

# BCCHB NEWSLETTER

OFFICIAL UPDATES FROM THE BC CHILDREN'S HOSPITAL BIOBANK

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**E-CONSENT IS LIVE!**

**COVID-19 UPDATES**

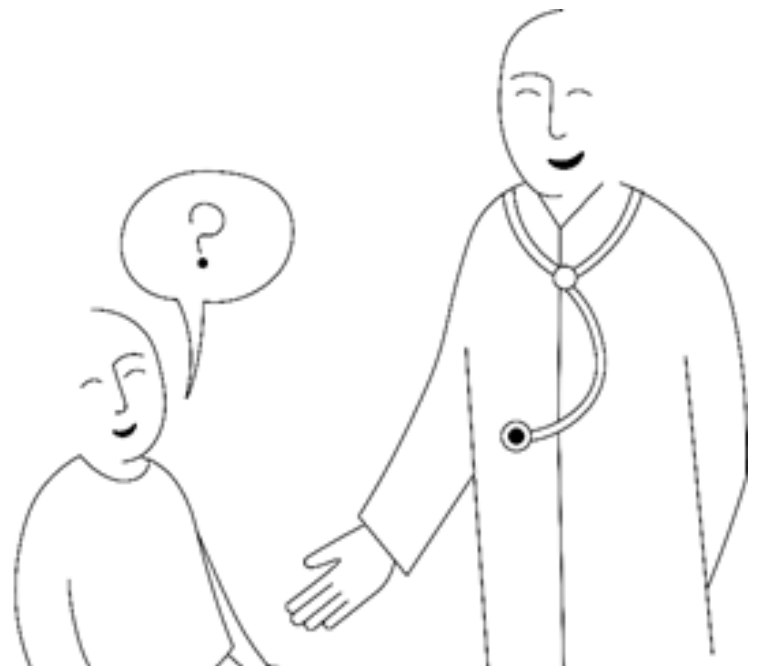
**WELCOMING DR.  
JONATHAN BUSH**

**PATIENT PARTNERS  
WANTED**

**TFRI/PROFYLE WEBSITE**

**WE CURRENTLY COLLECT:**

BLOOD  
BONE MARROW  
TISSUE  
SALIVA  
STEM CELLS  
URINE  
PLACENTA  
CEREBROSPINAL FLUID  
CORD BLOOD



## E-CONSENT PLATFORM IS LIVE!

ARTWORK BY AUGUSTA LUTINSKI

The BCCH BioBank platform is now LIVE! This project was made possible with the help of a grant from the BC Children's Hospital Research Institute's (BCCHR) Clinical Research Support Unit (CRSU), and many other members of the BCCHR community.

If you'd like to view a demo version of our newly, approved e-consent form, please click below:

<https://rc.bcchr.ca/redcap/surveys/?s=4ECKE9AKFA>



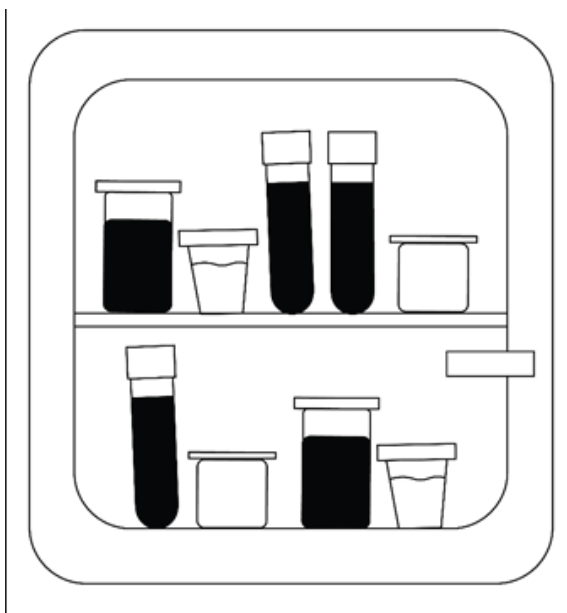
# BCCHB'S COVID-19 UPDATES

The BC Children's Hospital BioBank is actively recruiting participants at the BC Children's Hospital COVID clinic. We currently have 27 active participants within a cohort of 11-65 years old, and we may also have clinical data associated with the samples for research purposes. The samples are processed for blood derivatives such as whole blood, plasma, serum, and mononuclear cells.

