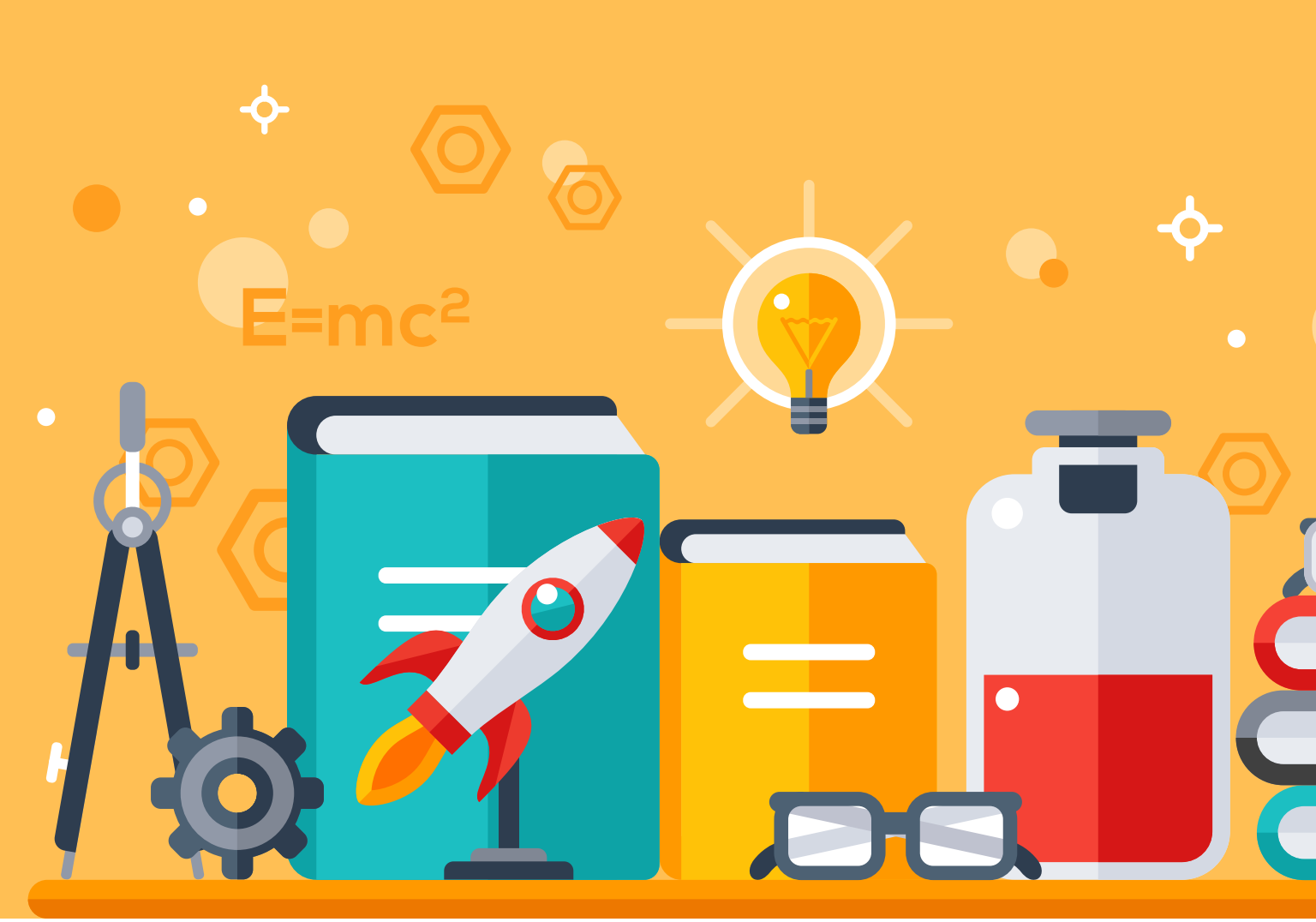


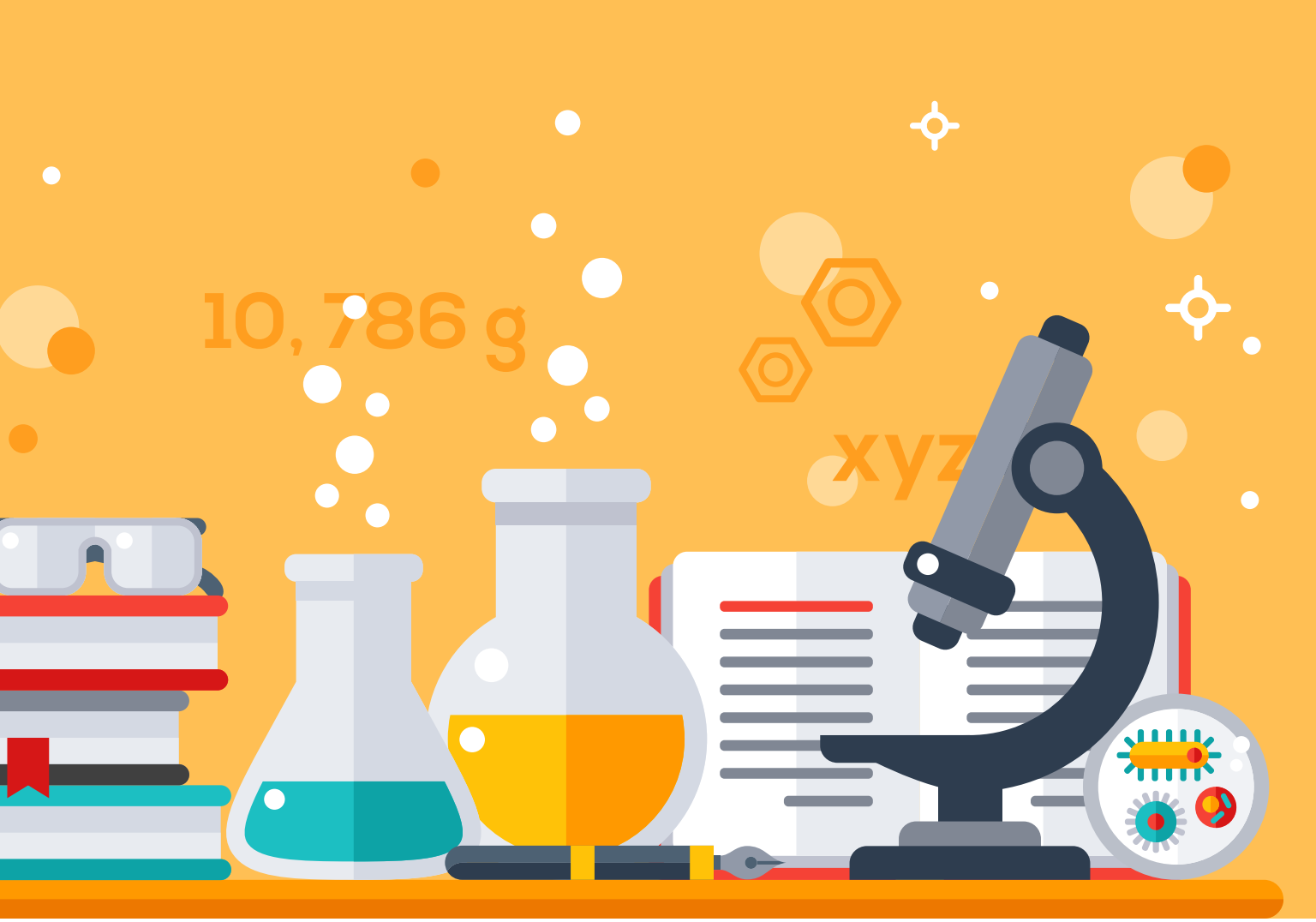
THE LIFE OF A SCIENTIST

Dr. Tara Klassen was destined to be a scientist working in healthcare. Her mother has degrees in science and education, and her father is a general practitioner, so it is not surprising that her interest was cultivated at an early age. “My dad was a doctor in a smaller community, and when I’d visit him, he would take me to the hospital when he was doing rounds. I loved going to see the nurses at the nursing station,” says Klassen. “They always took great care of me. I have very fond memories of being in the hospital, hearing the sounds, and seeing the people working. A life devoted to science and healthcare seemed preordained for me.”

