# Terms and Expectations
# 2026 – 2031 Charter

## Muscle Health Research Centre (MHRC)
## Faculty-Based ORU

### 1. Mandate

The mandate of the Muscle Health Research Centre (MHRC) is to provide a centralized research emphasis on the importance of "muscle health" for the well-being of Canadians. The vision of the MHRC is to be Canada's leading research centre for the study of muscle health and disease. We are achieving this through 1) innovative research, 2) the education of qualified trainees, 3) expanded national and international partnerships, and 4) the translation of our findings for the benefit of all Canadians.

### 2. Lead Faculty

As the lead Faculty, the Faculty of Health agrees to support the development of MHRC in collaboration with the Office of the VPRI. This support includes promoting membership in MHRC, supplying a decanal representative to serve as Chair of its Board. The Faculty of Health further agrees to integrate MHRC objectives into its strategic research planning and to champion the development of MHRC as a cornerstone of interdisciplinary research activity in the areas of its mandate. Development of MHRC will be factored appropriately into the Faculty's strategic planning including with respect to faculty complement, undergraduate, graduate, and post-doctoral fellow recruitment and training, communications, advancement opportunities, continuing education, and other relevant areas. Given the reciprocal nature of this relationship, the MHRC is expected to contribute to the research objectives and activities of the Faculty of Health. We would like to see the MHRC apply for large team grants and develop a plan to assess research productivity and success.

### 3. Participating Faculty

As a participating Faculty, the Faculty of Science agrees to play a supportive role in promoting the development of MHRC, including approving course release should the Director be a Faculty of Science faculty and providing a decanal representative to its Board.

### 4. Board

The Board for MHRC has responsibility for oversight and regular review of its progress against the expectations detailed below. The Board approves the appointment of the Director. The Board is expected to champion MHRC with internal and external stakeholders as appropriate, and to serve as a resource for the Director in assisting the Centre achieve its objectives. Composition of the Board for MHRC normally will be as follows:

a. Dean (or designate), Faculty of Health (Chair)
b. VPRI (or designate) (Vice-Chair)
c. Dean (or designate), Faculty of Science

The Board may consult with the Executive Committee or other governance, or advisory bodies established by MHRC but is not intended to replace or take over the functions of those bodies.

## 5. Directorship

Director terms are typically 5-years in length. Upon the completion of a Directorship term, the Faculty will appoint, following the Director search process, a Director for a 5-year term. Directorships are subject to the continuation of the Senate Charter for the Organized Research Unit, which is re-chartered every 5 years.

## 6. Objectives and Expectations, 2026-2031

General nature of research

Research at MHRC is focused on skeletal muscle, used for locomotion, movements and exercise, cardiac muscle, which circulates the blood, and smooth muscle, which determines the diameter of the blood vessels in which the blood is circulated.

MHRC faculty members and their trainees use multidisciplinary cellular, molecular, and whole-body approaches to study muscle biology in the broadest terms, including muscle and heart development, disease, metabolism, blood supply, injury and regeneration, and adaptation to acute and chronic exercise. These studies allow for an understanding of the integration of physiological systems that determine metabolism, locomotion, heart health and quality of life.

The overall objective for the MHRC is to develop new partnerships, programs, and funding opportunities that strengthen MHRC members' research and educational impact in themes focused on muscle health, and to continue expanding MHRC collaborations and prominence in this field both nationally and internationally. This

objective will be pursued by developing three major priority areas for the MHRC between 2026-2031 are:

1. Increase operating funding for MHRC member research programs through team-grant applications
2. Expand core research infrastructure through team-grant applications
3. Develop new national and international partnerships with academic, clinical, community, industry and not-for-profit sectors to provide MHRC faculty members with new research and educational opportunities

Proposed organizing themes, focus areas and programs of research:

