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#### **WHY SHAPE?**

Because at the University of Alberta, we shape futures through top-tier education and research. We shape ideas through impressive innovations and renowned discoveries. And we shape trust through the relationships and experiences we build every day. Each person's contribution to the University of Alberta gives shape to what we offer the world, and how we offer it.

We want this plan to shape the work we all do

— the work that will shape the future of the
university for the next 10 years.



We have a role as educators of Indigenous students, as researchers with and for communities, as advocates, and as partners with much to learn.

And we are committed to continuing the journey and taking responsibility for our historical role in sustaining barriers to Indigenous communities' success. We acknowledge that universities have played a role in Canada's colonial history, including through research and teaching that devalued Indigenous worldviews, knowledge and traditions. And we are committed to addressing the ongoing impacts of this legacy and to holding ourselves accountable for doing so.

#### **SHAPE**

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HOW THE FUTURE TAKES SHAPE

## MESSAGE FROM THE PRESIDENT AND VICE-CHANCELLOR

# Building on a proud 115-year history, *Shape: The University Strategic Plan 2023-2033* outlines a bold vision for the University of Alberta's future.

Rooted in the university's deep commitment to equity, diversity and inclusion, we envision a university where everyone feels included and valued. Building on our work to advance truth and reconciliation, we envision a university that incorporates and honours Indigenous identities, languages, cultures and worldviews across the university.

Committed to our students, we will deliver innovative, flexible learning and work-integrated experiences that prepare students as global citizens. Leveraging our new college structure, we will develop and deliver programs that transcend traditional disciplinary boundaries. Applying the latest learning technologies, we will strategically integrate hybrid and online delivery to support student success, access and flexibility. We will welcome and engage a growing number of international students, more than half of whom remain in Alberta upon graduating, contributing to the growth and diversity of Alberta's economy and society. Recognizing the projected demographic growth in Alberta, we will grow from 44,000 students today to over 50,000 students by 2026 and over 60,000 by 2030 — increasing our enrolment by over 35 per cent in the next seven years.

Building on a long history of excellence in research, we have responded to community feedback asking us to place more priority on our areas of greatest research strength. In a first for the University of Alberta, we identify our three priority areas of global research prominence: energy solutions, artificial intelligence, and health and well-being. We have also identified three areas where we have the potential for global impact in the next 10

years: Indigenous research, agriculture and food, and reducing social disparities. We recognize that global challenges require global collaboration and will continue to enhance our partnerships with international researchers and institutions. With a sharp focus on increasing our annual research funding to over \$650 million by 2028, we will leverage the college structure to foster creative collaboration across disciplines and target large-scale, multidisciplinary research initiatives, including a focus on fundamental research.

As we grow our enrolment by over 35 per cent in the next seven years, we will invest in a similar level of strategic growth in our faculty complement, deepening our research impact and depth and ensuring an outstanding learning experience for all our students. With this ambitious level of growth in research and teaching strength, we aim to rank among the top 50 research universities worldwide and among the top three in Canada by 2033.

As the province's first university, we recognize our unique position and profound influence on Alberta's development. We will continue to play a vital role in the social and cultural lives of our communities, convening diverse individuals and communities to pursue shared, positive outcomes and improve the lives of all Albertans. Building on our national and global links, we will connect Alberta to all of Canada and the broader world. We will build stronger ties between our research and the business community, supporting commercialization and entrepreneurship to help translate our innovations into real-world impact.



Our plan reflects the collective efforts and thoughtful feedback of innumerable faculty, staff and students along with a broad cross-section of alumni, community, industry and government partners. I am most grateful to everyone for their engagement and particularly grateful to the members of the Steering Committee who worked tirelessly to bring this plan forward.

Coming together as one university, our north star is *impact* — in Alberta, Canada and the world. We will lead with purpose as never before.

BILL FLANAGAN
President and Vice-Chancellor

#### USP STEERING COMMITTEE MEMBERS

Verna Yiu, Chair

Aminah Robinson Fayek

Andy Knight

Carrie Smith

Cen Huang

Cerrinaang

Greta Cummings

Christian Fotang

Hanne Ostergaard

Heather Bruce

Hongbo Zeng

Janmejay Rao

Joe Doucet

Jessica Kolopenuk

Jillian Pratt

Matina Kalcounis-Rueppell

Randa Kachkar

Demetres Tryphonopoulos Sara Dorow

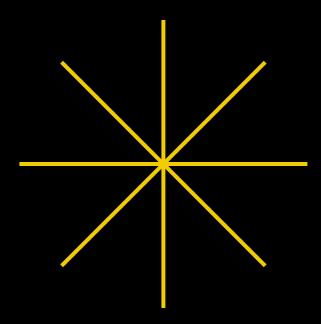
Sydney Tancowny

Todd Gilchrist

Valentina Kozlova

Wayne Clark





# S IMPACT

Everything we do, every choice we make, every initiative we undertake must fulfil our purpose and have a positive impact on our students and staff, our communities, and the communities we serve here in Alberta and around the world.

The following plan sets out a comprehensive vision for the University of Alberta's next decade. It is anchored in the three core areas of our mandate:

EDUCATION, RESEARCH AND COMMUNITY ENGAGEMENT.

Inspired by our long-standing mission to uplift the whole people, the University of Alberta will be distinguished in 2033 for its power to improve lives and communities in Alberta, in Canada and around the world. We will be at the forefront of educating a growing province with global ambitions.

#### AND THAT'S WHAT LEADING WITH PURPOSE MEANS TO US:

educating, researching and engaging in deliberate, purposeful ways — in order to make a lasting, positive difference.

We will continue to be a university with global reach — one that's a magnet for ambitious students, expert staff and talented faculty who are leaders in their fields. We will effectively leverage that reach — igniting all corners of our university, our alumni and our partners to tackle the complex social, economic and environmental challenges facing us all.

We will galvanize world-leading expertise in our areas of excellence. And we will be recognized globally, ranked among the top three universities in Canada and top 50 in the world.

Never being satisfied with the "now," we will be known for always seeking, always challenging, always searching for solutions that make our world healthier, safer, stronger and more just. The knowledge our university builds and shares will remain guided by its dedication to truth.

We will be internationally recognized as a university of change makers, community builders and world shapers — one that prepares creative, collaborative and confident global citizens who aspire to make their mark on the world.

## Ranked #7 in the world for impact,

based on 2023 Times Higher Education Impact Rankings assessing universities against the United Nations Sustainable Development Goals Research at the U of A saved Alberta's canola industry, today worth

#### \$20 billion

to Canada's economy

foundation for Alberta's oil and gas industry — and now, for emergent sectors like environmental reclamation, energy transition, Al and machine learning

U of A discoveries are the

#### 2020 Nobel Prize

awarded to
Dr. Michael Houghton
for the discovery of the
hepatitis C virus

More than

44,000

students from

156 different

countries

# MOMENTS OF IMPACT

Programs like
Walls to Bridges and
Humanities 101 bring higher
learning to correctional and
shelter settings, building
community and learning
together

## Ranked #2 in Canada

for (based on US News Global University AI rankings), driving breakthroughs in wildfire prediction, cancer detection, decision-making and more

More than

300,000

alumni in

140 different countries

Collectively our alumni have founded more than

70,000

organizations globally 130+

active spinoff companies

Total economic impact of nearly

\$19.4 billion

in 2021/22

# ТНЕ

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# In recent years, the University of Alberta has undertaken a bold evolution, including the development of a new academic structure. We stand ready for the future.

Over the next 10 years, we will leverage our new structure and align our resources to achieve deeper and more transformational impacts across all areas of our university's mission. Extensive engagement with our community has informed this strategic plan.

## Many clear expectations and aspirations emerged from their valuable input, including that we:

- Leverage the rapid technological progress affecting teaching, learning and research
- Work to be and remain sustainable amid climate change and other global instability
- Build on our strengths to foster exceptional education
- Become more innovative, more focused and more responsive to the communities we serve

- Focus more directly on our strongest areas of research excellence
- Expand our enrolment to meet the needs of a growing province
- Continue to deepen and live out our commitments to indigenization
- Move forward as one university, with a genuine commitment to equity, diversity and inclusion

# FOULTY DINERSHA & INCTRION INDIGENIZATION & OKO 100 INVINITY **RESEARCH** OUR **PEOPLE ENGAGEMENT EDUCATION** SARETY. SUSTAINABILITY. CREATIVITY

# PEOPLE ARE AT THE HEART OF WHAT WE DO

Our strategic plan is grounded in people. Our talented faculty, staff and students are the foundation for our university's past achievements and our future ambitions.

We must therefore take deliberate steps to support our people and create a culture where everyone can achieve their full potential.

