# Table of Contents

**SECTION 1.0 – THE BJI ADVANTAGE** ........................................................................................................... 2

**SECTION 2.0: ACCELERATION OF RESEARCH SUCCESS & INNOVATION** ........................................... 2

2.1 – Local Engagement & Recruitment of Stakeholders / Experts ........................................................................ 2
2.2 – Think Tanks, Strategic Funding & Catalyst Grants Program ........................................................................... 4
2.3 – Research Funding ............................................................................................................................................... 5
2.4 – MSK Innovation Program ................................................................................................................................... 6
2.5 – BJI Showcase Series ........................................................................................................................................... 6

**SECTION 3.0: EDUCATION & TRAINING** ................................................................................................... 6

3.1 – Enrolment & Mentorship .................................................................................................................................... 7
3.2 – MSK Courses, Learning Modules & Summer Program ......................................................................................... 7
3.3 – Transdisciplinary Bone and Joint Training Awards Program ........................................................................... 8
3.4 – Trainee External Awards & Publications ........................................................................................................... 8

**SECTION 4.0 – KNOWLEDGE TRANSLATION** .......................................................................................... 8

4.1 – Publications ........................................................................................................................................................... 8
4.2 – National Networks / Events & Engagement of Cross-Jurisdictional Experts ....................................................... 9
4.3 – Partnered Events .................................................................................................................................................. 10

**SECTION 5.0 – FINANCIAL REPORT** ........................................................................................................ 11
Section 1.0 – The BJI Advantage

Western’s Bone and Joint Institute (BJI) is focused on research excellence in innovation, collaboration, education, and knowledge translation for musculoskeletal (MSK) conditions. MSK conditions are a leading cause of pain and disability worldwide with tremendous and growing personal and financial costs for patients, families, and society. Through its programs and activities, the BJI supports a complex adaptive research environment that brings experts together to mobilize and integrate diverse perspectives, skills, and infrastructure. This enables the development of high-impact transdisciplinary research projects to investigate: the causes, prevention, diagnosis, treatment for MSK conditions; to enhance movement, mobility, and participation in daily life; and to improve support systems and rehabilitation for a wide range of MSK conditions.

Vision
- Lifelong mobility through MSK health.

Mission
- To catalyse transdisciplinary MSK research, innovation, translation and education.

Mandate
- To investigate the causes, prevention, diagnosis, and treatments for MSK conditions;
- To enhance movement, mobility and participation in daily life; and
- To improve support systems and rehabilitation for a wide range of MSK conditions.

To learn about BJI’s past accomplishments or its current strategic plan please visit: https://boneandjoint.uwo.ca/about_us/Institute%20Reports/index.html.

Section 2.0: Acceleration of Research Success & Innovation

Below is a summary of current strategies and metrics used to assess progress on strategic acceleration of research success and innovation goals.

2.1 – Local Engagement & Recruitment of Stakeholders / Experts

Orientation meetings and welcome packages were distributed to 10 potential new members. The BJI membership grew from 278 people in 2019 to 282 in 2020 including 100 faculty, 117 trainees, and 65 other members including: partners, collaborators, and staff (https://boneandjoint.uwo.ca/about_us/people/index.html). The graphics below display the types of members, distribution across partner Faculties, and alignment to BJI research areas/domains.
Prestigious Awards & Recognitions

BJI members holding prestigious awards include: 10 Research Chairs (6 Endowed/Industry-funded), 3 Fellows of the Royal Society of Canada, 8 Fellows of the Canadian Academy of Health Sciences, 2 Fellows of the Canadian College of Physicists in Medicine, 5 Distinguished University Professors, and 8 Faculty Scholars.

Recruitment

Below is a list of new members and their perspective on BJI’s influence on their recruitment.

Matthew W. Grol was hired in the Department of Physiology and Pharmacology at Schulich School of Medicine and Dentistry in July 2020. “BJI’s research leaders and strengths in preclinical research of MSK biology, health and biomedical imaging were significant incentives for my recruitment to Western”. Dr. Grol’s research explores the pathogenic mechanisms underlying various MSK diseases and is applied in vivo gene therapy approaches to slow disease progression.