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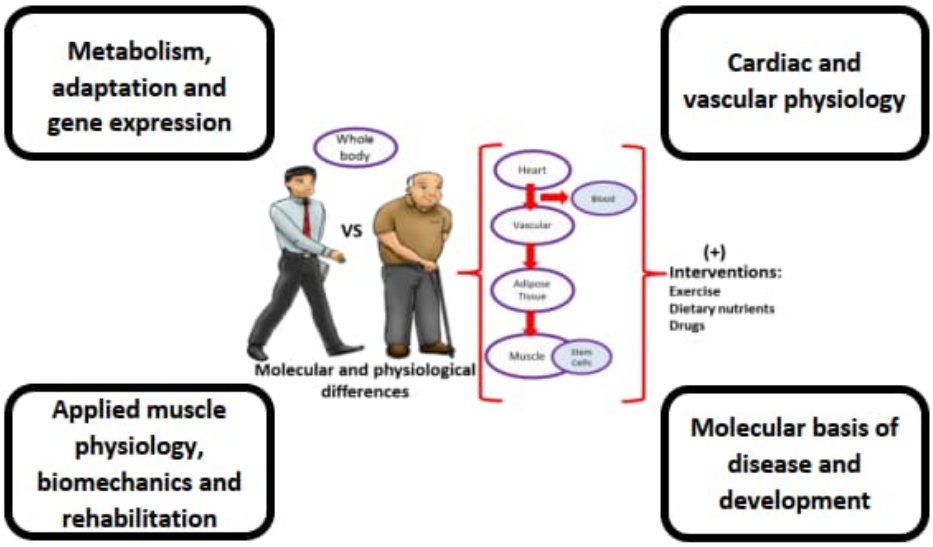


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To embrace the challenge of forging a greater understanding of muscle health in a variety of diseases and disorders as well as during aging, the MHRC has proposed a broad list of activities for this Charter.

This vision also spans the spectrum from the fundamental biology of muscle health to its applied and clinical implications for the health of Canadians. This approach draws on the complete strength and breadth of talent within the MHRC membership, with

continued expansion of our extensive previous and ongoing engagements with partners and communities through research, education, and training of HQP.

Below is a mandate of activities for the Charter period, designed to accept the challenge of furthering research and education in investigating muscle health, and its decline, in aging and aging-related diseases. It includes current programming and activities, as well as new initiatives.

The purpose is to drive innovation in muscle health research, translate discovery into solutions that improve muscle health in society, create opportunities for trainees to augment their research talent through external partnerships, create new avenues for impacting communities through education, and to elevate the MHRC toward even greater international reputation.

## Strategic Roadmap for the Muscle Health Research Centre (MHRC): 2026 and Beyond

The Muscle Health Research Centre (MHRC) continues to establish itself as a global leader in muscle science, driving innovation through a strategic blend of high-impact research, trainee empowerment, and community engagement. Over the coming years, the MHRC will transition from a successful research hub into a formalized national and international powerhouse, leveraging new funding streams and expanding its clinical and industry footprint.

### Research Excellence and Infrastructure Development

A cornerstone of the MHRC's future is the pursuit of large-scale team grants that provide the financial backbone for sustained discovery. In 2026, the MHRC will submit a Letter of Intent for an NSERC CREATE team grant, targeting $1.65 million over six years. This initiative is designed to support more than 50 trainee stipends and facilitate mobility with national and international partners as they developed skills that are in demand by the life sciences sector. Beyond the funding, this grant will serve as the catalyst for a Work Integrated Learning Program whereby trainees are placed with small and medium enterprise industries in the life sciences sector which are increasingly prioritized by the provincial government, as well as clinical research programs focused on biotechnology development in target populations, not-for-profit societies focused on knowledge translation, and academic labs who are already connected to our members and research centres across Canada and globally that are now formally partnering with our Centre. Another lasting outcome will be the formation of the first "Muscle Health Network of Canada" and a corresponding international network using these active partnerships as a foundation, providing a long-term

platform for global collaboration. If this grant is unsuccessful, reviewer feedback will guide a revised application and strategy for a 2027 resubmission.

The MHRC plans to apply for CFI-IF and ORF-LIF infrastructure grants in 2028, seeking between $4 million and $8 million. This funding will modernize the Centre's clinical and pre-clinical research tools, ensuring that MHRC members have the world-class facilities required to remain at the cutting edge of muscle health. This year is chosen strategically with the opening of the new medical school. The MHRC has already begun to form partnerships with clinicians throughout MacKenzie Health and other health centres (e.g. Southlake Regional Health Centre) as a proactive strategy to link our members to new clinical partnerships ahead of the School's opening. This strategy will inform the theme of the clinical focus of the grant application. Likewise, the MHRC has already been linked to numerous industry partners through Life Science Ontario provincial events and VPRI-sponsored industry events on campus that have led to active collaborations focused on biotechnology development. This strategy will be employed each year of the new Charter to expand the list as a strategy to support this grant application focused on acquiring clinical and preclinical (animal model, cell culture) research infrastructure that will accelerate the translation of discoveries into products and technologies that help people overcome physical disabilities that limit physical movement and counter the effects of diseases on muscle health. If unsuccessful, the grant will be revised and resubmitted in 2030.

