

CUMMING SCHOOL OF MEDICINE

How will Calgary  
become a world  
leader in the most  
exciting fields  
of medicine?



UNIVERSITY OF  
CALGARY

The image features a solid red background. In the top right corner, there are several curved, overlapping lines in shades of yellow, orange, and red. Similarly, in the bottom left corner, there are curved, overlapping lines in shades of yellow, orange, and red, mirroring the design in the top right.

# Together.

Together, we will move from  
treating diseases to treating people  
and creating healthy communities.

*Advances in health are driven by  
investments in health research.*



*For half a century, the University of Calgary has created and grown a community of thought leaders and visionaries. This is the genesis of **Energize: The Campaign for Eyes High**, the drive to charge our campus community, our city and beyond for the next 50 years—**unleashing the power of the Cumming School of Medicine to energize the future of health.** And this power can only be unleashed together.*



## The University of Calgary's Cumming School of Medicine aspires to be a leader in Precision Medicine in Canada.

Precision Medicine means instead of one-size-fits-all treatments, **we research, prevent disease and treat individuals based on their unique characteristics.** Individual factors like genetics, lifestyle and diet will determine a personalized approach to your health. Thanks to the mapping of the human genome, the path to treating individuals with far greater success—and even completely ending the ravages of some diseases—is clear.

Take cancer, for example, one of society's most devastating diseases due to both its severity and punishing treatments. Research has revealed that many cancers have their own genomic signature. This has led to the development of targeted cancer therapies that have achieved remarkable outcomes.

It's these kinds of **bold advances in health research** that the Cumming School of Medicine is delivering, thanks to a combination of four factors:

### People. Research. Partnerships. You.

Our People,  
our Rising Stars

Research  
Platforms for  
Health Innovation



Partnering for  
Healthy Communities

*“Attracting the world’s best researchers to Alberta is about **inspiring** and **challenging** them to make significant medical advances to benefit Alberta and the world.”*

— Geoff Cumming,  
donor and community leader



# Leaders are tackling the greatest challenges in medicine here in Calgary.

Medicine is about people, and the most advanced medicine takes the smartest people. Philanthropy has helped attract the kinds of people making breakthroughs right now. Leaders in their fields are following a **bold vision to create the future of health**. We are building the next generation of leaders here and around the world. More than 4,400 researchers, clinicians, educators and staff are engaged, responsive and committed to serving you and our communities, locally and globally.

## Rising stars *Recruiting the best and brightest health research innovators*

Competition for top talent is challenging. Attracting the brightest minds requires an environment that spurs **innovation, discovery and collaboration**. We are attracting the best to Calgary—vibrant and visionary, top medical and post-graduate students, and future research leaders.

These **rising stars** will energize our areas of excellence: brain and mental health, cardiovascular and chronic diseases, among others.

## Star students *Educating the next generation of health leaders and visionaries*

Students have the opportunity to be part of something incredible at the Cumming School of Medicine. From our Bachelor of Health Sciences program to our unique three-year Undergraduate Medical Education program, to doctoral studies and postgraduate research opportunities, these all pave the way for students to become future leaders in health sciences. Our learners are **uniquely prepared** to take a strong role in creating the future of health.

## Meet some of our people, our rising stars.

**Photo opposite:** Exchange students from China are some of the exciting researchers making their mark in Calgary and around the world.



*“Big dreams inspire people to enter medicine and health research. Making them come true brings them to the Cumming School of Medicine.”*

— Dr. Glenda MacQueen,  
Vice-Dean, Cumming School of Medicine



OUR PEOPLE,  
OUR RISING STARS





“Continuing to invest in researchers results in improved health for millions around the world.”

— Dr. Michael Hill, stroke neurologist,  
Cumming School of Medicine



OUR PEOPLE,  
OUR RISING STARS

## Cumming School of Medicine pioneers great ESCAPE for stroke patients.

A recent clinical trial led by the Cumming School of Medicine is one of five studies resulting in a change in stroke care. The breakthrough has the potential to improve the lives of hundreds of thousands of people worldwide who suffer strokes each year. The ESCAPE study involved removing a blood clot from a patient using guided imaging and reduces the mortality rate by 50 per cent. Instead of suffering from a major neurological disability, patients are able to resume their lives.

Photo: Dr. Michael Hill examines a stroke survivor.

