



Creating Impact:

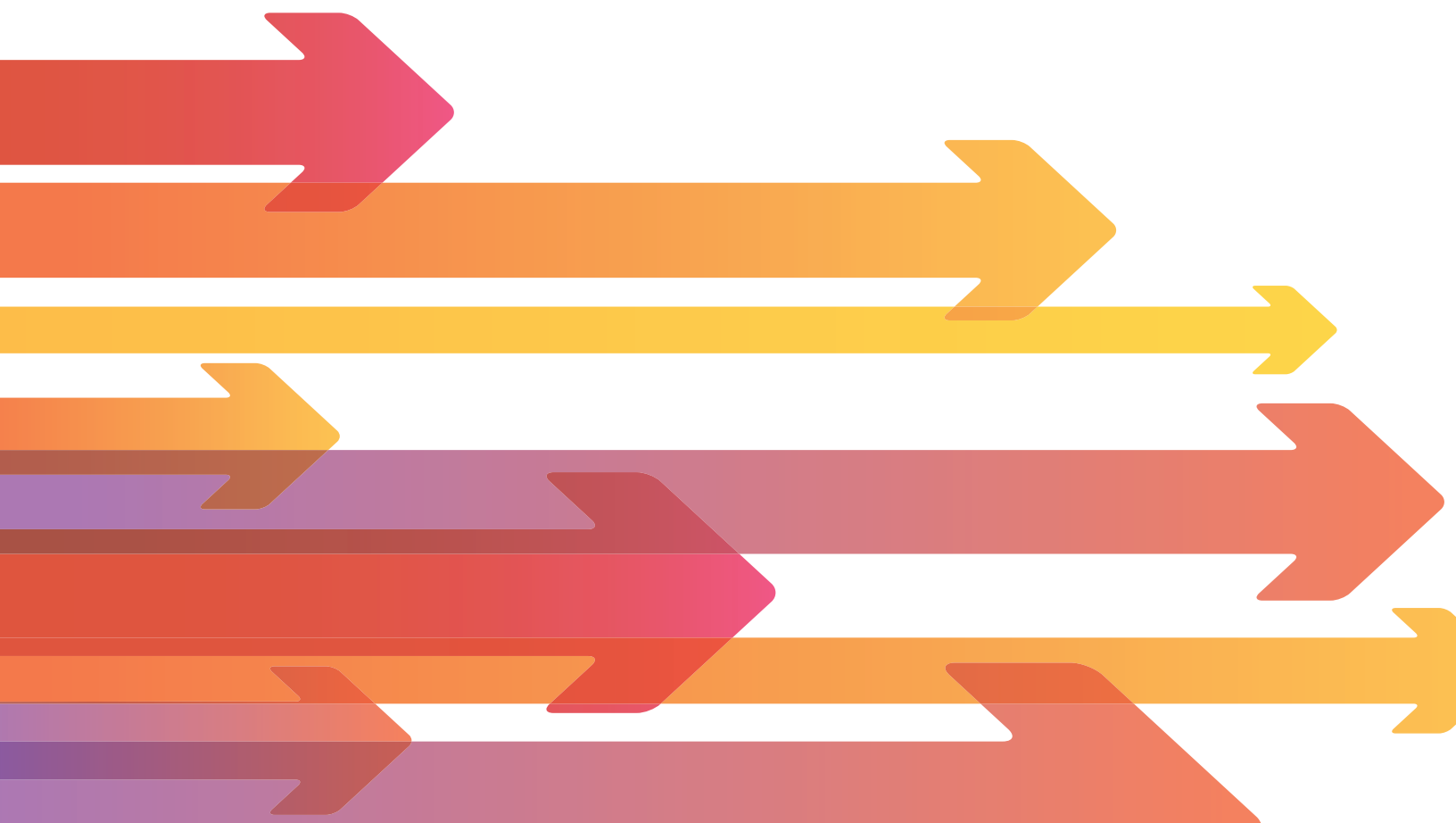
The Hotchkiss Brain Institute Strategy 2023-2027



HOTCHKISS
BRAIN INSTITUTE

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Hotchkiss Brain Institute

In 2004, The Hotchkiss Brain Institute was created through a foundational gift from the Hotchkiss family. In 2012, a gift from Ron Mathison established The Mathison Centre for Mental Health Research and Education, the mental health arm of the HBI. The Institute creates impact in myriad ways: undertaking original research that improves understanding of the brain; new scientific discoveries improving understanding of the brain; exploring new devices, drugs, data, and diagnostics; establishing provincial, national, and international collaborations. HBI is developing tomorrow's leaders of innovation and science, and driving the future of brain and mental health research.

