates are during a Jewish holiday and the 2025 dates are close to Easter.

CSI 2025 – Ottawa, ON – Angela Crawley (on behalf of Michele Ardolino)

She reported who the members making up the Local Organizing Committee.

The Hilton Lac-Leamy was announced as the venue.

New initiatives: Possibility of hosting a public event. Potential to bring in politicians due to location.



7. Treasurer's Report — Brent Johnston

Brent advised that the Review of Engagement report from our auditor stated that the financial statements present fairly and are acceptable. Overall, CSI is in a good financial position. In 2022, the Assets – End of year are \$1,245,551, just slightly less than 2021.

From Jan to Dec 2022 the CSI Investment account lost 4.53% (compared to 15.17% gain in 2021). This account has generated \$310K for awards and activities over its lifetime. The capital growth has exceeded inflation: \$756K in 2007 = \$1,016K in 2022.

Reviewed the recent conference history of meeting deficit / surpluses 2014 – 2022.

2022 Budget – Operating deficit of: \$41,938 (offset by \$40,000 contribution from investment account) plus \$6,000 in deferred costs.

CSI Draft Budget 2023 is projecting an operating deficit of \$64,320 which is to be offset by a \$54,500 contribution from investment account), leaving a deficit of \$9,820 plus \$4,000 in deferred costs, to be offset by projected meeting surplus \$3,900 to \$9,600.

Motion to approve 2023 budget – (Moved: Bebhinn Treanor; Seconded: Kelly McNaghy) – Motion carried.

8. Awards Committee Report — Kamala Patel

She gave an overview of this year's award winners. There were many more nominations in 2023 than in years past.

9. IUIS Report – Juan Carlos Zúñiga-Pflücker

The last IUIS council meeting was on Nov 19, 2022 (Hanne Ostergaard, Councillor 2016 - 2022, CSI Representative).

The next IUIS ICI is in Cape Town, South Africa, Nov 27 – Dec 2, 2023 (commitment to gender and geographical diversity).

IUIS ICI 2025 will be in Vienna, Austria.

Juan Carlos Zúñiga-Pflücker was successful with his bid for IUIS ICI, to be held in Toronto August 2028.

Discussions are ongoing regarding the relationship between IUIS and Frontiers in Immunology (IUIS receives funding from Frontiers based on submissions of Research Topics only).

Amendments to the IUIS Constitution about being not-for-profit status for tax purposes.

The Day of Immunology Awards submissions deadline was June 1, 2023.

CSI Annual Conference posting will be on IUIS website.

10. CSI / Government Relations — Eleanor Fish

No time given.

11. New Business:

No time given.

Adjournment – 1:35 pm

Provided by Gemstone and reviewed by Brent Johnston



4. FINANCIAL AUDIT 2022

THE CANADIAN SOCIETY FOR IMMUNOLOGY
Statement of Financial Position
December 31, 2022

	2022	2021
ASSETS		
CURRENT		
Cash	\$ 67,357	\$ 122,152
Marketable securities (Note 4)	1,206,041	1,266,838
Accounts receivable	-	774
Goods and services tax recoverable	17,856	1,443
Deposits paid	12,000	12,575
	\$ 1,303,254	\$ 1,403,782
LIABILITIES		
CURRENT		
Accounts payable	\$ 4,500	\$ 4,500
Deferred conference sponsorship fees	11,600	16,300
Current portion of deferred membership dues	15,953	15,735
Deferred conference registration fees	5,100	-
	37,153	36,535
DEFERRED MEMBERSHIP DUES	20,550	15,690
	57,703	52,225
NET ASSETS	1,245,551	1,351,557
	\$ 1,303,254	\$ 1,403,782



THE CANADIAN SOCIETY FOR IMMUNOLOGY
Statement of Revenues and Expenditures
Year Ended December 31, 2022

	2022	2021
REVENUES		
Membership dues	\$ 23,668	\$ 20,230
Conference registration fees	185,926	21,363
Sponsorships	81,889	45,600
Donations	540	260
	<u>292,023</u>	<u>87,453</u>
EXPENDITURES		
Awards	10,642	-
Conference expenses	284,606	42,735
Dues, licenses and memberships	3,130	2,822
Interest and bank charges	5,059	1,404
Office	18,196	13,730
Professional fees	4,531	4,459
Travel	11,103	1,350
Website services	-	1,926
	<u>337,267</u>	<u>68,426</u>
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES FROM OPERATIONS	<u>(45,244)</u>	<u>19,027</u>
OTHER ITEMS		
Investment income	33,388	26,159
Gain on sale of marketable securities	79,368	36,888
Unrealized gain on marketable securities	(153,285)	134,332
Investment management fees	(20,233)	(19,829)
	<u>(60,762)</u>	<u>177,550</u>
EXCESS (DEFICIENCY) OF REVENUES OVER EXPENDITURES	<u>\$ (106,006)</u>	<u>\$ 196,577</u>



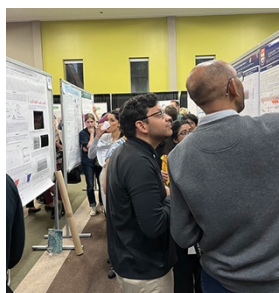
5. CSI ANNUAL MEETING HIGHLIGHTS

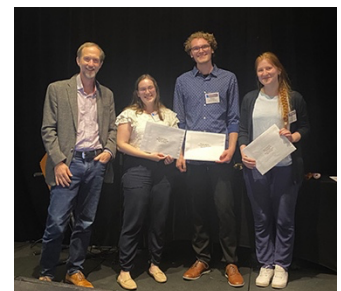
CSI 2023 kicked off with a memorable Keynote Address from Dr. Luke O'Neill of Trinity College Dublin. He delivered a magnificent presentation on the role of itaconate and fumarate in controlling macrophage biology, with the audience hanging on his every word and every piece of data!