Together, we have doubled the likelihood for stroke victims to enjoy a better recovery.



“

*I was inspired by the entrepreneurial spirit at the University of Calgary and how it can be used to transform the world.”*

— **Dr. Breanne Everett**, MBA and plastic and reconstructive surgery resident, University of Calgary

## Using innovation to prevent disease and save lives.

As a surgical resident, Dr. Breanne Everett was troubled by the number of patients who had lost a limb to diabetes. The disease can cause diabetic peripheral neuropathy—decreased sensation in the feet—and lead to nerve pain, infection and eventually amputation. So she started a company called Orpyx that developed a pressure-sensing insole that acts as a self-monitoring device for people with diabetes, allowing them to sense feeling in their feet. At the same time she completed her MBA at the University of Calgary’s Haskayne School of Business – an example of how innovation and fresh thinking is creating the future of health.

Photo: Dr. Breanne Everett, CEO, Orpyx Medical Technologies Inc.

Together, we will  
blaze new paths  
bridging science and  
entrepreneurship.





“*The opportunities for us at the Cumming School of Medicine allowed us to continue our research in an environment that fosters collaboration and excellence.*”

— **Dr. Jennifer Chan**, neuropathologist, Cumming School of Medicine

## Stepping up to the Cumming School of Medicine from Harvard.

There are many reasons why rising stars are finding their way to Calgary. For husband and wife clinician-scientists Drs. Eric Smith and Jennifer Chan, it was the school's international reputation that convinced them to trade Harvard for the Cumming School of Medicine. Dr. Chan is studying the biology of brain tumours as part of a national effort to improve the treatment of child and adolescent cancers. Dr. Smith's research focuses on the intellectual and behavioural conditions arising in patients with vascular dementia, with the hopes of developing new treatments and therapies.

Photo: Drs. Jennifer Chan and Eric Smith.

Together, we can  
bring the best  
and brightest  
leaders to Calgary.







# The foundation for your future health is research.

The best health outcomes demand having the right people in the right environment; one where active and curious students, researchers, creative thinkers and innovative problem-solvers work together. Breakthroughs occur when our efforts span the continuum — from research in the lab to the application of new methods of treatment or prevention in the community.

At the Cumming School of Medicine, philanthropy has been the catalyst for significant advances in key areas of research. To serve the needs of Calgarians and be a leader on the world stage, our focus is to expand and develop vital Precision Medicine platforms.

The health of our community depends on philanthropic investment in tools for research innovation:

- Transforming health through research centres of excellence: Centres in Genomics, Clinical Research and the Microbiome will host leaders whose work will uncover health risks, understand chronic disease and explore safe and targeted treatments.

- Technologies: New tools will advance our understanding and treatment of neurological disorders, chronic illness and other diseases.
- Bioinformatics: Combining computer science, statistics, mathematics and engineering to analyze, interpret and use vast amounts of information to improve health.




*“Advances in health are driven by investments in health research. Support for new ideas will provide answers to some of society’s most pressing health problems, and improve health outcomes for our community.”*

— **Dr. Jon Meddings,**  
Dean, Cumming School of Medicine

**Photo opposite:** Researchers at the Cumming School of Medicine are transforming our understanding of the most pressing health problems facing society.



A woman with dark hair tied back, wearing a black top, is smiling and holding a young child with light brown hair and blue eyes. The child is wearing a grey vest over a white shirt. They are in a brightly lit indoor setting, possibly a hallway or a room with large windows. The background is slightly blurred, showing architectural details like columns and doors.

Together, we  
will learn how  
your genes can  
influence your  
treatment.

### When we discovered why Enzo stopped breathing, Enzo's mom could stop holding her breath.

Enzo O'Neill has a rare genetic disorder that stops his breathing several times per week. Before he was two, he had undergone hundreds of painfully invasive medical tests and still there was no diagnosis. So Enzo was enrolled in a Canadian research study using rapid DNA sequencing and analysis at the Cumming School of Medicine's Alberta Children's Hospital Research Institute. His genes were tested against every human genetic disorder known to science—all 4,800 of them—with one test. This identified the problem and opened the door to new treatment options for Enzo. As a result, Enzo's mom could start breathing again too.