#### This means being an institution where:

- Faculty, staff and students want to be where they can develop professionally and personally and access the support they need to succeed
- Many different perspectives are valued and integrated into decision-making
- The safety, health, well-being and flourishing of faculty, staff and students underpin the implementation of this strategic plan — in every initiative of every size

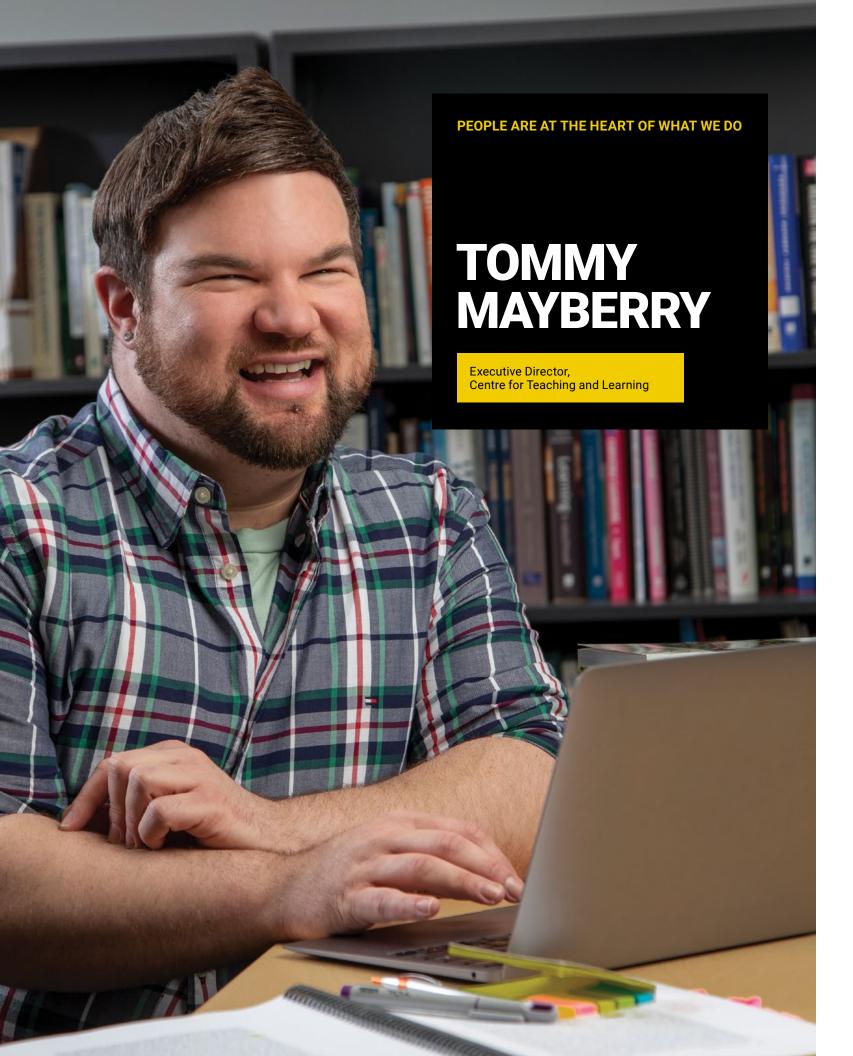
# DELIBERATE, PURPOSEFUL ACTION ON THREE FRONTS

Our strategic plan calls for action across the three core aspects of our mandate: education, research and community engagement.

Each aspect is pursued purposefully to generate more transformational impacts for students, communities, alumni and partners.

- EDUCATION WITH PURPOSE Delivering innovative, flexible learning and experiences that prepare students as global citizens who make impacts on the world
- RESEARCH WITH PURPOSE Reinforcing and enhancing our research, innovation and creative activities to make impacts that solve the complex challenges facing the world
- responsibility as a leader and convenor to help shape and positively impact communities in Alberta, in Canada and worldwide





#### **TOMMY'S STORY**



Tommy Mayberry, the executive director of the Centre for Teaching and Learning, often says in their work and leadership that every single job at the U of A is in direct service of our students and their total U of A experience – academically, personally and professionally.

"Our students chose us: chose to study here with us and to live, learn, work, play and grow here with us at the U of A. How are we honouring and sustaining our students (and ourselves) in our ever-changing world?"

When CTL began at the University of Alberta in the 1980s, it was the very first teaching centre in Canada, imagined into existence by U of A faculty members committed to student learning and success. It continues to partner with instructors toward meaningful learning experiences for students by inspiring, empowering, connecting, and shaping engaged teaching. Mayberry's leadership of the centre also does this by following author, theorist, educator and social critic bell hooks' call to "imagine ways that the teaching and learning experience could be different," which requires "individuals willing to take risks.

"I take risks every day in my work and leadership, often by just being who and how I am in my queer and transfeminine body as an academic drag queen. But, I also take risks together with our students and with our instructors to transform, to shape, teaching and learning experiences from the inside based on and celebrating the diversity of lived experiences that make up our U of A teaching and learning community."

Much of Mayberry's work with the CTL advances the teaching and learning community in reimagining pedagogies by centring



# We are offering to the world new and next generations of leaders and change-makers.

students' voices. Through sharing, demonstrating, exploring and embodying the plurality of approaches to university teaching, Mayberry's goal is to enhance our pedagogies as well as our teaching and learning environments across our institution.

"As the U of A teaching and learning community, we are offering to the world new and next generations of leaders and change-makers. This is our entire goal and purpose as a university. We owe it to our students to bravely shape the academy to be a place where, as bell hooks says, cultural diversity informs every aspect of our teaching and learning — because our students owe it not just to themselves but to their futures and to the future of the world."

# LIVING UP TO OUR CORE COMMITMENTS

As we realize this strategic plan, we will embed the following key core commitments in everything we do:

#### INDIGENIZATION AND DECOLONIZATION

We incorporate Indigenous identities, languages, cultures and worldviews across the university. This includes working to dismantle systemic barriers and celebrating the diversity, strength, complexity, resilience and beauty of Indigenous Peoples, cultures, languages and knowledge systems. Braiding Past, Present and Future: University of Alberta Indigenous Strategic Plan is a crucial foundation for our next decade.

#### **EQUITY, DIVERSITY AND INCLUSION**

We work to achieve a more diverse, equitable, accessible and inclusive environment for all who work, learn and live within our community. We value academic freedom and welcome and celebrate a diversity of perspectives and experiences.

#### **SAFETY**

We are committed to our people's physical, psychological and cultural safety, and to providing a safe and healthy work and study environment that enables high-quality education and research.

#### **SUSTAINABILITY**

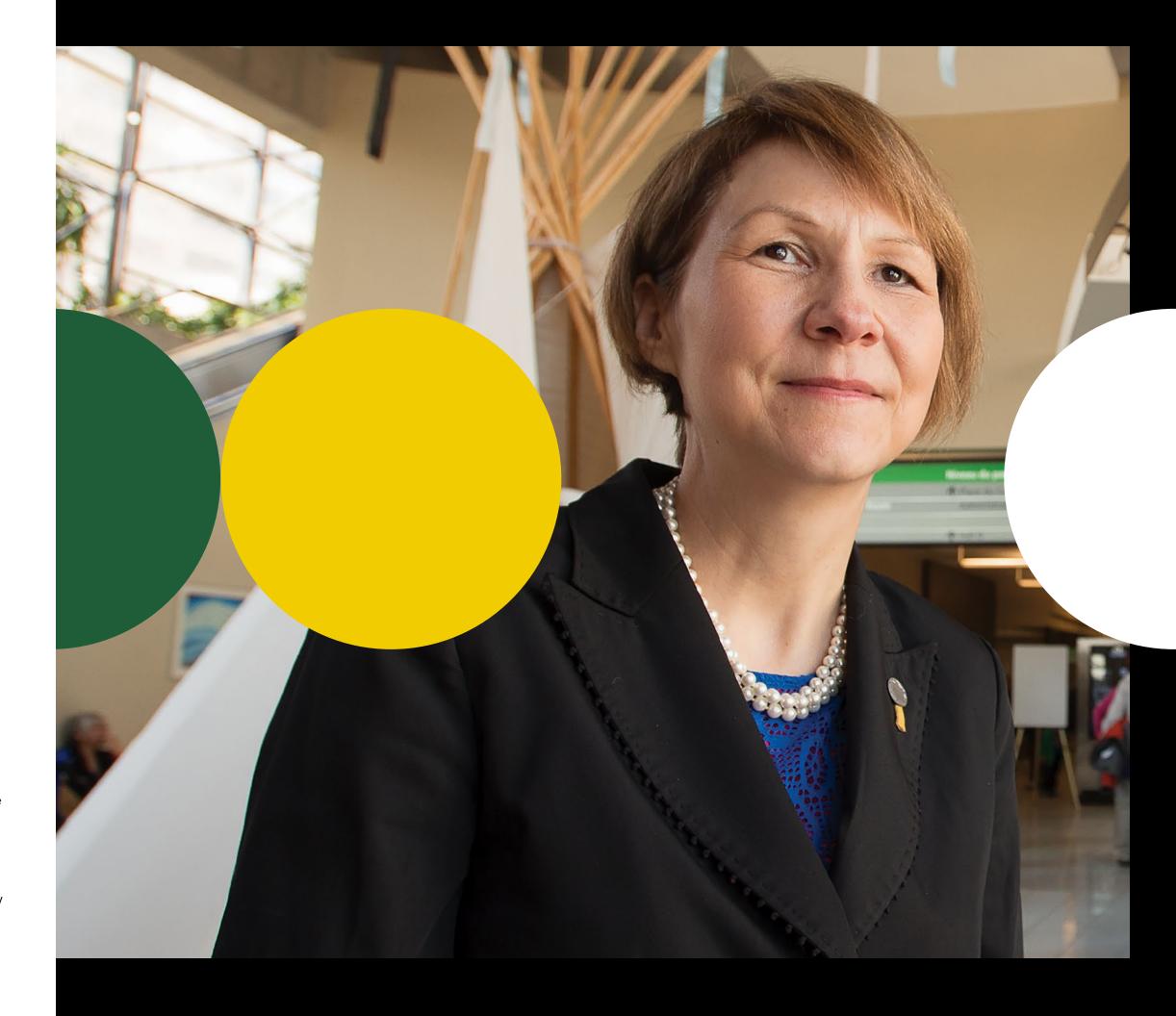
We strive to be a sustainable institution because we know the well-being of our people depends on our long-term viability. We lead through the prudent stewardship of resources and by stewarding our environment and the lands on which we reside.

