

# Child Health & Wellness Strategy

## Executive Summary

Spring 2020



UNIVERSITY OF  
CALGARY





Dear Colleagues,

We are deeply honoured to share with you the first strategic plan for child health and wellness that encompasses the entire University of Calgary campus. Spanning 2020–2025, this plan charts a course for our researchers and clinical scientists to tackle the challenges of child health and wellness as never before. With this plan, we become the first university and children’s hospital in Canada to put children and families at the centre of our research, creating a movement to transform the future for children and families.

Thank you for your tireless support for our diverse community of child health and wellness scholars. The University of Calgary and the Alberta Children’s Hospital are ideal environments in which to address research grand challenges in child health and wellness. Building on the University’s Eyes High Strategy, this strategic plan is closely integrated with UCalgary Strategic Research Themes, complementing and building upon existing areas of research excellence across campus. Our plan is also designed to incorporate the knowledge and lived experiences of patients, families and community partners, allowing us to drive science and introduce treatments for the most critical problems facing children today.

Our strategic goals:



Conduct **HIGH QUALITY, INTERNATIONALLY-RECOGNIZED** child health and wellness research for **CHILDREN & FAMILIES**



Become national and international leaders in **INNOVATIVE AND TRANSFORMATIVE** research from bench to bedside to backyard and back



Advance national leadership in **COMMUNITY-PARTNERED, CHILD AND FAMILY-CENTRED** health and wellness research



Lead **EVIDENCE CREATION, EVIDENCE-INFORMED HEALTH PROMOTION AND POLICY DEVELOPMENT** with and for children and their families in Alberta and beyond

Thank you for being such incredible partners, investing and believing in our work. Together, we are embarking on a new era in child health and wellness – an era in which children, families and community are at the heart of every decision we make. We have all of the ingredients for success: a critical mass of stellar research; integration of research with our partners who care for children and their families; campus-wide engagement; and the generous support of our community. Thank you for your unflinching support and wisdom.

**Dr. Susa Benseler**  
Director  
Alberta Children’s Hospital Research Institute  
Husky Energy Chair in Child and Maternal Health  
ACHF Chair in Pediatric Research

**Dr. Marinka Twilt**  
Scientific Director  
Clinical Research

**Dr. Benedikt Hallgrímsson**  
Scientific Director  
Basic Science

## This strategy is dedicated to the children and families we serve.

When patients and families help drive research, we transform care and save lives. The integration of patient needs, clinical care, and research is one of our superpowers – that integration is what sets us apart. Another of our superpowers is our dynamic culture – one that spans the University of Calgary, Alberta Children’s Hospital, and deep into the Calgary community. Our shared goal: to address grand challenges in child health and wellness.

## Child Health and Wellness Research

Child health research is life trajectory research. Problems of health and wellbeing in early life have life-long and sometimes multi-generational consequences. When we effectively treat illnesses, and prevent stressors in babies and children, the benefits to human health are monumental. By better addressing health and well-being early on, we help parents, caregivers, and service providers set children on the path to a healthier future.

Community support has allowed UCalgary researchers to make discoveries with local, national, and global impact. Among their many achievements, our child health and wellness scholars have: transformed how we prevent, detect, and treat concussions in youth sport across Canada; changed how emergency rooms around the world treat children with gastroenteritis; developed a blood test to identify women at risk of preterm birth; introduced rapid

diagnosis whole genome testing for children who are critically ill; revealed how gut microbes of moms and babies impact their risk of asthma and other diseases; and allowed children with physical disabilities to use their brain signals to power technology. Calgary is the first place in Canada constructing a dedicated mental health centre with research built into its foundations, setting the stage for exceptional mental health discoveries.

Today, we have a mature research ecosystem in which our investigators are leading larger teams on the national stage, being awarded multi-centre team grants, and asking big questions to solve complex problems with transformational impacts. Thank you for your tireless support of our shared goals for research.

## The Next Decade

Years of hard work and thoughtful consultation have culminated in this strategic plan. Researchers, community and thought leaders guided its development in close alignment with the University of Calgary 2018-2023 Research Plan, the 2019-2024 Alberta Children’s Hospital Strategic Plan and the Alberta Children’s Hospital Foundation’s 2019-2022 Strategic Plan.

Last year we embarked on an ambitious journey to engage child health and wellness researchers, health system and community leaders, as well as child and youth-facing agencies on big ideas for research. **Our consultations involved 640 participants from 40 organizations and 50 group discussions in a series of six town halls.** The input we received inspired us and challenged us to do better.

Results from that engagement process combined with a research strength assessment illuminated a sweet spot for child health and wellness: the intersection between our research strengths, the needs of our community, and international trends and opportunities. This plan is designed to accelerate discoveries that will translate into impact for children and families in Southern Alberta and far beyond.

“Research in children is  
research in life trajectories.”

Dr. Janet Rossant  
President of the Gairdner Foundation  
and keynote speaker at the  
10th Anniversary Research Symposium  
and Celebration of ACHRI, May 2019





“Patients and their families are the ultimate decision-makers in their own care. Yet the system is not designed to learn from their lived experience and their knowledge is rarely valued. Patients are central to the continuum of care because they are the ones who are always there. Their knowledge is an untapped resource that can be used to improve both their own care and the system as a whole.”

