

HLI Quarterly Meeting Summer 2022



Land Acknowledgement

Acknowledge that **we are gathered on the traditional, ancestral and unceded territory of** the Coast Salish peoples—Sk̓wx̓wú7mesh (Squamish), Stó:lō and Səlílwətaʔ/Selilwitulh (Tseil-Waututh) and xʷməθkʷəy̓əm (Musqueam) Nations

**Adoption of Minutes
from March 7 2022
Quarterly Meeting**

Adopted by JG/AB





Quarterly Meeting 9:00 – 10:00 am
Hybrid – in person and zoom – June 20th 2022

Adoption of Minutes from March 7th, 2022

Director's Update

Dr. Don Sin

Centre News

Finance Update

Tracy Yang

2021-2022 year end figures

Operational Updates

Chris Robinson

Human Resources News

Claire Smits

Operations

Ivan Leversage

Health & Safety, Education and Events

Joe Comeau

Information Technology

Katrina Besler

HLI Trainee Association

Aileen Hsieh

Introducing the EDI Committee

Dr. Vivienne Chan

Grants and Award Successes

Dr. Don Sin

Team Player of the Quarter Award

Director's Update



CENTRE FOR HEART LUNG INNOVATION (HLI): EXCEPTIONAL CARE THROUGH EXCEPTIONAL SCIENCE



www.hli.ubc.ca



Centre for
Heart Lung Innovation
UBC and St. Paul's Hospital

Providence
HEALTH CARE
How you want to be treated.

Providence
Research
We're all in.





**Ilker Hacihaliloglu, PhD
(Radiology)**



**Ying Wang, PhD
(Path-Lab Medicine)**



**Amrit Singh, PhD
(APT)**



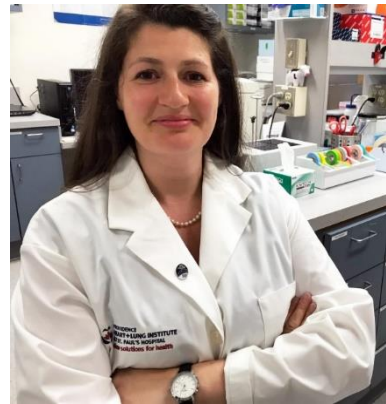
**Zach Laksman, MD
(Cardiology/Medicine/SBME)**



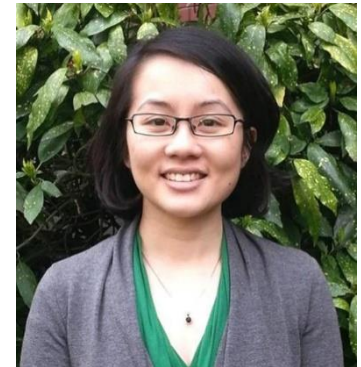
**Stephanie Sellers, PhD
(Cardiology/Medicine)**



**Graeme Koelwyn, PhD
(CRC in Public Health Omics
James Hogg Chair in
Public Health Omics)**



**Tillie Hackett, PhD
(CRC in Asthma-COPD
Lung Pathobiology
& Therapeutics)**



**Janice Leung, MD
(CRC in Translational
Airway Biology)**

Strategic Plan 2022 - 2027



Centre for
Heart Lung Innovation
UBC and St. Paul's Hospital

Vision

Inspired by patients and driven by science, we discover solutions to improve the heart and lung health of the people of British Columbia, Canada and throughout the world.



Mission

The Centre for Heart Lung Innovation attracts, supports, and connects world class researchers to discover patient-centred therapeutic and biomarker solutions to improve cardiovascular and respiratory health.



Values

Excellence

We make impactful and meaningful contributions to research and education by taking a patient-centred and innovative approach.

Innovation

We value novel innovative ideas and approaches to solving the most challenging heart and lung health problems.

Integrity

We ensure that our research and work relationships are driven by ethics and honesty.

Compassion

We are advocates for health and show empathy and respect towards others.

Collaboration

We take an interdisciplinary approach to discovering and expanding knowledge through our key partners.

Equity

We are committed to integrating diverse perspectives and approaches that promote a culture of respect, fairness and inclusivity.



68 Principal Investigators and
Affiliated Investigators

37 Research Associates and
Postdoctoral Fellows

55 Graduate Students

53 Undergraduate Students

6 Visiting Scientists

53 Support, Operations, and
Administrative Staff

> 50,000 ft²
laboratory and office space

9 Core Facilities

Cardiovascular Registry
Lung Tissue Registry
Cellular Imaging and Biophysics
Graphics and Imaging
Histology
Molecular Phenotyping
Pre-clinical Services
Digital Slide Scanning
Magnetic Resonance Imaging

> \$20.8 M
in external funding*

\$16.6 M
Peer-Reviewed Grants

\$1.5 M
Clinical Trials

\$1.1 M
Contracts and Agreements

\$1.6 M
Salary Awards

*April 2021 to March 2022. Details in [Appendix A](#). Total funding held at HLI: \$17.8M