Klassen, age 43, has been with Alberta Health Services (AHS) since 2020 as the Scientific Lead and Program Manager for the Evidence Decision Support Program (EDSP) and the Provincial Advisory Council on Surgical Innovation. This dual role sees her evaluating health technology for potential implementation in the Department of Surgery and the wider AHS network, perfectly aligning her interest in science and healthcare.

Born in Winnipeg but raised in Brandon, Manitoba, Klassen followed in her parent’s footsteps by attending Brandon University right out of high school. “I always knew I wanted to do something in medicine," says Klassen, "though I originally thought that meant being a veterinarian."

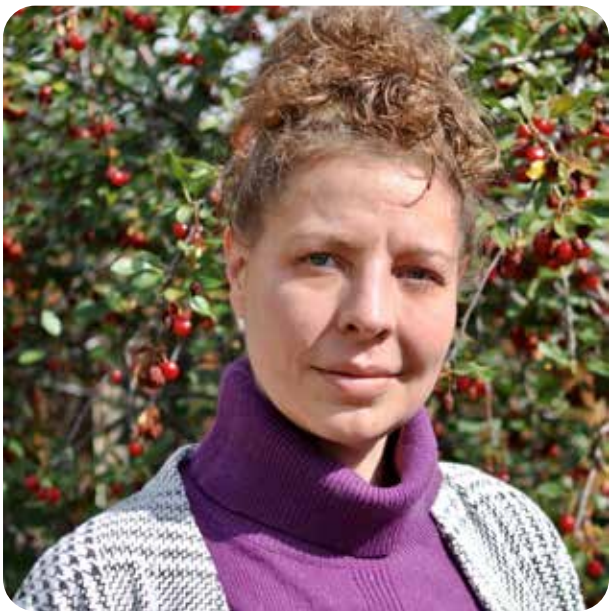
As an undergraduate student, Klassen had the opportunity to work as a research assistant and was teaching chemistry and biology labs by the time she graduated with a specialist degree in zoology. “I had my path planned out," says Klassen. "I even did my MCATs (medical college admission test) but