The Local Organizing Committee, who consisted of Dr. Manu Rangachari (*Chair - Université Laval*), Dr. Hélène Decaluwe (*CHU Ste-Justine*), Dr. Momar Ndao (*McGill University*), Dr. Martin Pelletier (*Université Laval*), Dr. Geneviève Pépin (*Université de Québec à Trois-Rivières*) and Dr. Lee-Hwa Tai (*Université de Sherbrooke*), were thrilled to inaugurate poster prizes for the incorporation of sex and gender as variables in immunologic research. With the support of the CIHR Institute of Gender and Health, CSI hopes to continue offering these awards in years to come.

Further, the CSI Council and LOC proudly offered childcare bursaries to participants for the first time at a CSI meeting, with a primary focus on supporting trainees. This initiative was driven by our commitment to fostering inclusivity within our scientific community, and we aspire to expand and continue this supportive approach going forward.

The Clinical Immunology Network-Canada meeting was held following the CSI 2023 conference. The mission of the Clinical Immunology Network-Canada (CINC) is to enhance and promote clinical and translational immunology collaborations and research in Canada. Its growing network (currently 90 members) is a pan-Canadian forum that reunites clinicians and researchers in the field of pediatric and adult clinical immunology. Since its foundation in 2020, CINC shares clinical expertise and knowledge in the care of children and adults suffering from inborn errors of immunity in Canada. CINC is grateful for the opportunity that CSI provided during their 2022 and 2023 Scientific Meetings in Halifax and Orford to host its Annual meeting through a Satellite symposium. It highlighted the Canadian expertise in the field of Clinical Immunology and created and strengthened translational bonds with CSI members. We hope to continue to nurture this growing relationship through a working group on Translational Immunology. Stay tuned!







A trainee's perspective on scientific conferences: lessons learned from the Canadian Society for Immunology Annual Symposium

Stefanie F. Valbon*, Lauralie Short*, Vanessa de Carvalho Oliveira*

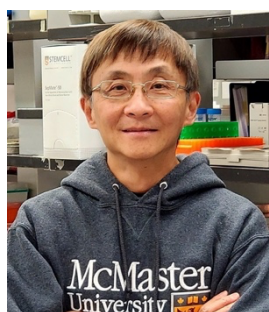
*Authors contributed equally

Becoming a competent and successful researcher involves performing experiments, critically analyzing data, communicating findings, and developing leadership skills; trainees must be given opportunities to develop these skills and the mentorship to succeed. In line with this, one of the Canadian Society for Immunology's (CSI) mandates is to support Immunology research education. To ensure that trainee voices are represented, the CSI established the trainee engagement committee (TEC). The TEC members contribute to the annual symposia by participating in the local organizing committee meetings and organizing trainee-directed events. This article offers a trainee perspective on how conferences can be better crafted to support emerging researchers. Significant measures implemented at CSI 2023 include a childcare bursary, numerous slots for oral presentations by trainees, and events designed to promote interactions between trainees and established scientists. We also highlight important scientific and research lessons learned from the invited speakers. We hope this opinion piece evokes discussions about the actions organizing committees can take to foster the development of the next generation of scientists during conferences.



6. CSI 2023 AWARD RECIPIENTS

Hardi Cinader Award Recipient 2023



Zhou Xing, MD, PhD

Professor, McMaster Immunology Research Centre & Department of Medicine, Faculty of Health Sciences, McMaster University

Presentation Title: “Respiratory Mucosal Immunity: A Trek Through Research and Self-Discovery”

Graduated from North Sichuan Medical College, Nanchong of China in 1981, Zhou Xing worked for a year as an infectious disease physician before his 3-year MSc training in anatomic pathology and occupational pulmonary diseases at Tongji Medical University, Wuhan. He then worked as a lecturer and pathologist for two years at West China Medical University, Chengdu, before coming to Canada for research training in 1987. He was research-trained with Dr. Jack Gauldie and received his PhD in immunology from McMaster University in 1993. Inspired by his mentors, he became a faculty member within the Department of Pathology and Molecular Medicine in 1996 and is now a faculty member in the Department of Medicine of McMaster. Since 2007, he has been a full professor primarily affiliated with McMaster Immunology Research Centre.

Zhou’s research program has focused on respiratory mucosal immunity, infectious disease, and vaccine development. His lab was among the first to discover the ability of lung macrophages to produce IFN-gamma during mycobacterial infection. He was also the first to identify TNF-alpha to be a critical negative regulator of T cell responses to intracellular bacterial and viral infections in the lung. His research showed the superiority of respiratory mucosal route of tuberculosis (TB) vaccination over parenteral injection. More recently, his team has discovered that besides its ability to induce adaptive memory immune responses, respiratory viral-vectored vaccination or subcutaneous live organism-based immunization can induce memory alveolar macrophages and trained innate immunity in the lung. These fundamental preclinical discoveries have led to bench-to-human translation of next-generation respiratory mucosal viral-vectored vaccine strategies against TB and COVID-19. Via closely working together with his colleagues, he has completed two clinical TB vaccine trials and is currently implementing a phase 1 inhaled aerosol COVID-19 vaccine study. His primary research has been published in such journals as *Journal of Immunology*, *Journal of Infectious Diseases*, *Mucosal Immunology*, *Journal of Clinical Investigation*, *Science Translational Medicine*, *Nature Immunology*, and *Cell*.