Yolanda Hedberg was hired this year in the Department of Chemistry and started her Canada Research Chair program in Corrosion Science. “BJI’s research environment and having access to the Implant Retrieval Lab led by Dr. Matt Teeter were very important factors in my choosing to come to Western”. She has expertise in corrosion science and surface chemistry of materials, particularly metallic materials that come in contact with biological environments.
Alison Rushton was recruited to Western as the new Director of the School of Physical Therapy. “Key BJI leaders - specifically Trevor Birmingham, Joy MacDermid, Michele Battie and Chris Bailey - were great resources in welcoming me to join this community”. Dr. Rushton is focused on understanding MSK and spinal pain disorders specifically in relation to precision rehabilitation that is tailored to an individual patient’s physical, social and psychological profile.

Jane Thornton was hired in the Department of Family Medicine, with cross appointments in the Department of Epidemiology & Biostatistics and School of Kinesiology. “BJI’s research environment was a natural fit as it perfectly aligns with my interests”. She is a Canada Research Chair and Clinician Scientist specializing in long-term athlete health, female athlete health, and physical activity in the prevention and treatment of chronic diseases.

Fiona Webster was hired in Western's Labatt Family School of Nursing in 2020. “BJI’s team was a relevant factor in my consideration of taking up this position”. She is a critical qualitative sociologist who has been working in the area of pain since 2011. She is currently completing a CIHR funded ethnographic study to explore the social organization of care for marginalized patients with chronic pain (2019-2023).

2.2 – Think Tanks, Strategic Funding & Catalyst Grants Program

Think Tank Series

The goal of the BJI Think Tanks is to explore grand MSK challenges and find solutions by bringing together transdisciplinary knowledge and perspectives. All current Think Tanks aim to advance work across multiple strategic priorities identified in the 5-year strategic plan: less invasive and joint-preserving treatments; strategies to decrease surgical infection; tools that support self-management and rehabilitation; clinical and cost effectiveness studies; data and/or samples sharing mechanisms; and the development and application of standardized research tools/protocols (https://boneandjoint.uwo.ca/events/BJI_ThinkTanks.html).

Strategic Research Fund Program

BJI initiated the development of a new Strategic Research Fund Program in 2020. This open (no submission deadlines) program is flexible to provide transdisciplinary teams timely support to advance BJI strategic priorities and targeted research themes. Research themes will be centered on/but not limited to infection control in orthopaedics, biomaterials for MSK, wearables for rehabilitation, phenotyping common spine disorders and arthritis in vulnerable populations. Funds of $5,000 to $20,000 will be awarded for meritorious proposals (contingent on fund availability at the time of the request) with a funding period of no more than 12 months (https://boneandjoint.uwo.ca/research/Strategic_Research_Fund/index.html).

GET EVERYONE STARTED - INDIGENOUS TRAINING INITIATIVE – GEt’S-IT

BJI will pilot the new Strategic Research Fund Program with one initiative: Get Everyone Started - Indigenous Training Initiative – GEt’S-IT (https://boneandjoint.uwo.ca/research/GEtS-IT/index.html). GEt’S-IT was selected to advance knowledge, partnerships and/or training opportunities that support self-reflection and learning about Indigenous ways of knowing, land-based learning, and research approaches.
Catalyst Grants Program

The purpose of the BJI Catalyst Grants Program is to support the initiation of innovative, high-impact, and early-stage projects and enable the leveraging of external funding (https://boneandjoint.uwo.ca/research/catalyst_grants_program/index.html). A summary of the 10 catalyst grants in progress is available on the website. All projects in progress were granted an extension to account for challenges created by the COVID-19 pandemic. Two teams identified the need to submit revisions to the originally proposed study because of ongoing restrictions that have made it impossible to meet project deadlines. A revision procedure was developed, and revision requests will be reviewed in the early part of 2021. In 2020, the review committee deemed all 3 applications to be of quality; thus, a 100% success rate for this year’s fall competition.

