UNIVERSITY OF TORONTO
FACULTY OF MEDICINE

U of T Medicine

Strategic Academic Plan 2011-16
Research Strategic Plan 2012-17
Strategic Implementation

INTEGRATION · INNOVATION · IMPACT

Faculty of Medicine: Strategic Academic Plan 2011-2016

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Chapter 1

INTRODUCTION

Message from the Dean

I am pleased to present the Faculty of Medicine's updated Strategic Academic Plan 2011-2016. Our initial plan was approved by Faculty Council in September 2011, the culmination of 18 months of effort and dedication on the part of many faculty, staff, students and key partners. Following the approval of the Plan, we set out to develop a framework for implementation, as well as a method for measuring the success of our performance.

In addition to the original Strategic Academic Plan for U of T Medicine, this updated document now includes the Faculty of Medicine's Strategic Research Plan – as originally envisioned by the Strategic Academic Plan – as well as an overall implementation strategy. The integration of these three elements offers a comprehensive overview not only of our goals, but also our anticipated outcomes and the tactics by which these goals will be achieved. As we assess our progress over the coming years, we will make use of performance indicators to quantify, qualify and evaluate the impact of our activities.

As with this update to the Strategic Academic Plan, the evolving nature of our Faculty encourages us to remain open and adaptable to change and, ultimately, enhancement. This flexibility will enable us to respond to as yet unforeseen developments and make necessary modifications as we move forward in furtherance of our mission and vision.

Catharine Whiteside, MD, PhD, FRCPC
Dean, Faculty of Medicine
Vice Provost, Relations with Health Care Institutions

Vision, Mission and Values[1]

Vision
International **leadership in improving health** through **innovation** in research and education

Mission
We fulfill **our social responsibility** by developing leaders, contributing to our communities, and improving the health of individuals and populations through the discovery, application and communication of knowledge

Values
- Integrity in all of our endeavours
- Commitment to innovation and excellence
- Life-long learning and critical inquiry
- Promotion of social justice, equity, diversity, and professionalism
- Effective partnership with all our stakeholders
- Multi-professional and interdisciplinary collaboration
- Supportive and respectful relationships
- Accountability and transparency
- Responsiveness to local, national, and international health needs

Our Social Responsibility

U of T Medicine is committed to fulfilling our social responsibility to benefit society at large through excellence, integrity, and innovation in our research, education and work in the health sciences.

[1] The bolded words represent changes to our *Vision* and *Mission*

U of T Medicine

Founded in 1843 as a school of medicine, ***U of T Medicine*** is now ranked fifth globally in the category of "Clinical Medicine" by the Higher Education Evaluation and Accreditation Council of Taiwan and 12th in the world in "Clinical and Pre-Clinical Health" by the Times Higher Education World Rankings. We are Toronto's medical school. With the opening of our fourth academy at the University of Toronto Mississauga we extend our reach to the greater Toronto area. Our success is attributed in large measure to our long-standing and deep-rooted successful affiliation with nine academic Toronto hospitals and their research institutes. The majority of our faculty and students are located in our fully affiliated partner institutions[2], and with the other Health Science Faculties at U of T we collectively form the Toronto Academic Health Science Network (TAHSN). Since the discovery of insulin 90 years ago, to the creation of one of the most powerful global stem cell networks today, ***U of T Medicine*** achieves impact through integration and innovation.

U of T Medicine encompasses four sectors (Basic Science, Clinical Science, Rehabilitation Sciences, and Community Health) based in 27 departments/institutes (including 15 graduate departments) and the Dalla Lana School of Public Health. In addition, Medicine's 15 inter-disciplinary Centres and Institutes/Extra-Departmental Units (EDUs) integrate strategic directions across TAHSN and cognate U of T Faculties.

*What distinguishes **U of T Medicine** from our peers?*

Our network of partnerships across TAHSN plus our 20 Community Affiliated Hospitals uniquely positions us to answer questions of local, national and international relevance. By implementing this Strategic Plan we leverage our leading-edge basic science research, innovative education programs and health outcomes knowledge to improve health and prosperity.

Dean Catharine Whiteside

Facts at a Glance…

- *Total research funding across **U of T Medicine** including partner affiliates is now close to $600 million per annum, tripling in the last decade*
- *34% of all Canada Research Chairs in Health and Biomedical Science are in **U of T Medicine***
- *The Faculty is ranked 1st for research publications and 3rd for citations among public universities in North America. When private universities are included, Toronto is 2nd only to Harvard for publications*
- *The MD program is the most competitive in Canada with more than 12 applicants for every position*
- *The Faculty graduates more than one-third of all the family physicians in Ontario and 25% of MD specialists in Canada*
- *The Faculty has 2,010 MSc /PhD students in 15 Graduate Departments engaged in research. We graduate 25% of all health and biomedical PhDs in Canada*

[2] TAHSN is composed of the Health Science Faculties of the University of Toronto, 9 fully affiliated hospitals/research institutes (Baycrest; Centre for Addiction and Mental Health, Holland Bloorview Kids Rehabilitation Hospital; The Hospital for Sick Children; Mt. Sinai Hospital; St. Michael's; Sunnybrook Health Sciences Centre; Women's College Hospital, University Health Network [Princess Margaret Hospital, Toronto General Hospital, Toronto Western Hospital, Toronto Rehabilitation Institute]) and 3 community affiliated hospitals (North York General Hospital, St. Joseph's Health Centre, Toronto East General Hospital).

U of T Medicine: Our Commitment

U of T Medicine is Student-Centered
We must provide the best possible experience for all of our students and ensure that our institutional support, both academic and financial, will enable them to become leaders of transformational change for society. The Faculty must enable students to take advantage of this unique environment that provides an incredible breadth and depth of scholarship across disciplines.

U of T Medicine is Faculty-Centered
We must value academic performance and enable our faculty members to achieve their best through effective engagement in education, research and creative professional activities.

U of T Medicine is Staff-Centered
We must recognize that our staff are the backbone of our enterprise and support our *Vision* and *Mission* through their expertise. Medicine contributes to the university's position as an "employer of choice." We must promote opportunities for development of administrative and management skills within a collegial and balanced work environment.

U of T Medicine Harnesses our Collective Advantage
We must recognize the profound advantage of the size and scope of the collective assets across TAHSN and our community affiliates. To better serve our collective academic aspirations, Medicine must facilitate effective and efficient academic integration among the partners.

U of T Medicine is Socially Responsible
We must step up to address our social responsibility by meeting the health needs of individuals and populations in local and global settings.