Zhou considers himself a solitary scientist. He enjoys spending an abundance of his time in nurturing young biomedical researchers and professionals. Quite some of his previous trainees are faculty members, scientists, or professionals currently working in academia, industries, government research agencies, and health organizations.



Investigator Award Recipient 2023



Dr. Kelly McNagny, *Professor, Departments of Biomedical Engineering and Medical Genetics, University of British Columbia*

Dr. Kelly McNagny obtained a BSc in Biology and Biotechnology at Worcester Polytechnic Institute (WPI) in Massachusetts and subsequently a PhD in Cellular Immunology at the U of Alabama at Birmingham (UAB). At UAB, he worked with Dr. Max D. Cooper, a founding father of B cell immunology, and his research focused on cell surface proteins that regulate B cell maturation and homing. He then moved to the European Molecular Biology Laboratory (EMBL) in Heidelberg, Germany, where he performed postdoctoral studies with Dr. Thomas Graf and his work focused on transcriptional control of stem cell fate and the commitment to macrophage, eosinophil and thrombocyte development. He also identified a number of novel hematopoietic stem cell surface proteins (the CD34 family) and this then became the research focus of his own laboratory at The Biomedical Research Centre, at the University of British Columbia in Vancouver. He is currently a full professor in the departments of Biomedical Engineering and Medical Genetics where his work focuses on ***stem cell behavior, innate immune responses, inflammatory disease, cancer biology and immunotherapeutics***. His research relies heavily on the use of transgenic mice and animal models of human inflammatory disease as well as high-throughput “omics” technologies to reveal the immune components that determine the outcome of human disease. Nationally, he has filled leadership roles in the Stem Cell Network Centre of Excellence, the Centre for Drug Research and Development and the AllerGen Network Centre of Excellence. He is currently Co-leader of the Immunotherapeutics Cluster at UBC and is UBC's Delegate to CIHR.

New Investigator Award Recipient 2023



Dr. Daniela F. Quail, *Assistant Professor, Rosalind and Morris Goodman Cancer Institute and Departments of Physiology and Experimental Medicine at McGill University*

Daniela F. Quail, Ph.D., is an Assistant Professor at the Rosalind and Morris Goodman Cancer Institute and the Departments of Physiology and Experimental Medicine at McGill University (Montréal, Canada). She received a Ph.D. from the University of Western Ontario (London, Canada) where she studied the role of embryonic morphogens on microenvironmental regulation of cancer stemness and metastasis. She later completed a postdoctoral fellowship at Memorial Sloan Kettering Cancer Center (NY, USA). Her postdoctoral research was focused on how the immune microenvironment impacts cancer progression and prognosis, with particular interest in the myeloid compartment. She contributed to a body of research characterizing the effects of the innate immune system in cancer, including the role of macrophages in brain tumors, and neutrophils and monocytes in breast cancer metastasis. After opening her lab at McGill, Dr. Quail served as Director of the Single Cell and Imaging Mass Cytometry Platform (2017-2021) where she developed multiplex imaging protocols to characterize the tumor immune microenvironment. She was the Early Career Representative for the American Association for Cancer Research Tumor Microenvironment Working



Group (2017), and currently holds a Tier II Canada Research Chair in Tumor Microenvironment research. Currently, the Quail lab studies cancer immunology through 3 major themes, including (1) the impact of chronic inflammatory conditions such as obesity on cancer progression and immunotherapy; (2) the role of diet and energy balance in shaping the immunological response to cancer; and (3) tissue-specific influences of the tumor microenvironment. By addressing these research gaps, her team hopes to contribute to new tools and therapies in immuno-oncology.



HOW TO NOMINATE YOUR FELLOW IMMUNOLOGISTS FOR CSI AWARDS:

Do you think your supervisor, colleague, former trainee or friend is an OUTSTANDING immunologist? Then why not nominate them for one of the **CSI AWARDS**? We welcome nominations from the immunology community and it takes essentially no time to complete. Best of all, they can be submitted at any time (even now while you are at the meeting and reminded of all the great immunology research being done in Canada). Your nominee will be honored and appreciate that you recognized their achievements. Simply email the required information to: info@csi-sci.ca

We have four categories of awards:

The **Bernhard Cinader Award** is named in honor of Dr. Hardi Cinader who was the inaugural award recipient at the first CSI meeting held in 1987. Dr. Cinader was a member of a small group of immunologists that “founded” immunology in Canada in the 60’s. Dr. Cinader was an outstanding immunochemist with a strong personality and a passionate patron of native Canadian art and artists. The Bernhard Cinader Award is awarded to an immunologist working in Canada who is an exceptional researcher, exceptional mentor and also has something “extra”. The “extra” could be teaching, art, outreach, writing, nearly anything in which the researcher excels (is not average). The nominee's service to the Canadian Immunology community will also be considered. Nominations are accepted by letter(s) and should describe the exceptional abilities and contributions of the scientist nominated. The award includes travel reimbursement to the meeting as well as a plaque along with a cash prize (\$500). The award is given at the CSI meeting.

CSI Investigator Award: An award for a member of the CSI recognizing for excellence in research and mentorship over their career. The applicant can be in any sector (academic, industry, etc.) beyond 6 years from their first appointment as an independent investigator. The award is up to \$1,000 for one or two trainees of the CSI Investigator Awardee to attend the next CSI Conference. Nominator must send a letter of rationale/support summarizing the achievements and CV of the Nominee. Note: the Awardee must use this award within two years of receipt.