“*We are incredibly grateful to people in our community who invest in innovative research initiatives. They act as catalysts in helping to move medicine forward.*”

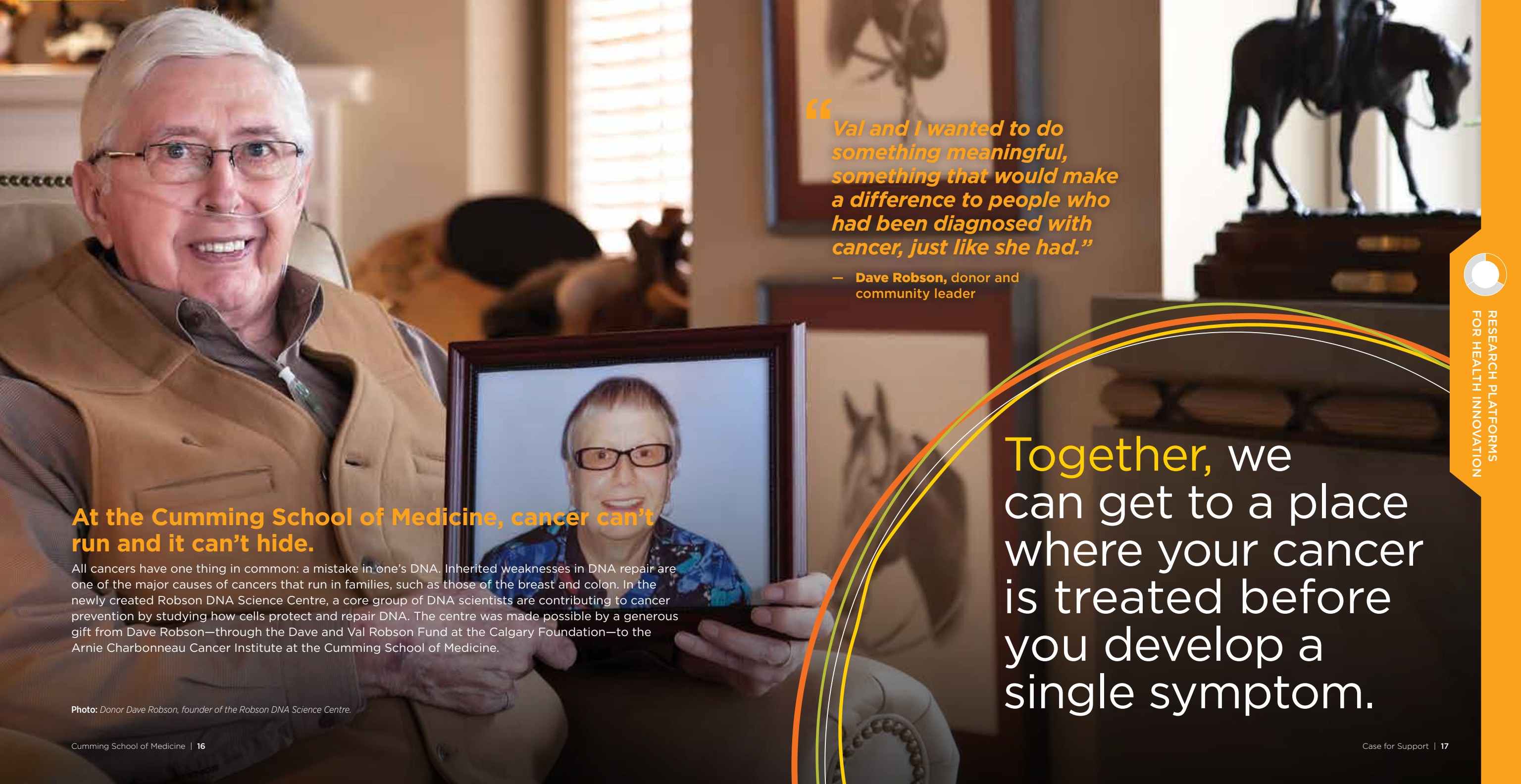
— **Saifa Koonar**, President and CEO,  
Alberta Children's Hospital Foundation

Photo: Enzo O'Neill and his mother, Rachael.