Who we are…
- *2859 full time faculty*
- *3500 part time clinical faculty*
- *887 administrative and research staff*
- *904 undergraduate medical students and 394 medical radiation sciences & physician assistant students*
- *42 MD/PhD students*
- *2828 professional graduate and MSc/PhD students*
- *2094 Residents*
- *1766 post-doctoral fellows*
- *1143 MD clinical fellows*

Our Programs include the following Health Professions*:*
- *Undergraduate Medicine*
- *Postgraduate Medicine*
- *Continuing Education and Professional Development*
- *Physical Therapy*
- *Occupational Science and Occupational Therapy*
- *Biomedical Communications*
- *Community and Public Health*
- *Health Policy Management and Evaluation*
- *Speech-Language Pathology*
- *Physician Assistant*
- *Medical Radiation Sciences*

MSc/PhD Degrees and Postdoctoral Education include:
- *Biochemistry*
- *Biomaterials and Biomedical Engineering*
- *Health Policy Management and Evaluation*
- *Immunology*
- *Laboratory Medicine and Pathobiology*
- *Medical Biophysics*
- *Medical Sciences*
- *Molecular Genetics*
- *Nutritional Sciences*
- *Pharmacology & Toxicology*
- *Physiology*
- *Public Health Sciences*
- *Rehabilitation Sciences*
- *Speech-Language Pathology*

U of T Medicine is Accountable to our Stakeholders
We must be evaluated using metrics that report on progress towards achieving relevant outcomes as defined by our Goals. The positive evaluation of this plan will result in the enhanced global reputation of the University and TAHSN.

U of T Medicine is Financially Strategic and Fiscally Responsible
We must make strategic investments in programs that deliver on our Goals and meet our *Vision* and *Mission*. We will contain expenditures and obtain new revenues within a balanced Faculty budget.

U of T Medicine is Aligned with U of T's Strategy
We must commit to full alignment with the strategic directions of the University of Toronto's *Towards 2030*[3]. We must drive success through advancement, enhanced alumni relations, capital development and the promotion of a globally recognized brand for ***U of T Medicine***.

[3] Towards 2030: A Third Century of Excellence at the University of Toronto -- http://www.towards2030.utoronto.ca/synth.html

Chapter 2

STRATEGIC ACADEMIC PLAN 2011-2016

U of T Medicine: Strategic Goals for 2011-2016

Our strategic goals embody the following core concepts:

Integration with our partners to promote new collaborative thinking and to address our strategic directions

Innovation that creates value by applying the full scope of our inter-disciplinary capability to answer complex health and biomedical questions

Impact of our education and research outcomes that reflects return on investment as we make meaningful contributions to improving health and prosperity

The strategic plan is based on six overarching goals. Achieving these goals will require the integrated efforts of our senior academic and administrative leaders in collaboration with the leaders of cognate University of Toronto Faculties and our affiliated hospitals/research institutes.

1. **Prepare tomorrow's leading scientists and scholars, clinical professionals, and administrators who will contribute to fulfilling the goals of *U of T Medicine*.**

2. **Lead research innovation that answers questions of societal relevance.**

3. **Translate discoveries to improve health, equity and prosperity in our community and around the world.**

4. **Share our innovations and expertise globally through strategic partnering to advance global health and international relations.**

5. **Create a collective vision for a shared academic future with TAHSN, University of Toronto Faculties, especially Health Sciences, and community partners.**

6. **Invest strategically in academic priorities in support of our learners, faculty, and staff to provide for their success.**

Building an Environment of Innovation

U of T Medicine must innovate and create value by putting new knowledge into action. We must create an environment that provides effective incentives for our faculty, staff and learners to be collaborative participants in the innovation agenda. A climate of mutual respect, open inquiry, transparency and constructive competition is essential to foster a risk-taking culture of innovation.

The goals identified in this strategic plan intentionally integrate across education, research and health care. Individual decanal portfolios (educational, clinical and research) and all academic units (Departments and EDUs) either have or will create unit plans. These specific plans will provide the detailed road maps demonstrating how each unit will ensure their goals, strategies and outcomes are aligned with those articulated by the Faculty of Medicine and the University.

Goal 1:

Prepare tomorrow's leading scientists and scholars, clinical professionals, and administrators who will contribute to fulfilling the goals of *U of T Medicine*.

Aims:

***U of T Medicine* will be recognized globally for top-ranked, enriched educational and innovative programs that apply leading-edge teaching and learning models for Undergraduate, Graduate and Postgraduate Students, for Faculty and for healthcare practitioners by:**

- Driving innovation through pilot initiatives that encourage experimentation with new modalities to promote the emerging inter-professional, patient-centered learning environment
- Ensuring the availability and utilization of contemporary educational tools and techniques, including simulation
- Enabling enrolment of a more socio-economically and internationally diverse student population
- Creating inter-professional and inter-disciplinary education opportunities with Health Sciences and other U of T Faculties (e.g., Arts and Sciences, Applied Sciences and Engineering, and Management)
- Engaging new stakeholders/partners in health professional education curriculum development and implementation
- Developing new frameworks for education scholarship and research to enhance faculty teaching skills based on best practice

Examples of Innovations in Education:

- Advance education opportunities through dual degrees, e.g., MD-MPH
- Align with the Global Commission and the Future of Medical Education of Canada Reports
- Demonstrate diversity, flexibility and creativity in curricular development
- Create programs for marginalized students in top tier programs
- Focus on wellness for a learner-centered environment
- Establish rigorous evaluation systems
- Integrate clinical partnerships across the Academy system and the continuum of education
- Develop a global health education strategy

Integrate research experience and scholarship development into all education programs by:

- Developing research-related education programs within all existing and new inter-disciplinary units
- Engaging learners in developing and evaluating innovative curricula and research methodologies
- Renewing existing curricula to reflect new knowledge and thinking that emerges from our inter-disciplinary research themes and methodologies
- Incorporating concepts of social responsibility into curricula as they apply to innovation and knowledge translation

Examples of Specific Actions:
- Create and expand MSc and PhD programs in Health Policy and Global Health
- Evaluate current interdisciplinary graduate programs
- Expand and promote successful interdisciplinary and interprofessional graduate programs
- Provide joint programs for PhD/Post-Doctoral Fellow and Health Professions advanced trainees for professional development

Build capacity to address local and global health-related system gaps by:

- Championing with government, public and private sector leaders the importance of integrating the education mission of ***U of T Medicine*** with provincial, national and international health and biomedical/technological human resource needs
- Aggressively expanding graduate education and training programs
- Defining health system challenges in collaboration with stakeholders/partners and designing education and training programs to effectively address these challenges
- Continually evaluating the contribution of our graduates to improving health and prosperity locally and globally

Examples of Specific Actions:
- Enable integration through improved committee structures in Education
- Produce key performance indicators aligned with workforce needs
- Attain the highest accreditation status for health professions programs
- Ensure the convergence of Education EDUs across TAHSN
- Sustained recruitment of outstanding students
- Track the performance, career paths and achievements of our graduates
- Create new frameworks for scholarship, research and innovation to enhance faculty skills
- Enhance new program development and new curricula that address the changing competency requirements of health professionals
- Lead in use of new technologies in new models of distance learning, continuing education and faculty development
- Engage new consumers/partners in health professions education

Goal 2:
Lead research innovation that answers questions of societal relevance.