CSI New Investigator Award: An award for a member of CSI for excellence or potential excellence in research. The applicant must be within six years from the date of their first appointment as an independent investigator, and can be in any sector (academic, industry, etc.). If the researcher took a parental leave during this six-year period, consideration will be provided at double time for the parental leave. For example, a researcher who took six months for parental leave would benefit from a 12-month extension of their eligibility for CSI New Investigator awards. The award is up to \$1,000 for one or two trainees of the New Investigator Awardee to attend the next CSI Conference. Nominator must send a letter of rationale/support summarizing the achievements and CV of the Nominee. Note: the Awardee must use this award within two years of receipt.

John D. Reynolds Award: This award is named in honor of Dr. John D. Reynolds who was the inaugural award recipient at the 21st annual CSI meeting in 2008. For over 20 years, John Reynolds served the CSI in multiple capacities, including as Councilor and President. But what the CSI honors him for most is his developing, building, and managing of CSI's first Website. John's creative computer leadership led the CSI into the 21st Century in conference and membership management long before such usage was common. His volunteer service pushed the CSI to the forefront internationally.



The John D. Reynolds Award is given for a long-term member of the CSI for their exceptional service to CSI. The award can be, but is not necessarily, given each year. The nominator should send a letter of rationale/support summarizing the service to the CSI. The award includes a \$2,000 travel reimbursement to be used by the awardee and as many trainees as they wish to include to the present CSI annual meeting or within two years of award receipt.

Meeting Travel Award Recipients 2023

Thank you to our Awards Committee, Subash Sad (Chair - University of Ottawa), Sung Kim (Western University), Irah King (McGill University), Sheela Ramanathan (University of Sherbrooke), Deanna Santer (University of Manitoba), Anastasia Tikhonova (University Health Network).

The Canadian Society for Immunology congratulates the following graduate students, post doctoral scholars and new investigators for their success in the CSI 2023 Travel Award competition.

Students:

Top Prize (\$1000) in alphabetical order:

USherbrooke Faculty of Med. & Health Sc. Travel Award	Lysanne Desharnais	McGill University
Research Centre of the CHUS-CRCHUS Travel Award	Esha Sharika Kaul	University of Calgary
CSI Travel Award	Megan Lee	University of Alberta
CSI Travel Award	Dakota Rogers	McGill University
CSI Travel Award	Bavanitha Thurairajah	McGill University

2nd Prize (\$500) in alphabetical order:

USherbrooke Faculty of Med. & Health Sc. Travel Award	Kirsty Brown	University of Calgary
CHU Ste-Justine Travel Award	Brandon Dickson	Western University
USherbrooke Faculty of Med. & Health Sc. Travel Award	Jhon Ralph Enterina	University of Alberta
CSI Travel Award	Sinthuja Jegatheeswaran	University of Toronto



CSI Travel Award	Mojdeh Matloubi	University of Manitoba
CSI Travel Award	Brandon Paradoski	University of Manitoba
CSI Travel Award	Alexandre Poirier	McGill University
CSI Travel Award	Ananya Saraph	University of British Columbia

Post Doctoral Scholars:

Top Prize (\$1000) in alphabetical order:

Research Centre of the CHUS-CRCHUS Travel Award	Maria Elena Gentile	University of Pennsylvania
USherbrooke Faculty of Med. & Health Sc. Travel Award	Aline Ignacio	University of Calgary
Greenberg Travel Award	Susan Westfall	Research Institute of McGill University Health Centre

New Investigators:

Top Prize (\$1,500) in alphabetical order:

Julianna Blagih	University of Montreal
Nargis Khan	University of Calgary
Ajitha Thanabalasuriar	McGill University



7. CSI SPONSORED SYMPOSIUMS

AAI Immunology 2023, May 11 – 15, Washington, DC

CSI Sponsored Symposium: May 13, 12:30 - 2:30 pm

The Ontogeny and Functioning of the Immune System: Lessons from Non-mammalian Systems

Chairs: **Dr. Edan Foley**, University of Alberta; **Dr. Jason N. Berman**, University of Ottawa and Children's Hospital of Eastern Ontario Research Institute

Dr. Edan Foley, *Univ. of Alberta, Canada*, "Single-cell resolution of the zebrafish intestinal immune response to a *Vibrio cholerae* infection"

Dr. Jason N. Berman, *Univ. of Ottawa and Children's Hosp. of Eastern Ontario Res. Inst., Canada*, "Leveraging the zebrafish model for preclinical studies of the immune microenvironment in cancer"

Dr. Francesca Di Cara, *Dalhousie Univ., Canada*, "Drosophila immunity"

Dr. Shayan Sharif, *Univ. of Guelph, Canada*, "Chicken immunity and viral pathogens"

Dr. W. Brent Derry, *Univ. of Toronto, Canada*, "C. elegans innate immunity"

FOCIS 2023, June 20 - 23, 2023, Boston, MA

CSI Sponsored Symposium: June 20, 1:30 - 5:30 pm

Immunometabolism 10 Years later: Implications for Health and Disease and Translational Immunometabolism

Chairs: **Francesca Di Cara**, *Dalhousie University, Halifax (NS)*; **Ramon Klein Geltink**, *University of British Columbia, Vancouver (BC)*

Dr. Julian Lum, *Associate Professor, University of Victoria, Victoria (BC)*, "Uncovering novel metabolic insights in T cells with ¹³C-glucose tracing in human ovarian cancer"

Dr. Sue Tsai, *Assistant Professor, University of Alberta, Edmonton (AB)*, "Insulin receptor signaling in adaptive immunity"

Dr. Aaron Marshall, *Professor & Head, Department of Immunology and President of the Canadian Society for Immunology, University of Manitoba, Winnipeg (MB)*, "PI 3-kinase-dependant reprogramming of hexokinase isoforms regulates B cell metabolism and function"