These large-scale bids are bolstered by agile CIHR Catalyst Grants, which will provide seed funding for community engagement in partnership with clinicians at MacKenzie Health. This approach is part of the larger strategy to form proactive partnerships with clinicians in advance of the School of Medicine as well as the York region community through initial funded community engagement events that educate the public about the effects of aging, nutrition, and exercise on muscle health. An application submitted to CIHR in partnership with new clinical and community partners as well as the City of Vaughan in Fall 2025 will be resubmitted in 2026 if unsuccessful. The Centre will also constantly scan for unexpected funding for additional knowledge translation activities.

The Director has also recently discussed new partnerships with the DRDC in National Defence with the goal of identifying initial funding opportunities for members in 2026-2027. This strategy is focused on finding new opportunities for our members' expertise to contribute to national priorities as recently identified in the Federal budget. Likewise, MHRC Executive Members are liaising with other not-for-profit organizations (e.g. Heart and Stroke Foundation) to discuss developing funding initiatives that meet their organizational objectives that align with MHRC member research strengths.

Members will be invited to co-apply to team grants and to form sub-committees that focus on specific components of the application while the Director guides the process

and focuses on major sections of each application as well as continuing to form and manage new partnerships with the Centre. New members will be recruited strategically to support major grants which could include faculty and students from Engineering in regard to recently developed and expanding partners between the MHRC and biotechnology companies. New members from Osgoode School of Law and Schulich School of Business will be approached as part of a plan to include leadership and professional development courses as well as Engineering for courses on AI that will become integral to the NSERC CREATE application's focus on providing trainees with the skills demanded by the life sciences sector. If successful, the implementation of these connected networks across campus and beyond for the CREATE grant will be realized through Faculty of Health support for a MHRC member(s) to assume new leadership roles in the Centre with guidance by the Director. Likewise, external professionals such as National Defence scientists, clinicians, and industry-based scientists will be invited as Adjunct members when they provide strategic value to MHRC members or Centre-wide initiatives such as team-grants.

The MHRC continues to provide a $5,000 seed grant to support new collaborations between MHRC faculty members focused on collecting preliminary data for larger external grant applications. The MHRC also provided a Visiting Scholar Fund for members to sponsor a visiting scientist for up to 2 weeks as part of a strategy to foster new external collaborations and provide expertise and training to MHRC members.

National and International Connectivity

The MHRC is actively expanding its reach through formal partnerships with international muscle research centers to support the 2026 NSERC CREATE grant in addition to the grander strategy of building new opportunities for all of our members to strengthen their research and skills development. Building on established dialogues with institutions in Canada (Neuromuscular Disease for Canada; NMD4C, Ottawa), Denmark (Danish Diabetes Academy, University of Copenhagen Microscopy Core, Southern Denmark University), France (Institute NeuroMyoGène, Lyon), and the USA (Myology Institute, University of Florida), the Centre is now integrating partners from Italy (University of Padova) and Sweden (Karolinska Institute). Many of these partnerships were established in the last 3 years and have led to MHRC members applying for funding to support co-supervision of PhD students with Danish researchers, trainee development workshops (Lyon), and shared seminars (Florida). These partnerships build on the numerous active partnerships that MHRC faculty have fostered on their own for many years.

For 17 years, the MHRC has become renowned by institutions across Ontario and Quebec through the annual Muscle Health Awareness Day (>150 attendees) held at York University as well as the MHRC Seminar Series that invites many Canadian

researchers as well as international speakers. This foundation is being expanded with the growing list of Canadian academic partnerships such as NMD4C (Ottawa) and individual member collaborations with other Canadian researchers, as well as patient community advocacy partners (Muscular Dystrophy Canada, MitoCanada for mitochondrial disease) who connect the Centre to patient community members who are keynote speakers at our annual conference. This rapidly expanding Canadian network will be leveraged to form the Muscle Health Network of Canada that draws on multidisciplinary researchers studying broad aspects of muscle health including how muscles are affected by aging, exercise, nutrition, and many diseases such as diabetes, obesity, cancer, injury, menopause, neuromuscular disease, and other conditions. As noted above, the Network's connectivity will be accelerated with applications for NSERC CREATE funding that promotes trainee mobility and new collaborations. This application will leverage the existing multi-institutional partnerships to create a formal ecosystem for knowledge exchange. The longer term goal of this network, facilitated initially by a NSERC CREATE grant, will be to formalize an ecosystem for knowledge exchange, hosting low-cost activities such as joint seminars and online methodology repositories, share in community knowledge translation events, strengthen large-scale infrastructure and operating funding that involves multiple institutions (e.g. CFI-IF/ORF-LOF; NFRF-T), create new pathways for trainees, and accelerate discovery and health solutions focused on improving muscle health in Canadians.

