

BC Children's Hospital Research Institute
 Thursday, November 7th, 2024

WORKSHOP CATALOGUE

Code	Title	Description	AM	PM	Coordinator/Presenters (Department) and Location
A01	Targeting Cancer, one gene at a time	Cancer forms as a result of multiple mutations in a cell's genetic code. While these mutations allow cancer to grow rapidly out of control, they also become a weakness that we can target in the clinic. This workshop will explain how scientists and doctors are using synthetic lethality to target cancer through a series of activities and games.	30	30	Katherine Baillie Cathy Cozma Leticia Dinatto Justin White (Medicine)
A02	Exploring Women's Health Research, Endometriosis	Endometriosis is a condition where tissue that is similar to the lining of the uterus begins to grow outside of the uterus. Approximately 10% of women, girls, and/or people born with a uterus are affected by this painful condition worldwide, yet its cause remains unknown! In this workshop, you will learn the signs and symptoms of endometriosis, how it is diagnosed, and how it is currently treated. You will have the chance to visit a basic science research lab and use real (anonymized) patient data to evaluate their medical history, symptoms, and surgical samples under the microscope to diagnose endometriosis pathology!		5	Mahfuza Sreya Yomna Bedaiwy (Obstetrics and Gynaecology) WHRI Research Wet Lab
A03	Biomedical Engineering	Students will use diagnostic patient monitors, usually found in Intensive Care Units (ICUs), to measure and view their own heart rate, blood pressure SpO2. Simulators will then be used to display other vital signs for more invasive measurements. Another two electrical medical devices will be demonstrated and discussed: an Electrosurgical Unit used in place of a scalpel in an Operating Room, and a Defibrillator to reset a heart beating in cardiac arrhythmia.		25	Alex Sayer (Biomedical Engineering)
A04	The Immune System and Allergies: Why do they exist?	In this workshop, you will learn about the amazing functions of the immune system and how to treat allergies. You will get to practice injecting with an EpiPen and Allerject!	10	10	Bahar Torabi (Pediatric Immunology) Classroom at Beth Israel Congregation

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A05	Genetic Counselling Detective: A Mystery in Family History	In this workshop, you will learn about the field of genetic counselling. Channel your inner detective as you work through a genetic counselling case about a patient with a history of breast cancer.	20		Lauren Jennings Cristina Fodor Nadia Dingelstad Claudia Pfeifer (Medical Genetics)
A06	Medical Imaging	In this workshop you will be introduced to all of our medical imaging modalities at Children's and Women's: X-ray, CT, MRI, Nuclear Medicine, Ultrasound, Interventional Radiology, and Mammography. You will get to meet some supervisors and technologists, tour around some of the department, and get hands on experience with some of our equipment!	30	30	Karin Le Page Samantha Morrow Jessica Kwan Hanna Ballantyne Judy Harder Kerri Smith (Medical Imaging) TI-378
A07	Physiotherapy: It Will Move You!	Physiotherapists and a Physiotherapy Student will give you insight into the rewarding career if Physical Therapy. You will then participate in 3 practical sessions in Respiratory, Neurology and Orthopedics where you can try some activities yourself!		18	Kathy Couture (Physiotherapy)
A08	Communication Through Play: Child Life at Work	In this workshop you'll step into the world of pediatric healthcare, and learn how child life specialists support children, youth, and families in the hospital every day. You'll get an opportunity to use real medical supplies in play and explore how medical play is used to help our patients learn and cope with procedures. Finally, you will see how we use play, advocacy and education to empower patient and families in the hospital.	30	30	Shavaun Chan Megan Wiebe (Child Life – Inpatient Medical/Surgical and Acute Inpatient Rehabilitation)
A09	Interpreting Genomes for the Discovery of Rare Diseases	The workshop will open with a brief introduction to genomics, followed by an explanation of the workshop's primary activity. The introduction will provide students with the basic concepts of genomics and rare diseases. Students will have 40 minutes to collaborate and actively process, analyze, and synthesize family history and genomic information to make correct diagnoses of hypothetical patient scenarios. Students will first be divided into teams with 4-8 people per team, and will each choose one of four roles: family doctor, bioinformatician, gene master, or geneticist. 'Family doctors' will focus on sharing the patient description including the symptoms or "phenotypes" of the patient; 'bioinformaticians' will	30	40	Simran Samra Maryam Vaseghi-Shanjani Courtney Hoskinson Pariya Yousefi (Medicine - Pediatrics) Room 2108 at BCCHR

