

University of Alberta  
Thursday, October 16, 2025

## WORKSHOP CATALOGUE

Code	Title	Description	AM	PM	Coordinator/Presenters (Department) and Location
A01	<b>Augmented Renal Clearance (Super Kidneys!)</b>	We will explore "Augmented Renal Clearance" (ARC), a fascinating phenomenon where the kidneys exhibit enhanced filtering capabilities, affecting medication clearance. We will discuss its clinical implications, including suboptimal dosing and increased risk of adverse reactions. Understanding ARC is vital for optimizing treatment decisions, especially for critically ill patients. Join me to unravel the impact of ARC on patients' health and how healthcare professionals can adapt their strategies to ensure safe and effective medication management for those experiencing this unique renal phenomenon.	20		Maged Kharouba  (Faculty of Pharmacy and Pharmaceutical Sciences)
A02	<b>The interaction of our genetic make-up with health: solving the mystery</b>	In this workshop, you will get to learn the roles of a clinical genetic doctor, genetic counselor, and molecular lab technologist. You will work through scenarios of rare genetic diagnosis in the media		15	Shailly Jain  (Medical Genetics)
A03	<b>Radiation Therapy</b>	An introduction to this specialized health care profession where compassionate cancer care meets cutting-edge technology. Learn about the profession of radiation therapy, participate in a mock treatment of an oncology patient and discover your pathway to becoming a student in the University of Alberta's Radiation Therapy program		15	Leslie Wutzke  (Oncology/Radiation Therapy)  0937 Cross Cancer Institute
A04	<b>The Development of the Brain</b>	In this workshop students will use microscopes to directly observe brain development in fruit flies, one of the most widely used laboratory animals in the world. We have established breeds flies have their body neurons labelled with green fluorescent protein (GFP). Students will have the opportunity to dissect the brains and observe them using advanced fluorescent microscopes.	8	8	Qiumin Tan Sarah Hughes Andrew Simmonds  (Cell Biology)  5-31 Medical Sciences Building

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A05	<b>Breath of Life</b>	<p>Have you ever wondered what an Anesthesiologist does?</p> <p>In this workshop, you will be introduced to the medical specialty of Anesthesiology, their role in the world of medicine, as well as some of the technical skills that they use daily. Following an introduction to Anesthesiology, participants will get to practice some of the hands-on techniques of airway management that anesthesiologists perform regularly (for example, bag-mask ventilation, intubation)</p>	24	24	Quinn McLellan Evan Johnson  (Anesthesiology and Pain Medicine)  ED 277
A06	<b>The Ever-Expanding Role of the Pharmacist</b>	<p>The scope of pharmacists' practice has evolved to include a lot more than just counting pills! Did you know that pharmacists also manage chronic medical conditions, administer drugs/vaccines by injection, work in hospitals, and even prescribe medications?</p> <p>Join some practicing pharmacists and current pharmacy students for a fun and interactive session that will involve a tour of the Faculty of Pharmacy and Pharmaceutical Sciences lab spaces, hands-on injection practice (don't worry, it won't be on real people!), and a casual Q&amp;A</p>	20		Dylan Moulton Rene Breault  (Faculty of Pharmacy and Pharmaceutical Sciences)  MS 1-15
A07	<b>Discovering Ophthalmology</b>	In this workshop you will learn about the different careers available in the vision sciences (including ophthalmology) as well as some basic eye anatomy, examinations, and surgeries!	20	20	Lucy Yang Paige Campbell Colton Gibb  (Ophthalmology)  2-464 ECHA
A08	<b>Emergency Medicine: Approach to an Injured Patient</b>	In this workshop, you will learn how emergency room doctors and nurses take care of injured trauma patients. At the end of the session, you will have an opportunity to learn how to place a breathing tube!	15		Mikayla Fredriksen  (Pharmacy and Pharmaceutical Sciences)  Medical Sciences Building (MSB) 1-15
A09	<b>Med School 101</b>	In the Med School 101 workshop, you will hear from current medical students about the University of Alberta MD Program and the process of applying to medical school. This includes topics such as courses to take prior to medical school, MCAT preparation, and supports/unique admission pathways for applicants from underrepresented backgrounds. After the presentation, you will have the opportunity to ask questions and then participate in two clinical workshops on suturing and physical exam skills	50	60	Chantal Schultz Erin Horton  (Medicine)  Katz 3-003 & Katz 1080