#### **CREATIVITY**

We embrace opportunities to innovate to make things better. While coming together as one university to reach new heights, we break down barriers, transform systems and remain flexible to create the conditions that support our students, faculty and staff to flourish.

#### **COLLABORATION**

We succeed by working together, within and beyond the university and across traditional boundaries. We prize relationships, and we create opportunities for mutual benefit. We celebrate each other's achievements and help each other to thrive.



## SHAPE

### **FUTURES**

This kind of work benefits battery and car manufacturers, as well as industries that depend on metals usually found in batteries.

**ANIL KUMAR VINAYAK**Engineering master's graduate

# EDUCATION WITH PURPOSE

# We prepare creative, collaborative and confident global citizens who are inspired to make their mark on the world.

Today's students expect their university degrees to represent more than an accumulation of course credits. They want to be meaningfully prepared for the professional and personal goals they will pursue, with learning experiences that reflect the realities of today's world and the uncertainties of tomorrow's. They want to be global citizens who make a tangible impact on Alberta, on Canada and around the world.

Our university will respond to these expectations by purposefully evolving how we craft, structure and deliver learning experiences for our students.

In doing so, we will leverage our strength in harnessing insights and inquiry from a comprehensive range of disciplines. We will sustain an outstanding range of programming, spanning the social sciences and humanities, natural and applied sciences, health sciences, professional programs, fine arts and more. All of these areas are critical in preparing the thinkers, creators and leaders of tomorrow. Our new college structure will be an asset, enabling us to develop and deliver innovative programs that transcend traditional disciplinary boundaries while building on our disciplinary strengths.

Significantly, all of our programs will meaningfully integrate our commitments reflected in *Braiding Past, Present and Future* — including to Indigenous Ways of Knowing, thoughtful community engagement and support for and value of Indigenous research.

We will also draw on our extensive experience to deliver education that meets the changing needs of learners, particularly by:

- Applying the considerable technological expertise of our faculty and staff to enhance teaching in all programs
- Remaining a leader in experiential and work-integrated learning, with further expansion across all program areas
- Strategically integrating hybrid and online delivery with in-person programs to support access and flexibility
- Enhancing our portfolio of leading online courses and programs in areas of distinct strength
- Thoughtfully leveraging our expertise in continuing education to support a wider range of credentials and pathways into the university for lifelong learners

# COLLEGE OF HEALTH SCIENCES

KINESIOLOGY, SPORT, AND RECREATION

MEDICINE + DENTISTRY

NURSING

SCHOOL OF PUBLIC HEALTH
REHABILITATION MEDICINE
PHARMACY + PHARMACEUTICAL SCIENCES

# COLLEGE OF NATURAL + APPLIED SCIENCES

AGRICULTURAL, LIFE + ENVIRONMENTAL SCIENCES

ENGINEERING

SCIENCE

# SOCIAL SCIENCES + HUMANITIES

ALBERTA SCHOOL OF BUSINESS
ARTS

EDUCATION LAW

### **STAND-ALONE FACULTIES**

AUGUSTANA CAMPUS CAMPUS SAINT-JEAN GRADUATE STUDIES + RESEARCH
NATIVE STUDIES

# THE U OF A ESTABLISHED ITS FIRST-IN-CANADA COLLEGE STRUCTURE IN 2021,

bringing together academic faculties under three umbrella colleges.

The colleges will facilitate greater collaboration, support interdisciplinary teaching and research, and drive administrative efficiency.



As we continue to provide academic excellence, we will enable students to have excellent university experiences overall.

We will develop campus environments and student services that support belonging, learning, wellness and personal growth to give our students rich, memorable and meaningful experiences at our university.

We will deliver transformational opportunities where students can flourish through thriving residence communities, athletics and recreation, creative activity, volunteer opportunities and more.

We will work to become a leading example in accessibility, addressing systemic ableism, championing equity and celebrating our diversity.

We will integrate diverse ways of knowing and doing within and beyond the

The boldness of this strategic plan is embodied in its laser focus on having impact in all we do, no matter what we do or who is doing it. Leading with purpose means just that; no effort wasted and all effort focused on making a difference — that is a powerful concept.

#### **HEATHER BRUCE**

Professor and Chair, Department of Agricultural, Food & Nutritional Science

classroom. Our campuses will be inclusive of diverse student needs and backgrounds through many aspects of barrier-free access.

We will provide dedicated and appropriate support to help Indigenous students thrive.

We commit to ensuring that everyone who chooses the U of A will feel included and valued. This commitment also includes optimizing existing campus infrastructure, where funding is available, as we grow to provide 21st-century learning environments and accessible spaces.

#### Along the way, we will aspire to grow.

As a young and dynamic province, Alberta will experience consistently increasing demands for post-secondary education — including the innovations and highly skilled graduates it generates.

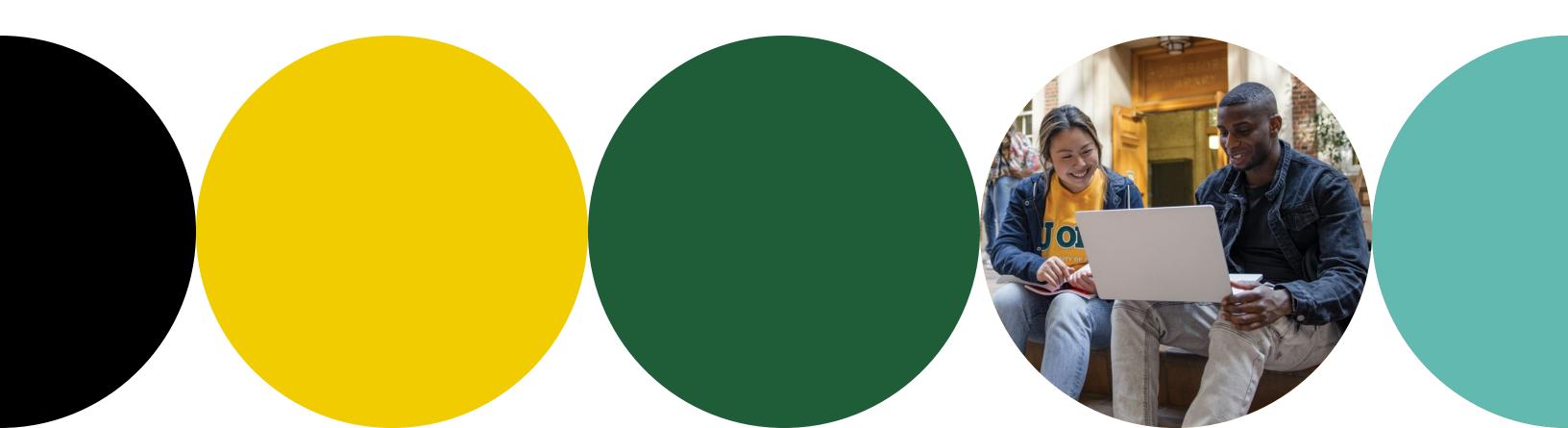
We embrace our role in delivering higher education to Albertans and welcome the opportunity to expand to meet Alberta's needs while sustaining outstanding academic quality. Undertaken thoughtfully, enrolment growth can enable us to better serve students from across rural and urban Alberta and support more lifelong learners than ever before.