Dr. Ramon Klein Geltink, *Assistant Professor, University of British Columbia (BC)*, "Mitochondrial complex III ROS improves anti-tumor CD8⁺ T cell function"

Dr. Francesca Di Cara, *Assistant Professor and Canada Research Chair in Human Immunology and Host-Pathogen interactions, Dalhousie University (NS)*, "Peroxisome's metabolism orchestrates myeloid cells development and activation in health and disease"

Dr. Morgan Fullerton, *Associate Professor, University of Ottawa, Ottawa (ON)*, "Nutrient and energy-sensing pathways as drivers of macrophage immunometabolism"



8. ECI WEBINAR SERIES

Early Career Investigators Webinar Series:

This lectureship Series is named in honor of Dr. Michael Gold who has made lasting contributions to the mentoring of ECIs and/or postdoctoral scholars transitioning into independent investigator positions. Please help us celebrate the new additions to our community of scholars by nominating ECIs joining your own institutes and elsewhere. Visit the [CSI website](#) on how to nominate speakers.



The Michael Gold Webinar Series has been established by the Canadian Society for Immunology (CSI) to honor a current or past CSI member who has made lasting contributions to the mentoring of early career investigators and postdoctoral scholars transitioning into independent research positions. Dr. Gold is a Professor and former Head of the Department of Microbiology and Immunology at University of British Columbia and the 2013 recipient of the CSI Cinader Award. He is known for his many contributions to the scientific community, including his roles in mentoring trainees of all levels to the top.

- | | |
|----------------|--|
| Jan. 12, 2023 | Dr. Chao Wang , <i>Sunnybrook Research Institute, University of Toronto</i>
"Immune Regulation of Stress" |
| March 9, 2023 | Dr. Michele Ardolino , <i>University of Ottawa</i>
"More than a ... Ligand: PD-L1 Promotes a Metabolic Shift that Suppresses Type I IFN in Cancer Cells" |
| May 18, 2023 | Dr. Deanna Santer , <i>University of Manitoba</i>
"Roles of Type III Interferons in Antiviral Immunity and Beyond" |
| July 13, 2023 | Dr. Christina Guzzo , <i>University of Toronto – Scarborough</i>
"Discovering Immune Cell Fingerprints on Viruses; Why and How We Study Them" |
| Sept. 13, 2023 | Dr. Valentin Jaumouille , <i>Simon Fraser University</i>
"How do Macrophages Decide What to Eat?" |
| Nov. 9, 2023 | Dr. Olga Rojas , <i>University of Toronto</i>
"Understanding the Role of B Cells in Neurodegeneration" |




9. IMMUNOLOGY IN CANADA

Below is a non-comprehensive collection of updates on immunology happenings across the country.

Research Canada: Showcasing CSI activities during the COVID-19 pandemic



At a recent ‘Leading Behind the Scenes’ Research Canada event for the federal government’s Parliamentary Health Research Caucus, Eleanor Fish gave a brief presentation highlighting the impact of CSI members’ research during the pandemic:

GOVERNMENT ADVISORY NACI Canadian Immunity Task Force Therapeutics Task Force Vaccine Task Force COVID expert panel: Chief Scientific Advisor (incl recent post COVID-19 condition action plan) Tracking SARS-CoV-2 school transmission (UBC)		Steering Committee, Joint Programming Initiative, antimicrobial resistance (29 nations) Director, CIHR Infection & Immunity  COVID-19 National Immunity Task Force Chair, Global Research Collaboration Pandemic Preparedness	
Immune responses to vaccines: pediatric, immune compromised (U of Toronto, U Montreal, U Alberta, Memorial U, UBC) NACI Canadian Immunity Task Force Vaccine response with ageing (SFU) VACCINES Vaccination intervals (UofT, Dalhousie) waning immunity, cross-reactivity (UBC) CAR-Ts vaccine alternative (U Montreal) Novel bivalent DC targeting vaccine (U Manitoba) VSV-based vaccine (Western U)			
mild to severe disease: immune correlates (U Alberta, UofT, UHN) Reinfection and COVID (U Montreal) ACE2 cell entry (UBC, U Manitoba) VIRUS Spike protein interactions (U Alberta) How virus disarms immune response (UofT, UHN, U Montreal, U Calgary) Dexamethasone (U Alberta) Neutrophil inhibitor (U Calgary) VOCs (Memorial U, UofT) Viral evolution (UofT)			
antibody scaffold technology (HSC, UofT)			
THERAPEUTICS Interferon-λ treatment (U Manitoba) Interferon-α treatment (UofT, UHN) ACE2 inhibitors (UofT) sACE2 decoy receptor (UBC) Interferon-β treatment (Uof T, UHN)		Viral detection in sputum (UBC) DIAGNOSTICS Galectin-9 as biomarker of severe disease (U Alberta) Optimization of PCR test (U Quebec)	
PANDEMIC PREPAREDNESS			

At the outset, Dr. Fish informed the parliamentarians that CSI scientists played an important role in advising municipal, provincial and federal governments on a variety of issues, including protective measures to prevent transmission of the virus, which potential vaccine candidates under development to procure and vaccination intervals. Dr. Charu Kaushic, CIHR Institute Director and CSI member, assumed leadership roles both nationally and internationally. Beyond advisory roles, CSI members undertook research on various topics related to the pandemic, collaborating across the country, addressing how SARS-CoV-2 infection affected the immune response in the young, the immunocompromised and the elderly. Their research activities made and continue to make critical



contributions in the areas of vaccines, diagnostics and therapeutics. In response to questions from the parliamentarians, Dr. Fish stressed the demonstrable value of Canadian immunology research on the course of the pandemic in Canada and around the globe. How scientific discoveries and interrogation informed public health advice and vaccination schedules. How collaborative networks across the country enabled world class research to have an impact on the course of the pandemic. How vital research is to the health and economy of Canadians.