Aims:

Establish and promote overarching research themes and methodologies that address major societal challenges by:

- Identifying inter-disciplinary capacity exemplified by a critical mass of researchers and collaborations that have emerged as a result of strategic investments by the Faculty of Medicine and our partners
- Partnering strategically among multiple departments/EDUs/hospital research institutes/UofT campuses to address complex health and biomedical questions
- Enabling access to and continued development of supporting infrastructure and common methodologies across the partner institutions
- Expanding graduate enrolment to build research capacity in inter-disciplinary fields – preparing the next generation of scientist and leaders
- Completing by the Fall of 2011, a research strategic plan that addresses existing research strengths, supports foundational health services research and recognizes fundamental curiosity-driven research that underlies our innovation and translation agenda

Examples of Research Innovation focused on Interdisciplinary Themes:

- Human Development
- Neurosciences & Mental Health
- Regenerative Medicine
- Personalized Health – Chronic Disease Prevention and Management
- Local and Global Public Health

Identified Leading-Edge Methodologies and Infrastructure:

- Imaging (molecular to whole organism)
- Genomics/Proteomics
- Health Informatics & Bioinformatics (ICES at UofT)
- Human subjects research support units
- Harmonized Ethics Boards
- MaRS Innovation and commercialization partnerships

Support research innovation by:

- Recruiting and retaining outstanding researchers, staff and learners who are essential for the success of the innovation strategy
- Encouraging joint recruitment among Departments, Faculties and hospital research institutes
- Identifying major gaps in infrastructure, e.g., Phase 1 and 2 human subjects' research support unit capacity
- Increasing revenue generation for priority research themes and leverage peer-reviewed, industry and philanthropic funding

Examples of Specific Actions:

- Align inter-disciplinary research themes across Departments and hospital/research institutes
- Harmonize REB reviews across TAHSN
- Build a new Inter-Faculty Education & Research Innovation Centre
- Streamline the IP disclosure and contracts processes
- Speed the analysis of early human subjects data on new products

Goal 3:
Translate discoveries to improve health and prosperity in our community and around the world.

Aims:
Align collaborative education and research outcome-based objectives with identified societal needs by:

- Developing curricula to address the changing competency requirements of health professionals and provide researchers with the tools to translate new knowledge into practice
- Creating practical education and research programs that put knowledge into action to bridge the quality gap in health care
- Establishing new inter-disciplinary teams with TAHSN partners and U of T Faculties to undertake local and national knowledge exchange and translation
- Building on the success of existing interdisciplinary academic units that promote collaboration among Departments, Faculties and affiliated institutions
- Identifying new opportunities for strategic partnering with other Universities to advance health professions education and research

Examples of existing Interdisciplinary Academic Units that promote Collaboration among Departments and Affiliates:
- Banting and Best Diabetes Centre
- Heart & Stroke/Richard Lewar Centre for Cardiovascular Research
- Transplantation Institute
- Tanz Centre for Research in Neurodegenerative Diseases
- Centre for Patient Safety

Understand the impact of knowledge mobilization, translation and application and adjust strategic investment by:

- Developing robust metrics to benchmark outcomes of inter-disciplinary education and research programs against specific objectives and targets
- Modifying outcomes-based objectives as necessary to improve impact
- Directing investment of resources to outcomes-driven education and research programs that demonstrate impact in improving health and prosperity
- Ensuring continued long term investments towards sustaining basic sciences research

Examples of planned New Interdisciplinary Institutes:
- Institute for Human Development (OISE/UT, Medicine, UTM, Mt. Sinai/Lunenfeld, Hospital for Sick Children, Holland Bloorview)
- Institute for Neuroscience and Mental Health (Medicine, Molecular Genetics, Surgery, Physiology, Psychiatry, Biochemistry, Psychology, UT Scarborough, University Health Network, Center for Addiction and Mental Health)

Goal 4:

Share our innovations and expertise globally through strategic partnering to advance global health and international relations.

Aims:

Create a strategic and coordinated global health program by:

- Engaging with and gaining the endorsement from faculty, staff and learners for a global health vision and mission
- Establishing the structures and processes that optimize ongoing collaboration and exchange in global health
- Advancing research scholarship in global health
- Developing and providing diverse, learner-focused educational offerings in global health
- Engaging in and nurturing effective, sustainable partnerships with specific Universities in targeted developing countries

Examples of Specific Actions:

- Establish governance and organizational structure for Global Health
- Expand collaborative projects to advance the global health vision and mission
- Establish linkages to the Division of Global Health in the Dalla Lana School of Public Health

Create a strategic and coordinated international relations agenda by:

- Encouraging integration of groups working in the same countries and avoid duplication of effort
- Interfacing international activities with core strategic academic activities
- Actively promoting mutually beneficial and sustainable international partnerships with top-ranked Academic Institutions that exhibit strength in areas identified as strategic priorities for ***U of T Medicine***
- Aligning international activities across our contributions in education, research and capacity development
- Determining regional differences in criteria for Institutional Partnerships that acknowledge the diversity of resources among countries (e.g., developed vs. developing nations)

Examples of Specific Actions:

- Establish measures and criteria for our international activity
- Establish clear priorities and processes for International Relations

Goal 5:

Create a collective vision for a shared academic future with TAHSN, University of Toronto Faculties, especially Health Sciences, and community partners.

Aims:

Realign the Faculty of Medicine operating structures and processes to fast-track implementation of TAHSN - shared education, research and clinical care goals by:

- Critically evaluating current governance and operations structures against the best international models within research-intensive university and academic health science organizations
- Reviewing and optimizing each point of interface between ***U of T Medicine*** and its partners within the University (e.g., Health Science Faculties) and with University affiliates
- Working with the University to review the goals, academic oversight and support for the interdisciplinary collaborating academic Extra-Departmental Units (EDUs) to ensure they are positioned for optimal outcomes and maximum impact

Collaborating with the TAHSN hospitals and Health Science Faculties, develop a shared vision for a renewed network with specific academic priorities to be pursued over the next three years by:

- Identifying and addressing the perceived and actual barriers to enable a more integrated collective innovation environment
- Providing criteria for the evaluation of integrated performance in academic units
- Identifying incentives and rewards to recognize individuals, programs and departments that create effective networks
- Supporting the establishment of a TAHSN brand that effectively recognizes the University of Toronto

Examples of Specific Actions:

- Complete the renewal of all Hospital/University Affiliation Memoranda of Agreement for the next 5 years
- Implement recommendations from the Task Force on Valuing Academic Performance 1&2
- Provide incentives to recognize effective integration among partners

Goal 6:

Invest strategically in academic priorities in support of our learners, faculty, and staff to provide for their success.