Mapping the human genetic architecture of COVID-19

Nature | Vol 600 | 16 December 2021

<https://doi.org/10.1038/s41586-021-03767-x>

COVID-19 Host Genetics Initiative*

Received: 2 March 2021

Accepted: 23 June 2021

Published online: 8 July 2021

Open access

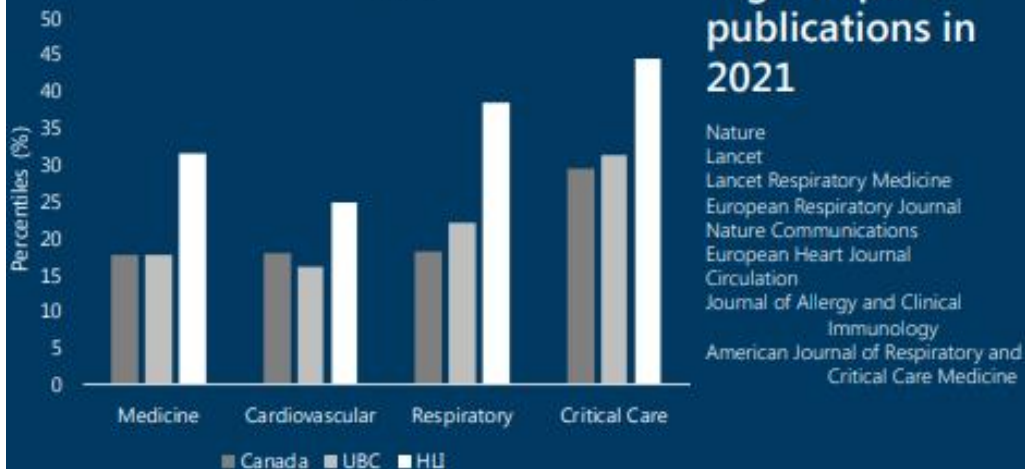
The genetic make-up of an individual contributes to the susceptibility and response to viral infection. Although environmental, clinical and social factors have a role in the chance of exposure to SARS-CoV-2 and the severity of COVID-19^{1,2}, host genetics may also be important. Identifying host-specific genetic factors may reveal biological

In 2021, HLI Principal Investigators published
358 Peer-reviewed journal articles, together receiving
1,493 Citations

HLI researchers published more frequently in top journals compared to UBC and Canadian researchers, and are cited

2.56 times more than the average paper in the field.*

High-impact publications in 2021



*Data obtained from SciVal. Comparisons were made using Field Weighted Citation Impact. A full list of publications can be found in [Appendix B](#)

2021 FACULTY AWARDS



Dr. Gordon Francis

MSFHR Health Professional Investigator



Dr. Jordan Guenette

UBC Faculty of Medicine Distinguished Achievement Award



Dr. Tillie-Louise Hackett

Tier 1 Canada Research Chair in Asthma and COPD Pathobiology and Therapeutics



Dr. Kelly McNaghy

AllerGen Michelle Harkness Mentorship Award



Dr. Chris Ryerson

PHC Research and Mission Award



Dr. Ying Wang

UBC Faculty of Medicine New Faculty Research Award
Leducq Foundation - PlaQOmics Consortium Junior Investigator Award



a place of mind

THE UNIVERSITY OF BRITISH COLUMBIA



**Providence
Research**

We're all in.



Summer 2022 Update

- *Clinical Support and Research Centre (CSRC)*

HLI Finance Update

Year end figures Apr 21- Mar 22



REVENUE

April 2021 – March 2022

	Received	Projected Budget	Balance
Hospital Infrastructure personnel	\$951,643	\$951,643	\$0
BioRegistries	\$299,571	\$299,571	\$0
Cost Sharing (3.5%)	\$209,559	\$130,000	\$79,559
Research Support Fund (Tri-Council)	\$236,146	\$230,250	\$5,896
Overhead (Clinical Trials)	\$106,525	\$100,000	\$6,525



Equipment Facilities & Safety (MOM)

April 2021 – March 2022

Paid for from Source		Carry-Over	Budget	Expenses	Balance
Cost Sharing	General Repair and Maintenance	\$0	\$30,000	\$24,873	\$5,127
Cost Sharing	Miscellaneous Equipment	\$0	\$12,000	\$0	\$12,000
Freezer Billing	Service Contracts - Freezers	\$1,516	\$0	(\$1,391)	\$2,907
Cost Sharing	Service Contracts - Other	\$0	\$30,000	\$41,626	(\$11,626)
Cost Sharing	Tissue Culture	\$0	\$21,000	\$10,215	\$10,785
New	Freezer Program	\$0	\$75,000	\$0	\$75,000

Service Contracts – Other – Autoclave contracts increased 3K each x 4

Freezer Program – Freezer room 5 was reassigned to another centre, so renovation funds not spent



Computing

April 2021 – March 2022

Paid for from Source		Carry-Over	Budget	Expenses	Balance
Cost Sharing	Server Room Hardware and Maintenance	\$0	\$45,000	\$71,248	(\$26,248)
Cost Sharing	Server Software	\$0	\$30,000	\$28,713	\$1,287
Cost Sharing	Workstation Software	\$0	\$40,000	\$28,300	\$11,700
Cost Sharing	Supplies	\$0	\$30,000	\$10,051	\$19,949
ICR/OH	Supplies	\$0	\$15,000	\$0	\$15,000
Carry-Over	IT/Equipment Contingency	\$130,000	\$0	\$0	\$130,000