We will furnish our province with a stronger future-ready workforce, ambitious entrepreneurs and businesses, social and cultural leaders. We will enhance access to education and foster a more diverse and dynamic student body across all our campuses.

Integral to our growth, we will expand our complement of graduate researchers and faculty to increase our teaching and research impact and create more opportunities for advanced study.

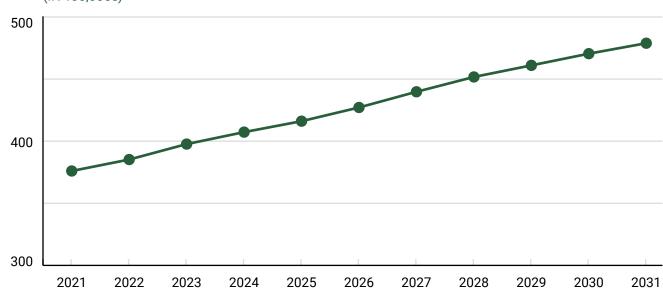
In collaboration with key partners and with the right conditions in place, we will carefully pursue opportunities for growth. This will include deliberate efforts to expand Indigenous enrolment.

It will also include deliberate efforts to welcome and engage international students, many of whom remain in Alberta upon graduation, to build their lives and contribute to the growth and diversity of our economy and society. The participation of international students enriches our learning environment, fosters greater multicultural interactions and understanding and helps us develop global citizens who are more engaged with the world.



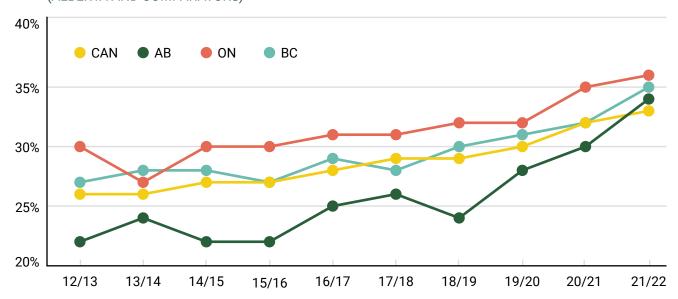
## WE NEED TO GROW SUBSTANTIALLY TO ENSURE ACCESS TO UNIVERSITY EDUCATION FOR ALBERTANS.

#### PROJECTED GROWTH IN ALBERTA'S POPULATION AGED 18-24 (IN 100,000s)

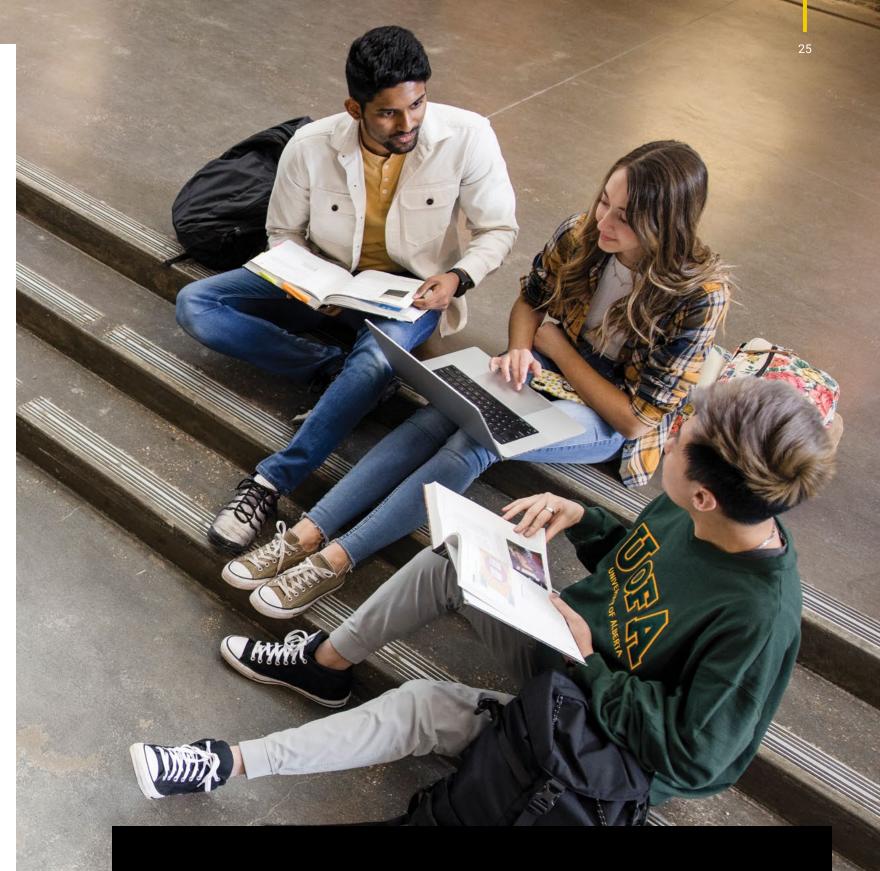


Source: Alberta Advanced Education

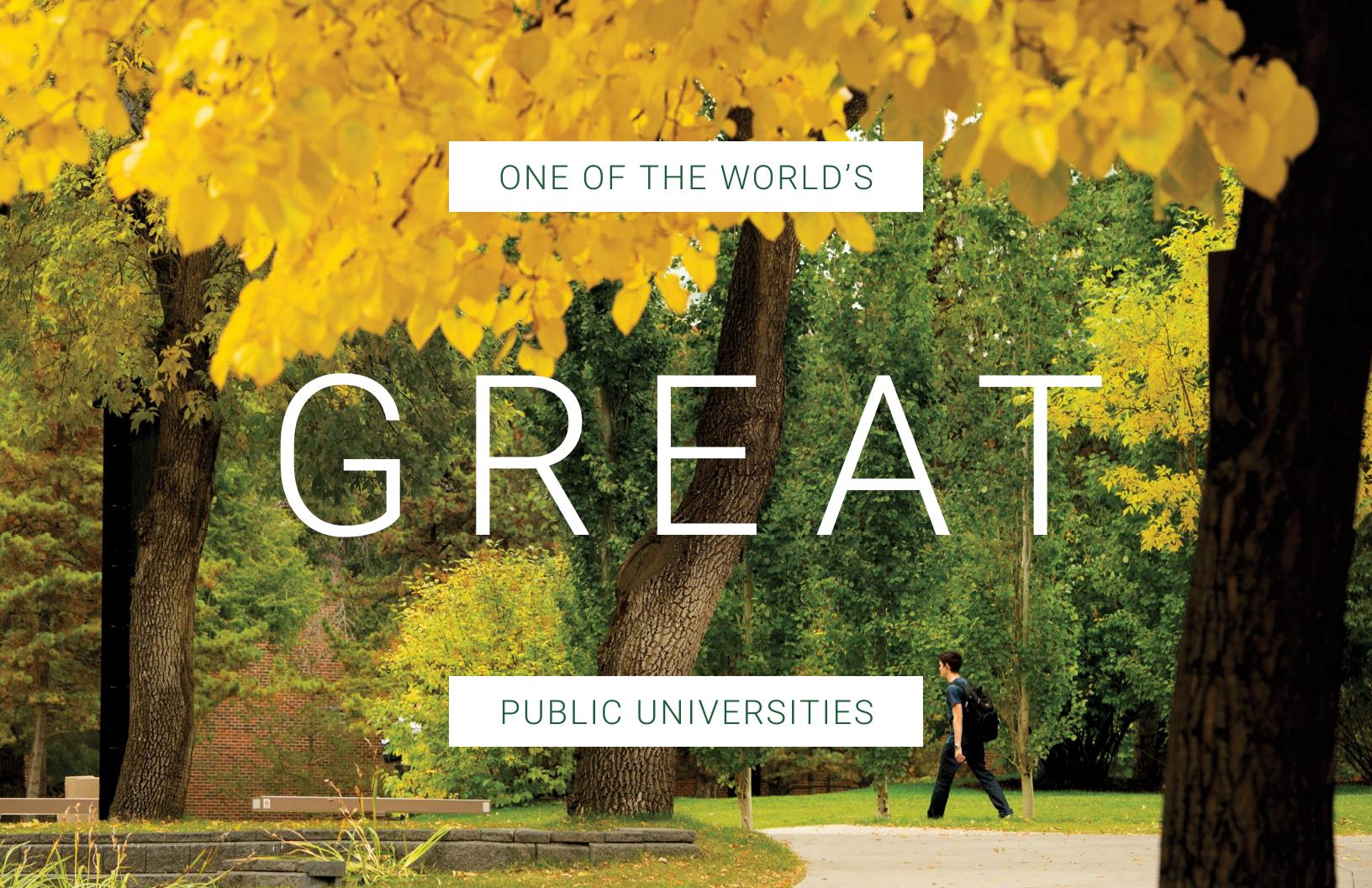
### UNIVERSITY PARTICIPATION RATES AMONG 18- TO 24-YEAR-OLDS (ALBERTA AND COMPARATORS)



Source: Statistics Canada



Over the next decade, Alberta will experience enormous growth in the traditional university-aged population. Alberta has historically had the lowest university participation rate in Canada, and today we remain behind BC and Ontario.