Aims:

Expand existing enabling platforms and develop new ones as a foundation for organizational excellence by:

Internal Academic and Administrative Structures

- Defining leadership and staff roles to ensure alignment with the strategic directions and directly engage faculty and staff in processes to shape the future
- Reviewing alignment and function of existing internal Faculty committees as appropriate
- Building shared roles among the professional management portfolios to achieve more integration
- Reviewing and planning for the needs of the Faculty in all areas of human resources

Advancement and Alumni Relations

- Aggressively pursuing priority advancement initiatives to maximize philanthropic and volunteer leadership support for our academic mission
- Engage in fundraising campaign with a total working goal of $400-450 million from 2005-2016
- Amplifying our alumni programming to ensure alumni are actively engaged with ***U of T Medicine*** and the strategic priorities of the Faculty

Communications & External Relations

- Developing and implementing a strategic communication agenda and establish the ***U of T Medicine*** brand
- Establishing a new Office of Strategy, Communications and External Relations to coordinate and market all academic activities
- Building key performance indicators linked to academic planning and the mandated quality assurance framework of the University
- Improving external and media relations to enhance knowledge mobilization and the reputation of ***U of T Medicine***
- Utilizing strategic communications tools for effective and timely marketing and dissemination of ***U of T Medicine*** achievements

Examples of Specific Actions:

Internal Academic and Administrative Structures

- Promote efficient decision-making to support the ***Medicine at U of T*** strategic academic goals
- Strategically invest in new roles to build capacity
- Increase staff development opportunities

Advancement and Alumni Relations

- Increase student bursary funds to promote socio-economic diversity among all students
- Create a culture of alumni engagement that serves all graduates and supports the Vision and Mission of ***Medicine at U of T***

Communications & External Relations

- Provide comprehensive data quality and measurement plans for annual reporting
- Constantly update all websites with uniform information relevant for communication and marketing
- Office of Strategy, Communications and External Relations will collaborate across all partners
- Create a data base of faculty experts in content of our areas of strength for external communications

Infrastructure

Information Technology

- Renewing the Information Technology Plan to support our strategic goals
- Investing in Inter- and Intra-organizational e-platforms to support academic priorities
- Evaluating the effectiveness and impact of IT services ensuring improved cost-benefit

Space and Facilities

- Ensuring space and facility development reflects and effectively supports our academic priorities using accreditation standards as a minimum target
- Leveraging shared infrastructure opportunities with all partners
- Creating accessible and sustainable spaces

Strategic Investments & Fiscal Responsibility

- Leveraging the asset-base of the Faculty in support of academic priorities
- Investing in key priority areas that support collaboration and networking
- Optimizing resources towards sustainable revenues and expenditures
- Collaborating with TAHSN partners to seek economies, reduce duplication and enhance effectiveness

Examples of Specific Actions:

Infrastructure

Information Technology

- Complete the WebCV project
- Integrate POWER, MedSIS, GradSIS, etc
- Expand videoconferencing and teleconferencing systems to integrate the education and research environments for learners on- and off-campus

Space and Facilities

- Complete and keep current a Master Space Plan for ***Medicine at U of T*** on campus and coordinate with TAHSN partners for off campus academic activities

Strategic Investments & Fiscal Responsibility

- Build a sustainable and balanced budget within 3-5 years
- Create new revenue streams

Research Strategic Plan 2012-2017

Background

The Faculty of Medicine (FoM) with its partner University of Toronto (U of T) hospital/research institute full affiliates constitute a major national resource in health and biomedical research that has achieved international recognition in many fields. In the 2011 Global Rankings, the Times Higher Education places the University of Toronto at 17th of the world's top universities in research, teaching and knowledge transfer. In 2011, the Higher Education Evaluation and Accreditation Council of Taiwan, that focuses on research bibliometric analysis of 500 research-intensive universities world-wide, ranked U of T ninth, and in the sub-category of Clinical Medicine for World Universities U of T ranked fourth. This success rests, in part, on the depth and breadth of the research enterprise in the FoM that accounts for more than half of the total research funding obtained by the UofT. According to a 2011 Thomson-Reuters survey, the U of T topped 15 fields in Canada in total citations: chemistry; materials science; engineering; space science; mathematics; ecology/environment; clinical medicine; immunology; biology and biochemistry; molecular biology/genetics; neurosciences; pharmacology; psychology/psychiatry; education; and economics and business. When examining impact (average citations per paper), the U of T ranked first in Canada for five fields: engineering, microbiology, biology & biochemistry, molecular biology/genetics and education.

In 2010/2011, in the FoM there were 1,613 researchers holding research funding, who obtained 8,317 research grants and contracts from internal and external sources, and total research funding (external and internal to U of T and its affiliates) of $792 million. The extensive health research enterprise across the U of T and affiliates captures greater than 20% of the Canadian Institutes of Health Research (CIHR) national funding, with the majority of these researchers appointed in the FoM. U of T Medicine, along with other Health Science Faculties and the nine fully affiliated hospitals/research institutes, together form the Toronto Academic Health Sciences Network (TAHSN) Research Institute. TAHSN houses 125 Canada Research Chairs and two recently awarded Canada Excellence in Research Chairs. Our exceptional graduate education programs are distributed across 15 graduate departments with over 2,000 masters and doctoral graduate students engaged in research. U of T Medicine also trains the largest number of physician-scientists compared to other research-intensive universities in Canada, through its Clinical Investigator Training and M.D./Ph.D. Programs.

Through improvements in education, health care and wealth Canadians are living longer and leading more active lives than ever before. While we have enabled relative longevity, many individuals are living with long-term chronic disease that requires the availability of high-quality health care. The health care system has reached a challenging level of complexity and cost requiring more focus on disease prevention, health promotion and community-based care to enable Canadians and others around the world to live healthy, productive lives.

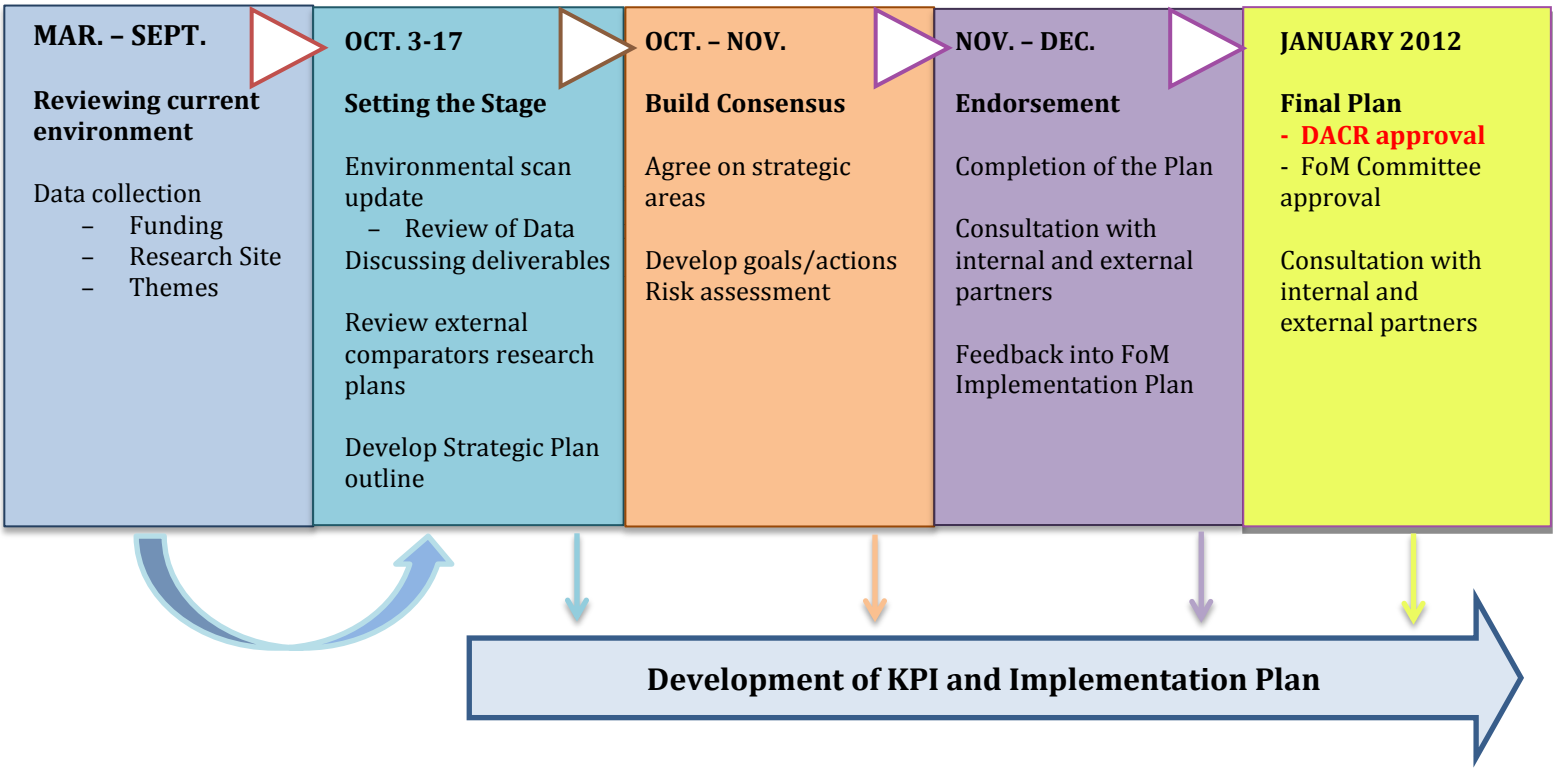
U of T Medicine has contributed to the understanding of fundamental mechanisms of disease and improved diagnostics and therapeutics. From the early days of Banting and Best, through the stem cell discoveries of Till and McCullough our researchers are consistently at the forefront of new discovery and implementing these discoveries to the benefit of our societies. U of T Medicine must step forward to lead the development of transformative solutions for the challenges created by an aging population and the rise of complex, chronic disease trajectories. It is no longer sufficient to study genes, cells, organs or diseases in isolation – an integrated approach must be applied. While diabetes is primarily caused by lack of, or non-responsiveness to insulin, the consequences of diabetes affect multiple systems including neural, cardiac, vascular and renal. The impact of this disease on the quality of life of the individual and their communities can be devastating. In order to fully understand disease we need studies that span molecules to populations.