2.3 – Research Funding

Tri-Agency Funding Overview

The Western Research team reports that since the launch of the BJI, members have pursued funding more aggressively than non-BJI members. BJI members submitted a total of 199 Tri-Agency applications in 2020, 107 of which were successful for a 54% success rate. The mean funding per successful proposal for BJI members was over $50K higher than non-BJI faculty. BJI members held an average of 3.55 grants/PI compared to 2.47 grants/PI for non-BJI faculty with total funding per BJI PI over $137K higher than non-BJI members. Western Research funding data for 2020 is incomplete, as several major programs including NSERC Discovery Grants, NSERC Research Tools & Instruments, NFRF Exploration and some CIHR Project Grants are still pending sponsor decisions or may not yet be converted to awards in ROLA (Western database).

All Funding Sources

Despite the COVID-19 pandemic, BJI members held over 330 external grants and over 240 internal grants totaling over 580 grants (Appendix D). These totaled nearly $110M in multi-year funding, with over $94 M in external funds and over $17 M in internal funds. These data do not include grants located at or shared with other Institutions or Institutes.
2.4 – MSK Innovation Program

The BJI’s MSK Innovation Program aims to cultivate skill sets that enhance, support, and celebrate entrepreneurial spirit and commercialization of MSK innovations. The MSK Innovation Stakeholder Group decided to delay the launch of an entrepreneurship workshops series and the full year business mentorship program until 2021. Due to the COVID-19 pandemic challenges, the Spring MSK Innovation Competition was cancelled. This unique 5-stage competition, with a local focus and openness to all stages of idea/project development, will resume in 2021 (https://boneandjoint.uwo.ca/research/msk_innovation_competition/index.html).

Technology Transfer & Commercialization

Western’s technology transfer office – WORLDiscovers® reports that since fiscal year (FY) 2015, there was a total of 55, 37, and 22, respectively. In FY 2021, this represents 10% of all technology submissions and 18% of all patents issued via WORLDiscovers® by Western/Robarts/Lawson faculty members. These data do not include submissions, applications or patents issued independently of Western.

Industry Contracts

BJI members held/received 91 industry or private contracts/donations at Western totaling over $2,710,000 in multi-year funding.

2.5 – BJI Showcase Series

The BJI Showcase Series replaced the more traditional academic seminars approach this year in to enhance BJI members’ knowledge of current work and opportunities for local collaboration. Events generally included three 10-15 minutes presentations followed by Q&A. All presenters were encouraged to use plain language to support cross-disciplinary engagement. With 4 showcase events and 2 traditional seminars held in 2020, over 15 presenters had the opportunity to share their work with an average of 39 audience members – 12% investigators, 87% trainees, and 2% partners/staff (https://boneandjoint.uwo.ca/events/bji_showcase/index.html).

Section 3.0: Education & Training

BJI’s mission to catalyze transdisciplinary training and education is accomplished primarily through Western’s Collaborative Specialization in Musculoskeletal Health Research (CMHR; https://cmhr.uwo.ca) – Western’s largest Collaborative Specializations with trainees from one of 14 participating home graduate programs. In 2020, despite COVID-19 pandemic-related limitations, CMHR achieved its largest intake since the program’s inception, and maintained its
high-quality programming. The high caliber of CMHR trainees is reflected in the external awards they received and publications this year: $500K+ new external awards and 95 co-authored publications. CMHR underwent review by Western's School of Graduate and Postdoctoral Studies (SGPS). Review recommendations are expected in 2021 at which point the Training and Education Committee will amend the BJI strategic plan where appropriate.

### 3.1 – Enrolment & Mentorship

A total of 32 trainees were admitted to CMHR in September 2020. Program enrolment remains over 100 trainees, indicating continued success in both recruitment and program completion. Importantly, approximately half of the trainees are at the PhD or postdoctoral level. The graphics below provide more details about trainee career levels and distribution over time.

#### 3.2 – MSK Courses, Learning Modules & Summer Program

CMHR offers two graduate courses: MSK 9000 – Musculoskeletal Health Research A / Biomedical & Bioengineering Concepts and MSK 9100 – Musculoskeletal Health Research B / Fundamental Concepts in Clinical & Health Services Research. The curriculum was modified and delivered virtually by over 22 faculty members this year. MSK9100 (Winter term) and MSK9000 (Fall term) were completed by 16 and 32 graduate students respectively.