#### **FDUCATION WITH PURPOSE**

#### THE TRANSFORMATIONAL IMPACTS

- Preparation of well-rounded graduates who are positioned to drive change, think and engage critically, lead in new and emerging fields and enhance connections between Alberta and the world
- Innovative and flexible pedagogical approaches meeting the needs of diverse learners across their lives and careers
- A portfolio of leading online courses and programs in areas of distinct strength
- A wider range of credentials and pathways into the university, enabling better access for diverse learners throughout their lifetimes

- Experiential and work-integrated learning that positively contributes to communities while empowering students with future-ready skills
- Increased participation in post-secondary education by Indigenous students, helping contribute to reconciliation
- Strategic enrolment growth among domestic and international learners, enabling more skilled young people to stay in Alberta and contribute to building the province
- An outstanding student experience within an inclusive environment, bolstered by effective supports, contributing to higher rates of student completion

#### **KEY INDICATORS**

 STUDENT COMPLETION RATE: Percentage of students who complete their degree within the designated period (six years for undergraduate, five years for master's, nine years for PhD)

#### PRELIMINARY TARGET:

Meet or exceed U15 benchmarks

GRADUATE EMPLOYMENT RATE: Percentage of students employed in a field related to their studies two years after graduation (Graduate Outcomes Survey)

**PRELIMINARY TARGET:** >90%, with performance benchmarked against other Alberta post-secondary institutions

experiential Learning: Students completing experiential learning as part of their program (National Survey of Student Experience)

#### PRELIMINARY TARGET:

Meet or exceed U15 benchmarks

TOTAL ENROLMENT AND TOTAL INDIGENOUS

ENROLMENT: Headcount enrolment (undergraduate and graduate)

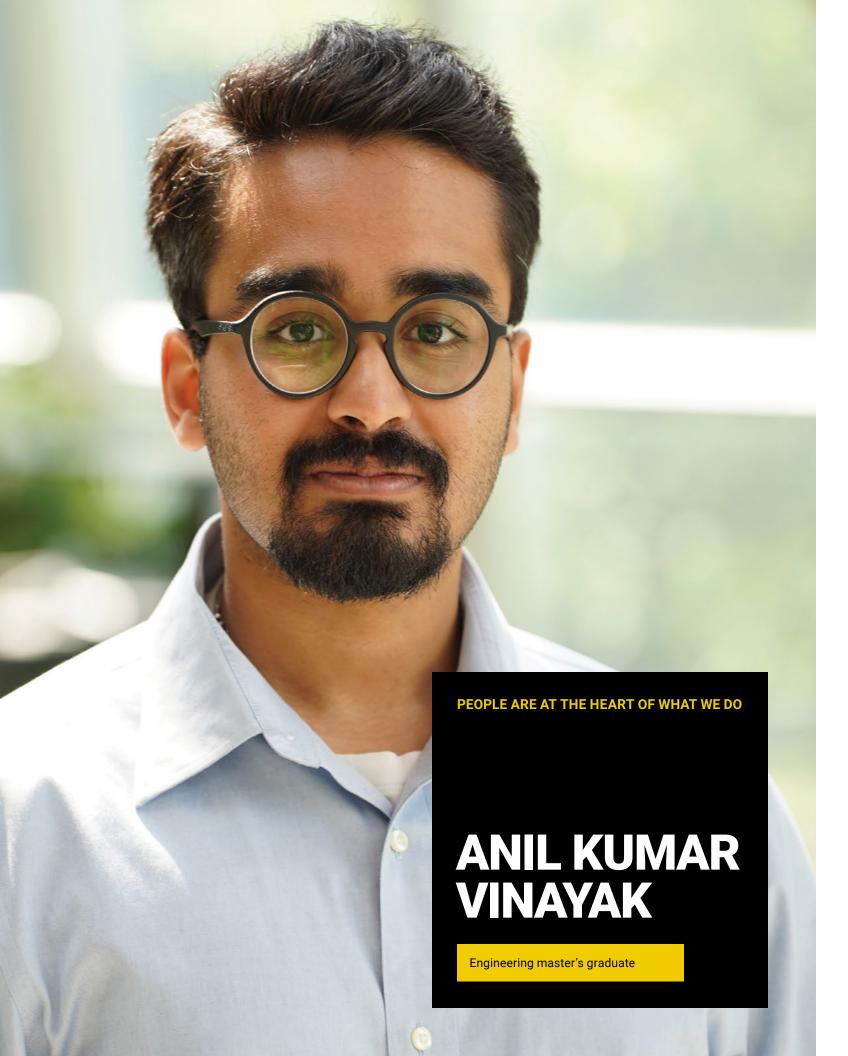
**PRELIMINARY TARGET:** 50,000 total headcount by fall 2026; 60,000 total headcount by fall 2030 (contingent on provincial funding support); current headcount is 44,000

STUDENT SATISFACTION: Overall student-reported satisfaction (National Survey of Student Experience and other survey mechanisms)

#### PRELIMINARY TARGET:

Meet or exceed U15 benchmarks

 Key indicators may be supplemented or modified through the implementation planning process. Qualitative reporting will also be essential.



#### **ANIL'S STORY**



As a student, mentor and researcher, Anil Kumar Vinayak is an inspiring example of how hands-on experiences foster the next generation of research leaders.

While earning his master's in chemical engineering, Vinayak thrived under the mentorship of supervisor Xiaolei Wang — and supported other students as a teaching assistant and mentor.

In Wang's lab, Vinayak experimented with new ways to regenerate spent lithium-ion batteries, aiming to reduce environmental costs while boosting the bottom line for manufacturers.

Current processes use harsh mineral-based acids, but Vinayak tested milder organic chemicals that have minimal environmental impact.

The less toxic mixtures also mean cost savings in maintenance and handling for industry. And because they can be reused, they're a better bargain for recycling companies, Vinayak says.

He also looked at a more sustainable process for regenerating graphite used in batteries so it can be reused or refurbished for other applications.

Vinayak's work is rooted in the "circular economy" — using products and their components to the fullest, then reclaiming as much as possible to minimize waste and pollution.

He believes this approach will help resolve waste management challenges, and says it's also "a perfect model" for addressing the cost and reliance on mining for raw materials, bottlenecks in supply chains and energy use.

#### 7h a i....

# The impact is quite relevant and imminent.

Using his organic acid mixtures, Vinayak recovered more than 95 per cent of the lithium from the spent batteries. "Once that figure gets closer to the 100 per cent mark, it can be scaled up for industry," he says. He also achieved complete regeneration of graphite from spent batteries.

Because the method is already in use, Vinayak says his techniques could be adopted "almost immediately" as a more eco-friendly alternative.

"This kind of work benefits battery and car manufacturers, as well as industries that depend on metals usually found in batteries.

The impact is quite relevant and imminent."

# If we can prevent a pandemic strain from killing us, that's enormous. And sugars might really tell us that.

#### **LARA MAHAL**

Director of the Glycomics Institute of Alberta and Canada Excellence Research Chair in Glycomics

#### RESEARCH WITH PURPOSE

We mobilize and energize our research, innovation and creative activities to solve our planet's toughest challenges.

A recognized global leader in health, disease prevention and lifecourse approaches to care and well-being...

A hub for forward-leaning discourse and action on migration, race, intersectionality, decolonization and poverty...

A renowned leader in energy and climate change research, at the forefront of developing innovative solutions for stable, reliable and sustainable energy sources...

An institution undertaking critical research in areas ranging from housing policy and policing to equity in education and refugee settlement...

These are just some of the many ways to describe how the University of Alberta generates research, innovation and creative activities that have profound influence locally, nationally and globally.