VISION

Healthy brains for better lives

MISSION

Propel research towards innovative solutions to understand and improve brain function and mental health

VALUES

Creativity, collaboration, excellence, inclusiveness, integrity, impact, relevance

HBI's path forward: **Creating Impact**

Neuroscience is an exciting and fast evolving discipline with incredible opportunities to make real world differences in our global community. Advances in the understanding of brain biology, innovations in computational neuroscience, open science, and other rapid scientific advances mean that the Hotchkiss Brain Institute needs to be adept at reacting to and anticipating change to affirm its place as a world-leading centre of discovery.

HBI's **Creating Impact** strategy will help take us there. This is a roadmap guiding future directions and actions — a statement of aspirations, priorities, intentions, goals and directions that will help us move forward most effectively in our quest to deliver the greatest impact to people, communities and science locally and worldwide. This strategy is a high-level touch point for decision-making across the Institute, intended to inspire us and sharpen our focus on the vital tasks at hand. It is not an end unto itself, but rather an evergreen plan relevant to and reflecting the environment in which we operate now, while strengthening our ability to be nimble in the face of rapid and as-yet-unknown future challenges and opportunities.

The **Hotchkiss Brain Institute** is unwaveringly focused on one thing: **Creating an impact.**

Working closely with the HBI Executive Leadership Committee, HBI's Strategy Steering Committee members volunteered their time to expertly guide the strategy-building process. They invited input and perspectives from HBI community members, staff, faculty and trainees, and from this input, synthesized strategic directions, priorities and recommendations that are reflected in the strategy.

Because of this broad-based engagement, the **Creating Impact** strategy is expected to be used by HBI leadership, members, trainees, staff, the University of Calgary community, philanthropists, government, research funding agencies and society.

Engaging the HBI community to develop the strategy

HBI's Creating Impact strategy flows from a seven-month-long process, which included external and internal scans, as well as the active engagement of HBI members, trainees and fellows, and staff. The Strategy Steering Committee oversaw the process, and led the oversight of the strategy and its development. The Committee was comprised of:

- Dr. David Park, HBI Director, Professor, Department of Clinical Neurosciences
- Dr. Todd Anderson, Dean, Cumming School of Medicine
- Dr. Paul Arnold, Professor, Department of Psychiatry
- Dr. Jaideep Bains, Professor, Department of Physiology & Pharmacology
- Ms. Jennifer Dotchin, Senior Manager, Innovation, Partnerships and Strategy, Hotchkiss Brain Institute
- Dr. Daniel Kopola-Sibley, Associate Professor, Department of Psychiatry
- Dr. Lawrence Korngut, Associate Professor, Department of Clinical Neurosciences
- Dr. Hedwich Kuipers, Assistant Professor, Department of Clinical Neurosciences
- Dr. Deborah Kurrasch, Professor Department of Medical Genetics
- Dr. Sarah McFarlane, Professor, Department of Cell Biology & Anatomy
- Dr. Eric Smith, Professor, Department of Clinical Neurosciences
- Dr. Val Taylor, Professor, Department of Psychiatry
- Dr. Cam Teskey, Professor, Department of Cell Biology & Anatomy

Strategy development milestones included:

- In August 2022, an environmental scan of 81 comparable institutes across Canada (30), the United States (15) and Europe (37); reviewed these organizations' current missions, visions, and current and future research focus areas. A PESTLE (Political, Economic, Social, Technical, Legal and Environmental) Analysis was also completed, which provided a view of the broad environment in which HBI works.
- In September – October, consultations with key stakeholders — including 33 researchers, clinicians, donors, trainees, and colleagues in the not-for-profit sector — were undertaken, resulting in 2,430 minutes of responses to open-

ended questions. These responses were synthesized and the 144 recommendations generated helped to inform our HBI membership survey.