U of T Medicine's Strategic Plan 2011-16 emphasizes three goals: INTEGRATION, INNOVATION and IMPACT. The first of these – INTEGRATION - will be a primary focus of the implementation of the new Research Strategic Plan. U of T Medicine will support existing and develop new major cross-cutting initiatives that take advantage of the breadth and depth of the research talent pool available within the U of T/TAHSN partnership. These initiatives will integrate researchers from differing departments/disciplines and health professions to focus on common, complex problems. Examples of these initiatives are the Donnelly Centre for Cellular and Biomolecular Research, and the recently created Institute of Human Development. At the same time, we will work in partnership with Departmental leaders to ensure that disciplinary research and graduate education remain at the forefront of their respective fields. Successful leadership in inter-disciplinary and inter-professional research requires that the core fields contributing to these integrating initiatives are resourced and strongly supported.

In Fall 2011 under the leadership of Professor Alison Buchan, Vice Dean Research & International Relations, members of the Dean's Advisory Committee for Research and invited faculty leaders formulated a transformative five year Research Strategic Plan (2012 - 2017) for U of T Medicine.

The plan aligns directly with the six overarching goals of the U of T Medicine Strategic Academic Plan 2011-2016 and six Strategic Objectives of the University of Toronto's 'Excellence, Innovation, Leadership' Strategic Research Plan 2012-2017.

Figure 1: Strategic Research Plan 2012-2017 Project Overview



Current Status: Environmental Scans

The strategic planning process involved a comprehensive scan of the research activity within the FoM. The geographic location of a researcher in the FoM/TAHSN community; their funding and research focus were identified for the 2,131 faculty who have held research grants/contracts in the past four years (see appendix A for complete report). The areas of research focus were initially drawn from a database created by U of T's Office of the Vice President, Research; this was subsequently modified to fit the U of T/TAHSN community. The research areas were clustered into areas of critical mass and strength based on the activity of the researchers and the research directions of the Departments/Extra-Departmental Units and Hospital Research Institutes. These areas directly correlate with the following University of Toronto Strategic Research Themes: PROMOTE - ENGAGE - ADVANCE – ENABLE.

The environmental scan identified that U of T Medicine researchers are engaged in the full spectrum of the health research continuum, ranging from biomedical to health systems research. Our unique size and scope is the result of the combination of the U of T with its affiliated hospitals/research institutes. The breadth and depth of the health research enterprise places us in an exceptional position for discovery and innovation. By capitalizing on these strengths through increased INTEGRATION across disciplines and health

professions U of T Medicine and partners are poised to expand our global leadership and IMPACT.

The commonalities between the existing strategic plans of U of T Medicine and its nine fully affiliated TAHSN Hospitals were identified. In Figure 3 the size of the individual word reflects the number of Institutions identifying the term in their plan. Health Research was clearly articulated as a major focus among all institutions.

A similar scan of Research Strategic plans (where available) for U of T Medicine's Departments, Extra-Departmental Units and TAHSN Research Institutes provided a number of commonalities, shown in Figure 4.

Thematic Areas

The commonalities identified from the Strategic Plans/Areas of emphasis were clustered into 18 related thematic areas (see appendix 1 for clustering) based in part on those areas previously identified by the Vice President Research. The 2,131 active health and biomedical science researchers identified in the last four years in the U of T Medicine databases have been assigned to a maximum of two themes; once the plan is finalized researchers will have the opportunity to ensure their assignment accurately reflects their current research focus. Given the complex and dynamic nature of health and biomedical research it is not uncommon to find researchers aligned with multiple areas, an indication of the inter-disciplinary nature of the work they do. For example, a geneticist may be working the field of cancer, a biochemist in neuroscience, an epidemiologist in infectious disease.

Figure 2: Alignment of the Research Strategic Plan with U of T Medicine's Strategic plan and the University of Toronto Research Strategic Plan