Charlie Fischer  
Child Health & Wellness Champion

## Our Values



excellence



integrity



child & family centred



collaboration



innovation



equity, diversity, inclusion

# Strategic Objectives

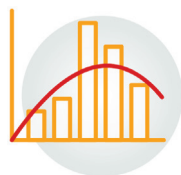


## 1 Build a Culture and Community of Research Excellence

- 1-1** Enable cross-disciplinary groups of researchers
- 1-2** Build collaborative research culture

### Initial Aims:

- Child health and wellness researchers across UCalgary campus become CHW Scholars
- Invest in all stages of research training and careers
- Provide mentorship for early career researchers
- Bring Child Health and Wellness Scholars together through seminars and workshops
- Support culture of research excellence through internal and external communications



## 2 Create Child Health and Wellness Research Programs at the intersection of strength, need and opportunity

- 2-1** Healthy Children, Families, and Communities
- 2-2** Care Transformation
- 2-3** Child Health Data Science
- 2-4** Precision Medicine and Disease Mechanisms
- 2-5** Maternal and Child Health
- 2-6** Child Brain and Mental Health
- 2-7** Childhood Cancer and Blood Disorders

### Initial Aims:

- Drive transformative research within each program via Grand Challenge Program Grants
- Program teams develop proposals aligned with research priorities and evaluated based on criteria including impact beyond the academy



## 3 Create and support core research facilities and platforms to enhance productivity and impact

- 3-1** Develop and expand on cores and platforms
- 3-2** Meet the needs of research programs and gaps in existing research infrastructure
- 3-3** Ensure sustainability and flexibility of core resources

### Initial Aims:

- Work with researchers to budget for use of core facilities and platforms
- Work across UCalgary to harmonize cost-recovery, access and use policies
- Work with core facilities, platform directors and faculty leaders on sustainability targets
- Pursue licensing and commercialization opportunities with core facility and platform directors in partnership with UCalgary innovation ventures



## 4 Equip and foster the next generation of child health researchers

- 4-1 Increase Research Capacity
- 4-2 Ensure Excellence in Training
- 4-3 Foster Community

### Initial Aims:

- Increase research and training capacity within child health and wellness priority areas
- Increase capacity via stipend/salary support
- Increase capacity through external opportunities for program-specific or cross-cutting training grants
- Establish trainee recruitment in partnership with UCalgary recruitment initiatives
- Enhance experiential learning for trainees



## 6 Foster national and international partnership, leadership and research in child health

- 6-1 Support large-scale national and international team grants through matching funds
- 6-2 Fund trainees for national and international research exchanges that align with strategic research priorities
- 6-3 Support Child Health and Wellness Scholars to participate in and lead international research initiatives
- 6-4 Work in partnership with UCalgary experts in global child health



## 5 Foster partnership with patients and communities to drive research

- 5-1 Co-design research with children, families and community partners
- 5-2 Integrate with local, provincial and national plans

### Initial Aims:

- Support community-engaged researchers and partners to accelerate research and amplify outcomes
- Introduce grants of varying scope and scale to grow community-partnered research
- Define the terms of engagement to foster clarity, efficiency and build trust
- Create community partnership committee to ensure discoveries become measurable actions
- Enhance communications and community engagement to spark new collaborations, celebrate and mobilize discoveries
- Build the skills and culture to foster robust partnerships through training programs

## 7 Create a sustainable framework of support for the Child Health and Wellness Strategy

- 7-1 Internal sustainability – ensure proficiency, accountability, and efficiency
- 7-2 External sustainability – match strengths to opportunities

## Measuring Success

Research teams have a social obligation to deliver on the goals in their research proposals. This plan emphasizes enhanced metrics and outcomes for research to ensure funders and institutions see the return on their investments.