Server Room Hardware overspending will be offset by underspending for server and workstation software



Education, Seminar Series, Training

April 2021 – March 2022

Paid for from Source		Carry-Over	Budget	Expenses	Balance
Cost Sharing	Imaging	\$5,000	\$0	\$1,230	\$3,770
Cost Sharing PI Contribution	Seminar Series	\$0	\$10,000	(\$5,720)	\$15,720
Cost Sharing	Education/T&E	\$0	\$4,500	\$2,167	\$2,333
Cost Sharing	Infrastructure Training	\$0	\$2,000	\$3,073	(\$1,073)
Cost Sharing	Clinical Research Project Support	\$0	\$65,000	\$7,455	\$57,545

Infrastructure training account is for core staff to spend time training PI techs and students and to not bill PI groups for this time (free training) , they bill this account instead. The more training the better !



Administration

April 2021 – March 2022

Paid for from		Carry-Over	Budget	Expenses	Balance
Cost Sharing	Courier	\$0	\$6,000	\$1,550	\$4,450
Cost Sharing	Telephone Fax Expenses	\$0	\$3,000	\$1,142	\$1,858
Cost Sharing	Laundry	\$0	\$500	\$0	\$500
ICR/OH	Administrative Costs	\$0	\$45,000	\$25,467	\$19,533



Contingency

April 2021 – March 2022

Paid for From Source		Carry-Over	Budget	Expenses	Balance
ICR/OH	Infrastructure Salary	\$0	\$85,000	\$8,587	\$76,413
Carry-Over	HLI Contingency	\$3,278	\$39,778	\$26,705	\$16,351



Cores

April 2021 – March 2022

Core Facility Budgets	Carry Forward	Total Received**	Total Spent	Balance
Molecular Phenotyping*	\$60,576	\$50,931	\$87,030	\$24,477
Cellular Imaging*	\$96,352	\$11,946	\$46,252	\$62,045
Cell Culture*	\$6,549	\$15,947	\$25,120	(\$2,624)
Histology*	\$47,099	\$70,333	\$79,643	\$37,788
MRI Core*	\$0	\$57,358	\$4,845	\$52,512
Imaging	\$66,338	\$18,697	\$42,325	\$42,710
Computing	\$260,541	\$311,805	\$439,607	\$132,739
GEM***	\$157,311	\$291,004	\$230,821	\$217,494

*Estimated data, not finalized until Providence Research audit completes
Cell culture will be sending out billing earlier next year

**Actual revenue received

***GEM carried over funds for equipment repair last year and this year has not been successful in hiring a new tech



HLI OPERATIONS



HR Update

- Welcome to all new HLI members
(large group of student for Summer 2022)
- BC Minimum Wage - \$15.65/h June 1, 2022
(\$2373.58 MINIMUM working 35 hours)
- New members for September
- Share desk space if possible