**MSK Ivey Modules** successfully transitioned into interactive virtual sessions this year with offerings for both existing and incoming trainees. Modules were well attended and evaluation responses revealed positive views with respect to content relevance, delivery of the information, and the learning environment provided by the speaker. Evaluation results suggested a need for more emphasis on linking the applicability of trainees’ new knowledge to their research role. This influenced the development of online modules for the remainder of the academic year including:

In 2020, the Summer Undergraduate Program and Summer Studentship Awards Program was cancelled due to the COVID-19 pandemic. The program will be offered in 2021.

3.3 – Transdisciplinary Bone and Joint Training Awards Program

The September 2020 call for applications for the Transdisciplinary Bone and Joint Training Awards Program yielded 25 applications for new funding. Ten awards were granted. CMHR also awarded 8 renewals. In total, this represents a new investment of $130K in the next generation which assists BJI researchers who support trainees and/or operating costs of trainee projects. When combined with the 6 multi-year awards from 2019, there are 24 graduate trainees (11 master’s/$74,250, 12 doctoral/$84,500, 1 postdoctoral fellow/$10,000) funded by the Program: 9 from Engineering/$64,750, 5 from Schulich/$24,500, and 10 from Health Sciences/$79,500.

3.4 – Trainee External Awards & Publications

Over 30 BJI trainees received new external awards this year from CIHR, NSERC, OGS and the Arthritis Society totaling over $500K. Combined with previously awarded multi-year funding, trainees currently hold over $1.5M in external funding. BJI trainees co-authored 95 publications, of which 84 are available in InCites. On average, these joint publications have higher citation counts than 27% of the 2020 publications in the Web of Science database in their respective research area and document type. This includes 4 publications listed in the top 10% most cited and 1 recognized among the top 1% most cited. Citations come from authors in 30 regions around the world. Of the 95 co-produced publications, 80 are tracked in Altmetric and 53 have attracted media attention with 742 social media mentions, 3 blog references and 2 mentions in news stories.

Section 4.0 – Knowledge Translation

The 5-year strategic goals for knowledge translation are to: a) enhance the interconnectedness of the MSK community (locally, regionally, nationally, and internationally) and b) increase collaboration among institutions for a more coordinated national MSK research effort. Due to the COVID-19 pandemic restrictions, the launch of a trainee travel awards program was delayed. Also, the enormous and sustained efforts by our Western communications team to keep all staff, trainee and faculty members informed about relevant COVID-19 information and impact, resulted in the suspension of website redesign efforts. That said, BJI staff made some modifications to better maintain and improve various aspects of the website. Also, multiple BJI News Stories described important research and achievements by BJI members – a full list is available at https://boneandjoint.uwo.ca/about_us/BJI%20News.html.

4.1 – Publications

In 2020, BJI members published a total of 430 MSK papers. The expertise of BJI members is often applied to other fields, such as cardiovascular disease, respiratory disease, and cancer, but these papers were not included in this total. The average number of MSK publications per BJI member decreased slightly from 4.6 in 2019 to 4.02 in 2020, but BJI members were still more productive in 2020 than in any year prior to 2019. Among the total 430 publications produced, 391 are captured in InCites. Of these, 135 publications were co-authored with international scholars.
across 44 regions outside of Canada with an average citation impact well above the world average at 1.90. An additional 8 publications were co-authored with industry partners and had an average citation impact of 1.81. Collaboration occurs internally as well as externally with 132 publications being co-authored by 2 or more BJI members in 2019 and 103 in 2020. The 2020 publications co-authored by 2 or more BJI members has an average citation impact of 1.17. The average citation impact of the 391 publications available in InCites was 1.23 times the world average benchmark, with higher citation counts than 35.2% of the publications published in 2020 in the Web of Science database in their respective research area(s) and document type. The contribution made by BJI members through these scholarly works was evidenced by 87 different regions around the world and 128 different research areas citing these publications. Of all the publications produced in 2020, 38 (9.7%) are listed among the top 10% most cited publications and 5 (1.3%) are among the top 1% most cited publications in the Web of Science database. With 156 publications (39.9%) identified as open access, the knowledge created by BJI members in 2020 supported more equitable access - an average citation impact of 1.43 for open access publications. A total of 375 publications produced by BJI members in 2020 are tracked in Altmetric, of which 265 have attracted attention with a total of 5,414 social media mentions, 211 references in news stories, 21 in blog posts, two in policy documents by the National Institute for Health and Care Excellence, two in academic sources, one Wikipedia and one video reference.