The BC Children's Hospital BioBank is also supporting COVID-19 research projects by providing pre-pandemic prenatal serum samples to a project by Dr. Pascal Lavoie (BC Children's Hospital Research Institute) studying the prevalence of antibody cross-reactivity between COVID-19 and other endemic coronaviruses. By using the pre-pandemic samples to compare antibodies pre- and post-outbreak, the information could be used to create prediction models of protection within the local population.

We also support research looking at the relationship between COVID-19 and multisystem inflammatory syndrome in children (MIS-C). MIS-C is considered to be a rare illness caused by the COVID-19 virus and the BC Children's Hospital BioBank has been able to release MIS-C diagnosed plasma samples to a project led by Dr. Josef Penninger (UBC) looking at differences in antibodies found in COVID-19 with and without MIS-C in pediatric participants. Analysis of these antibodies would be able to detect biomarkers which could predict disease progression and complications.

We are actively accepting requests for COVID-19 related research and continuing to support PI-driven studies on their projects!



## PAPERS ACKNOWLEDGING THE BCCHB & OUR CONTRIBUTIONS:

PROFYLE "Revisiting Risk and Benefit in Early Oncology Trials in the Era of Precision Medicine: A Systematic Review and Meta-Analysis of Phase I Trials of Targeted Single-Agent Anticancer Therapies" was published online in JCO Precision Oncology on January 8, 2021.



## WELCOME DR. JONATHAN BUSH!

BCCHB would like to welcome Dr. Jon Bush on board as our new Co-Director! Originally from Manitoba, Dr. Bush is a pediatric and perinatal pathologist at BC Children's and Women's Hospital. He has particular clinical and research interests in pediatric tumors including osteosarcoma, gastrointestinal diseases including eosinophilic disorders, and developmental and perinatal pathology including congenital heart anomalies. Having been involved in BioBank projects in the past such as the eosinophilic esophagitis (EoE) study, we are excited to have him on board!

## PREEMIE BIOBANK UPDATES

Babies born prematurely often experience severe illness from bacterial or viral infection in their first months of life. Age-specific therapies are rare because studying the preterm immune system has been difficult as these babies are so fragile. In collaboration with the BC Children's BioBank, the Lavoie lab has been collecting cord blood samples from babies born before 33 weeks of pregnancy. Using cord blood, the lab can look at white blood cells from preemies without needing to draw blood from the babies themselves.

This project, led by PhD student Christina Michalski in the Lavoie lab, is studying the metabolism of newborn immune cells. Like any other cell in our body, white blood cells need energy to function properly. Upon encountering bacteria or viruses, immune cells increase their metabolism to quickly respond to the threat. Researchers in the Lavoie lab found that white blood cells from premature babies are less efficient at using glucose and oxygen and this makes them less effective in responding to bacteria. Now, the Lavoie lab is expanding their research to understand molecular mechanisms regulating metabolism in preterm immune cells.

Besides being used for ongoing studies in the Lavoie lab, the preterm cord blood samples are also made available to other researchers through the Premie BioBank - a unique project managed by the BCCH BioBank.

## PATIENT PARTNERS WANTED!

The BCCH BioBank has several committees to make sure the BioBank is running properly as well as a committee to determine whether sample requests by researchers are appropriate. We would like to have the patient partner voice better represented on these committees but need your help.

We would like to hear from you how we can best learn from you and change our practices to make sure the patient partner voice is included in a safe and inclusive manner. We would like to set up a patient partner advisory committee to discuss how your voice can be heard and enacted upon by our committees so that we can better represent and inform our patient population.

This platform will be a safe environment to voice your thoughts and concerns and we are striving to have a diverse representation. Your time and related expenses will be reimbursed.

Please email us at [biobank@cw.bc.ca](mailto:biobank@cw.bc.ca) if you would like to learn more!



## INVENTORY OF CANCER SAMPLES ON THE PROFYLE/TERRY FOX RESEARCH INSTITUTE WEBSITE

The BCCHB is part of PROFYLE (PRecision Oncology For Young people), a Canadian project supported by funds from The Terry Fox Research Institute (TFRI) and many other partners from across Canada. As part of this project, we will be hosting sample inventory from our biobank with oncology samples on the TFRI website. These samples are completely de-identified and the sole purpose of posting the samples on this website is to make it easier for cancer researchers to find the samples they need for their research.