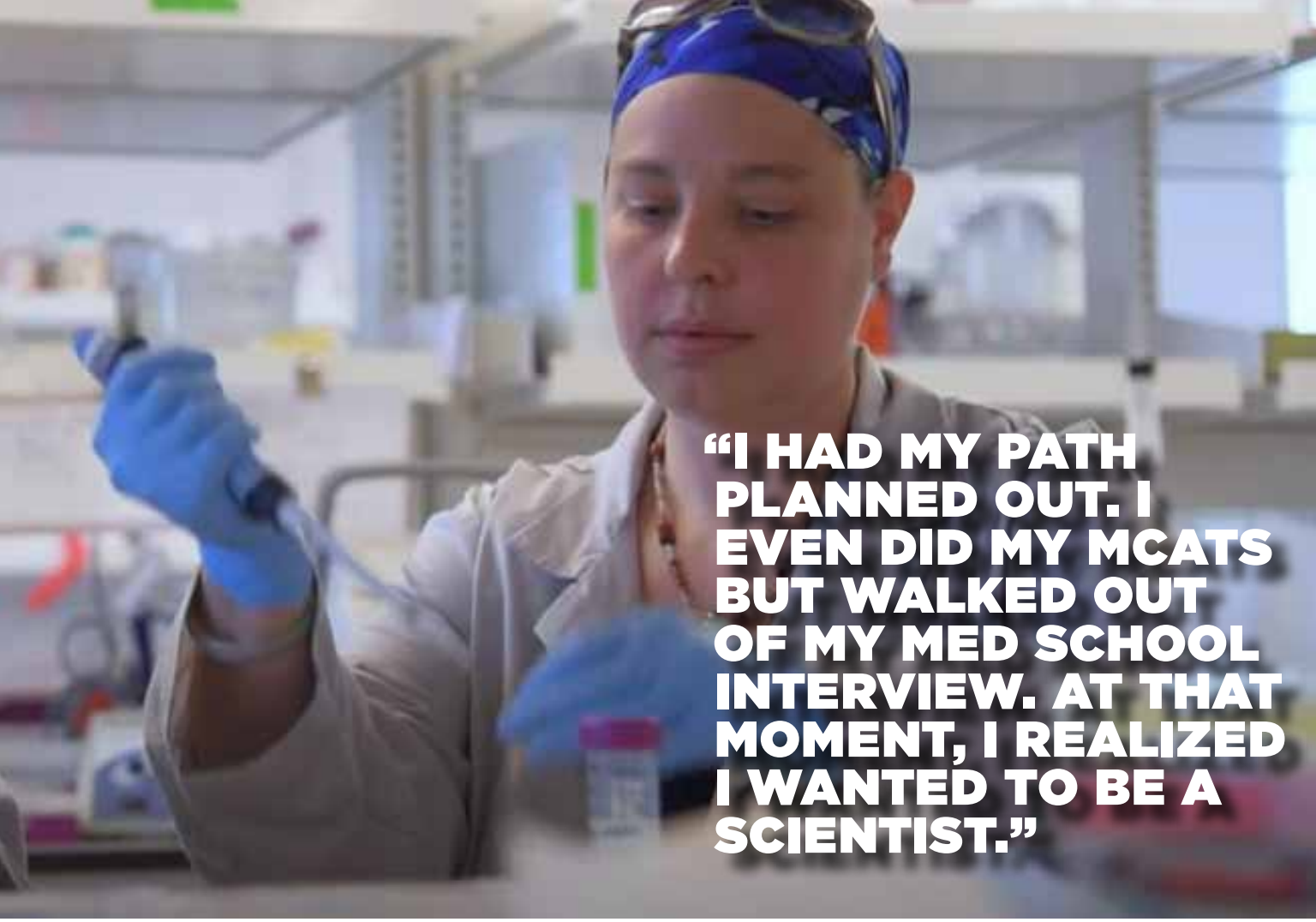
walked out of my med school interview. At that moment, I realized I wanted to be a scientist." She received a National Science and Engineering Research Council Postgraduate Scholarship to come to the University of Alberta, where she started working on a master's degree in biological sciences.

Klassen quickly fast-tracked from a master's into a PhD program working on ion channels, proteins responsible for electrical neuromuscular signalling, in jellyfish. Though she enjoyed this work, she felt that something was missing. "There was a disconnect," says Klassen. "I love animals. Obviously, I did a degree in zoology, but I was missing the patient care piece that really inspires me."

Klassen and her husband, Dr. Tim Chen, completed their PhDs within months of each other. Once done, they packed up and moved to Texas to complete postdoctoral fellowships at Baylor College of Medicine. "We worked for six years in the same lab and on the same project with back-to-back desks," says Klassen. "He's literally my partner in life and science." This



continued...



began Klassen’s transition into patient-directed care. Her work on ion channels in animals was applied to researching ion channel involvement in complex, uncontrolled epilepsy, which led to one of the most important projects of Klassen’s career.

Klassen and her husband were invited to partake in a project studying Sudden Unexpected Death in Epilepsy (SUDEP). “SUDEP cases are tragic. Outside of their epilepsy, you have these young adults that are very healthy,” says Klassen. “But, 30% of patients with uncontrolled epilepsy will die of SUDEP, and there seemed to be no reason or rationale. It is not seemingly caused by their seizure disorder. They just go to bed one night and don’t wake up.”