### 4.2 – National Networks / Events & Engagement of Cross-jurisdictional Experts

**Canadian MSK Rehab Research Network**

The Canadian MSK Rehab Research Network ([https://mskrehabnet.com/](https://mskrehabnet.com/)) received nearly $2M in CIHR funding in 2019 that allowed operations to be extended and scaled-up through to at least 2026. The Network maintains its focus on high impact, national studies to enhance mobility, reduce pain, and improve quality of life. Linkages were made among MSK research centres and patient groups across Canada to strengthen the research community. One of the Network’s first post-pandemic initiatives was partnering with BJI on the highly successful virtual **Canadian Bone and Joint Conference (CBJC 2020)**. Also, the Network hub worked with BJI to co-develop a database of **mobility resources for those isolated at home during the pandemic**. This collection of trusted resources, current research efforts and published research studies on at-home exercise programs was shared nationally by the federal government through the Canadian Pain Taskforce. The Network funded six new pilot projects focused on utilizing online or remote data collection/interventions, and/or projects specifically targeting MSK mobility challenges related to COVID-19. It also facilitated national working groups: **OpenWear** – a shared open-source coding platform for use with data collected from wearable technologies, and **GaitNET** – a self-assembled national consortium with expertise and infrastructure for sharing and processing movement analysis data. Finally, two **steering committees** were established to identify key remote /wearable technologies research priorities and to support patient engagement that will help bridge gaps between research and practice.
Leaders of the Canadian Network for Mobility Research (CaNMoR), David Holdsworth Steve Boyd, and Joy MacDermid led 11 meetings with a total of 55 experts in various disciplines from across the country to expand collaborative opportunities and identify research priorities that would benefit from national coordination and engagement. This included 11 early career researchers (ECRs) (Western - 5; Calgary - 3; Dalhousie - 3) who identified mechanisms that would meaningfully integrate them in the team. A leadership team of 13 people was established with representation from 3 institutions (led by Western’s BJI in partnership with the McCaig and Dalhousie) to prepare an application for the highly competitive: NFRF Competition – Transformation Stream. The program of research focused on: 1) building a national cohort that integrates individual, cultural/social and structural/resource data to help transform our understanding of how mobility is compromised and to inspire more equitable care innovations; and 2) redesigning prevention and care interventions to better meet individual needs (i.e., developing, testing and validating novel remote delivery interventions that integrate social connectedness with technology innovation). Participating in this national interactive consultation process improved collaborative relations, coordinated research efforts, and increased readiness to pursue other funding sources. In November of 2020, the team received very positive reviews from NFRF, but no funds. The team is dedicated to exploring how current resources can initiate projects and help seek additional resources.

4.3 – Partnered Events

At a time when researchers and trainees were receiving conference cancellation notices one after the other, the BJI led a national committee to create a unique opportunity to engage researchers from across the country and guest speakers from around the world: The Virtual Canadian Bone & Joint Conference (CBJC 2020). “It was great to have a conference and this one was extremely well organized with great flow that provide participants the ability to listen and learn about cutting edge research on a broad variety of MSK topics happening at many different research labs across Canada”. One of the first of its kind, our virtual conference had over 225 registrants who benefited from over 100 presentations, including invited lectures from researchers in Vancouver, Halifax, San Francisco (USA), Liverpool (UK), and Sydney (Australia) and over 1900 poster views on the vimeo platform (https://cbjc.ca/program/history/CBJC_Agenda_2020.pdf). Timely topics were covered with sessions on improving inequities in Indigenous MSK healthcare, and innovations in remote, virtual and wearable technologies. One of the highlights was a talk and panel discussion led by André Picard, health reporter and columnist for the Globe and Mail, related to the future of “virtual healthcare”. “The panel discussion at the end was very interesting and thought provoking about real-world challenges in MSK care delivery, despite that not being my area of research”. Session polls indicated an average of greater than 85% satisfaction on all sessions. Evaluation data revealed that 80% of respondents agreed that the CBJC offers a unique added value not offered by other events and 100% of respondents would likely participate in a future CBJC. The Young Investigator Forum, planned by-and-for trainees to address some of the challenges of doing MSK research during the COVID-19 pandemic, preceded the CBJC 2020. Attendance ranged from 75 to 85 trainees per session. Many were Western students, but the event also attracted trainees from other Canadian institutions. The event addressed common points of concerns for trainees, which is a feature participants described as enjoyable and different from usual student conferences.
Section 5.0 – Financial Report