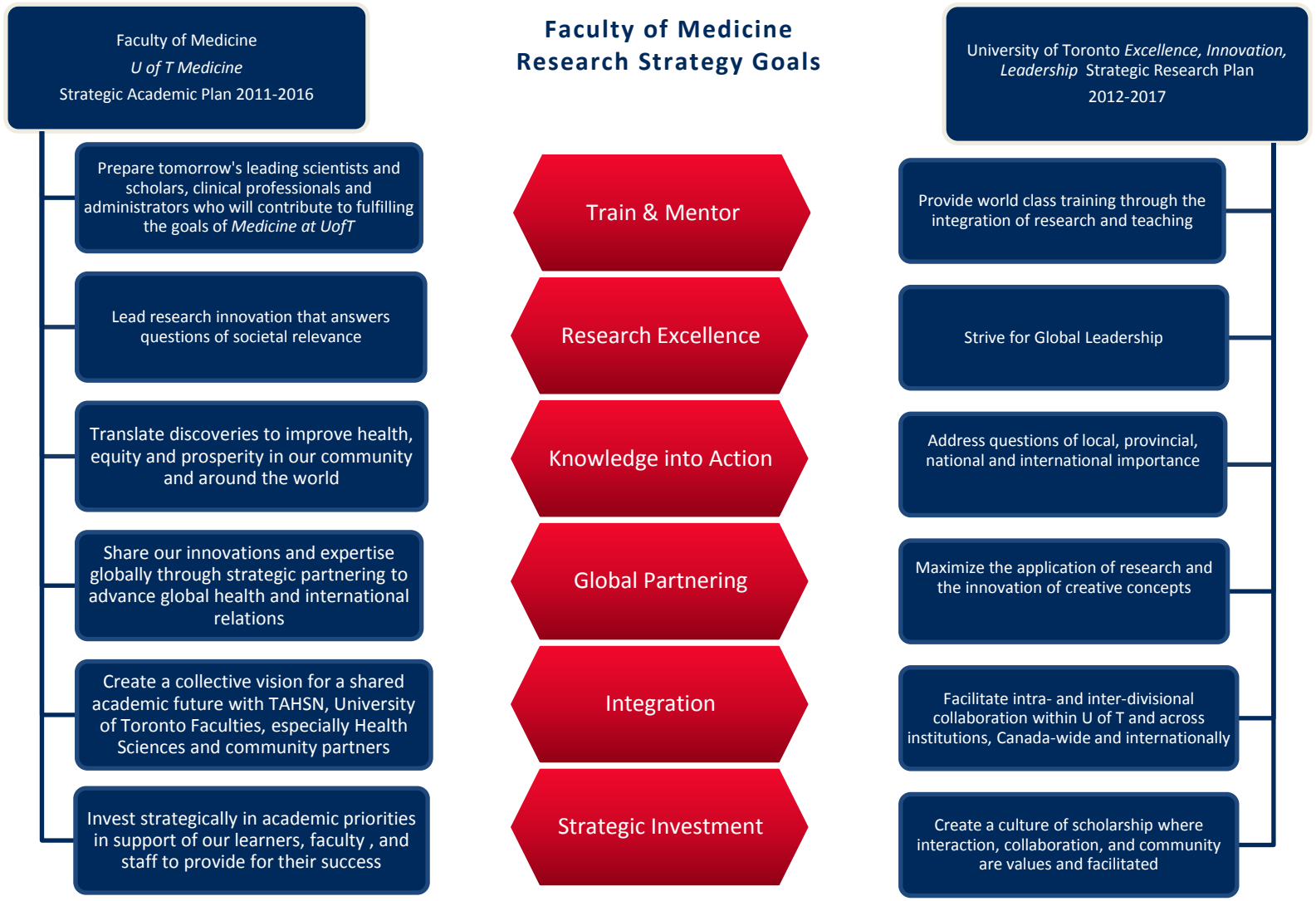
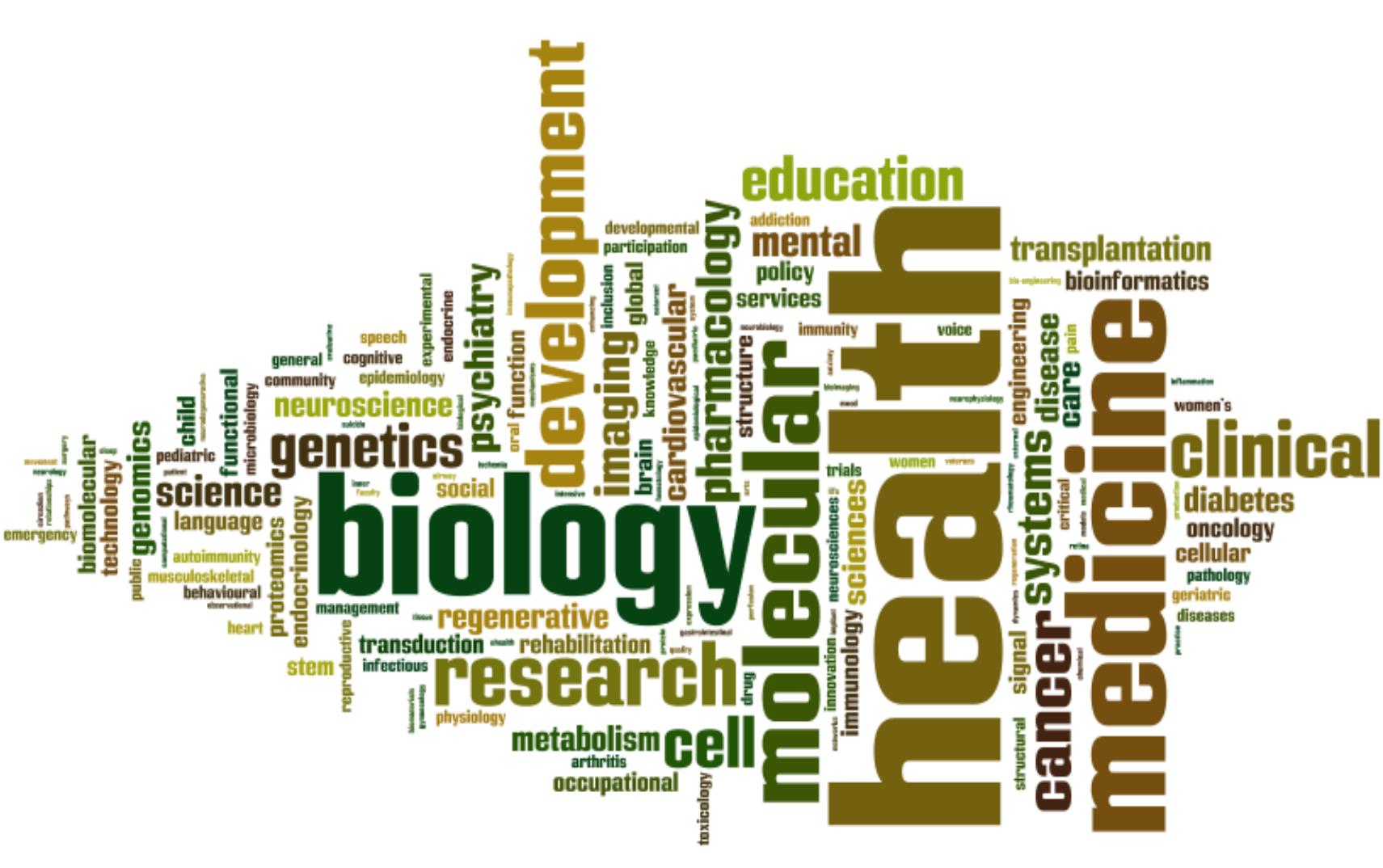


Figure 3: Faculty of Medicine & TAHSN All Strategic Plans: Commonalities

Figure 4: Departmental/EDU & TAHSN Research Institute commonalities



Researchers by Thematic Area

Theme	Number of Researchers	Theme	Number of Researchers
Bio-Engineering/Tech. Development	47	Infection/Immunology/ Inflammation	214
Cancer	422	Metabolism/Nutrition	118
Cardiovascular	217	Musculoskeletal	136
Computational Biology	64	Molecular Cell Biology	79
Clinical Research	253	Neurosciences/Brain Health	474
Development/Child/ Maternal Health	288	Drug-Development/ Toxicology	74
Education/Knowledge Translation	154	Population Health/ Global Health	388
Genetics Genomics-Proteomics	257	Regenerative Medicine	111
Health Services/Policy	187	Imaging	129