Clinical Integration and the School of Medicine

The upcoming opening of the School of Medicine in 2028 represents a transformative opportunity. The MHRC Director will play an active role in planning committees to align muscle health research with the new medical curriculum. Central to this integration is the expansion of clinical affiliations with Southlake Regional Health Centre and Mackenzie Health. The Director has proposed an outline of a satellite lab at Southlake hospital that is being considered by their administration. By expanding this strategy with more hospitals, the MHRC aims to bridge the gap between bench-side research and bedside clinical application, particularly in rural and underserved communities, and forge new opportunities for engaging our members in clinical trials for emerging therapies and practices.

Trainee-Centric Initiatives and Workforce Development

Trainees are the lifeblood of the MHRC. The Centre's Student Committee has grown significantly, fostering a "for students, by students" culture that includes international seminar series, podcasts, and social media outreach. The Student Committee has created a new podcast series on numerous social media forums that interview mentors offering professional guidance to trainees as well as other students to discuss

challenges and opportunities in graduate school. The Committee also spearheaded new local elementary and high school connection events to bring the science of kinesiology and muscle health to local schools with interactive models and fitness testing equipment. The Committee is also launching a new program inviting local area schools to submit artwork emphasizing their understanding of muscle health which will be followed by invitations to visit campus and rotate between MHRC labs for a Day at York. We will identify barriers to such visits and provide support to ensure students can attend this inspiring event. The Committee also created a new and innovative International Trainee Seminar Series that is hosted by MHRC students and invites one international, one national, and one MHRC student to present virtually. Several seminars are held each year by the Committee.

To support MHRC students, the MHRC maintains its Student Fellowships—prioritizing those without other funding—and biennial Career Day to highlight diverse professional pathways by inviting industry, clinical, government, and academic experts to provide mentorship and connections.

Innovative educational programs also serve as opportunities to transform MHRC students into leaders and elevate the prominence of faculty research programs and the Centre. The Aurora Scientific-MHRC International Murine Muscle Mechanics Workshop has established the MHRC as the international headquarters for specialized muscle force measurement training. This model will be replicated through new theme-specific workshops, increasing the Centre's reputation and providing trainees with roles as expert instructors. Furthermore, a new Work Integrated Learning (WIL) program that will be catalyzed by partnerships such as this and the planned NSERC CREATE grant will offer micro-certificates and paid internships, connecting students directly with industry and municipal partners. A modified version of WIL will be developed with the Faculty of Health if the CREATE is unsuccessful.

<u>Knowledge Mobilization and Public Visibility</u>

The Muscle Health Awareness Day remains the MHRC’s flagship national conference. Now revenue-neutral or better, MHAD has expanded its scope to include the voices of patient partners alongside clinical experts, conveying the real-world impact of muscle disorders. This commitment to visibility extends to the planned Public Lecture Series that will be supported by applications to CIHR Catalyst Grants in partnership with the City of Vaughan and clinicians at Mackenzie Health. There will also be an extension of ongoing high school visits which use hands-on lab tours to inspire the next generation of scientists.

The MHRC will extend its success in partnering with national networks to host summer schools. A template for this approach is exemplified by the success of the MHRC’s new

partnership in 2025 with the Neuromuscular Disease for Canada (NMD4C) network. Together, the 2nd annual NMD4C Summer School was planned and hosted by the MHRC. This event was conducted by two MHRC laboratories (Drs. Cheng, Scimé) who provided hands-on instruction of techniques related to muscle force assessment and stem cell measurements to over 30 graduate students visiting from across Canada. MHRC students were put in leadership positions as instructors and formed new connections. Building on this success, the MHRC has recently partnered with the Canadian Musculoskeletal Rehab Research Network in London, Ontario, to provide discounted rates for MHRC students to attend their summer school. This Network has invited MHRC members to join and access new clinical and patient communities. The partnership has led to a discounted rate for MHRC students to attend a summer school, and ongoing discussions focus on future opportunities for the MHRC to host a similar school. Similar strategies will continue to be developed by identifying additional networks of interest and benefit to our members.