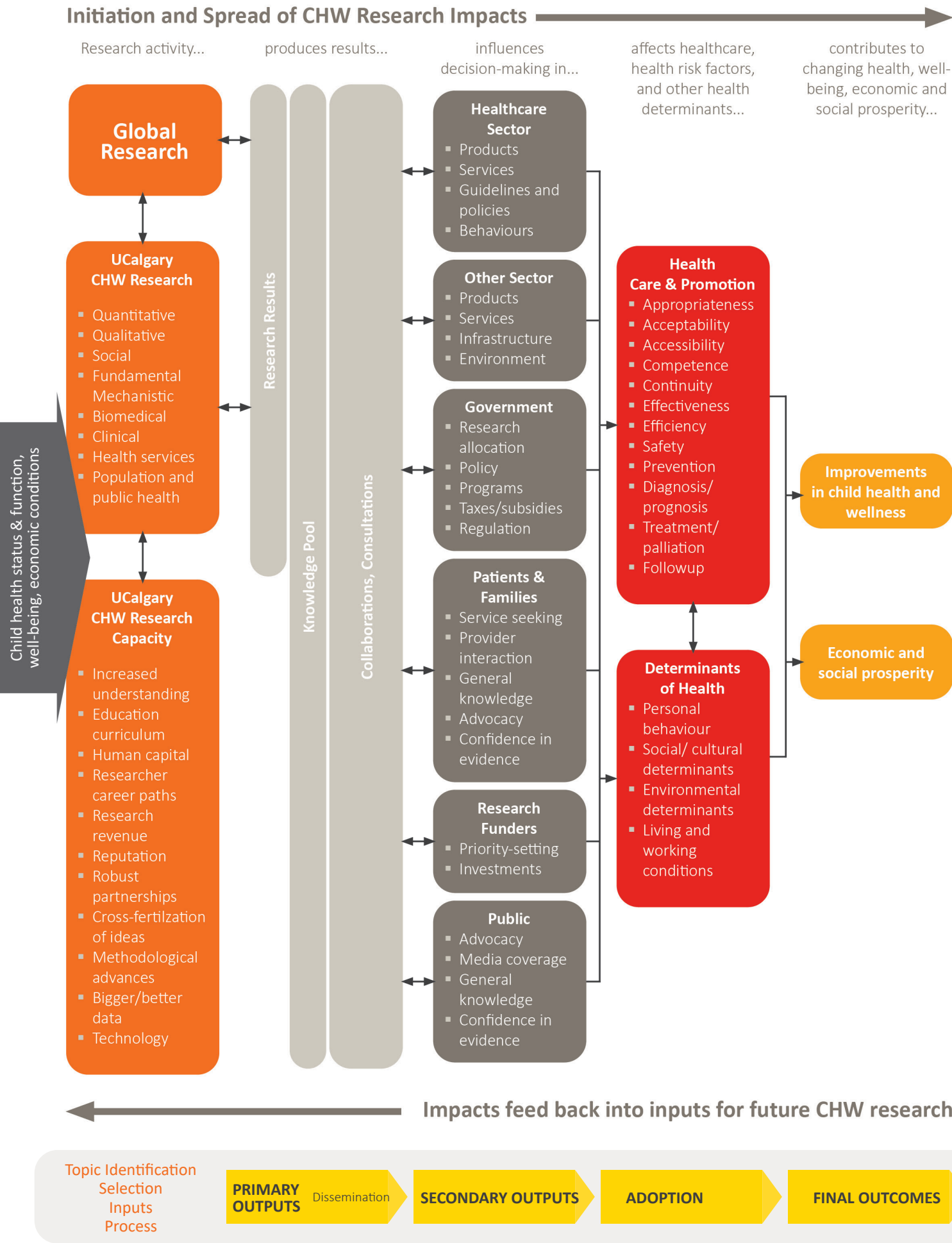
**How will we know if our Child Health and Wellness Strategy is successful?** By the collective impact of the people, programs, platforms, partnerships and activities in which we invest. Our research will always have impact in more than one domain:

- health impact
- social impact
- economic impact
- academic impact

We have adapted the Canadian Academy of Health Sciences (CAHS) Framework with metrics and measures for domains and impacts at all levels.

Impact in capacity-building and informing decision-making are highly relevant in our work. The CAHS Framework also includes metrics from the Alberta Quality Matrix for Health- widely used throughout AHS. Assessing research impact is much more than numbers and statistics. Impacts on children and families are also essential. Overall, the Child Health and Wellness strategy aims to tell the story of a child whose future is healthier through research.

# Measurement Framework







## Investment in the Strategy

In partnership with ACHF, we will ongoingly support prioritized recruitment, matching and bridge funding, as well as competitive trainee awards. Additional investments in child health and wellness will allow us to launch Grand Challenges to support multidisciplinary, innovative, and transformational research teams that align with the priorities of our Research Programs.

### **Maintaining impact through current investments:**

- Startups
- Endowed chairs
- Internal awards
- Bridge funds
- Matching funds
- Competitive trainee stipend support
- Training courses, seminars, travel
- Core funding for ACHRI leadership and operations

### **New investments into Child Health and Wellness:**

- Staff scientists
- Seed grants
- Grand Challenge program awards
- Experiential learning
- Community-partnered grants
- Publication and dissemination awards
- International training and leadership support



## **Our first-ever Child Health and Wellness Strategy will drive transformational outcomes for children and families in our community and far beyond.**

This is a joint enterprise: building on the UCalgary Strategic Research Plan; aligning with ACH's Strategic Plan; aligning with ACHF's Strategic Plan; supporting AHS' commitment to patient and family engagement in a learning healthcare system; leveraging UCalgary's burgeoning framework for innovation; following the path of UCalgary's community engagement; and partnering with community agencies and leaders to address the most critical threats to child health and wellbeing today.

This is the perfect time to take child health and wellness research at the University of Calgary to the next level. The impact? Better health and wellbeing of children and their families here and around the world. We are so grateful to be on this road together.



**UNIVERSITY OF  
CALGARY**

Alberta  
**Children's**  
**HOSPITAL**   
RESEARCH INSTITUTE