HLI 5 YEAR STRATEGIC PLAN 2022-2027

Three Core Committees being formed

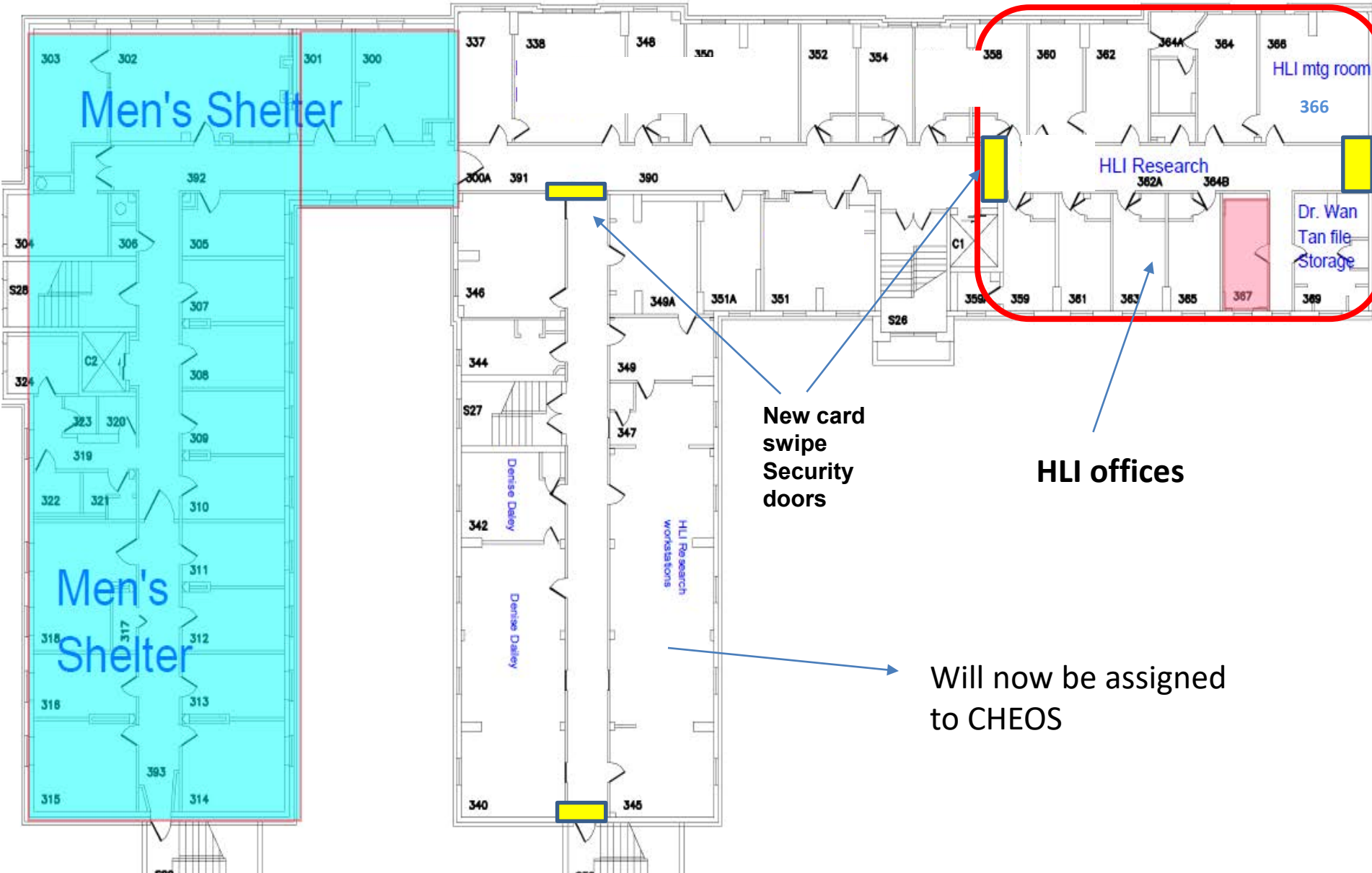


- **Research- Committee Chair – Jordan Guenette**
- **Education- Committee Chair- Scott Tebbutt**
- **Knowledge Translation & Mobilization- Chair- TBD**

Action items are being identified and prioritized for each core area as detailed in the Strategic Plan document.

Seeking additional staff and trainees to join each committee.

Comox 3rd floor



New card
swipe
Security
doors

HLI offices

Will now be assigned
to CHEOS

Comox progress

- ✓ Painting of offices 359-361,365 completed
- ✓ Washroom renovated
- ✓ Four occupants moved in with furniture, signage and keys – 4 to go.
- Waiting for PHC to update datalines & power



Tours and Visitors at HLI

- Reminder that any lab tours for non-HLI members should be run by Operations first.
- This is to ensure HLI members working in the area are notified, security is adhered to and any demo stations are organized well in advance.
- Vendor shows restarted in April with some limitations on attendance.
- Slowly start to hold limited gathering social events



Congrats to Amrit Singh and family



**Welcome to
our newest
HLI Member
Karam
Celyan Singh
Apr 24, 2022**



Featuring... HLI member photos



- Do you have a photo celebrating an achievement, family celebration, milestone, HLI activity, pet or trip photo you would like to share ?
- We will be re-starting up playing HLI members photo slides pre QM in September. (they may also be posted on the intranet) Send your photo with your name and photo details to reception@hli.ubc.ca at least one week prior to the QM and all will be entered into a random draw to win a \$25 gift card.
- *HLI Ops may edit or limit photo numbers and format for display purposes*



IT Update

Joe Comeau



Supply Chain Issues

- Continuing to have issues getting certain types of equipment
- We have received our Desktop/Wetlab computers for upgrades and refresh



Supply Chain Issues

- Server from Dell have started to arrive
- We are waiting on certain components and having a difficult time



Phishing & Malware

- Be extra vigilante with emails
- If you don't recognize the sender or do not know what it is, do not click on the link
- Since the resent issues world issues started, attacks have more than doubled



Windows 11 Reminder

- Has not yet had enough time to mature
- Do not Upgrade to Windows 11
- <https://home.hli.ubc.ca/2022/03/it-do-not-upgrade-to-windows-11-at-this-time-2022/>



Updates

Health & Safety
Education

Ivan Leversage



Masks



- Masks are still required to be worn onsite.
- If you are working alone in an office you can remove it.
- If you have visitors, all must wear a mask.