RESEARCH PLATFORMS  
FOR HEALTH INNOVATION





**At the Cumming School of Medicine, cancer can't run and it can't hide.**

All cancers have one thing in common: a mistake in one's DNA. Inherited weaknesses in DNA repair are one of the major causes of cancers that run in families, such as those of the breast and colon. In the newly created Robson DNA Science Centre, a core group of DNA scientists are contributing to cancer prevention by studying how cells protect and repair DNA. The centre was made possible by a generous gift from Dave Robson—through the Dave and Val Robson Fund at the Calgary Foundation—to the Arnie Charbonneau Cancer Institute at the Cumming School of Medicine.

*Photo: Donor Dave Robson, founder of the Robson DNA Science Centre.*

**“Val and I wanted to do something meaningful, something that would make a difference to people who had been diagnosed with cancer, just like she had.”**

— **Dave Robson**, donor and community leader

**Together, we can get to a place where your cancer is treated before you develop a single symptom.**



RESEARCH PLATFORMS  
FOR HEALTH INNOVATION



“*Being in Calgary and knowing I have access to one of the world’s leading centres for IBD research and treatment gives me hope.*”

— **Mark Rievaj**, patient of Dr. Gil Kaplan

## **We discovered an environmental health issue that impacts thousands.**

Cumming School of Medicine researchers were first to make a connection between the air we breathe and Inflammatory Bowel Disease (IBD), a debilitating and incurable disease of the gastrointestinal tract that affects 25,000 Albertans. Studies show increased numbers of people with IBD in industrialized countries, suggesting air pollution may be a cause. Researchers believe chronic inflammation plays a key role in conditions such as IBD, rheumatoid arthritis and multiple sclerosis. Understanding the relationship between inflammation and environmental factors may be key to preventing disease. As we seek to prevent inflammatory diseases, the answers may be right outside our door.

*Photo: Dr. Gil Kaplan, epidemiologist and gastroenterologist.*

**Together, we will create  
a healthier world.**





## We believe in creating a future of health that includes everyone.

While society is made up of individuals, we exist together as a global community. We are part of a community where many struggle to achieve good health. We are committed to listening, learning and being respectful as we find solutions together. Everything we do at the Cumming School of Medicine has impact in the community — be it local or global.

### Compassionate communities

- The Cumming School of Medicine is tackling societal health issues, like homelessness and aging. Reducing gaps in health reduces unnecessary suffering, improves societal well-being, and yields huge health care savings.
- Exploring refugee health support, palliative care for vulnerable populations and collaborating on care for those with major health challenges will lead to a healthier community for all.

### Meeting the needs of specific communities

- At the Cumming School of Medicine, we partner with Alberta's Indigenous people to close the health services gap and improve wellness in Indigenous communities.
- Partnering with communities is helping to promote cultural safety and knowledge of policies related to health, and uses research to advocate for policy changes.

**Photo opposite:** The Cumming School of Medicine works with Indigenous communities in Southern Alberta, including kidney prevention clinics in the Kainai First Nation. Together we are strengthening our commitment to Indigenous health, grounded in principles of social accountability, respect and equitable partnerships.



*“Whether through our global health programs or the work being done locally, the Cumming School of Medicine is moving beyond treating illness to promoting wellness.”*

— **Dr. Jennifer Hatfield,**  
Associate Dean, Strategic Partnerships  
and Community Engagement





Together, we will  
serve the needs of  
our communities.

### Partnering with the community to transform health.

Juvenile arthritis affects approximately 20,000 children in Canada, limiting their ability to participate in activities like school and sports. The condition is characterized by painful, swollen joints, impaired mobility and chronic fatigue — and little is known about how children cope with these stresses. Expressions of Arthritis is a joint program between the McCaig Institute for Bone and Joint Health and the Alberta Children's Hospital Research Institute, and offers insight into how art therapy can increase quality of life. Workshops pair children with the condition with artists from around the world. It's one of the ways the Cumming School of Medicine is partnering with our communities to foster change and hope.

*Photo: Participants of the Expressions of Arthritis program.*





“*Local health providers and communities themselves now have the tools they need to manage their own challenges; the impact on health for mothers, babies and young children has been dramatic.*”

— **Dr. Jenn Brenner**, clinical associate professor,  
Cumming School of Medicine

**Together,** we will  
create a bright future  
of health for all.

### Working with African colleagues and community members to save lives.

Dr. Jenn Brenner has led a university partnership called Healthy Child Uganda since 2003. The Calgary pediatrician and clinical associate professor at the Cumming School of Medicine works together with colleagues from Canada and Uganda to train local health providers, health managers and volunteer village ambassadors in rural southwestern Uganda. Projects target key local health challenges such as malaria, malnutrition, maternal death and deaths which take a terrible toll on women and young children. Together, Dr. Brenner's team, local leaders and community members are working to improve the lives of mothers and children in East Africa.