The research team was successful in identifying the genes involved in SUDEP events. “It was an important finding,” says Klassen. “Probably one of the most impactful scientific achievements of my career.” This meaningful work was highlighted in a 2010 New York Times piece called Unmasking Silent Killer in Epilepsy. “I’m happy we were able to provide a rationale and understanding of these tragic events,” says Klassen. “I hope it gave families some peace of mind knowing there was nothing they could have done.”

FUN FACT: Klassen’s lab at UBC was used to film the pilot for The Flash and a WWE movie featuring Canadian professional wrestler Edge (Adam Joseph Copeland).

After six years in Texas, Klassen returned to Canada, landing at the University of British Columbia (UBC) as an Assistant Professor of Pathophysiology for the Faculty of Pharmaceutical Sciences, overseeing curriculum and research.

Vancouver is known as Hollywood North, and Klassen had a front-row seat for film production occurring at the UBC campus. “At times, our entire lab was hired out for film production,” says Klassen. “Some of my summer students were even hired as extras. It was pretty cool to see explosions or recognize an actress.”

After five years in Vancouver, Klassen and her husband moved to Calgary to be closer to aging parents. “My husband and I really like Calgary,” says Klassen, “and it put us even closer to family in Manitoba.” Klassen found a perfect opportunity with the Department of Surgery, which brought her interests and experience together as the Scientific Lead and Program Manager for the Evidence Decision Support Program (EDSP) and the Provincial Advisory Council on Surgical Innovation.

Once a niche program within the Department of Surgery, the EDSP has evolved into a program that sits within the Department of Surgery Calgary Zone and the Surgery Strategic Clinical Network. “We are the only innovations-based program in AHS,” says Klassen. “We have strong connections to our frontline stakeholders and clinical caregivers, so it creates a new model for health technology assessment and management through the support we provide teams in making evidence-based decisions.”

The Provincial Advisory Council on Surgical Innovation ensures the EDSP’s research and recommendations are shared broadly with the AHS community. “One group or stakeholder may have a question or an idea about a health product or drug, but other groups may also be interested,” says Klassen. “The advisory council ensures that everyone has this information.”

As the newly minted Provincial Program Lead of Surgical Innovation, Klassen regularly works with a variety of surgical specialties, including those outside of the Department of Surgery, such as cardiology and obstetrics and gynecology. She also works with anesthesiology and their pain medicine partners. Klassen’s portfolio spans every site and zone across Alberta, and she has an innate ability to connect people and ideas. In 2022, she was awarded the Cumming School of Medicine’s (CSM) Service to People and Partners Individual Award, recognizing her outstanding personal contributions to the CSM by an individual employed by AHS, their subsidiaries, or partners.

“It’s so invigorating to find a role and place that fits the pace of how I think and work. I really appreciate the opportunity to impact patient care, even without being the clinical hands-on provider,” says Klassen. “I really enjoy what I do. I’ve taken a different journey than I expected, but every step has prepared me for what I’m doing today, and I couldn’t love it more.”

To learn more about the EDSP and its work, visit https://cumming.ucalgary.ca/departments/surgery/programs/evidence-decision-support-program or https://www.albertahealthservices.ca/scns/edsp.aspx.

By Tammie Roy

"WE ARE THE ONLY INNOVATIONS-BASED PROGRAM IN AHS. WE (THE EDSP) HAVE STRONG CONNECTIONS TO OUR FRONTLINE STAKEHOLDERS AND CLINICAL CAREGIVERS, SO IT CREATES A NEW MODEL FOR HEALTH TECHNOLOGY ASSESSMENT AND MANAGEMENT THROUGH THE SUPPORT WE PROVIDE TEAMS IN MAKING EVIDENCE-BASED DECISIONS.”