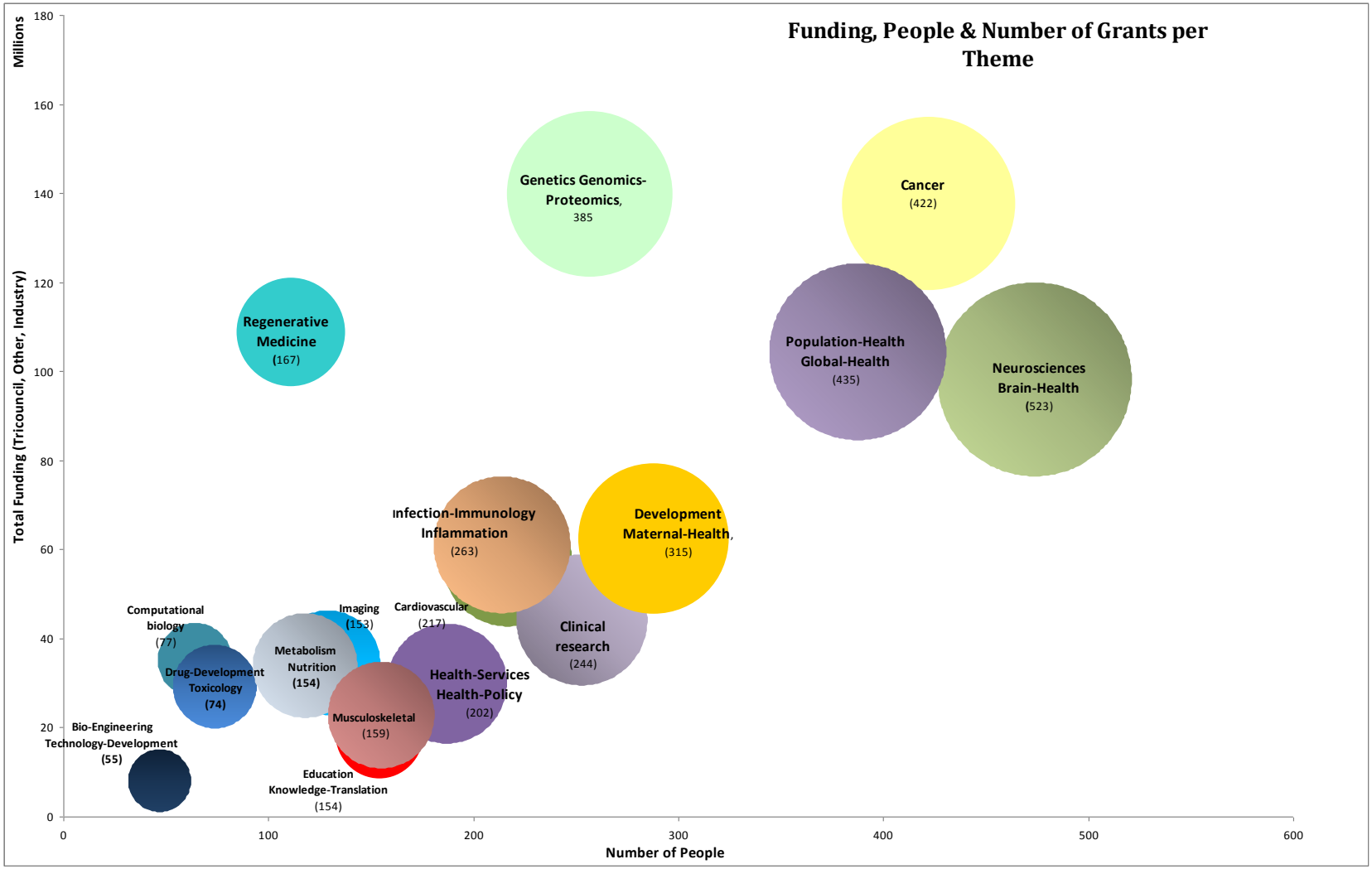
Funding 2009 -10 by Thematic Area*

Theme	Funding (M)	Theme	Funding (M)
Bio-Engineering/Tech. Development	$8.0	Infection/Immunology/ Inflammation	$61.0
Cancer	$138.0	Metabolism/Nutrition	$34.0
Cardiovascular	$57.0	Musculoskeletal	$23.0
Computational Biology	$35.0	Molecular Cell Biology	$32.5
Clinical Research	$44.0	Neurosciences/Brain Health	$98.0
Development/Child/ Maternal Health	$62.5	Drug-Development/Toxicology	$29.0
Education/Knowledge Translation	$18.5	Population Health/Global Health	$104.0
Genetics Genomics-Proteomics	$140.0	Regenerative Medicine	$109.0
Health Services/Policy	$30.0	Imaging	$34.0

*#Researchers & Funding reflects some double counting for individuals assigned to more than one theme.

Figure 5: Critical Mass of Researchers/Theme
(Size of word reflects number of researchers in topic)

Figure 6: Graph of Researchers (x axis), Total funding per Theme (y axis) and Number of grants (in brackets)*.



*The above graph combines information on first and second thematic assignment, therefore double counting those researchers assigned to more than one theme as well as their funding grants

Future Directions: Strategic Priorities

Emerging from the above analysis are four U of T Medicine Research Strategic Priorities involving initiatives that have INTEGRATION – INNOVATION – IMPACT as key components and that deliver on the mandate of discovering and implementing new knowledge that answers questions of societal relevance. The breadth and depth of health research expertise within U of T Medicine/TAHSN provides the unique opportunity to nucleate initiatives that bring together researchers from across the entire U of T community to address challenging, complex problems that cannot be solved by individual units alone. Each of these priority areas are interlinked and build on one another to address the most important societal issues – promoting health and preventing/ameliorating the effects of disease.

The four priorities are based on current and developing health research expertise in the U of T Medicine/TAHSN research community and address critical challenges. These investigator-initiated research programs cross multiple Thematic Areas as defined above, and bring together researchers from multiple Departments/EDUs and Institutional partners.

A secondary focus of the strategic plan is to provide Institutional support for the methodological platforms required to enable health research. These will build on and expand currently available infrastructure across the U of T Medicine/TAHSN community.

Strategic Priorities

1) Human Development

An emerging area of health and biomedical science focuses on defining environmental influences that foster both healthy fetal and neonatal development and predispose individuals to enter specific disease trajectories. Recent evidence indicates that exposure to adverse conditions in the antenatal period (e.g. inadequate maternal nutrition), and during infancy and childhood results in increased risk of neuro-cognitive and cardio-metabolic illness, impaired learning and limited ability to engage in successful social integration. Research in the field of epigenetics indicates that the mechanisms causing these developmental trajectories rests, at least in part, on interactions between genes and the environment in early life. Alarmingly, the number of children world-wide affected by these adverse outcomes is increasing, and threatens to overwhelm health, education and social service systems.

