

Western University
 Friday, May 6, 2022

WORKSHOPS

ACCESS CODE	TITLE	DESCRIPTION	PRESENTER(S)
A01	BLASTBioinformatics: An introduction to the marriage of computer science and biology	In this workshop students will be introduced to the fascinating world of Bioinformatics - the intersection between health science, computer science and mathematics. Students will be exposed to common techniques used in the field such as combing through databases, sequence alignment and protein visualization using online tools. This workshop will include many aspects of exploratory learning, as students EQUIP (Explore, Quantify, Understand, Investigate and Present) themselves to become future bioinformaticians. We will also introduce students to undergraduate bioinformatic programs available in Canada (Bachelor of Medical Health Informatics at Western University, Bachelor of Health Science in Bioinformatics at the University of Calgary).	Erin Brintnell Cenxiao Li Neera Patadia (Department of Pathology & Laboratory Medicine)
A02	Pediatric Surgery: An unbiased talk about the best job in the world	In this workshop you will learn about what life as a pediatric surgeon is like. We will discuss how to become a surgeon, including details about medical training from university, medical school, residency and fellowship. We will discuss what the day-to-day of a pediatric surgeon is like, as well as how research and teaching are a big part of the job of an academic surgeon. We will review some interesting cases and learn about rare congenital defects that pediatric surgeons fix.	Natashia Seemann MD (Division of Pediatric Surgery)
A03	Walking the Walk: What does the brain have to do with it?	Do you know what happens when you walk and talk? In this workshop you will learn about the relationship between mobility and cognition. You will also see the impact of aging on these processes and how cognitive impairments may lead to more falls.	Surim Son (Gait and Brain Lab, Parkwood Institute)
A04	Sports and Injuries: An Analysis Using Tae Kwon Do	Using Tae Kwon Do board breaking as a framework, this interactive workshop will consider injuries in sports. We place prevention/safety as a priority, but when accidents happen, who helps you? How do they help you? What options are available to you? Consideration is placed on all three high school sciences, paving a pathway for Discovery in the Health Sciences!	Jason Kim (Faculty of Science and Faculty of Education)

A05	Life as a Doctor to Be!	Ever wonder what the paths are to enrolling in medical school? How about what it's like to be in medical school? Interested in hearing about what goes into being a doctor outside of what you might expect? This session will dive into some of the wonderful and possibly unexpected opportunities that medicine can offer throughout medical school and beyond!	Montana Hackett (Schulich School of Medicine & Dentistry)
A06	Brain Health and Dementia: What is Alzheimer's Disease?	In this workshop you will learn how to keep your brain healthy, what is dementia and Alzheimer's Disease. Topics will include: <ul style="list-style-type: none"> • Brain Health • Alzheimer's Disease Facts • What is Dementia • Risk Factors • How You Can Help • What You Can Do • The Alzheimer's Society • Southwest Partners – Services • Guest Speaker - Lived Experience 	Dina Boone John Hammel (Alzheimer's Society Southwest Partners)
A07	An Inside Look at Medical Imaging	This workshop will take a case-based review of interesting clinical scenarios that will highlight the diverse and exciting world of Medical Imaging and the wide array of career choices that are available.	Amol Mujoomdar MD Sachin Pandey MD Mina Swiha MD (Department Medical Imaging)
A08	The Human Brain: Function and Dysfunction in Aging and Dementia	In this workshop you will learn about the way that the brain functions and what happens when it ages, particularly in dementia. You will have the opportunity to participate in an interactive case study.	Chloe Stewart PhD (Department of Clinical Neurological Sciences)
A09	So you Wanna Go To Med School?	This workshop will provide students the opportunity to learn about the medical profession, the requirements for medical school, a day in the life of a medical student, and the vast opportunities and interests a career in medicine can provide.	Bojana Radan MD Aleksa Zubic MD (Department of Family Medicine)
A10	Hearing in 3-D with only two ears: Spatial hearing and auditory virtual reality	Experience how the auditory system uses sound received at the left and right ears to determine the direction of sound sources in space. Listening activities will take place in the anechoic chamber at the National Centre for Audiology. We will also use measurements of the acoustics of an individual's outer ears to produce sounds that can be played over headphones in virtual auditory space. This method will be used to let you "hear through another person's ears", to simulate different listening environments, and to simulate listening through a hearing aid or cochlear implant.	Ewan Macpherson PhD (School of Communication Sciences & Disorders, Faculty of Health Sciences)
A11	A Day in the Life of a Medical Resident	In this workshop, you will learn about the roles, responsibilities and lifestyles of medical residents. Residency is a stage of training following medical school, which prepares physicians for independent practice. Residents from various specialties will share information about their medical specialty and answer your questions.	Nafis Hossain MD Jonathan Hu MD Lauren Kolodzey MD Albert Vo MD (Schulich School of Medicine & Dentistry)

A12	Computer-Assisted Medical Interventions	<p>In this workshop you will learn about medical imaging modalities, such as ultrasound, Magnetic Resonance Imaging, and X-Ray Computed Tomography, and how they are applied in modern medicine. You will also learn about how computers and tracking system (think GPS for surgery) can be used to help doctors perform surgeries. In the virtual platform, you will learn how augmented and virtual reality systems can be used to help surgeons to perform surgery.</p>	<p>Daniel Allen Joeana Cambranis Romero Patrick Carnahan Elvis Chen PhD (Robarts Research Institute)</p>
A13	What makes a neighbourhood great?	<p>A great neighbourhood is a place where people can do all the things that they want and need to do. In this workshop you will learn about the social, physical and cultural aspects of neighbourhoods that affect our daily lives, with a special focus on older adults. We will discuss how older adults can be included and excluded from their neighbourhoods, often related to age, race and gender. You will learn about methods for doing research in neighbourhoods, such as GPS tracking, go-along interviews, and photo interviews, as well as methods for improving neighbourhoods for all residents. We will also discuss career paths that can lead to research and practice in neighbourhoods, such as occupational therapy and geography.</p>	<p>Carri Hand PhD Andrea Keber (School of Occupational Therapy, Faculty of Health Sciences)</p>
A14	Biomechanics and Engineering: Understanding joint injuries and repair	<p>In this workshop, you will learn how human joints, like the knee, are able to permit motion but maintain stability, and survive millions of loading cycles. Of course, some joints get injured. We will discuss the roles that engineers play to better understand how joints get damaged, and their contributions to innovations that help people get up and moving again. This will include a presentation and live demos from a research lab.</p>	<p>Ryan Willing PhD (Department of Mechanical & Materials Engineering)</p>
A15	Gross Anatomy: The key that unlocked the many hidden mysteries in human disease	<p>Join me as we take an interactive dive into understanding how gross anatomy has shaped and changed medicine.</p>	<p>Berk Rasheed (Department of Anatomy & Cell Biology, Schulich School of Medicine & Dentistry)</p>
A16	Explore the Innovative World of Medical Research: Designing new strategies to repair injured tissues	<p>Do you know how a biomedical research facility works? Delve into the world of research scholars as they explore new strategies for tissue engineering, drug delivery, and 3D bioprinting. Find out how upcoming research can be applied in modern medicine, where it aims to decrease hospital visits and accelerate the efficiency of tissue healing and regeneration. In this virtual platform, you will learn how scholars from diverse backgrounds (chemists, engineers, and molecular biologists) work together to provide unique solutions to current healthcare problems.</p>	<p>Aishik Charkraborty Cho-E Choi Arghya Paul PhD Yasmeen Shamiya Alap Zahid (Departments of Chemistry; Chemical & Biochemical Engineering; Biomedical Engineering)</p>