To ensure these efforts reach a global audience, the MHRC is modernizing its digital presence across LinkedIn, Instagram, and Spotify. This multi-channel approach not only promotes member publications but also highlights the "human side" of research through the "Meet the MHRC" series that highlights the research of MHRC students. The video series is designed by student members following our core principle of placing students in leadership positions focused on benefits ‘by students, for students’.

Sustainability and Organizational Growth

The MHRC is committed to a sustainable financial and structural model. New revenue streams, such as fee-for-service analytical offerings, will utilize core infrastructure to support the salary of research staff. The MHRC will also liaise with core facilities at local universities and at York University to negotiate discounted fee-for-services using the Centre’s critical mass as leverage (e.g. transcriptomics, other). Internally, the Centre is refining its membership structure to ensure a highly active and engaged faculty base, while providing input on faculty hiring to ensure the "complement plan" aligns with future research themes like AI in muscle health.

The Centre’s activities are sustainable given they are built on a strong foundation of collaboration between our many members. For example, the Student Committee is highly active and structured into sub-committees with Chairs that report to the overall Committee student Chair and Director. Faculty mentors are in support of the Committee’s activities. Numerous faculty members have held grants together or co-supervised graduate and undergraduate students with graduate student work and training being conducted in multiple labs. Likewise, there are many dozens of

publications that demonstrate how collaboration between our members labs is a natural process that continues to expand each year.

Further efforts to promote sustainability include budgeting MHRC costs in team grant applications including Coordinator salary, student stipends, potential teaching release for MHRC faculty to assume leadership roles in implementing successful team grant activities, and other costs, as well as conducting workshops in partnership with industry that attract international attendees using a fee-for-instruction model.

The MHRC will provide a more official voice to FoH and KHS hiring to support continued MHRC international reputation and FoH complement planning in critical areas (e.g. replace future retirees, identify new areas of research themes).

Through these integrated initiatives, the MHRC is not merely conducting research; it is building a self-sustaining, globally recognized ecosystem that advances muscle health for the benefit of trainees, clinicians, and the broader community.

Expanded partnerships on campus. The MHRC will form new partnerships with units on campus that provide expertise in commercialization and intellectual property, AI, and mathematical modeling to strengthen our research and develop curricula that educate our trainees in these skills that are in-demand for numerous sectors. We will advance our ongoing discussions with other Organized Research Units on campus including LaMarsh Centre of Child & Youth Research to expand our partnership with Muscular Dystrophy Canada (MDC) with the aim designing educational programs that inform children with neuromuscular disease and their families of the science of muscles and, with guidance from MDC and their clinical partners, include content that explains the science behind emerging therapies that improve mobility. The MHRC leadership will also interact with other ORUs at annual Retreats to identify new opportunities for cross-disciplinary collaboration in the next Charter with the aim of developing health solutions and educational programs for students and communities that combine multiple themes (e.g. health technologies, communication of muscle health through creative expression in the arts, other).

The proposed research program is timely given the MHRC's trajectory for national and international recognition has accelerated. The activities over the last 5 years have recruited more faculty and student involvement in MHRC initiatives including summer schools, student committees, and team grants. This momentum and unification of MHRC members will be further stimulated by continued investment into existing and successful activities as well as the next stage of ambitious objectives to extend the MHRC's positive influence to make further impact locally in communities, nationally through national partnerships, and internationally by creating formalized networks.

Alignment with York University and Faculty of Health Academic and Research Priorities:

The mission of York University is the pursuit, preservation, and dissemination of knowledge, with a promise to pursue excellence in research and teaching in pure, applied, and professional fields. The University Action Plan UAP 2020-25 outlines six priorities and initiatives that guide strategic actions and initiatives. Among these, several priorities stand out as most relevant to the pursuits of the MHRC, including: 1) Knowledge for the Future: from Creation to Application, 2) 21st Century Learning: diversifying whom, what and how we teach, 3) Global Engagement, 4) Working in Partnership, and perhaps most of all 5) Living Well Together (promoting health in the Global Community). These activities also align with the United Nations Sustainable Development Goal 3 "Good Health and Well-Being" that is featured in the UAP. Likewise, the Charter aligns with the Faculty of Health Strategic Plan 2024-2028 Building a Health World for All by focusing on 1) "Student Engagement and Impact" by enhancing student opportunities and capacities to succeed in their education through greater access, meaningful community engagement and experiential and work-integrated learning, 2) "Amplifying Research Impact" by being leading innovators, collaborators, and changemakers in health research, education, and practice, locally to globally, and 3) "Partnering for Positive Change" by employing and strengthening ethical, respectful, collaborative, and reciprocal relations with governments, health organizations and community groups to advance innovation and achievement in scholarship and research.