Photo: Dr. Jenn Brenner, clinical associate professor, with a mother and child in Uganda.



As part of *Energize: The Campaign for Eyes High*, the University of Calgary will raise \$1.3 billion for our campus community. We anticipate that support of the Cumming School of Medicine will result in \$700 million of investment in health research.

**\$350 million**

**Research Platforms for Health Innovation**  
Prevention | Diagnosis | Treatment

**YOU**

**\$250 million**

**Our People, our Rising Stars**  
Innovation | Discovery | Education

**\$100 million**

**Partnering for Healthy Communities**  
Listening | Impact | Sustainability

# Together, we will energize the future of your health.

Our people, platforms and partnerships ARE that energy. Your support will fuel our potential to achieve excellence.

**Our People, our Rising Stars – \$250 million**

Recruiting leading researchers and clinicians will add some of the brightest minds in medical research to our team.

- Educators, clinicians and researchers are a critical component of our ability to advance health outcomes. Philanthropic support enhances our ability to attract and retain these visionaries.
- Dedicated support for start-up and research endeavours furthers discoveries and enables entrepreneurial pursuits.
- Scholarships, bursaries and awards fund tomorrow’s medical and research leaders today.

**Research Platforms for Health Innovation – \$350 million**

We are on the cusp of countless pioneering medical discoveries. With your help, key research platforms will foster collaboration and drive innovation. Philanthropic investment will accelerate the development of solutions to the most complex health issues:

- Families will be given solutions to rare childhood diseases as we increase our efforts in **genomics**.
- **Imaging** technology and tools will help us better understand dementia, arthritis and cardiac diseases.

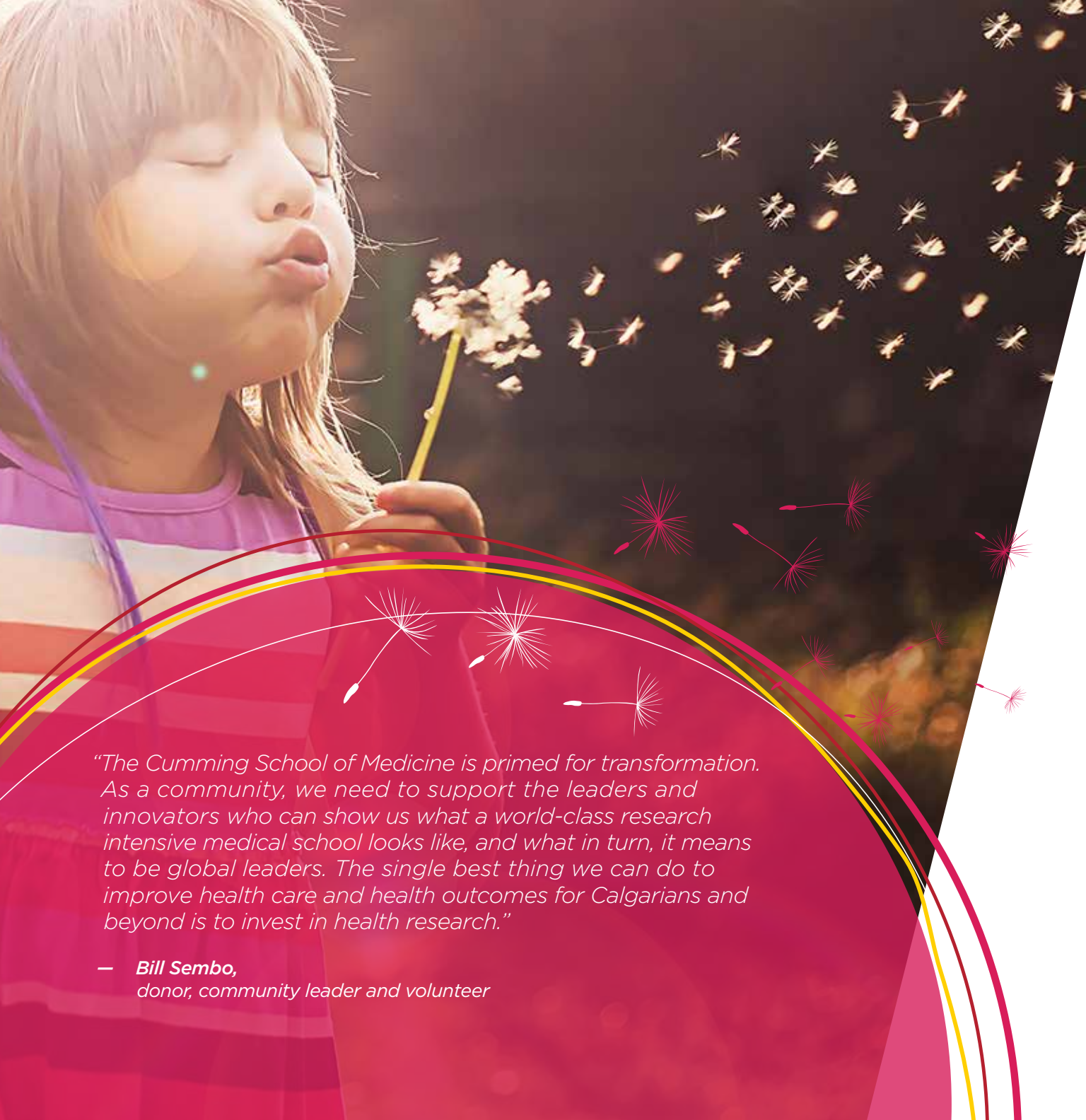
- Working with our Indigenous and underserved populations, we will create **precision public health** solutions for their unique needs.
- Development of the **Microbiome Centre and Germ-Free Facility** will enable the prevention and treatment of inflammatory diseases like arthritis, IBD and asthma.
- New cancer treatments will be brought to the community more rapidly as **clinical trials** are increased.
- **Bioinformatics** and the use of “big data” will inform new practices of prevention and treatment, and provide greater information about our health.