Our university has a proud legacy of high-impact research and creativity across a wide range of disciplines. These accomplishments are underpinned by the extraordinary contributions of staff, students and post-doctoral researchers.

Today, our deep disciplinary knowledge is needed more than ever.

We will enhance partnerships with international researchers and institutions.

Many of the challenges we face are global in scale yet have distinct local impacts.

Addressing these challenges requires deep engagement in our local context, but with a global perspective founded on partnership and collaboration with researchers worldwide.

With a bold new academic structure, our university is well positioned to bring together multidisciplinary expertise around shared problems for the benefit of Alberta and the world.

This means advancing high-impact research and innovation across all disciplines while strengthening what we are best known for.

These include areas of global excellence, where our university has already demonstrated its internationally ranked institutional strength over the past many years, and areas reflecting growth, where we are making major contributions and have the potential to reach global significance in the next 10 years. In conjunction with a more dynamic and collaborative academic structure, we will make focused, long-term investments in these areas to foster transformational achievements.



Key among these will be deliberate initiatives to reinforce and enhance our university's overall research, innovation and creative climate, including:

- Continuing to attract and retain leading researchers in their fields
- Increasing the numbers of and supporting our graduate students and post-doctoral fellows to develop the next generation of research leaders
- Identifying, nurturing and welcoming researchers from historically underrepresented and equity-denied groups, which will better position our academy to explore issues from a broader lens and allow ideas and creativity to flourish through diversity
- Ensuring our high-impact researchers benefit from highimpact research spaces and supports, including expert staff

- Examining ways to incentivize and reward all forms of research, innovation, entrepreneurship and creative work to promote greater impact
- Building capacity to support and incentivize communitybased research

Importantly, our initiatives will meaningfully integrate our commitments reflected in *Braiding Past, Present and Future* and our commitments to equity, diversity and inclusion. This includes how we conceive, design and conduct research, recognizing the importance of genuine community engagement and participation.

Our efforts will also recognize that addressing global challenges requires global collaboration. To that end, we will enhance partnerships with international researchers and institutions. This will amplify our world-leading strengths while building our profile and helping us attract outstanding talent and innovation to Alberta.

The result will be an environment that empowers our university's talented researchers and innovators to secure funding, enter into partnerships, engage with communities, generate new insights, capitalize on research opportunities and achieve transformational impacts for Alberta and the world.



#### RESEARCH WITH PURPOSE

#### THE TRANSFORMATIONAL IMPACTS

- Increased number of large-scale, multidisciplinary research initiatives that stimulate community-engaged research and impact
- Development of innovations that tangibly address major social, economic and environmental challenges facing Alberta, Canada and the world
- More robust and comprehensive research capacity through the durable embedding of Indigenous community engagement and Indigenous Ways of Knowing into research practices

- Spinoff and other commercialization activities that bring new products and services to the world
- Increased representation and research success among researchers from historically underrepresented and equity-denied groups
- Markedly higher research, innovation and creative collaboration across disciplines, through realized potential of the college structure
- Improvement in the quality of life for millions of people in communities across Alberta, Canada and the world

#### **KEY INDICATORS**

 INTERNATIONAL RANKING: the University of Alberta's overall standing in international rankings of research universities

**PRELIMINARY TARGET:** among the top 50 internationally ranked research universities by 2033

U15 SPONSORED RESEARCH RANKING: ranking within the U15 in annual sponsored revenue

**PRELIMINARY TARGET:** top three by 2033

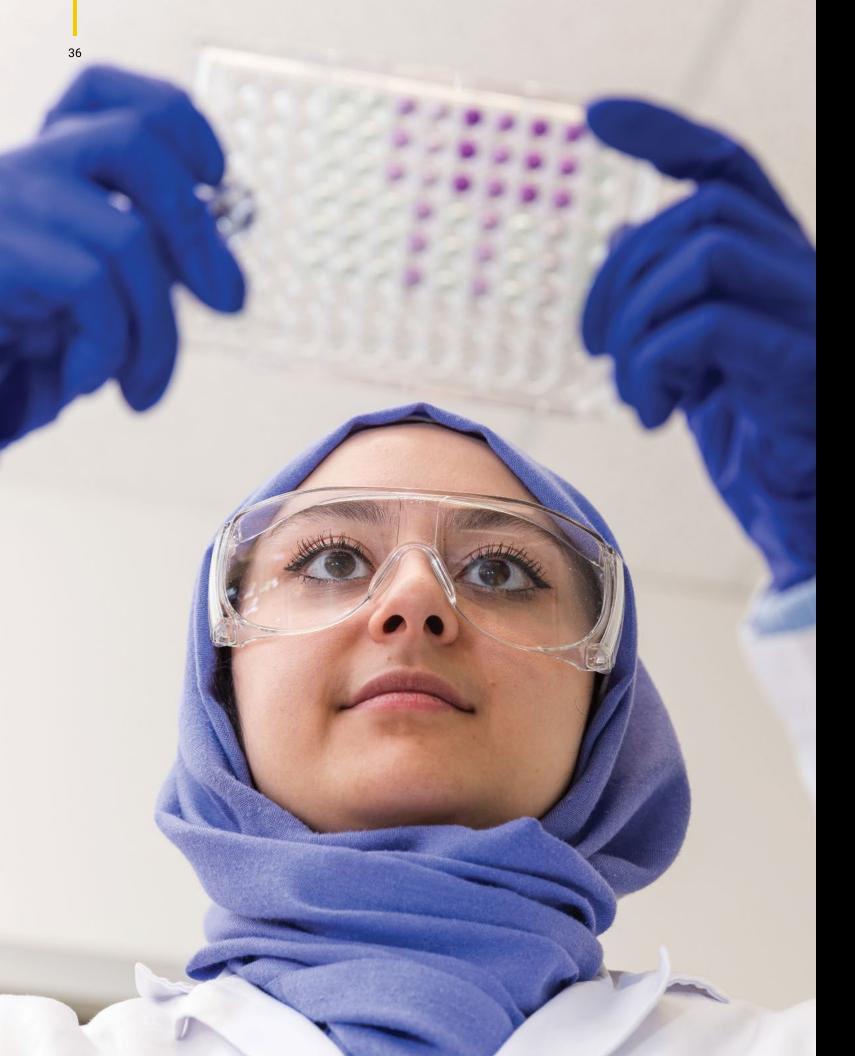
ANNUAL SPONSORED RESEARCH REVENUE: total annual sponsored research revenue from all sources

**PRELIMINARY TARGET:** increase from \$550M to \$650 million by 2028

The University of Alberta is committed to advancing education and research for the benefit of Alberta and beyond. With our transformative strategic plan, we aim to foster collaboration, address complex challenges, and leave a lasting impact on the lives of our students and communities as we embark on an exciting journey toward a promising future.

BRENDA HEMMELGARN
Dean, Faculty of Medicine & Dentistry;
Vice-Provost and College Dean, College
of Health Sciences

Key indicators may be supplemented or modified through the implementation planning process. Qualitative reporting will also be essential.



#### A LEGACY OF HIGH-IMPACT RESEARCH AT THE U OF A

Groundbreaking work by Dr. James Collip leads to the discovery of insulin in 1921, markedly enhancing quality of life for people around the world.

Dr. Michael Houghton wins the 2020 Nobel Prize for discovering the hepatitis C virus, enabling development of blood tests and medications that save millions of lives.

Ways to separate oil from sand are developed, starting in the 1920s and carrying over decades, giving rise to an entirely new industry that generates jobs, wealth and secure energy supplies for North America.

The quantum canola strain is developed in the 1990s, saving Canada's multibillion-dollar canola industry from the threat of blackleg disease and propelling agriculture forward.

North America's only Faculty of Native Studies, beginning as the School of Native Studies in 1984, has contributed to generations of leaders and experts in Indigenous research, community engagement and relationships.

The C-Leg is created beginning in the early 1990s, giving the world a bionic leg with a fully microprocessor-controlled knee, helping over 70,000 people walk more easily, safely and naturally.

The U of A establishes nationally renowned expertise in feminism and intersectionality, with ongoing influence in policy, education, pedagogy and research practice.

The Chinook program is developed and becomes the first to win a human World Checkers Championship. It is undefeated since 1994, setting a new trajectory for AI and machine learning.

#### AREAS OF GLOBAL EXCELLENCE

We are developing novel and resilient solutions to mitigate greenhouse gas emissions in energy demand and supply sectors. Globally, this will significantly help in achieving net-zero emission goals.

#### **AMIT KUMAR**

NSERC/Cenovus/Alberta Innovates Associate Industrial Chair in Energy and Environmental Systems Engineering

U of A has a history of excellence in AI research and is well positioned to bring adaptive control systems into the real world — from smart buildings to water treatment to interactive recommender systems. Making static systems instead adapt and learn will create huge energy and time savings.