In view of the breadth of our research programs, spanning skeletal muscle, the heart, smooth muscle regulation of blood flow, and related physiological themes, research within the MHRC exemplifies interdisciplinarity, a hallmark and priority of the York 2023-2028 Strategic Research Plan. In particular, research within the MHRC fully conforms with two of the top research priorities for York University in the area of "Building Health Lives, Communities and Reimagining Futures" and "Reaching New Horizons in Science, Technology and Society." The proposed expansion of faculty

collaborations and student internships with multiple sectors supports a 3rd Priority "Elevating Entrepreneurship through Socially Responsible Innovation" considering that projects will integrate patient partners from local communities, clinical professionals, and industry as co-creators of research projects generating basic scientific knowledge with translational outcomes to health solutions. As described above, muscle health research in the field of aging and inherited diseases is a key component of the MHRC platform that has contributed to top global rankings in muscle research, thereby positioning York University as a leading institution in the field of muscle health research in Canada and globally.

## 7. Added Value

The Muscle Health Research Centre (MHRC) at York University provides an indispensable collaborative framework that transforms the individual expertise of 28 faculty members into a formalized national and international powerhouse. The "added value" of the Centre lies in its ability to act as a strategic catalyst for activities that are functionally inaccessible to isolated researchers, moving York University into the top five global institutions for muscle research.

### 1. Scaling Research Impact through Collective Critical Mass

The MHRC provides the structural "backbone" required to secure large-scale funding that individual faculty members cannot achieve alone. By unifying 28 multidisciplinary investigators across cellular, molecular, and whole-body physiology, the Centre enables the following examples:

- Major Team Grant Success: The Centre serves as the lead applicant for the $1.65 million NSERC CREATE grant and the $4M–$8M CFI-IF/ORF-LIF infrastructure bids. These applications rely on the MHRC's ability to coordinate sub-committees and manage multi-sector partnerships (biotechnology, clinical, and academic) that span the Faculty of Health and the Faculty of Science.
- Strategic Infrastructure Development: The MHRC centralizes world-class clinical and pre-clinical research tools, ensuring that faculty have access to state-of-the-art facilities. This includes a proposed development of a satellite lab at Southlake Regional Health Centre, a clinical bridge that leverages the collective reputation of the Centre to provide "bench-to-bedside" opportunities for all members.

### 2. Formalized National and International Ecosystems

While individual faculty members maintain their own collaborations, the MHRC formalizes these into enduring institutional networks:

- The Muscle Health Network of Canada: The MHRC will be liaise with Canadian muscle health researchers currently connected to identify strategies that bring benefits to our mutual programs. In so doing, a foundation will be laid to create a Muscle Health Network of Canada. This Network will be a formal ecosystem for knowledge exchange, online methodology repositories, and shared seminars as well as future applications for large-scale network funding (e.g. NFRF-T).
- Global Institutional Partnerships: The Centre has established formal ties with world-renowned institutes in Denmark, France, Sweden, Italy, and the USA. These partnerships provide a unique platform for co-supervising PhD students and hosting international workshops (e.g., the Aurora Scientific-MHRC Murine Muscle Mechanics Workshop) that elevate the prominence of every affiliated faculty member as well as global-partnership network grants.

3. Unparalleled Trainee Empowerment & Workforce Development

The MHRC adds unique value to the student experience by creating a "for students, by students" culture that operates independently of individual lab constraints. Examples include:

- Student-led initiatives that promote MHRC student members as noted in section 6.
- Work-Integrated Learning (WIL): By working with the Faculty of Health, this initiative will ensure trainees gain access to paid internships and micro-certificates in the life sciences sector, biotechnology, and clinical research.
- Professional Development: The MHRC hosts biennial Career Days and an International Trainee Seminar Series, inviting industry, government, and academic experts to mentor students. This broad exposure to diverse professional pathways is only possible through the Centre's extensive multi-sectoral network.