**Partnering for Healthy Communities – \$100 million**

Ensuring the best in health for you and others requires that we extend our reach by partnering with the community. Philanthropy will:

- Create health solutions for disadvantaged populations.
- Elevate health outcomes in global communities.
- Enhance research translation to address societal health issues and needs.





*"The Cumming School of Medicine is primed for transformation. As a community, we need to support the leaders and innovators who can show us what a world-class research intensive medical school looks like, and what in turn, it means to be global leaders. The single best thing we can do to improve health care and health outcomes for Calgarians and beyond is to invest in health research."*

— **Bill Sembo,**  
donor, community leader and volunteer



# Together you can take your place among the philanthropic leaders of your time.

Yes, you. People like you will be the catalyst to making the Cumming School of Medicine's vision a reality. You are as vital to the future of health as our students, researchers, clinicians and educators.



## Join us in creating the future of health

**You** will help us attract the rising stars and emerging leaders who will explore new frontiers and deliver real solutions in prevention, diagnosis and treatment.

**You** will help us educate future generations of students, researchers, and clinicians who will take up the cause and boldly push into exciting new fields of discovery.

**You** will help us continue the vital research that has already benefited millions of patients, and could benefit billions more.

**You** will elevate Calgary in prominence as a world leader in the development of treatments that will prevent some of the most pressing health problems facing society.



This is your opportunity to spark meaningful change in the world. Because great cities need great universities. And great universities are built on great philanthropy.

Together we will create the future of health.





Help us take our place as a  
global leader in medicine.

Join us.

**Elizabeth Cannon**  
President and Vice-Chancellor  
University of Calgary  
403.220.5617  
[president@ucalgary.ca](mailto:president@ucalgary.ca)

**Nuvyn Peters**  
Vice-President, Development  
and Alumni Engagement  
University of Calgary  
403.220.6949  
[npeters@ucalgary.ca](mailto:npeters@ucalgary.ca)

**Dr. Jon Meddings**  
Dean, Cumming School of Medicine  
University of Calgary  
403.220.6842  
[meddings@ucalgary.ca](mailto:meddings@ucalgary.ca)

University of Calgary  
2500 University Drive NW, Calgary, AB T2N 1N4, CANADA  
[ucalgary.ca/campaign](http://ucalgary.ca/campaign)