Non surgical face masks are available at reception, and at hospital main entrance

Meetings can go ahead with masks and physical distancing



COVID-19 Rules Reminder

- All HLI members have self reported as fully vaccinated. When on site have proof of vaccination available, if needed.
- Continue to complete your daily health check <https://bc.thrive.health>. and if you are unwell or are exhibiting symptoms - **stay home**
- **Get an optional booster shot when available**
- Practice physical distancing
- Sanitize work and common touch areas before and after use
- Wash hands frequently
- Fewer faces, smaller spaces – keep your groups small- no shared food

- If you have had contact with a COVID-19 positive person
 - get tested
 - stay home until you get your test results
 - if positive – isolate and notify
 - **in addition to provincial requirements, we ask that you test negative before returning to HLI**

- If travelling internationally - check for the latest travel requirements for re-entry into Canada

Health & Safety

- **N95 Fit Testing** – You now have options
 1. Register for an appointment through Learning Hub
 2. Drop in to the Thursday sessions – 8am to 4pm in Conference Room 9 (SPH, Lower level)
 3. By appointment – Contact Ivan Leversage

- **Fume hood recertification** – planned for early July



Liquid Nitrogen Training Video – Now live

<https://home.hli.ubc.ca/cell-culture/>

Contents include:

- PPE, tank labels, Liquid levels and Indicator gauze
- Dispensing Liquid Nitrogen
- Troubleshooting & Other tips

Liquid Nitrogen FAQ pdf has also been added.
LN users- please watch videos and document
in your training records.

**Thank you Tiffany for creating the videos and
Gurpreet who starred in them**



**Cardiovascular Tissue Biobank
(CVTB) co-op student**

Education Update

- Spring RIP Seminar 2022 - now complete
- Fall RIP Seminar 2022 – will commence September 12
- SSRIP is starting June 27th – Zoom link will be sent out shortly
- Spring Friday Seminar Series – now
- Fall Friday Seminar Series – will commence September 16
- 6 spots remaining for fall speakers
- Preliminary Abstracts – Due July 5th
- PATH 521 – 3 new lectures
- HLI Research Day – August 19th

HLI Summer Student – Lunch and Learn Seminars for 2022



Starting June 22
Wednesdays 12pm – 1pm
Gourlay Conference Room

- **June 22nd – Tissue Culture Training – Dr. Gurpreet Singhera**
- **June 29th – Giving an Effective Oral Presentation – Dr. Stephanie Sellers**
- **July 6th – Scientific Poster Presentation – Dr. Pascal Bernatchez**
- **July 13th – Writing Grant and Scholarship Applications – Drs Katherine Adolphs & Vivienne Chan**
- **July 20th – Sigma Product Show**
- **July 27th – What is it like Being a Physician Scientist?" - Dr. Liam Brunham**
- **August 3rd – How to Publish Papers – Dr. Tillie Hackett**
- **August 10th – Safety/Ice Cream Day**

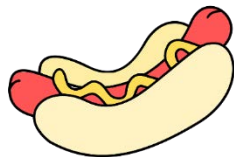


Upcoming Events



- June 15th – Bio-Rad Western Blot Seminar
- June 16th – UBC Career Day 2022
- June 20th – Virtual Summer Quarterly Meeting
- June 22nd – Tissue Culture Training
- June 22nd – SS Lunch & Learn Series Kick Off
- June 27th – Virtual SSRIP Kicks Off
- June 28th – Multi Vendor Product Show
- July 5th – Millipore Sigma Product Show
- Aug 2nd – HLI Summer BBQ
- Aug 19th – HLI Research Day