A Vice-President Research (VPR) report, including term 1 accomplishments, term 2 strategic plan, and funding projections, was developed and submitted to Senate for Institute renewal (https://boneandjoint.uwo.ca/about_us/Institute%20Reports/index.html). The BJI approval was obtained in May 2020. Below is an updated summary table of the BJI financials including actuals and projections of available funds and their sources as well as expenses from Year 6 (FY 2019-20) to Year 10 (FY 2023-24). In 2019, the VPR approved the transfer of remaining MSK cluster funds to the BJI to maintain both Institute and cluster activities under the banner of the BJI. This is reflected in the Cumulative surplus/deficit (BJI & Cluster) line in the summary at the top of the table. Only a portion of the cumulative surplus is being allocated annually (in year fund allocation) to help support multi-year planning/operations/awards. BJI received written confirmation in June 2019 that Institute funding from central was awarded at 300K for FY (fiscal year) 2019-20 to sustain operations with possibility of renewal for FY 2020-21 and beyond. Both the FY2019-20 and FY 2020-21 allocation were received in year 7 (2021). Should revenues fall behind, our priority is to maintain core operations and reduce catalyst, innovation and training award allocations until additional funding can be secured. It is important to note that advancement activities will be crucial to maintain programs beyond Year 8 (2021-22).

### FINANCIAL SUMMARY

<table>
<thead>
<tr>
<th></th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019-20</td>
<td>2020-21</td>
<td>2021-22</td>
<td>2022-23</td>
<td>2023-24</td>
</tr>
<tr>
<td></td>
<td>Actuals</td>
<td>Actuals</td>
<td>Projected Costs</td>
<td>Projected Costs</td>
<td>Projected Costs</td>
</tr>
<tr>
<td>Cumulative surplus/deficit (BJI &amp; Cluster)</td>
<td>2,109,733</td>
<td>1,100,945</td>
<td>1,157,482</td>
<td>382,513</td>
<td>143,248</td>
</tr>
<tr>
<td>In-year fund allocation from cumulative surplus</td>
<td>940,000</td>
<td>310,000</td>
<td>775,000</td>
<td>290,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Revenues</td>
<td>940,000</td>
<td>938,995</td>
<td>1,079,000</td>
<td>894,000</td>
<td>804,000</td>
</tr>
<tr>
<td>Expenses</td>
<td>931,267</td>
<td>572,458</td>
<td>1,078,969</td>
<td>843,264</td>
<td>792,823</td>
</tr>
<tr>
<td>In-year surplus deficit</td>
<td>8,733</td>
<td>366,537</td>
<td>31</td>
<td>50,736</td>
<td>11,177</td>
</tr>
<tr>
<td>FUND BALANCE</td>
<td>1,178,466</td>
<td>1,157,482</td>
<td>382,513</td>
<td>143,248</td>
<td>4,425</td>
</tr>
</tbody>
</table>