- The HBI membership survey was distributed to the HBI community on October 12, 2022, and 196 responses were received by November 17, 2022. This survey enabled HBI to gather information about members' values and thoughts on the Institute's mission. An additional 62 recommendations were received later, which were blended with those from the key constituency interviews.
- Responses were organized into nine major themes, and HBI hosted three focus groups with members, trainees and staff in January 2023 to clarify some of the recommendations and to fully understand some of the complex challenges which had been noted. Additional suggestions were also obtained and incorporated into the strategy.
- The HBI Executive Committee prioritized the recommendations in February 2023 and clarified the goals and objectives which are the heart of the strategy.
- The Strategic Steering Committee worked with the Cumming School of Medicine and UCalgary Central as they developed their strategic plan to ensure we have a shared vision and harmonization.
- The Strategy Steering Committee undertook a final review and approved the draft wording to be shared with the HBI community.

The **Creating Impact** strategy will be reviewed and revised annually, typically each January – February. This will include reporting on progress, evaluating the effectiveness of paths and actions, assessing new and emerging challenges and opportunities, and making any required course corrections.

Flexible, adaptable, moving quickly

Demonstrating our commitment to action, some of the recommendations that arose from consultations and surveys were fast tracked and implemented immediately, including: monthly informal meetings of HBI members, staff and trainees forging stronger ties between HBI Leadership and the HBI Trainee Organization

Our overarching objective: to deliver impact through discovery

HBI is passionate about making a positive impact on society by improving the lives of those who struggle with brain and mental health challenges and by advancing the science and practice that will make it possible to address these complex issues. To achieve this, we are dedicated to the innovative foundational research and collaboration essential for expanding understanding of brain function and for promoting novel solutions for brain health and mental well-being.

Driving innovative discovery, therefore, is central to all we do, and integral to every aspect of HBI activity.

By driving innovative discovery, HBI aims to leverage its history, substantial talent, and momentum to propel inventive solutions to deliver real and meaningful impact in Calgary, across Alberta and around the world. We aim to demonstrate the HBI's ability for meaningful global-impact research being undertaken right here.

Harnessing the power of innovation to drive progress, working with partners from myriad of places and perspectives, while fostering a culture of creativity, collaboration, integrity, impact, inclusiveness, relevance and excellence are all crucial in the quest for better understanding of the brain and in our drive to become a world-class leaders in this area.

Our future success hinges on our people. Strengthening a supportive, inclusive and interconnected Institute, where members, staff and trainees are able to thrive and grow, is imperative. We also need to recruit the best trainees, fellows and members from around the world, and support those who are already here, with cutting-edge training, mentorship and access to the best technology.

The following pages of this **Creating Impact** strategy describe the priority directions which, when implemented over the next four years, will grow HBI's place in the world of neuroscience — and the positive difference we make in people's lives.

The **Creating Impact** strategy aligns with five central avenues to advance our progress. These avenues, and the intersections among them, are detailed on the following pages.

Creating Impact



Accelerate Translational Research

Accelerating translational research will lead to the development and adoption of new and novel treatments and therapies that clinicians can use in practice to improve the lives of patients and clients, ultimately improving the lives of individuals, families and communities.

Build Global Leadership

Demonstrating global leadership will unleash the full potential of HBI's work, enabling others to benefit from and build on the discoveries made here, as well as enhance HBI's research endeavors.

Strengthen a Supportive, Inclusive, Interconnected Institute

By looking through a wider lens and bringing more voices to the table and into the lab, HBI will be better able to attract and retain top talent from around the world, enhance innovation, generate more new ideas, spur creativity, and enrich teaching and learning.

Intensify Training and Education

Focusing on our trainees' well-being and building their capacity to integrate into and thrive in the wider community when they complete their training will enable them to make meaningful contributions to advancing understanding of the brain and mental health, and to improving lives.

Propel Innovation

By propelling innovation and maintaining a strong emphasis on tangible real-world outcomes, HBI will create impact by making a significant contribution to the betterment of lives and our communities.

Accelerate Translational Research

Avenue

Integrate cutting-edge neuroscience research, advanced technologies and research expertise to accelerate the discovery of new treatments and therapies and understanding of the brain within the next five years.