details/ZOOM invites to follow





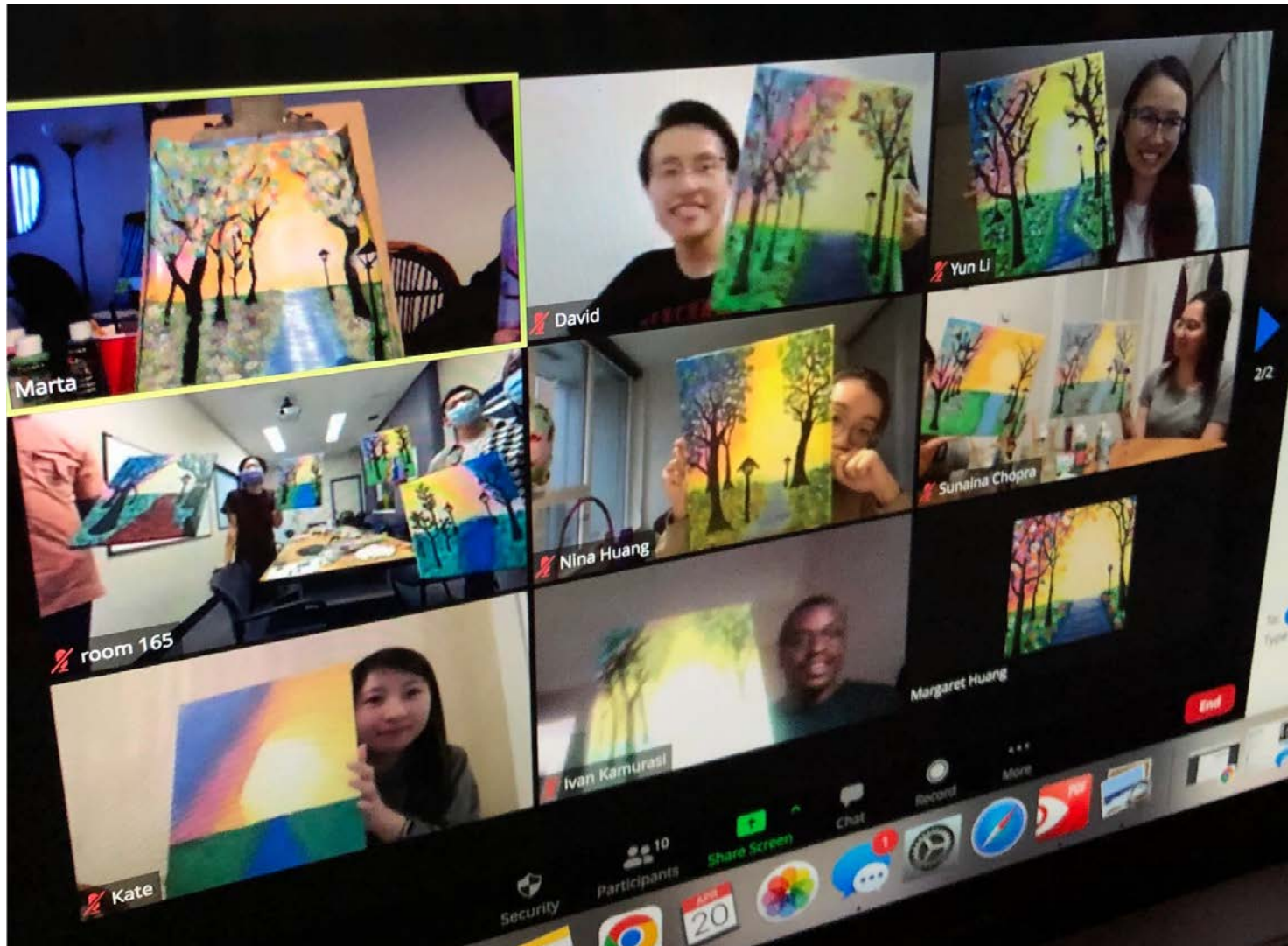
HLI Trainee Association

Katrina Besler





Paint Night, April 20th





Post-seminar lunch with Dr. Clint Miller



Stay tuned for the next opportunity to network with seminar speakers!



Whyte Lake hike, May 29th





HLI Mentorship Program Update

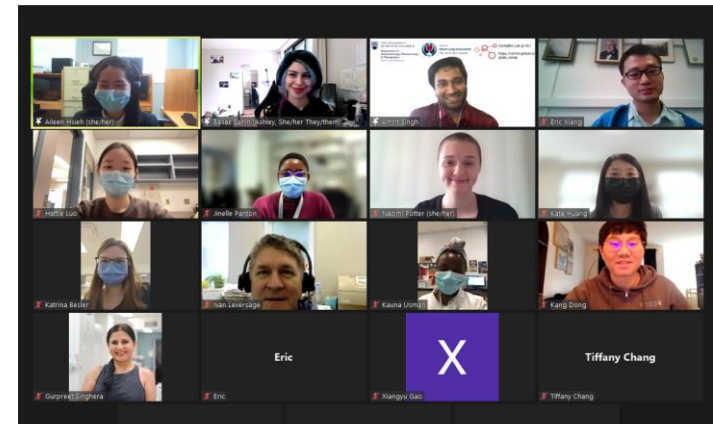
Favorite part of the program:

- Meeting new people
- Helping others and providing advice/feedback
- Career seminar
- Learning from other people's career paths

Future suggestions and plans:

- More in-person events early in the program

**100 % Positive
experience from all 9
Mentorship Pairs**



Career Seminar: January 25th, 2022

**THANK YOU TO OUR 2021/22 MENTORSHIP
COMMITTEE**

Upcoming in June...



- R tips and tricks workshop, June 22nd
- Bioinformatics office hours
 - Alternating Tues/Wed 3-4 pm, starting next week
- TAHLI meeting June 23, 10 am
- Trainee Tea Time
 - June 23 1-2 pm
 - June 29 4-5 pm



- HLI Soccer game, June 30th



Upcoming in July...



- Trainee Tea Time
 - July 13 4-5
 - July 21 1-2
 - July 27 4-5
- Grants and scholarships workshop, July 13th
- TAHLI meeting July 21st
- Abstract deadlines for Research Day
 - Summer students July 5th (for feedback)
 - All trainees July 25th



HLI EDI Committee

Introductions and Updates



Vision, Mission, and Values

Vision

We create initiatives to establish lasting meaningful change to make the academic workplace environment more equitable, diverse, and inclusive for faculty, staff, and students at HLI.

Mission

The Centre for Heart Lung Innovation Equity Diversity and Inclusion Committee defines and implements educational programs to empower minority members within HLI and enhance recruitment and retention of diverse researchers.