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		interpret candidate genomic variants by matching inheritance patterns between observed variants and known gene-to-disease relationships			
A10	<i>Newborn Intensive Care – Off to a Good Start</i>	In this interactive workshop, you will learn how babies transition to life in the real world. You will get to see what happens when things don't go as expected and how doctors train with simulated patients to practice for these emergencies. You will get a hands-on experience in dealing with an emergency and learning what is done in the Neonatal Intensive Care.	10	10	Jonathan Wong Deepak Manhas (Pediatrics)
A11	<i>A Day in the Life of a Midwife</i>	In this workshop you will get to explore pregnancy through the lens of midwifery care. There will be four hands-on stations where you will have the opportunity to: 1. Palpate a real pregnant person, feel the baby and find its heartbeat! 2. Get an up close look at the equipment midwives bring with them to births. 3. Learn how babies navigate the pelvis on their way into the world, practice "catching" a baby and have a tour of a real placenta! 4. Learn how to assess the health of a newborn baby and provide breastfeeding support.	20	20	Marella Falat (Department of Midwifery) Markin Family Boardroom @ Beth Israel Congregation
A12	<i>Getting Psyched about Psychology</i>	In this workshop, you will be introduced to the field of clinical psychology and learn about the role of psychologists at BC Children's Hospital. You will take part in a treatment planning exercise for a patient case vignette	25		Hannah Mohun Georgi Wallington (Medical Psychology)
A13	<i>Adventures in Global Public Health</i>	Join us for an exciting and insightful workshop as we explore the dynamic world of global public health! I'll share my hands-on experiences from working in diverse settings across Canada, India, Nigeria, Mexico, and beyond, illustrating the unique challenges and triumphs of each region. We're thrilled to be joined by medical student Simran Grewal, who will bring fresh perspectives and discuss the intersection of global health practices with emerging medical insights. Together, we'll dive into real-world case studies, share stories of impact, and explore how different cultures tackle health issues in innovative ways. Don't miss this opportunity to broaden your understanding and engage with global health in an interactive session!		25	Farah Shroff (Public Health) Ballroom at Beth Israel Congregation.

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A14	Genetics in Forensics: A Hands-On DNA Workshop	Students will be given a tour of a genetics laboratory and get to practice loading DNA into gel which we will use to separate DNA fragments by size. While we wait for their DNA to run through the gel students will learn about how genetics are used in forensic science. They will learn about what genotypes, alleles, and short-tandem repeats (STRs) are and how they are used to differentiate individuals based on their DNA. They will be given two forensic cases, one they will solve with the results of their gel experiment. The second case will include a report that mimics a real forensic DNA report and is slightly more complex than the first case. If there is time remaining during the workshop the students will get to play a genetics trivia game.	10		Hannah Illing Brenna Lee (Medical Genetics)
A15	Inclusivity and ethics in health research: a how-to guide	Join us for a fun and engaging workshop on how to conduct health research the right way - with inclusivity and ethics! In this interactive workshop, we'll cover: Research Ethics: Understand the basics of research ethics (like consent and confidentiality) Historical Lessons: Examine eye-opening examples of unethical and un-inclusive research to learn what went wrong and why these lessons are crucial today. Inclusive Design: Explore strategies for designing research studies that welcome participation from people of all backgrounds. You'll also have the chance to apply your newfound knowledge to real-life case studies, giving you hands-on experience in crafting research studies with these important considerations in mind. Come ready to learn, engage, and make a positive impact in the world of health research!	20		Elaha Niazi (Pediatrics) Ballroom at Beth Israel Congregation
A16	Thinking like a behavioral scientist	In this workshop we'll go over what a "behavioural scientist" and how they help healthcare systems around the world. We'll then walk through a hands-on activity where we'll practice thinking like a behavioral scientist to design and test student created behavioral interventions addressing pressing health challenges in Canada.	20	20	Alysha Deslippe (Human Nutrition)

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A17	Exploring the Future of Data: AI and Machine Learning in Healthcare and the Essential Skills for Aspiring Data Scientists.	<p>In this workshop, participants will gain an understanding of what data is and its importance in research, as well as how AI and Machine Learning contribute to research.</p> <p>I will also discuss career pathways in research data roles.</p> <p>By the end of the presentation, participants will have a clear understanding of the educational background and core skills required to become a Data Scientist.</p> <p>The workshop will cover the following topics:</p> <ol style="list-style-type: none"> 1. Introduction to Data 2. Importance of Data in Research 3. Role of AI and Machine Learning in Research 4. Career Pathways in Research Data Roles 5. Education and Core Skills for Data Scientists" 	10	10	<p>Chandan Harikrishna</p> <p>BC Children's and Women Hospital Room AB319 (Tactical Room)</p> <p>Take the entrance number 77 Shaughnessy Building, 3rd Floor</p>