COVID-19 UPDATE

Child health and wellness researchers,

We are now into week three of our new reality with COVID-19. These are challenging times, and we appreciate your superhuman efforts as you adjust your research, teaching and clinical care. Most of you are now working from home. If your work requires you to be on campus, please keep a safe physical distance from one another.

Many of your studies are now on hold. For anyone still transitioning, pediatric research leaders created this flow chart to help you. UCalgary also has transition strategies here. Those of you in Pediatrics and ACH, Nicole Romanow is available to help. Kathy Gratton is pleased to support other ACHRI members.

Good news – there will be summer studentships in 2020. We will award 15 ACHRI summer studentship awards, up to 5 ACHRI-BME awards and, of course, support ACHRI PIs with summer students across campus. Supervisors will need to adjust projects so that summer student experiences can be delivered remotely. Reach out
to Julia Klenin if you have questions. We will provide updates on summer students in the next two weeks.

Those of you wanting to volunteer during the COVID-19 crisis can fill in an application on UCalgary’s COVID-19 Volunteer Support website. Colleagues from the O’Brien Institute and Social Work report an urgent need for medical and general volunteers to work in Calgary homeless shelters. Register on the portal for this, and other volunteer opportunities. Please share with your staff, students and trainees.

As we team up to improvise, adapt and overcome challenges, we will get through this together.

Susa, and your ACHRI team

We publish every Monday to keep everyone up-to-date on news affecting our ACHRI faculty, staff and trainees. If you have information you would like shared with our community, please contact us at r4kids@ucalgary.ca.

RESOURCES DURING COVID-19

Self-assessment for COVID-19 AHS My Health
Alberta Health Services Information on COVID-19
UCalgary COVID-19 response website
CSM COVID-19 daily updates
Research Guide for working in AHS facilities
CSM Dept. of Peds Useful links for researchers
UCalgary Guidance for Researchers
Critical Research Designation Form
UCalgary COVID-19 Community Support
Resources for our families and parents

UCALGARY A LEADER IN TRANSMISSION ANALYSIS
Is a 14-day quarantine period optimal for effectively controlling COVID-19?

Dr. Edwin Wang, PhD, (Photo above: Wang lab) is on a global research team that analyzed the optimal quarantine period for effectively reducing the spread of coronavirus disease, published in this preprint article.

GLOBAL EFFORT TO DESIGN MODERN DAY IRON LUNG

Biomedical team builds prototype

A team co-led by Dr. Mark Ungrin, PhD, (photo above) with collaborators across Alberta and around the world, says a negative pressure ventilation (NPV) device – the modern version of an iron lung – could help save lives if the current global pandemic leaves patients with no other options.

Wang’s team analyzed patient-level information of 2015 laboratory-confirmed COVID-19 cases, noting that “incubation periods of 233 cases (11.6%) were longer than the WHO-established quarantine period (14 days).” His team reports incubation periods from 0 to 33 days among 2015 cases, thus recommending “an extension of the adult quarantine period to 18 days or 21 days.” Wang holds the Alberta Innovates Chair in Cancer Genomics and Informatics.

Ungrin’s team is working with public health agencies and others to prototype their system, aiming for a basic, safe and reliable design that is easily manufactured in large numbers. “If we can put a safety net in place, that’s one less thing for our frontline health-care workers to worry about,” says Ungrin, an associate professor of comparative biology and experimental medicine in the Faculty of Veterinary Medicine and the university’s Biomedical Engineering research program. Read more

SUPPORTING CHILDREN WITH SPECIAL NEEDS DURING COVID-19
Pediatric Grand Rounds - 8:30 am, April 1
Dr. Kara Murias MD, PhD, FRCPC, a pediatric neurologist in the departments of Pediatrics and Clinical Neurosciences, is presenting grand rounds on supporting children and families during a pandemic with special consideration for populations at increased risk.

IN THE COMMUNITY

Murias will discuss how children, and children with disabilities are at risk of increased physical and mental health concerns, how children with disabilities can present with trauma, abuse, or mental health concerns. She will discuss supports for families and children.

Registration required: zoom meeting
After registering, you will receive a confirmation email containing information about joining the meeting. Registration will be used to generate an attendance list for the purpose of CME credit.
The research team collected information from 1,800 women in the Alberta Pregnancy Outcomes and Nutrition (APRON) study. Mothers completed questionnaires during their babies' first year and participated in lab assessments of maternal-infant interaction at 6 and 20 months. The study is published in the *Journal of Developmental Behavioral Pediatrics*. APRON is supported by community donations through the Alberta Children's Hospital Foundation. The study was funded by a grant from Social Sciences and Humanities Research Council (SSHRC).