Values

Equity, Diversity, Inclusion, Humility, Courage, Commitment



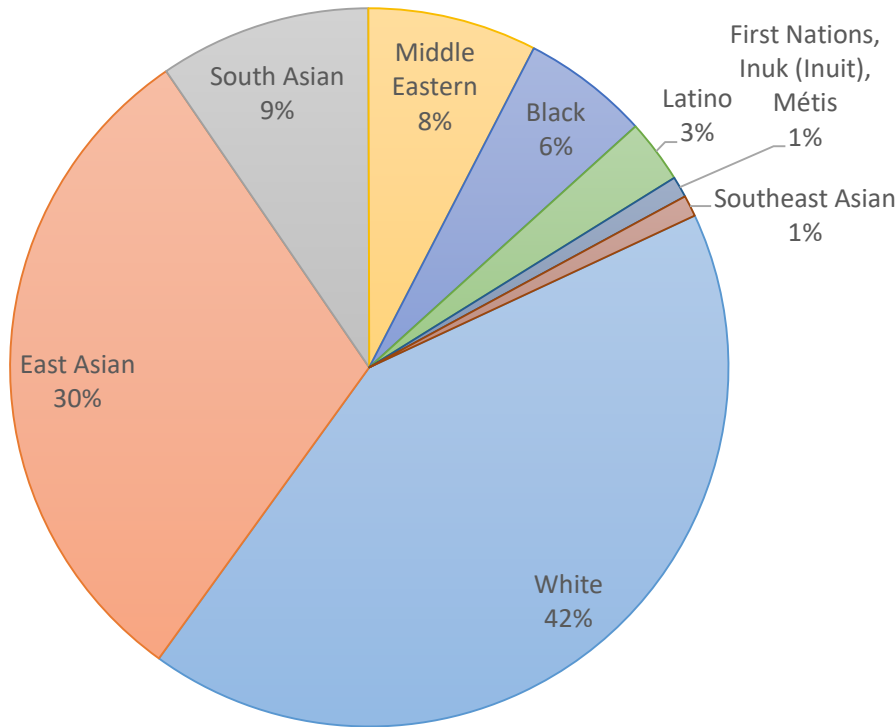
What we have been up to so far

- Screening of Race Ideology: Historical Perspectives, Current Realities and Re-imagining the Future (May 25, 2022)
- High School Student Week → Dedicating 1 spot per seasonal session for an Indigenous High School Student
- Applied for Equity Enhancement Fund and Enhanced Patient Care Fund (June 2022)

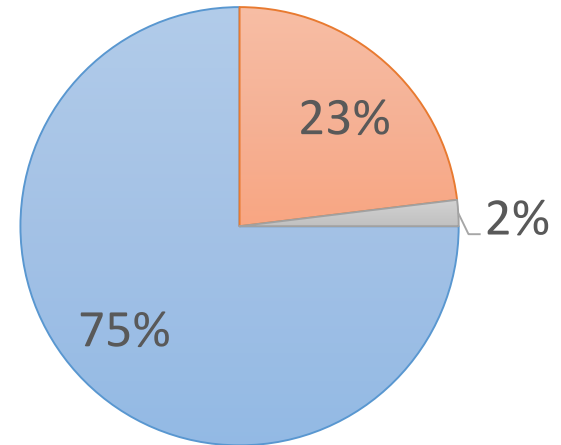


Preliminary results from Diversity Survey

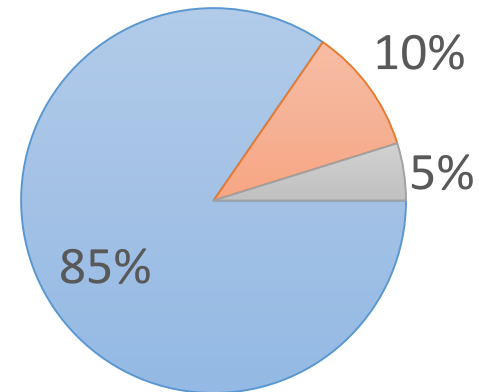
Ethnicity



Invisible Disability



2SLGBTQIA+



■ No ■ Yes ■ Prefer not to answer



Future Directions

- Workplace experience survey → will be sent out after today's meeting
- Collaborating with Faculty of Medicine REDI Office to create an EDI series tailored to HLI's needs starting in August/September
- If you would like to join our team, please reach out aileen.hsieh@hli.ubc.ca



Grants and Awards

March 8, 2021 to June 20, 2022

PI Grants and Awards



Ying Wang

- **CFI – JELF New Recruit**

Spatial characterization of human atherosclerotic disease for therapeutic and biomarker development

Amount: \$125,000

- **SSHRC – New Frontiers in Research Fund-Exploration**

Beyond morphology: Convert disease-related gene networks to pixels in digital pathology to solve the puzzle of “vulnerable plaques” that lead to cardiovascular events

Amount: \$250,000

Co-PI: Dr. Clint Miller(UVa) Co-applicant: Dr. Amrit Singh (HLI)

- **Heart and Stroke Foundation, New Investigator Award**

Targeting efferocytosis to reduce risk of cardiovascular events

Amount: \$180,000



PI Grants and Awards

CIHR and Canadian Lung Association – Respiratory Effects of Long COVID-19



Jordan Guenette

Cardiopulmonary exercise testing and functional imaging determinants of dyspnea post-COVID-19

Amount: \$40,000



Alyson Wong (Ryerson lab)

Identifying long COVID phenotypes and their association with long-term quality of life

Amount: \$39,696



PI Grants and Awards



Honglin Luo

- **NSERC Discovery**

Autophagy mechanism of coronaviral infection: Lessons from enteroviruses

Amount: \$544,500

Congratulations also to **Honglin** for receiving the **Research and Discovery Award** – all Faculty from the Department of Pathology!