From the CSI Executive

Discounts for publication in BSI journals: CSI members are eligible for a 25% discount on article processing charges (APC) to publish Open Access in the British Society for Immunology (BSI)'s long-standing hybrid journal Clinical & Experimental Immunology, as well as a 15% APC discount to publish in their fully Open Access journals Immunotherapy Advances and Discovery Immunology. BSI journals offer a home for papers on a wide range of immunological topics, excellent author services, fast turnaround times, and a commitment to promote published articles through their marketing team. To benefit from these exclusive offers, CSI members will need to include the email address that is registered to their CSI account during the manuscript submission process, as well as their first and last names. This will enable the BSI to verify CSI membership and apply the appropriate discount. If you have any questions about this process, please contact the BSI editorial office at journals@immunology.org.

Day of Immunology – April 29

The International Day of Immunology falls on April 29th every year and consists of public events organized by immunologists around the world in an effort to raise the public profile of Immunology and the impact immunology has on health. <https://iuis.org/activities/2023-day-of-immunology/>

CSI applauds this initiative and would like to encourage our members to get involved in their local areas. Here are some latest activities planned by CSI Members:

From the Ontario Immunology community

IMMspire 2023 University of Toronto, St. George - April 2023

In 2023, IMMspire focused on something you may never thought about, the relationship between **cancer and the immune system**. The **in-person** IMMspire Conference took place on **April 28-29, 2023**. The event featured interactive activities about the research done in immunology – with a focus on various kinds of cancers, presentations from U of T Professors and graduate students, campus tours, Q&A periods with undergraduate students, and an escape room!

From the British Columbia Immunology community

UBC ImmunoTherapeutics Cluster (ImmunoT) - April 2023

The UBC ImmunoTherapeutics Cluster (ImmunoT) made it their mission to make immunology accessible to all audiences. This year, ImmunoT celebrated the Day of Immunology by hosting an event to inform the public about immunotherapeutics. In partnership with Science World, and



sponsored by local and international biotech companies and faculties/departments from UBC, ImmunoT harnessed the power of volunteers and leveraged the expertise of scientists to take over the city! In alignment with their commitment to equity, diversity and inclusion, ImmunoT procured free tickets and collaborated with equity-seeking community groups to donate them, opening the door for many families to access Science World and the event. This unprecedented gesture will hopefully serve as an example and catalyst to make science and immunology accessible to all.

Day of Immunology 2023

by the CSI Trainee Engagement Committee



What is the best career decision you have ever made as an immunology researcher?

CSI Trainee Engagement Committee
Day of Immunology 2023

"The best career decision I've made as an immunology researcher was to seek mentorship from outstanding individuals in environments that fostered excellence in research, were passionate about immunology, valued creativity, and provided unwavering support. This network of mentors includes the amazing immunologists I trained with directly but also many CSI colleagues and individuals around the world."

Dr. Troy Baldwin
University of Alberta

We all know that life as a scientist is not always easy, what keeps pushing you through the hard times?

CSI Trainee Engagement Committee
Day of Immunology 2023

"As scientists, we have the privilege of learning something new almost every day! Even the smallest experimental successes made by our team bring me much joy. It is absolutely thrilling to know that these advancements are helping us to unravel the complexities of the immune system and may, one day, contribute to improving human health."

Dr. Heather Melichar
Université de Montréal

What is one question in the field of immunology that you would most like to see answered?

CSI Trainee Engagement Committee
Day of Immunology 2023

"I am deeply fascinated by Natural Killer cells, a population of killer immune cells that eliminate dangerous cells in the body, such as cancer cells or cells that have been infected by a virus. Despite their awesomeness, Natural Killer cells often fail to complete their job and progressively lose the ability to kill dangerous cells. This process is similar to what happens for Natural Killer cells' close 'cousins': CD8 T cells, in a phenomenon called exhaustion. I think one of the most important questions in the field is to understand if and how Natural Killer cells also become exhausted. A better understanding of Natural Killer cell exhaustion will allow us to design better therapies to harness our innate killers against tumors and viruses."

Dr. Michele Ardolino
University of Ottawa

What advice you received has made the most significant impact on your career?

CSI Trainee Engagement Committee
Day of Immunology 2023

"I think the best advice I have received was to that developing a successful career in research is a marathon, not a sprint. It takes hard work and consistent effort, day after day, year after year, to see results. You cannot lose heart because one grant application did not get funded or a paper got rejected, you must look back and appreciate how far you have come in last 3-5 years and set your goals for next 5 years. This thinking has helped me keep a positive outlook regardless of the ups and downs that come with a research career."

Dr. Charu Kaushic
McMaster University

What has been the most rewarding aspect of being an immunology researcher?

CSI Trainee Engagement Committee
Day of Immunology 2023

"As a researcher, you have the privilege to explore the unknown. Although we know the major cell types that compose all of the organs in the human body, immunology teaches us that there is so much still to uncover. New immune cell types are still being discovered!"

Dr. Sylvie Lesage
Université de Montréal

What is the best career decision you have ever made as an immunology researcher?

CSI Trainee Engagement Committee
Day of Immunology 2023

"The best career decision I have ever made as an immunologist is to step out of my comfort zone and collaborate across disciplines. Immunity by its very nature is integrated with the physiology and life trajectory of nearly every facet of health and well-being. Widening my lens in this way has enriched my research program, trainee experiences, impact, and sense of what is achievable in rigorous integration of disciplinary expertise."