#### **MARTHA WHITE**

Associate Professor of Computing Science and Canada CIFAR AI Chair

The U of A is clearly recognized as a global leader with its immense contributions to hepatitis B therapy, hepatitis C diagnosis, COVID antivirals, safer smallpox vaccines, herpes viral and respiratory virus research, use of viruses to kill cancer cells and more. We have a precious, not-to-be-missed growth opportunity for Alberta.

#### MICHAEL HOUGHTON

Director of the Li Ka Shing Applied Virology Institute and 2020 Nobel Laureate in Physiology or Medicine

#### **AREAS OF GROWTH**

# HEALTH AND WELL-BEING

\$200M+

in funding for precision health, intelligent medical devices, therapeutics, and women and children's health research

# ARTIFICIAL INTELLIGENCE

**TOP 2** 

in Canada for artificial intelligence research

(Source: US News Global University Al rankings)

# SOCIAL TRANSFORMATIONS

**TOP 7** 

global leader in achieving the UN's Sustainable Development Goals

# INDIGENOUS RESEARCH

\$24M

for research in health and well-being of Indigenous communities and environments

# ENERGY AND ENVIRONMENT

TOP 10

university globally for energy systems research

AGRICULTURE AND FOOD

**LEADING** 

innovation in smart and digital agriculture and driving cellular agriculture research



#### LARA'S STORY



Headed by a world-leading expert, the Glycomics Institute of Alberta will foster collaboration, communication and education in a critical yet understudied area of science.

As director of the new institute, Lara Mahal wants to shape connections among experts and researchers who may not realize the impact glycomics could have on their work.

New knowledge and innovation in the field of glycomics could play a critical role in solving health challenges related to cancer, infectious diseases, neurodegenerative illnesses like Alzheimer's and more.

"Glycosylation is incredibly strong here at the University of Alberta. It is a central science to all sorts of different areas — biology, medicine, agricultural health," says Mahal.

The current membership in the Glycomics Institute of Alberta already includes researchers from the departments of chemistry, biology and pharmacology, and Mahal anticipates that as membership grows, more departments and faculties will be represented.

"Part of it is helping everyone's research by giving them the connections and the resources to figure out how to incorporate these really critical aspects into their work. We want to educate the larger biomedical community about the importance of sugars, which has really been undervalued," Mahal notes.

Mahal has examined diseases like influenza, finding that high levels of a certain sugar in the lungs are linked with more severe and even fatal outcomes. "If we can make it so that when we get sick with the flu from a pandemic strain that would normally kill 50 per cent of the population, but we now know how to prevent

Glycosylation plays a critical role in every major disease, and yet it is probably one of the most understudied areas of science.

it from killing any of us, that's enormous. And sugars might really tell us that."

"I want people to walk away with an idea that sugars aren't just the stuff that you eat. This interesting code is telling us lots of information and controlling things, and as a result can really help us to get to the next generation of drugs and biomarkers that will help with human health."

The problems facing our society ... are not going to be solved by partial, disciplinary perspectives.

#### **JESSICA KOLOPENUK**

AHS Chair in Indigenous Health, Cree researcher and U of A professor

## **ENGAGEMENT WITH PURPOSE**

We lead, convene and collaborate with partners to help uplift individuals and communities throughout Alberta, across Canada and around the world.

While we are an international university, we always acknowledge and honour our special and unique position in this province. As the first university established in Alberta, the University of Alberta has had, and continues to have, a profound influence on Alberta's development.

Our situation on Treaties 6, 7 and 8 and the homelands of the Métis is fundamental to our identity, and we are deeply committed to building and sustaining relationships of trust, respect and mutuality with Indigenous communities.

We are an extraordinary contributor to the Edmonton region, enhancing culture, quality of life and economic opportunities while serving as a magnet for talented people. Our Campus Saint-Jean, unique in Western Canada, is at the heart of Alberta's francophone community and a vital partner in French-language education across many fields.

Our Augustana Campus in Camrose helps ensure that the university remains strongly embedded in rural Alberta, now and in the future, offering students a unique educational experience grounded in liberal arts and sciences. And we continue to embrace our long-standing relationships with the North.

Across Alberta, our faculty, staff, students and alumni enrich the social and cultural lives of communities.
Our contributions to the creative arts, athletics and all areas of civic life are fundamental.

Located throughout the world, our alumni are integral to the social, cultural and economic fabric of our communities.

We, in turn, benefit greatly from the support of our proud alumni and donors, who help us flourish and provide direct benefit to our communities.

Through the students, faculty and staff we welcome, to the research and creative activities we pursue, to the graduates we produce, to our world-spanning alumni, our university helps connect Alberta to the entire country and the broader world.

This privileged and influential position comes with a keen responsibility. Our university's knowledge, networks and expertise can be of deeper and more meaningful service to Albertans. To this end, we will engage with the broader community more purposefully.



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We will take a leading role in confronting issues of importance to communities across Alberta – such as energizing and diversifying economic development, improving health-care delivery, reducing poverty, addressing community safety and enhancing sustainability. This means being more than a participant, but rather a driving force, leveraging our capacity to convene diverse individuals and communities to pursue shared, positive outcomes. But this also means engaging with humility, recognizing we need to understand community needs, build trust and develop lasting, reciprocal relationships.

### Taking up this role more fully will involve deliberate actions, including:

 Proactively engaging with private, public and non-profit partners and with Indigenous communities to identify how our university can best advance the quality of life for all Albertans

- Sustaining and deepening our commitment to Indigenous communities, and embracing our responsibilities under the calls to action of the Truth and Reconciliation Commission of Canada
- Building capacity and incentives for our faculty, staff and students to collaborate and engage with communities, industry and social and cultural organizations
- Developing strategic partnerships, locally and internationally, to contribute to the United Nations Sustainable Development Goals

We will specifically invest in building stronger connections between our research enterprise and the business community, working more purposefully to solve industry problems and supporting commercialization and entrepreneurship to help translate our innovations into real-world impact.

Our alumni are essential to our success. They are our community and business leaders, our cultural champions, our innovators, our artists and thinkers. We will engage, celebrate, support and collaborate with them to the benefit of all.

Our global connectedness will be key in engaging more purposefully. Through international partnerships and

We are continuing to build on our history of transformative research and innovation at the University of Alberta. Our goal through this strategic plan is to support our researchers, creators and innovators and their work, enabling the university community to continue to address global and local challenges in collaboration with the wider society.

**AMINAH ROBINSON FAYEK** 

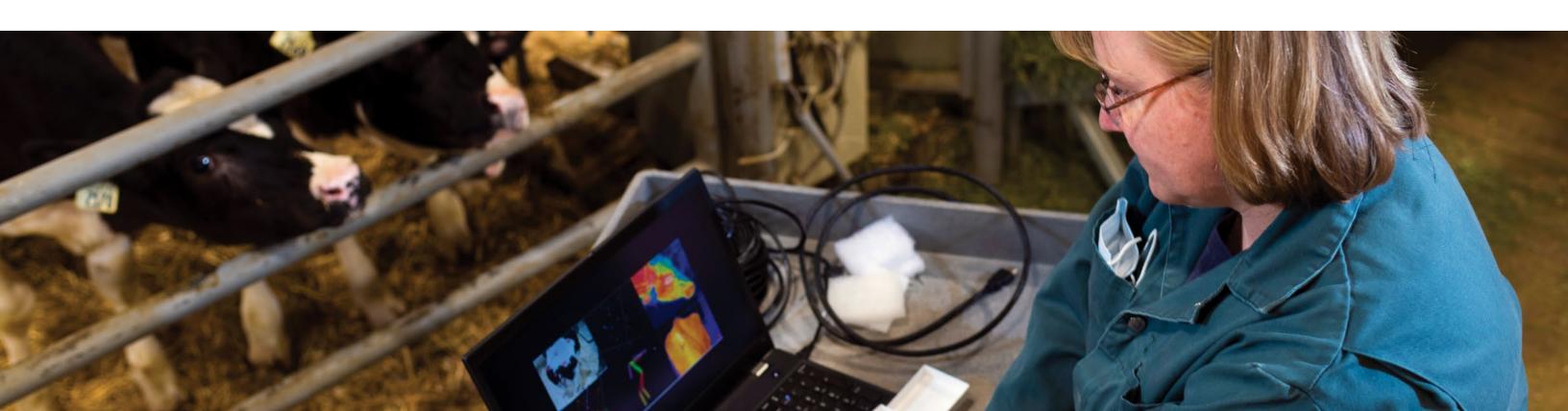
Vice-President (Research and Innovation)

engagement, we will bring global knowledge to bear on local challenges and opportunities, while making major contributions to global solutions. We will also help our local industry and community partners achieve global scale and impact.