Impact

Accelerating translational research will lead to the development and adoption of new and novel treatments and therapies that clinicians can use in practice to improve the lives of patients and clients, ultimately improving the lives of individuals, families and communities.

Focus on high-impact and translational research

HBI WILL

TIMELINE

PROGRESS MEASURE

Develop and support mechanisms by which high-risk high-reward innovative translational research is encouraged

Short Term
1 yr

- \$ of translational research funding

Recruit interdisciplinary faculty members in key priority areas, including brain circuits/development, mental health/addictions/stress, and large data/computational neuroscience

Short Term
1-4 yrs

- # of new faculty members year over year

Build the investigator-led interventional clinical trials programmatic capacity to enhance translation from foundational knowledge to the community

Medium Term
2-4 yrs

- # of clinical trials
- # of clinical trials partnership

Accelerate Translational Research

PROMOTE COLLABORATION AND INTERDISCIPLINARY RESEARCH

HBI WILL

TIMELINE

PROGRESS MEASURE

Integrate clinical and community connections into our research. Facilitate public, private, government, industry and interdisciplinary connections within UCalgary and beyond

Medium Term
2-4 yrs

- # of connections with community and clinical projects
- # of new partnerships
- # of collaborations with each stakeholder group

Provide funding opportunities for HBI members that encourage interdisciplinary collaboration

Medium Term
2-4 yrs

- \$ and # of grant funding provided
- # of partnerships created from grant funding

Increase capacity and build Institute skills to support collaborative open science efforts

Medium Term
2-4 yrs

- # of open science collaborations
- Impact of open science projects

Accelerate Translational Research

IMPROVE ACCESS TO DATA COLLECTION, FACILITIES AND EMERGING TECHNOLOGY

HBI WILL

TIMELINE

PROGRESS MEASURE

Build a comprehensive and effective Real-World Brain and Mental Health Data Centre that enhances HBI's capacity to capture and integrate research, clinical and community data to support translational and open science efforts with impact in patient and community populations

Short Term
1 yr

- creation of the Real World Brain and Mental Health Data Centre
- # of community group datasets included in the Real World Brain and Mental Health Data Centre
- user satisfaction (survey) of the Real World Brain and Mental Health Data Centre
- # of times Real World Brain and Mental Health Data Centre accessed/used

Continue to support the creation of and access to the most leading-edge technologies in foundational and clinical research. Consider the use and impact of AI in research.

Short to Long Term
1-4+ yrs

- # of dollars invested by research cores

Continue to advocate for additional space and explore the feasibility of constructing a new building to expand capacity, given HBI's urgent need to overcome the challenge of limited lab and office space, and research cores

Long Term
4+ yrs

- # of new lab spaces, office spaces and access to facilities is created, year over year

Propel Innovation

Avenue

Enhance a culture of innovation within HBI that centres around leading-edge strategies and solutions for neurological and mental disorders, as well as leverage insights into brain function to create advanced technologies that impact our communities.

Impact

By propelling innovation and maintaining a strong emphasis on tangible real-world outcomes, HBI will create impact by making a significant contribution to the betterment of lives and our communities.

FACILITATE COLLISIONS AMONG MEMBERS OF HBI, ALUMNI, AND INDUSTRY

HBI WILL	TIMELINE	PROGRESS MEASURE
Reinforce and bolster training opportunities for trainees and faculty members to learn more about innovation, leadership, commercialization, intellectual property and entrepreneurship	Short Term 1 yr	<ul style="list-style-type: none"># of trainees who participate in learning and development opportunities
Build and nurture relationships with industry partners to support research and translation, and to amplify impact	Short Term 1 yr	<ul style="list-style-type: none"># of new industry relationships, partnerships and collaborations established