Dr. Adam MacNeil
Brock University

What are the best skills a young scientist should focus on mastering if they want to pursue a career in immunology?

CSI Trainee Engagement Committee
Day of Immunology 2023

"To pursue a career in immunology, master the ability to think critically, speak clearly and write effectively. It also doesn't hurt to learn some immunology techniques along the way!"

Dr. Lee-Hwa Tai
University of Sherbrooke



<p>What is one concept in the field of immunology that still blows your mind?</p> <p>CSI Trainee Engagement Committee</p> <p>Day of Immunology 2023</p> 	<p>"The biology of MHC molecules still amazes me. These proteins pickup fragments of proteins called peptides within a cell and display them to the immune system, allowing T cells to scan a cell for evidence of infection. Structural studies from the Wiley and Strominger groups at Harvard, starting with Bjorkman et al. Nature 1987, provided a beautiful solution to how a single protein could bind such a diverse array of peptides and yet hang on to them tightly enough to display them for T cells to recognize. Coupled with the revelations over several years of research from multiple groups that the structurally similar MHC I and II proteins traffic through different parts of the cell to make sure that peptides from within all cellular compartments and without the cell are displayed to the immune system is remarkable, highlighting the complex ways our immune system has evolved to recognize pathogens in every nook and cranny!"</p> <p>Dr. Tania Watts University of Toronto</p> 	<p>What is one concept in the field of immunology that still blows your mind?</p> <p>CSI Trainee Engagement Committee</p> <p>Day of Immunology 2023</p> 	<p>"That immunologists still: (1) don't know the function of basophils (2) think that IL-4 is required to initiate a Th2 response."</p> <p>Dr. Irah King McGill University</p> 
<p>What are the best skills a young scientist should focus on mastering if they want to pursue a career in immunology?</p> <p>CSI Trainee Engagement Committee</p> <p>Day of Immunology 2023</p> 	<p>"It may not seem the most uplifting, but I think it is really important to get comfortable with failure. The VAST majority of beautiful hypotheses will be disproved by ugly data, to paraphrase Huxley. Sometimes, controls won't behave as expected and might cause you to consider whether different ones are needed. And as you progress through your career path, you will find that even for senior PIs, the bulk of grant applications are unsuccessful. It is human nature to want to take these setbacks personally, but it's really important not to - instead, try to take each as an opportunity to learn about your experimental system or to challenge your preconceived notions."</p> <p>Dr. Manu Rangachari Université Laval</p> 	<p>What has been the most rewarding aspect of being an immunology researcher?</p> <p>CSI Trainee Engagement Committee</p> <p>Day of Immunology 2023</p> 	<p>"One of the most rewarding aspects of this career has been getting to work with inspiring trainees/colleagues every day. Often in science people move across countries and continents, which means you end up with a network of friends across the world. It is quite incredible to be able to meet up with friends and people with shared interests at conferences in locations you never thought you'd travel to."</p> <p>Dr. Lisa Reynolds University of Victoria</p> 
<p>What advice you received has made the most significant impact on your career?</p> <p>CSI Trainee Engagement Committee</p> <p>Day of Immunology 2023</p> 	<p>"Go all in. You should put forward your very best effort in everything (experiments, committee reports, posters, presentations, first drafts, theses) as first impressions matter."</p> <p>Dr. Ninan Abraham University of British Columbia</p> 	<p>We all know that life as a scientist is not always easy, what keeps pushing you through the hard times?</p> <p>CSI Trainee Engagement Committee</p> <p>Day of Immunology 2023</p> 	<p>"There are very few careers that offer such diverse and rewarding opportunities, but this certainly comes with long days, many rejections, and difficulties to face. It is key we recognize we cannot change the world overnight; take breaks and surround yourself with supportive colleagues, team members, and collaborators. Most importantly, our goal is to work together as a global community to improve the lives of those suffering from autoimmune diseases, and it is important to remember that no difficulty we face in our day to day research comes close to what these patients are experiencing."</p> <p>Dr. Heather Armstrong University of Manitoba</p> 

From the Alberta Immunology community

University of Alberta – Immunology Network (ImmuNet) year in review..

Over the past year, the Immunology Network at the University of Alberta continued its strong tradition of celebrating outstanding local, national and international science focussing on immunity and host-pathogen interactions.

On June 23, 2023, the trainees of the Immunology Network (ImmuNet) proudly hosted the 27th annual ImmuNet Research Day (IRD) at Lister Hall on the University of Alberta campus. The IRD welcomed over 120 individuals including undergraduate and graduate scientists, post-doctoral fellows, research associates and faculty including attendees from the University of Calgary and the University of British Columbia. Everyone thoroughly enjoyed spirited conversations around the diverse research topics explored by ImmuNet members.

The IRD began with a Keynote presentation from Dr. Brad Nelson from the University of Victoria who discussed the remarkable progress made by his group on re-engineering the immune response toward cancer. Four outstanding oral presentation sessions that focused on various aspects of immunology, host-pathogen interactions, physiology, bacteriology and virology were mixed with two different energetic poster sessions. Awards were presented for each of the oral presentation sessions as well as for the poster sessions.



The IRD was grateful for the generous sponsorships secured by the organizing committee from groups such from Diamond sponsors including the Li Ka Shing Institute of Virology, Charles River, Merck and DMKS Research. These sponsorships again allowed for no-cost attendance. The trainees have already begun the planning and organization of the 27th annual ImmuNet Research Day for June 2024. We are again looking forward to a stimulating day of science with fantastic presentations and lively discussions.

We are thrilled to have Dr. Michel Sadelain, a University of Alberta alumnus and pioneer in the development of CAR-T cell therapies, joining us in March 2024 for the Tyrrell lectureship in Infection and Immunity.