Gordon Francis

**UBC Martin M. Hoffman Award
for Excellence in Research**



PI Grants and Awards



Brad Quon

- **Cystic Fibrosis Canada Grant**

Inflammatory and Immune Biomarkers of Response to Elexacaftor/ Tezacaftor/ Ivacaftor in People with CF

Amount: \$295,100

* Winner of the Robbie Award for the top-ranked grant!

- **MITACS Accelerate Research Proposal**

Model systems to Assess The in vitro efficacy of CFTR modulator therapies in Cystic Fibrosis (MATCH-CF)

Amount: \$210,000 over 3 years

Trainee: Naomi Potter



PI Grants and Awards



John Boyd (co-I: Graeme Koelwyn)

- **VCHRI Innovation and Translational Research Award**

Aerobic exercise training as a therapeutic intervention to improve outcomes in sepsis survivors

Amount: \$75,000



Pascal Bernatchez

- **UBC Grants for Catalyzing Research Clusters**

AATHEN - The UBC Advanced Angiotensin Therapeutics Network

Amount: \$100,000



Trainee Grants and Awards



Justin Turner (Camp lab)

Canadian Respiratory Health Professionals (CRHP), Canadian Thoracic Society

- CRHP Research Poster Award

Poster Title: Health and Social Service Providers' Lived Experiences of Severe Wildfires and Associated Poor Air Quality in North Central BC, 2018

Indigenous Mentorship Network Program of the Pacific Northwest

- Conference/Community Travel Award

World Federation of Occupational Therapists 2022 International Congress, Paris, France

Amount: \$1000



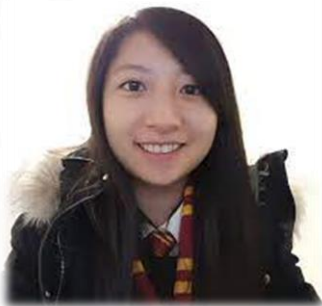
Trainee Grants and Awards

CIHR CGS-Doctoral Awards



Naomi Potter (Quon lab)

Patient-derived Model Systems to Assess the in vitro Efficacy of Cystic Fibrosis Transmembrane Conductance Regulator (CFTR) Modulator Therapies in Cystic Fibrosis



Kate Huang (Brunham/Laksman lab)

Investigating atrial fibrillation caused by titin variants using patient induced pluripotent stem cell-derived atrial cells



Trainee Grants and Awards

CIHR CGM Awards



Hacina Gill (Sellers lab)

Smooth Muscle Cell Contribution to Atherosclerosis Susceptibility in Familial Hypercholesterolemia

Amount: \$17,500



Aileen Hsieh (Hackett lab)

Investigating heterogeneity of small airways disease in asthma

Amount: \$17,500



Trainee Grants and Awards

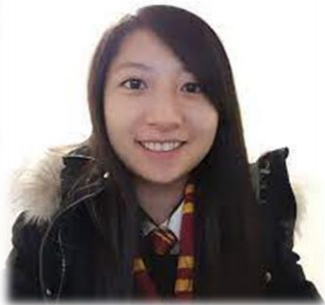


Naomi Potter (Quon lab)

UBC Friedman Award for Scholars in Health

Cell-based Models to Support Equitable Access to Breakthrough Cystic Fibrosis Therapies

Amount: \$21,996



Kate Huang (Brunham/Laksman lab)

UBC Four-Year Doctoral Fellowship and Tuition Award

Amount: \$5,000/yr



Team Player of the Quarter

Every Quarter we nominate a deserving HLI member for the Team Player of the Quarter Award

The nominee can be a staff member, trainee or PI. This person did something exceptional, above and beyond and/or caring for their fellow team members and will be rewarded with a \$50 gift card (of their choice)



This quarter we have a 3 way tie !

Here are some comments about the winners:

1st and 2nd (Team) winners

Fantastic efforts towards the HLI's recent submission to the CFI competition. These 2 team members went above and beyond to ensure this grant and all of our grants are submitted on time (student fellowships, centre infrastructure) and always provide thoughtful feedback.

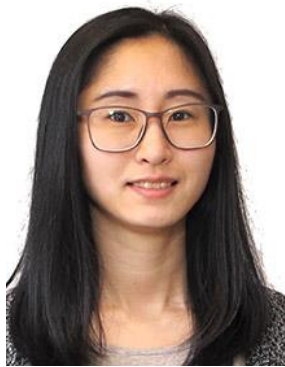
3rd winner

This person came up with the idea to champion Equity, Diversity and Inclusion at our centre. Her willingness and excitement to bring out the best in our actions is contagious.

She has taken initiative to improve everyone's experience at HLI by not only starting an EDI Committee but also being the Co-Director of the new trainee mentorship program and helping to organize Research Day. She is always reliable, positive and ready to help.



TEAM PLAYER(S) OF THE QUARTER WINNERS



1) Vivienne Chan



2) Kasia Adolphs



3) Aileen Hsieh

All 3 winners will receive a \$50 gift card (of your choice)
Let Claire know your preference (ideally e-card)



Next Quarterly Meeting

Fall QM

September 19th 2022

9-10 am