While undertaking a more energetic posture beyond our campuses, we will also make it easier for individuals and communities to connect with our university.

This includes:

- Streamlining access to the university for our current and future partners, creating an open door for those who want to partner with us
- Creating more opportunities for students to experience education at Campus Saint-Jean and Augustana Campus
- Continuing to support access to our facilities, events and activities for the public
- Simplifying ways for communities to identify their needs and connect with researchers





#### ENGAGEMENT WITH PURPOSE

#### THE TRANSFORMATIONAL IMPACTS

- Enhanced relationships and partnerships with First Nations and Métis communities within Alberta and an increase in Indigenous community-engaged research
- Deeper integration between our university and the business community, resulting in further growth and diversity for Alberta
- Expanded economic impact for the province including higher employment, wealth generation and technological advancement
- Expanded recognition of the university's importance in supporting thriving communities, driving change, enriching arts and culture and making a difference in people's day-to-day lives
- Headway on achieving the United Nations Sustainable Development Goals locally, globally and at all levels.

#### **KEY INDICATORS**

 IMPACT RANKING: The University of Alberta's international ranking in advancing Sustainable Development Goals

PRELIMINARY TARGET:

7th globally (current ranking)

RELATIONSHIPS WITH BUSINESS COMMUNITY:
 Increase in the value of partnerships annually

PRELIMINARY TARGET: TBD

NATIONAL AND INTERNATIONAL REPUTATION:
Comprehensive improvement across reputational rankings

**PRELIMINARY TARGET:** Top three in Canada and top 50 in the world

 EXPERIENTIAL LEARNING: Students completing experiential learning as part of their program (National Survey of Student Experience) (also noted under Education with Purpose)

PRELIMINARY TARGET: Meet or exceed U15 benchmarks

What stands out most in "Shape" is the recognition of our people.

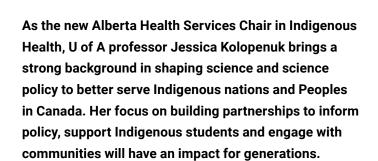
Without them, the university's work cannot be done. That's why — whether someone is running a lab, taking care of our buildings, or welcoming fellow students to campus — everyone is vital. It's also why we should be supporting them, in turn.

SYDNEY TANCOWNY
Communications Associate, Augustana
Campus; NASA representative on the
University Strategic Plan Steering Committee

Key indicators may be supplemented or modified through the implementation planning process. Qualitative reporting will also be essential.



#### JESSICA'S STORY



As a Cree researcher, Kolopenuk understands the importance of bringing Indigenous knowledge and governance to health and research policy.

"It's not only about including our Indigenous knowledges and perspectives in research and policy," she says. "It's about having control over the knowledge production that impacts us — knowledge that is about us, our territories and our communities and relatives."

The purpose of the newly created position, funded by Alberta Health Services, is to promote research and scholarship in Indigenous health and to develop research and training partnerships, including partnerships with Indigenous communities.

Kolopenuk, who has a PhD in political science from the University of Victoria, wants to focus on three main goals. The first is to support Indigenous students and communities who are interested in science, technology, and health research and policy. "The capacity of our people is already present," she says. "What is often missing are the opportunities to lead through Indigenous expertise and relationships."

Her second goal is to produce critical research that will inform policy at the provincial, national and global levels. She plans to



engage relationships that will allow her to join national and global conversations regarding health science and policy.

Her third goal is to build the capacities of health institutions, including the university, "to support research and training projects that are highly interdisciplinary and relational that Indigenous scholars, communities and students wish to lead and govern."

"We know that the problems facing us today — our society, our environment, our relationships — are not going to be solved by partial, disciplinary perspectives," says Kolopenuk.

"Relationality, interdisciplinarity and anticolonial approaches and dispositions are going to be key in working together to centre and strengthen Indigenous leadership and governance in health, science and policy."

#### HOW THE FUTURE TAKES

# SHAPE

#### We are excited about tomorrow.

Our university's recent evolution leads the way for the rest of Canada and positions us to do things fundamentally differently going forward. We are eager to transcend boundaries, create new ways of working together and foster more collaboration.

Enriched by talented people and committed to building a thriving culture, our university is ready to generate maximum impact for the world around us. Impact is not something we do for communities. It is something we achieve *together*.

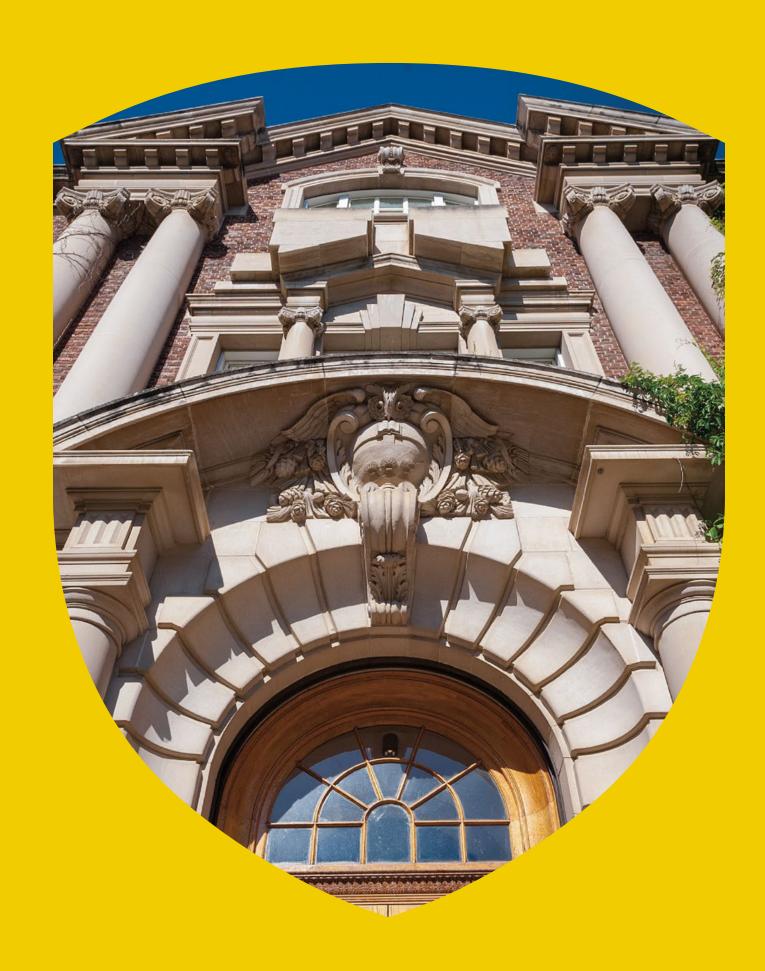
Living up to this aspiration will require diligent and considered actions in line with this strategic plan across

all areas of the university. These will be identified and pursued through a series of implementation plans that are created alongside students, faculty, staff, partners and supporters of our university.

Importantly, our implementation work will reflect and integrate *Braiding Past, Present and Future: University of Alberta Indigenous Strategic Plan,* which provides a roadmap to ensuring our work on indigenization and decolonization is embedded across the institution.

As we take those next steps together, we are committed to building a university of tomorrow for students, educators, researchers, alumni and community partners — here in Alberta and around the world.

IN ALL WE DO, WE ARE COMMITTED
TO LEADING WITH PURPOSE
AS NEVER BEFORE



**Every generation is** called upon to build a university poised to tackle the challenges of today and tomorrow. We meet those challenges grounded by our roots yet spurred forward by our profound responsibility to seek truth, solve problems and shape a future unhampered by fixed tradition. Here we seek out challenges so we can create change. We question and then innovate on and test the status quo it. We collaborate and integrate. We overcome barriers so our ideas can collide and grow. And, together, we create new purpose. We build the for the students who are university of tomorrow For the educators and seeking their purpose. theirs in the lab and share researchers who pursue around the world. For our it in the classroom — and alumni and partners who deliver greater good into ourcommunities. Working together alongside and

in partnership with Indigenous Peoples and all under-represented voices. We weave together a tapestry of backgrounds and cultures, because we are made stronger by our diversity. Together we are change makers, community builders, world shapers. This world has been challenged like never before. But when we stand together and listen to one another, we generate the solutions that make us healthier,

safer, stronger and more make this simple, but University of Alberta, will the "now." We will always challenging and, most of just. Moving forward, we vital promise: We, the never be satisfied with be seeking, always be all, always be leading.

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# Leading with Purpose.

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