Finally, we enjoyed an outstanding lecture series again organized by Drs. Sue Tsai and Kris Baker that featured incredible speakers from across Canada and the US.

From Saskatchewan and Manitoba Immunology community



The Prairie Infectious Immunology Network (PIIN) is an investigator-driven collection of researchers from academia, industry and government in Manitoba and Saskatchewan with research interests in understanding the immunology of communicable and non-communicable diseases. The mission of PIIN is to promote health research and education through scientific networking, mentorship, and career development opportunities for trainees and researchers across the prairies. After several years of hiatus due to the COVID-19 pandemic, the PIIN 2023 meeting was proudly held in-person on Sept 24-26 at Hecla Lakeview Resort Center in Hecla, Manitoba, about a 2-hour drive north of Winnipeg. This beautiful venue features a golf course, lakeside scenery and hiking trails





which set the stage for a relaxed and enjoyable learning environment for our 140 attendees across both provinces. Conference attendees were immersed in engaging scientific talks, career development opportunities, and a chance to reconnect with friends and colleagues. PIIN 2023 was particularly focused on highlighting research by our early career researchers, especially those that joined as faculty in the last few years and may not have heard about PIIN. Even the skies opened up one early morning (on cue of course) for a breathtaking aurora display that was surely one of the highlights for many.

Many CSI members were part of the organizing committee and in attendance at this meeting. The event featured two Keynote speakers, Dr. Dana Philpott from the University of Toronto and Dr. Joanne Lemieux, from the University of Alberta. Dr. Philpott spoke about the role of NODs in the pathogenesis of Crohn's disease, including the interesting connection of NOD2 to fibrosis and metabolism. Dr. Joanne Lemieux took us on her scientific journey into the testing and development of antiviral drugs against SARS-CoV-2, with a focus on candidate inhibitors against viral proteases that are often mutated to evade host antiviral mechanisms. There were 5 scientific sessions covering a wide range of research themes: "Vaccines and Immunotherapeutics" chaired by Drs. Heather Wilson and Deanna Santer, "Immunology of Chronic Diseases and Aging" chaired by Drs. Cedric Tremblay and Jeff Dong, "One Health including Livestock and Wildlife Species" chaired by Drs. Oliver Lung and Jenny Wachter, "Host-Pathogen Interactions" chaired by Drs. Barbara Porto and Alyson Kelvin, and "Clinical and Veterinary Microbiology" chaired by Drs. Denice Bay and Brad Pickering. Each session featured exciting research updates from both faculty members and abstract-selected trainees. We had over 90 abstracts submitted, and all trainees had an opportunity to present posters over two successive nights. Through the generosity of academic and corporate sponsors, the poster judging committee was able to hand out 17 student awards for research excellence across 5 research themes. Awardees can be seen at <https://www.piin2023.com/>. Finally, a trainee-led career-development session, titled "Navigating Career Success" featured a panel of 5 researchers from academia, government, and industry to reflect on their career path trajectories. This meeting succeeded in highlighting important research initiatives led by Manitoba and Saskatchewan researchers and showcased research strengths in the fields of immunology and infectious disease by our trainees. See you at PIIN 2025!

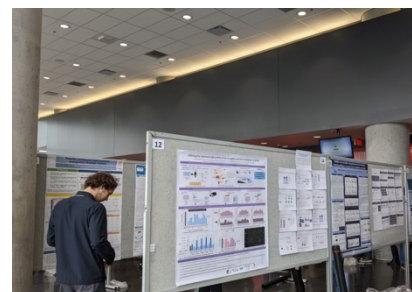
Dr. Deanna Santer & Dr. Thomas Murooka

From the Montreal Immunology community



The Montreal Immunology Meetings committee organizes bimonthly Immunology Happy Hour events during the academic year as well as an annual symposium in the fall. Each Happy Hour event hosts two speakers from the greater Montreal area and attracts a crowd of 50-60 trainees, research personnel and PIs. The 10th annual Montreal

Immunology Meetings symposium was held on November 7, 2023 at the Research Center of the University of Montreal hospital center. The free, one-day event had more than 200 registrants from the Montreal area and Ottawa. This year's central topic was





'Immunological Memory' and featured two international Keynote speakers, Dr. Susan Moir from NIH and Dr. Sebastian Weis from the Leibniz Institute at Jena, Germany. Dr. Moir gave an insightful presentation about the effects of chronic and repeated antigen exposure on B lymphocyte differentiation and memory in HIV and in SARS-CoV-2. Dr. Weis talked about the impact of DAMPs on myeloid differentiation and reprogramming and argued for a more stringent definition of trained immunity. Local speakers included Dr. Nathalie Labrecque, who discussed the importance of early Notch signaling in resident memory CD8⁺ T cells, and Dr. Naglaa Shoukry, who described key determinants of protective T cell and B cell immunity against hepatitis C reinfection. The poster session was split in two this year, based on feedback from previous events, and nearly 70 trainees had the opportunity to present their work in poster format over two extended coffee breaks. Four abstracts were chosen for short oral presentations: Hai Trieu Nguyen, Yousef Maali, Priscilla Carvalho Cabral, and Olivia Makinson gave well-prepared talks and were presented with an award. Four trainees, Marc Groleau, Capucine Bourel, Qianqian Lyu, and Ève Mallet Gauthier, also received poster abstract awards. These activities and trainee support, including travel awards to attend the annual CSI meeting, would not be possible without generous contributions from many of the local Montreal universities and research institutes as well as from corporate sponsors and in 2023, a dissemination grant from the CIHR.