SUPPORT INNOVATIVE RESEARCH

HBI WILL	TIMELINE	PROGRESS MEASURE
Leverage the Hopewell M.I.N.D. Prize and other programs to encourage ground-breaking research	Short Term 1 yr	<ul style="list-style-type: none"> # of programs and grants awarded
Expand the reach and impact of Cumming Medical Research Fund projects	Short to Medium Term 1-4 yrs	<ul style="list-style-type: none"> # of departmental collaborations \$ of matched funding or follow on investment in M.I.N.D. Prize, CMRF projects, and REEF supported research
Use the methods and techniques within the innovation realm to drive novel research, including innovations in clinical trial design, prototyping, and other innovative approaches to generate fresh ideas and explore new avenues of inquiry	Short Term 1 yr	<ul style="list-style-type: none"> # of HBI members who access innovation techniques training

ACCELERATE INVESTMENT IN BOLD IDEAS THROUGH POLICY AND INNOVATION IN NEUROSCIENCE

HBI WILL	TIMELINE	PROGRESS MEASURE
Facilitate collaboration with UCalgary entities, other external agencies, and community based organizations to encourage investment and partnerships to enhance our innovation agenda	Medium Term 2-4 yrs	<ul style="list-style-type: none"> \$ of venture capital funding received by HBI originating companies \$ and % of UCeed funds allocated to HBI members
Support the philanthropic funding of UCeed Neuro to promote early-stage investment funds to advance HBI members' innovative research	Medium Term 2-4 yrs	<ul style="list-style-type: none"> \$ of funds within UCeed Neuro # of companies formed by HBI members and trainees

Build Global Leadership

Avenue

Build a stronger, more diverse and unified network of researchers, trainees, alumni and collaborators throughout the world to enhance the research and educational impact of HBI. Foster a culture of innovation, knowledge-sharing and collaboration within Canada and beyond. Facilitate opportunities for global joint research projects, mentorship and professional development. Leverage various communication platforms and channels to engage with the research and lay communities to promote HBI's achievements and thought leadership in neuroscience and mental health.

Impact

Demonstrating global leadership will unleash the full potential of HBI's work, enabling others to benefit from and build on the discoveries made here, as well as enhance HBI's research endeavors.

SHOWCASE HBI'S STRONG RESEARCH PORTFOLIO

HBI WILL	TIMELINE	PROGRESS MEASURE
Showcase cutting-edge research that is recognized globally, using a variety of communication methods	Short Term 1 yr	<ul style="list-style-type: none">• social media metrics (Twitter, TikTok, Instagram)• % of website users outside Canada
Support members in presenting research findings at international conferences	Short Term 1 yr	<ul style="list-style-type: none">• \$ of funding provided to members• # of partnerships created because of this travel

Build Global Leadership

INCREASE RESEARCH AND EDUCATION COLLABORATIONS

HBI WILL	TIMELINE	PROGRESS MEASURE
Expand international collaborations and networks	Short & Medium Term 1-4 yrs	<ul style="list-style-type: none"> # of publications (total, provincial national and international collaborations) \$ funding distributed # of collaborations with international stakeholders (industry, academic, government)
Build a strategy to seek out top international trainees	Medium Term 2-4 yrs	<ul style="list-style-type: none"> # of international trainees \$ funding provided to international trainees

IMPROVE TRAINEE AND ALUMNI NETWORKS

HBI WILL	TIMELINE	PROGRESS MEASURE
Enhance communication both internally and externally to build community and expand HBI's global network	Short Term 1 yr	<ul style="list-style-type: none"> # of interactions with our communication channels # of HBI members who are satisfied with our communication
Expand the HBI alumni program to ensure HBI is represented globally	Short Term 1 yr	<ul style="list-style-type: none"> % of trainees who are actively engaged with HBI (events, programs, etc.) % of alumni who are actively engaged with HBI (events, programs, etc.) % of trainees who recommend HBI to others % of alumni who are employed or contributing to the community # of mentorships coordinated

Intensify Training and Education

Avenue

Recruit, train and mentor the next generation of leaders and experts in the field of brain and mental health. Provide comprehensive support, resources and opportunities for their growth and development.

Impact

Focusing on our trainees' well-being and building their capacity to integrate into and thrive in the wider community when they complete their training will enable them to make meaningful contributions to advancing understanding of the brain and mental health, and to improving lives.