4. Clinical Integration and Community Impact

The MHRC acts as a unified representative for muscle health in the planning of the York University School of Medicine (2028). By aligning research themes with the new medical curriculum and expanding clinical affiliations with Mackenzie Health and Southlake Regional Health Centre, the Centre ensures that York's research impacts rural and underserved communities. Individual faculty members will benefit from this approach by gaining access to clinical trials and patient communities that would be difficult to navigate independently.

Conclusion: More Than the Sum of Its Parts

An Organized Research Unit (ORU) is the only mechanism capable of undertaking these ambitious 2026–2031 objectives. By unifying 28 diverse researchers under a single mandate, the MHRC provides a self-sustaining, globally recognized ecosystem that accelerates discovery, secures institutional-level funding, and translates muscle health science into tangible solutions for the benefit of all Canadians.

## 8. Resource Commitments (to be completed by VPRI Office)

### Faculty of Health

The Faculty is committed to ensuring that MHRC has access to sufficient resources throughout the Charter term to fund the Collective Agreement mandated course release, stipend, and benefits for the Director. The Faculty will contribute up to $65,000 annually to fund MHRC's operations and continue to support the Centre in working towards becoming financially independent through overhead and revenue generated from conferences, courses, and other events hosted by the Centre. The Faculty has agreed to flow 2/3 of any unrestricted overhead generated through research grants, contracts or revenue generating programs in the Centre directly to its operating budget.

In accordance with the SHARP Budget Model, the Director will negotiate with the Faculty to determine the percentage of unrestricted overhead funds to be allocated to the ORU. The Faculty's allocation of overhead funds to the centre will use the VPRI model of 75% as a guide for consideration.

Administrative support is being provided by a centre coordinator who is shared with YU-CARE. The staff member devotes 50% of effort to MHRC and 50% to YU CARE and is funded by the Dean of Health.

### VPRI

The VPRI office will ensure MHRC has access to specialized research support services and appropriate matching funds for the preparation of large-scale collaborative grant applications. MHRC is welcome to apply for the regular internal funding opportunities offered by the VPRI office. Further, the VPRI office will support the Director in the development of areas such as advancement, strategic planning, project management and budget planning, depending on identified needs.

## 9. Commitment to DEDI in ORU Membership and Activities

The MHRC at York University is committed to fostering a research environment where inclusivity is recognized as a necessity for achieving impactful scientific discovery. Grounded in the principles of York University's DEDI framework and the Faculty of

Health's "Building a Healthier World for All" strategic plan, the MHRC recognizes that our mission—to lead in the study of muscle health and disease—requires the active dismantling of systemic barriers that limit the participation and success of equity-deserving groups.

### 1. Inclusive research practice and improving accessibility

The MHRC acknowledges that traditional physiological research has often operated in a manner that overlooks underserved communities. Our 2026–2031 strategy shifts this power dynamic by:

- Reciprocal Partnerships: Strengthening collaborative relations with community groups and hospitals, such as Southlake Regional Health Centre and Mackenzie Health, to ensure research is informed by the perspectives of diverse populations in the Greater Toronto Area. The MHRC has also prioritized the development of community partnerships that reflect the diversity of the Greater Toronto Area, including initiatives focused on women's heart health, health equity in aging populations, and collaborations with local hospitals serving diverse communities.

- Knowledge Mobilization: Integrating patient partners as "co-creators" of research projects rather than passive subjects, ensuring that findings on aging, exercise, and nutrition directly address the needs of marginalized communities.

- Accessibility in Science: Overcoming physical and geographical barriers by expanding clinical research into rural and underserved communities who cannot visit the main campus and are therefore historically excluded. By partnering with local hospitals to establish physical space in their facilities dedicated to MHRC collaborations, our members will greatly increase the inclusion of communities traditionally under-represented in research investigations to that health solutions are informed for all members of our communities. Likewise, our growing network of industry partnerships allows our members to directly inform the development of new health products and technologies with research into the fundamental biological mechanisms of health that in the context of race, sex, gender, and age to ensure health solutions are customized to provide maximal benefit to all members of our communities.

- The MHRC will establish a patient advisory panel to ensure those living with conditions that affect muscle health inform our research practices with their perspectives and lived experiences. This will be achieved by extending our current practice of partnering with advocacy foundations who link us with patient communities. The MHRC will continue to provide a space to amplify the

voice of those living with conditions that affect muscle health through keynote speaker presentations at our annual Muscle Health Awareness Day.