**Study supports selective use of 'crying it out'**

Dr. Gerald Giesbrecht, PhD, and co-authors Dr. Nicole Letourneau, PhD, and Dr. Lianne Tomfohr-Madsen, PhD, investigated how a delayed response to infant crying during the first year of life affects infant well being and attachment. The team found that when used selectively and in response to the infants' needs, delayed responsiveness may reduce problematic behavior and doesn't harm the infant's socio-emotional development.
American Association for Anatomy
The association has announced its Early-Career Publication Awards, recognizing the best publication by an early-career anatomist in its journals.

A LITTLE DOSE of HAPPINESS

Share your Zoom meeting photos!
Drs. Marta Vidal-García, PhD, and Lucas Lo Vercio, PhD, postdocs working in the Hallgrimsson Lab, are quickly adapting to their home offices. The researchers are meeting online to collaborate on their project, developing a technique for complex facial analyses. "Work is going well, the VPN is working well and virtual meetings are helping us to stay focused and feel unified," says the lab team.

Your working-at-home photos!
Mark Agius, program manager at the Owerko Centre at ACHRI, is flattening the curve and his hair while working at home. His children Oliver and Georgia are helping too with a little hair styling.

New feature in ACHRI Newsletter
What brings you happiness? Send a screenshot of your zoom meetings, of your science art, children, pets - things to make us all smile.
Email r4kids@ucalgary.ca

Dr. Rebecca Green, PhD, a postdoctoral fellow in the Hallgrimsson lab, has won the award for her paper published in the journal Developmental Dynamics. Green investigated the nonlinear gene expression-phenotype relationships that contribute to variation and clefting in the A/WySn mouse. Congratulations Dr. Green.
Pull out your pencil crayons people!
Tyler Ruel took this picture in Dr. Peng Huang's lab of adult zebrafish skeletal muscles in high resolution. Huang's team works to understand the molecular and cellular mechanisms that regulate muscle regeneration.

Click here for the colouring page and then save the image on your device. You can print the page to colour by hand OR colour digitally by following the instructions here. Happy colouring!

GRANT OPPORTUNITIES

COVID-19 NSERC/SSHRC Grant Extension Requests
The Natural Sciences and Engineering Research Council (NSERC) and Social Sciences and Humanities Research Council (SSHRC) have announced that due to the current COVID-19 situation, academic institutions can immediately approve grant extension requests of up to 12 months. This applies to Agency grants with end dates between February 1, 2020 and March 31, 2021 inclusive. This applies to all grants, regardless of whether they have received a previous time extension of any length, for any reason and includes grants that have an automatic one-year extension. More information.

Research Assistance Machine Learning
During the COVID-19 outbreak, many labs have had to pause their research plans on hold. Dr. Nils Forkert’s Machine Learning and Image Processing lab is offering to help apply novel machine learning techniques to analyze any unpublished data or re-imagine data from an existing database. More information Email nils.forkert@ucalgary.ca

CANCELLED Kids Cancer Care Nursing and Allied Health Grant

For these and other opportunities, please view our external funding website.

ACHRI TRAINEES

The Canadian Child Health Clinician Scientist Program (CCHCSP) workshops at the Alberta Children's Hospital will be rescheduled in the Fall.

Please note - The application deadline to the CCHCSP National Program has been extended to May 1, 2020. Details
Trainees wishing to apply to CCHCSP for doctoral and fellowship awards should please follow the process outlined on our ACHRI Trainee Funding page under the CCHCSP tab.

**Banting Postdoctoral Fellowships**  
LOI deadline April 15  
If you are interested in applying for a Banting Postdoctoral fellowship, please register for a workshop on April 1 or April 6.

Visit the ACHRI Weekly Training Post on the [ACHRI website](https://achri.ca) to learn about your training experience with ACHRI during OVID-19.

**ACHRI CALENDAR OF EVENTS**

**Event planning during COVID-19**  
All planned, in-person university events on our campuses are cancelled immediately. Until further notice, the scheduling of future campus events is on hold. Please refer to UCalgary COVID-19 response.

ACHRI is cancelling its Grand Rounds in March and April. Grand Rounds in May will take place virtually.

**CANCELLED** Apr. 21 | Friesen International Prize Lecture  
**POSTPONED** Apr. 22 | All in Creating Synergy in Pediatric Complex Care  
**POSTPONED** May 5 | Doug Lockhart Memorial Oncology Research Day  
**CANCELLED** May 14 | ACH Quality Forum  
**POSTPONED** May 6-7 | Improving Youth Transitions to Adulthood Conference  
**CANCELLED** June 10 | Owerko Centre Conference  
**Nov. 30 & Dec. 1** | ACHRI All Member Retreat  
Banff Centre of the Arts

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