ENHANCE THE IMPACT OF HBI'S PIONEERING REALISE PROGRAM

HBI WILL	TIMELINE	PROGRESS MEASURE
Develop a rigorous and interdisciplinary leadership curriculum	Short Term 1 yr	<ul style="list-style-type: none">• # of graduates who go on to make significant contributions• # of publications
Increase training in the areas of innovation and entrepreneurship	Short Term 1 yr	<ul style="list-style-type: none">• # of presentations
Facilitate opportunities for mentorship and career support from established leaders in the field	Short Term 1 yr	<ul style="list-style-type: none">• # of trainees who obtain mentorship

Intensify Training and Education

INCREASE AWARD FUNDING

HBI WILL	TIMELINE	PROGRESS MEASURE
Improve access to both a higher number of awards and a higher value of those awards for trainees by increasing scholarships, fellowships and grants funding through philanthropy, and pursuing additional government funding opportunities	Medium Term 2-4 yrs	<ul style="list-style-type: none"> \$ amount of scholarship, fellowship, and grant funding provided to trainees \$ of external awards received by trainees % of acceptance rate % diversity of trainees of applicants \$ of external awards received by trainees
Advocate for increased minimum award funding for trainees and fellows	Short Term 1 yr	<ul style="list-style-type: none"> \$ of external awards received by trainees \$ minimum funding increases for trainees and fellows

RECRUIT THE BEST AND BRIGHTEST TRAINEES

HBI WILL	TIMELINE	PROGRESS MEASURE
Develop a comprehensive recruitment strategy	Short Term 1 yr	<ul style="list-style-type: none"> recruitment strategy completed
Create a communication strategy to showcase the trainee program nationally and internationally, and build HBI's brand as a leading training institute	Short Term 1 yr	<ul style="list-style-type: none"> communication strategy created and implemented
Leverage alumni connections worldwide to recruit trainees	Short Term 1 yr	<ul style="list-style-type: none"> % diversity applicants

Intensify Training and Education

IMPROVE TRAINEE'S EXPERIENCES

HBI WILL	TIMELINE	PROGRESS MEASURE
Foster an increased sense of community by encouraging collaboration and communication among trainees, faculty and staff	Medium Term 2-4 yrs	<ul style="list-style-type: none"> % increase in the sense of community within trainees
Provide more opportunities for social interaction that promote a shared sense of belonging	Medium Term 2-4 yrs	<ul style="list-style-type: none"> # and % of trainees attending events
Create more opportunities for active engagement between HBI leadership and members with trainees, in order to mentor, guide and collaborate, while supporting trainee-driven communication and engagement opportunities such as town halls, newsletter articles and social media	Short Term 1 yr	<ul style="list-style-type: none"> # of collaborations trainees feel they are actively engaged and participate

SHOWCASE A VARIETY OF CAREER PATHWAYS FOR TRAINEES

HBI WILL	TIMELINE	PROGRESS MEASURE
Ensure all trainees have more opportunities to find employment in their preferred career area by increasing connections to community, research, and industry	Medium & Long Term 2-4+ yrs	<ul style="list-style-type: none"> % of trainees who successfully obtain a job in their field of interest after training 1, 3, 5, 10 years average of (self-reported) salaries
Provide opportunities to trainees for career internships and work-integrated learning opportunities	Medium & Long Term 2-4+ yrs	<ul style="list-style-type: none"> # of trainees who access work integrated learning programs # of trainees who access internships
Build capacity between HBI and external stakeholders to provide mentorship and career advice by broadening the HBI alumni program to include access to mentors	Short & Medium Term 1-4 yrs	<ul style="list-style-type: none"> # of mentors and mentees # of external mentors

Strengthen a Supportive, Inclusive, Interconnected Institute

Avenue

Leverage the value of different perspectives, talents and lived experiences to create the optimal environment for thinking beyond the usual, and for promoting innovative discovery. Build a sense of belonging to ensure that all HBI members, trainees and staff have opportunities to succeed, creating a place where all feel valued and supported. Prioritize creating safe and welcoming spaces in order to support the physical and mental health, and quality of life, of all HBI members, trainees and staff.

Impact

By looking through a wider lens and bringing more voices to the table and into the lab, HBI will be better able to attract and retain top talent from around the world, enhance innovation, generate more new ideas, spur creativity, and enrich teaching and learning.