### OVERVIEW OF REVENUES

<table>
<thead>
<tr>
<th></th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019-20</td>
<td>2020-21</td>
<td>2021-22</td>
<td>2022-23</td>
<td>2023-24</td>
</tr>
<tr>
<td></td>
<td>Actuals</td>
<td>Actuals</td>
<td>Projected Costs</td>
<td>Projected Costs</td>
<td>Projected Costs</td>
</tr>
<tr>
<td>In-Year Fund Allocation from Cumulative Surplus</td>
<td>940,000</td>
<td>310,000</td>
<td>775,000</td>
<td>290,000</td>
<td>150,000</td>
</tr>
<tr>
<td>Membership Fees</td>
<td>0</td>
<td>6,200</td>
<td>4,000</td>
<td>4,000</td>
<td>4,000</td>
</tr>
<tr>
<td>Central Support</td>
<td>0</td>
<td>600,000*</td>
<td>300,000</td>
<td>300,000</td>
<td>300,000</td>
</tr>
<tr>
<td>Faculty Support</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Partner Support</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Conference Fees</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Event Sponsorship</td>
<td>0</td>
<td>22,795</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Fundraising /Donations/Internal Grants</td>
<td>0</td>
<td>0</td>
<td>300,000b</td>
<td>350,000b</td>
<td></td>
</tr>
<tr>
<td>TOTAL REVENUES</td>
<td>940,000</td>
<td>938,995</td>
<td>1,079,000</td>
<td>894,000</td>
<td>804,000</td>
</tr>
</tbody>
</table>

* Late transfer of FY20 300K allocation
b Anticipated fund supported by efforts of the advancement team.
## Overview of Expenses

<table>
<thead>
<tr>
<th>Category</th>
<th>Year 6</th>
<th>Year 7</th>
<th>Year 8</th>
<th>Year 9</th>
<th>Year 10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019-20</td>
<td>2020-21</td>
<td>2021-22</td>
<td>2022-23</td>
<td>2023-24</td>
</tr>
<tr>
<td></td>
<td>Actuals</td>
<td>Actuals</td>
<td>Projected Costs</td>
<td>Projected Costs</td>
<td>Projected Costs</td>
</tr>
<tr>
<td>Member Initiatives &amp; Events (think tanks, showcase, workshops, seminars, research retreat, other events)</td>
<td>16,482</td>
<td>123(^c)</td>
<td>30,000</td>
<td>30,000</td>
<td>21,000</td>
</tr>
<tr>
<td>Member Funding Opportunities (catalyst grants program, MSK innovation program, strategic funding program)</td>
<td>270,000</td>
<td>30,000(^c)</td>
<td>420,000</td>
<td>180,000</td>
<td>180,000</td>
</tr>
<tr>
<td>Training Program (courses, workshops, undergrad summer program, stipends, transdisciplinary awards, operations)</td>
<td>302,810</td>
<td>217,835</td>
<td>265,000</td>
<td>265,000</td>
<td>265,000</td>
</tr>
<tr>
<td>National Initiatives (national events - conference and young investigator forum, travel awards, network support)</td>
<td>66</td>
<td>14,388</td>
<td>30,000</td>
<td>30,000</td>
<td>50,000</td>
</tr>
<tr>
<td>Communications (website, advertisement, news items, outreach events)</td>
<td>4,451</td>
<td>1,939</td>
<td>14,000</td>
<td>10,000</td>
<td>10,000</td>
</tr>
<tr>
<td>Operating (equipment, services, supplies)</td>
<td>13,257</td>
<td>701</td>
<td>17,500</td>
<td>15,000</td>
<td>15,000</td>
</tr>
<tr>
<td>Staff Compensation (operations manager, manager of research and innovation, training program coordinator)</td>
<td>324,201(^d)</td>
<td>307,472 (^d)</td>
<td>302,469(^d)</td>
<td>313,264(^d)</td>
<td>271,823(^d)</td>
</tr>
<tr>
<td><strong>TOTAL EXPENSES</strong></td>
<td><strong>931,267</strong></td>
<td><strong>572,458</strong></td>
<td><strong>1,078,969</strong></td>
<td><strong>843,264</strong></td>
<td><strong>792,823</strong></td>
</tr>
</tbody>
</table>

\(^c\) Program activities delayed or modified due to the COVID-19 pandemic.

\(^d\) Staff Compensation FTE 1.0 Manager of R&I, 1.0 Operations Manager, 0.5 Admin Assist, 0.7 Research Assistant (Year 6-7 included Early Career Faculty Position)