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<b>A11</b>	<b><i>Medical Detective for the day: Discovering the 5 essential disciplines of medical laboratory science!</i></b>	<p>"Like medical detectives, medical lab technologists (MLTs) analyze biological clues, solve complex problems and report their findings. Major decisions about a patient's medical care are based on clinical tests performed by MLTs."</p> <p>In this workshop, we will be doing a deep dive into the five disciplines of medical laboratory science:</p> <p>Clinical Biochemistry - learn how to use a pipette, prepare dilutions, and measure the concentration of fluids using a spectrophotometer!</p> <p>Microbiology - perform microscopic analysis to identify the microorganisms present in a sample!</p> <p>Hematology - a person's blood sample can tell you a lot about them! Take a look at how different diseases can manifest under the microscope!</p> <p>Histology - ever wondered how tissues look under the microscope? This might just be your opportunity to do so!</p> <p>Transfusion Medicine - perform a blood typing activity to get a glimpse at the intricacies of transfusion medicine!</p> <p>PLEASE NOTE: Food-grade items will be used to mimic clinical laboratory scenarios. Participants will not be working with non-fixed biological or hazardous materials. However, it is recommended, per lab protocol, to wear long pants and closed-toed shoes. Laboratory gowns will be provided to participants, and there will be absolutely no drinking, eating, or chewing gum in the laboratory. We also strongly prohibit the use of cellphones or cameras inside the laboratory.</p>	<b>25</b>		<p>Richen Basig Rhonda Pouliot Roberta Martindale</p> <p>(Medical Laboratory Science)</p> <p><b>Clinical Sciences Building - B136</b></p>
<b>A12</b>	<b><i>Rehabilitation Rounds: An introduction to the professions</i></b>	Join us for tours and activities with the Departments of Physical Therapy, Occupational Therapy and Communication Sciences & Disorders. Learn about what rehabilitation medical professionals do on a day-to-day basis.		<b>30</b>	<p>Mark Hall</p> <p>(Rehabilitation Medicine)</p> <p>Corbett Hall</p>
<b>A13</b>	<b><i>Hip Replacement Workshop</i></b>	In this workshop students will learn about hip replacements and get to perform the surgery in a sawbone model.	<b>10</b>		<p>Edward Masson Samuel Goertz Spencer Lindsay</p> <p>(Surgery)</p>

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<b>A14</b>	<b><i>The Art &amp; Science of Nursing: A Commitment to Excellence in Patient Centered Care</i></b>	In this workshop, you will have the opportunity to work with state-of-the-art lab equipment and participate in hands-on activities that simulate real nursing practice such as taking vital signs, conducting vision assessments, and listening to heart and lung sounds. You will also have an opportunity to interact with current nursing students and a Registered Nurse.		<b>16</b>	Katherine Trepanier  (Nursing)  ECHA 1-240
<b>A15</b>	<b><i>From Atoms to Anatomy: Exploring the Field of Medical Physics</i></b>	In this workshop, you'll explore the physics principles behind medical imaging and cancer treatment. You'll examine real diagnostic images and radiation therapy treatment plans.	<b>20</b>	<b>30</b>	Lauren Smart  (Department of Oncology)
<b>A16</b>	<b><i>AI in Healthcare: The Future of Medicine</i></b>	In this workshop, students will explore how Artificial Intelligence (AI) is transforming healthcare. We will discuss real-world applications such as medical imaging, diagnostics, personalized medicine, and virtual health assistants. Using videos and examples, students will learn how AI helps doctors make faster, more accurate decisions and improves patient care. We will also look at the future of AI in medicine and the important ethical questions it raises	<b>20</b>		Riya Patel Aida Mohammadabadi Alex Chau Devaanshu Kundu Jiayin He  (Medicine)
<b>A17</b>	<b><i>Dietetics and the role of food in health and disease</i></b>	In this Workshop you will see techniques used for body composition and energy metabolism assessments as part of a tour of the Human Nutrition Research Unit. We will touch on the role of Registered Dietitians in healthcare and research.	<b>15</b>		Naomi Hotte  (AFNS, Agricultural Food and Nutritional Science)  2-004 LiKaShing
<b>A17</b>	<b><i>The Do's and Don'ts of Graduate School</i></b>	In this workshop I will discuss my PhD, Master's and MD studies answering questions students have about graduate school, how to choose the program, school, and pathway that's right for them.		<b>20</b>	Lisa van Lierop  (Emergency Medicine)
<b>A18</b>	<b><i>AI in Healthcare: The Future of Medicine</i></b>	In this workshop, students will explore how Artificial Intelligence (AI) is transforming healthcare. We will discuss real-world applications such as medical imaging, diagnostics, personalized medicine, and virtual health assistants. Using videos and examples, students will learn how AI helps doctors make faster, more accurate decisions and improves patient care. We will also look at the future of AI in medicine and the important ethical questions it raises.	<b>20</b>		Riya Patel Alex Chau Devaanshu Kundu Jiayin He Aida Mohammadabadi  (AI in Healthcare)

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<b>A19</b>	<b>Discover breathing: Air pollution, allergy and health</b>	<p>This 2-part interactive workshop is designed for a maximum of 20 students, who will receive a brief introduction then explore two discovery stations.</p> <ol style="list-style-type: none"> <li>1. Introduction to Respiratory Medicine and Research (10 minutes)</li> <li>2. Two interactive discovery stations</li> <li>3. Free time –chat with the researchers</li> </ol> <p>Exploration stations</p> <ol style="list-style-type: none"> <li>1. What you breathe: wildfire smoke, vape, smog and your lungs <ol style="list-style-type: none"> <li>a. Research: How do we sample human airways?</li> <li>b. Interactive: Check out where air pollution happens over time on an interactive mapping program.</li> <li>c. Allergy: what is it, how does it happen and what can you do about it? <ol style="list-style-type: none"> <li>i. Check it out: Why does my mouth itch when I eat certain foods?</li> <li>ii. Emergency! Learn about life-threatening allergies and try out the training devices used to teach people how to save themselves and others.</li> </ol> </li> </ol> </li> <li>2. More than drama: the tangled relationship between mental health and breathing <ol style="list-style-type: none"> <li>a. Research: How do we cope with stressors? How do we learn from people with chronic disease?</li> <li>b. Try this..."when you feel the icy hand of death clutching at your throat"...actually, that is vocal cord dysfunction! Try out some relaxed throat breathing exercises – literally physiotherapy for your voice box.</li> </ol> </li> </ol>	<b>15</b>		Anne Hicks Alex Hicks  (Respiratory Medicine)