ADDRESS SYSTEMIC BARRIERS AND BIASES THAT LIMIT RESEARCH, CAREER AND TRAINING ADVANCEMENT

HBI WILL	TIMELINE	PROGRESS MEASURE
Identify, review and consider any employment barriers, and develop mechanisms to ensure these are removed or minimized	Medium Term 2-4 yrs	<ul style="list-style-type: none">strategy to overcome employment barriers is created
Define best practices to decrease recruitment barriers	Medium Term 2-4 yrs	<ul style="list-style-type: none">strategy to decrease recruitment barriers is created
Augment and communicate available childcare support to enable people to manage home and work responsibilities effectively	Short Term 1 yr	<ul style="list-style-type: none">Increased access to childcare supports

Strengthen a Supportive, Inclusive, Interconnected Institute

EMBRACE A CULTURE OF DIVERSITY, AND INCLUSION

HBI WILL	TIMELINE	PROGRESS MEASURE
Develop an EDIA strategy for HBI that includes recruitment, retention, training and education	Short Term 1 yr	<ul style="list-style-type: none"> strategy is implemented
Remove communication barriers to ensure inclusion and visibility of all members, staff, and trainees	Short Term 1 yr	<ul style="list-style-type: none"> all HBI communication reflects HBI's diverse community
Provide EDIA and wellness training opportunities to members, trainees and staff	Short Term 1 yr	<ul style="list-style-type: none"> # of training opportunities # of people who attend

FACILITATE COLLISIONS AMONG MEMBERS OF HBI, ALUMNI, OTHER INSTITUTES, AND THE COMMUNITY

HBI WILL	TIMELINE	PROGRESS MEASURE
Build mechanisms for ongoing engagement among all HBI members, trainees and staff	Short Term 1 yr	<ul style="list-style-type: none"> mechanism is built, and members, trainees are staff are satisfied with communication
Test and develop effective internal communication channels, including informal mechanisms (e.g., Slack)	Short Term 1 yr	<ul style="list-style-type: none"> internal database of members, staff and trainees is created offering segmentation and improved communication
Create a funding opportunity that brings HBI members together formally and informally	Short Term 1 yr	<ul style="list-style-type: none"> # of funding opportunities used # of people engaged
Build connections among HBI trainees and HBI members by hosting monthly informal social opportunities	Short Term 1 yr	<ul style="list-style-type: none"> # of opportunities to engage increased
Build connections among the HBI Trainee Organization and the EDI committee to ensure that trainees, staff, and faculty are represented	Short Term 1 yr	<ul style="list-style-type: none"> HBITO member attends and provides guidance on the EDI committee

Strengthen a Supportive, Inclusive, Interconnected Institute

ENHANCE THE HEALTH AND WELLNESS - OF MEMBERS AND PHYSICAL INFRASTRUCTURE - THROUGHOUT THE INSTITUTE

HBI WILL	TIMELINE	PROGRESS MEASURE
Conduct yearly physical space inspections to ensure a healthy work and study environment, and resolve any issues quickly	Short Term 1 yr	<ul style="list-style-type: none"> yearly inspection completed time to resolve issues
In collaboration with UCalgary stakeholders, encourage the HBI community to use existing wellness and mental health training opportunities, such as those offered by the WOW office, for trainees, members and staff	Short Term 1 yr	<ul style="list-style-type: none"> # of training opportunities advertised and/or attended increased access and use of WOW activities
Develop a health, safety and wellness strategy for HBI, in collaboration with experts, as well as promote and support improved work-life balance	Short Term 1 yr	<ul style="list-style-type: none"> strategy is created and implemented faculty, staff and trainees note an improved work-life balance

Next steps

The Hotchkiss Brain Institute's new **Creating Impact** strategy is a comprehensive roadmap born of collaboration, and as such, it will guide the Institute's efforts toward making a significant impact in the field of neuroscience. The strategy's key focus is to deliver the greatest impact to people, communities and science locally and globally. Implementation of the strategy has already begun, and HBI plans to review and revise it annually, ensuring that it remains relevant and effective in the face of new and emerging challenges and opportunities. This new strategy is a crucial step toward achieving our vision of being a world-leading centre of discovery in brain and mental health — and for creating impact in the world.