- 2. Inclusive Excellence in Training and Mentorship

The lifeblood of the MHRC is our trainees, and our "for students, by students" culture is designed to foster a genuine sense of belonging. We move beyond tokenism through tangible support:

- Financial Equity: Maintaining MHRC Student Fellowships that prioritize individuals who lack other sources of external funding to reduce financial barriers to graduate education.
- Diverse Workforce Development: Focusing new grant initiatives that promote accessible training programs for all trainees that equip them with skills required for broad employment sectors.
- Accessible Programming: Our Student Committee organizes initiatives such as the International Trainee Seminar Series, which creates a global platform for diverse voices to present virtually, and the "Meet the MHRC" series which highlights the "human side" of research across diverse identities. These initiatives are shared on our expanding social media presence to demystify research to broad public communities and inspire the next generation of students to pursue scientific education

3. Sex and Gender

The impact of our discoveries will be strengthened by understanding of how muscle health varies across the human spectrum. The MHRC actively promotes Sex and Gender-Based Analysis (SGBA) as a core research principle:

- Dedicated Research: Faculty members are leading investigations into biological sex differences in a variety of physiological processes and diseases from preclinical models to clinical studies. The clinical research in the Centre will continue to expand the critical component of gender in pursuits focused on understanding the underlying mechanisms that determine how gender influences the degree to which muscles adapt to exercise, nutrition and disease.

4. Accountability and Leadership

We believe that DEDI is a shared responsibility. MHRC leadership actively participates in the Faculty of Health Council to ensure our internal policies align with institutional strategic directions. By strategically recruiting new members and fostering a diverse

Student Executive Committee, the MHRC ensures that representation and success are woven into the very fabric of our Organized Research Unit.

Through these specific, resource-backed actions, the MHRC strives to be a community where every researcher and trainee—regardless of race, gender, ability, or socioeconomic background—can contribute to the future of muscle health.

The inclusive approach of consulting each faculty member and the broad student executive committee to identify the diverse goals across our Centre further demonstrates the MHRC's commitment to York University DEDI Strategic Directions including 1) "Campus Climate & Environment" focused on creating an inclusive and equitable community where everyone has the potential to feel a sense of belonging and that they are respected, 2) "Representation and Success" by linking each of our members to clinicians and diverse community members so that their individual and team research are informed by the broad needs and perspectives of communities, and 3-5) "Teaching & Learning", "Research & Innovation" and "Leadership & Capacity Building" whereby the goals of each member are translated in activities that support each member in a manner that invites their participation as leaders in co-creating initiatives that are meaningful to their teams, all of which are evident in past activities and proposed activities.

## 10. Appendices

Appendix A – Proposed Members of the Executive Committee

| Name | Title/Affiliation |
|---|---|
| Christopher Perry, MHRC, KAHS | Professor, Director of MHRC |
| David Hood, Faculty KAHS | Professor, Founding Director of MHRC |
| Jacklyn Hurley, Faculty KAHS | Associate Professor |
| Peter Backx, Faculty Biology | Professor |
| Robert Tsushima, Biology | Professor |
| Heather Edgell, Faculty KAHS | Associate Professor |
| Devin Phillips, Faculty, KAHS | Assistant Professor |

| | |
|---|---|
| Emily Fraschetti, Student Representative | PhD Candidate |
| Associate Director at mid-career stage: Associate Professor, clinical research, underrepresented group. | TBD |

Appendix B – Proposed Members of the Advisory Committee

A long-term goal is to leverage the growing relationships with clinical and patient partners to form a biomedical and patient advisory panel for MHRC activities and team grant applications.

| Name /Title/Affiliation |
|---|
| Dr. Alejandra Villalobos Vazquez MD ABIM, Geriatrician, Mackenzie Health, Geriatric Outreach and Senior Wellness Clinic. Advise on best practices for engaging patient communities during knowledge translation events and identifying urgent health challenges that inform new research directions. Guide the creation of a patient-partner advisory panel drawing on community members with lived experiences. |
| Kate Murray, CEO of MitoCanada. Advise on best practices for engaging patient partners as keynote speakers and co-instructors at knowledge translation events. Guide the creation of a patient-partner advisory panel drawing on community members with lived experiences. |
| Dr. Homira Osman, Vice President, Muscular Dystrophy Canada. Advise on best practices for engaging patient partners as advisory on study design and grant applications. Guide the creation of a patient-partner advisory panel drawing on community members with lived experiences. |