In response to these highly complex health challenges, a U of T Medicine/TAHSN wide multidisciplinary initiative, the Institute of Human Development (IHD), has been established. U of T Medicine along with OISE/UT are key participants in the Institute with two of the founding principal investigators located in the Departments of Physiology and Obstetrics and Gynaecology. The breadth of expertise in this area ranges across maternal-child health, learning, and development involving multiple academic units at all three U of T campuses and TAHSN. U of T Medicine alone has 288 researchers in the area of development/child/maternal health, involving every one of the U of T Medicine/TAHSN sites. In 2009-10 these researchers brought in $18.0 million in Tri-Council grants and $42.0 million in funding from health charities, foundations and provincial government sources.

The Institute will help to realize the potential of on-going large population-based studies including the Ontario Birth Cohort Study that includes genetic and epigenetic analysis of samples collected through early neonatal development and childhood. The effect of environmental factors such as nutrition and culture on developmental milestones, overall health (obesity, cognitive ability) and social awareness will be determined and the effect of selected interventions evaluated.

2) Global Health

Understanding the environmental characteristics that favor life-long human health in turn raises the question of how to enable equitable access to appropriate provision of health care resource. The principle of equity is at the heart of an emerging 21st Century ecosystem that is defining the discipline and practice of Global Health. The 2008 WHO Commission on the Social Determinants of Health defined health equity as the absence of systematic differences in health, both between and within countries.

Global Health is an academic priority for many Faculties and Schools at U of T and this common focus is coalescing within a new Institute of Global Health Equity and Innovation. U of T Medicine, through researchers in the Dalla Lana School of Public Health with the Departments of Family and Community Medicine, Medicine and Surgery, has taken the lead in the formation of the Institute. U of T Medicine has 120 researchers in the broadly defined area of Global Health, involving every one of the U of T Medicine/TAHSN sites, and in 2009-10 these researchers brought in $10.5 million in Tri-Council grants and $23.2 million in funding from health charities, foundations and provincial government sources.

The breadth of research in Global Health includes projects examining the impact of climate change, infectious diseases, chronic disease management, urban and rural community design and resilience in the face of increasing community-wide challenges. Ongoing research ranges from examining how climate change affects complex interlocking systems

including: food production, urban design, and health care systems, to assessing the burden of infectious and non-communicable diseases on vulnerable populations. The requirement to provide vulnerable populations with affordable solutions, either technological or pharmaceutical in nature has led to the expansion of "frugal innovation" with an increased emphasis on prevention strategies.

3) Neurosciences & Brain Health

Brain Health is a key component of Human Development and Global Health, the increasing incidence of autism in children and mental health challenges at all ages are examples that underscore the need to understand the biology and sociology of Neurosciences and Brain Health. The U of T and TAHSN are home to one of the greatest concentrations of neuroscientists in the world. U of T Medicine alone has 475 researchers and their teams in the area, who collectively brought in $30.1 million in Tri-Council and $63.0 million in funding from health charities, foundations and provincial government sources in 2009-10.

Neuroscience and brain health represents an enormously complex and diverse research and health care sector that focuses on how the biological determinants of the central and peripheral nervous systems interplay with social and environmental determinants to effect human behaviour and health. Research ranges from birth cohorts examining how early development affects cognition and the ability to learn, through traumatic injury to the spinal cord and the brain, to addiction and mental illness, and the consequences of aging and neural degeneration in Alzheimer's and Parkinson's diseases.

A virtual Institute for Neurosciences and Brain Health is envisioned that will bring together topic-specific clusters, such as the Toronto Dementia Research Alliance and the Tanz Centre for Neurodegenerative Disease, that cross disciplines and Faculties to address the fundamental challenges of development, regeneration and degeneration of neuronal networks. Researchers in the Institute will combine neuroimaging, epigenetics, high-throughput genomics/proteomics/metabolomics screening, systems biology and epidemiology to address these complex problems.

4) Complex Disorders – System Management

Advances in Human Development revealing predisposition to chronic disease trajectories, recognition that non-communicable diseases including mental health and cognitive disorders are now the most prevalent health challenges globally, U of T Medicine will focus on the systems management of the most common complex disorders affecting Canadians. Successfully addressing these challenges will require system-wide solutions in the understanding and management of the interplay between health promotion and disease

treatment. Equitable access and effective management of concurrent disorders, e.g., individuals who suffer Parkinson's disease and simultaneous depression and cardiovascular disease, require integration of medical/ rehabilitation /pharmaceutical / social care delivery and fundamental health and biomedical research.

U of T Medicine/TAHSN is one of the few academic communities with the breadth and depth of health researchers required to effectively tackle these complex problems. For example, within U of T Medicine there are at least 1,500 researchers in this overall area with in excess of $400 million in funding in 2009-10, covering the Thematic Areas of Cancer, Clinical Research (includes Rehabilitation, Primary Health Care), Cardiovascular, Drug-Development/Toxicology, Infection/Immunology Inflammation, Metabolism & Nutrition, and Health Services/Health Policy. These researchers are distributed across a number of U of T Medicine's Centers and Institutes (extra-departmental units - EDUs) focused on addressing their individual section of the problem; including the Banting and Best Diabetes Centre, the Lewar Heart & Stroke Centre for Cardiovascular Research, the Transplantation Institute, Musculo-skeletal Centre and the Centre for Patient Safety. To provide system-wide solutions requires effective interaction among researchers in these EDUs to develop innovations that can be tested in the TAHSN and partner communities.

An example of U of T Medicine/TAHSN addressing a common challenge in health care is the development of an innovative solution focused on reducing hospital admissions. Researchers and clinicians in the U of T Medicine Departments of Family & Community Medicine and Medicine have established a new patient-centred Virtual Ward "The Bridges program" focused on enabling effective ambulatory and community-based care and reducing hospital re-admissions through the provision of inter-professional team support and establishment of most responsible primary care physician oversight. Evaluation of the effectiveness and impact of this intervention will contribute to transformation of health systems locally and nationally. This intersection of quality improvement, knowledge translation and health systems design represent a new inter-disciplinary approach to solving complex challenges in health care provision.

Strategic Infrastructure Platforms

The successful implementation of the Strategic Priorities outlined above require the availability of highly sophisticated core research infrastructure ranging from integrated health informatics, through high resolution/high throughput imaging and screening methodologies to effective dissemination/commercialization strategies. In many cases individual research groups have developed customized solutions to methodological challenges, however these are not integrated (for example genomics data are not integrated across the different disease-specific research groups). To enable effective use of

infrastructure resources and dissemination of best practices the UofT Medicine and TAHSN research institutes will conduct an environmental scan to determine current strengths and identify areas for development.

a) Health and Bio-Informatics Cluster

This cluster will bring together leaders in the collection and use of health related electronic data to enable research in basic, clinical, population and public health. All of these fields are experiencing an unprecedented and exponential increase in information such that our collective task is to turn the individual data streams into relevant knowledge. The U of T Medicine/TAHSN group is not unique in this need and many institutions have implemented integrating programs such as the Biomedical and Health Informatics program at the University of Washington (http://www.bhi.washington.edu/vision) linked to the US-wide American Medical Informatics Association (http://www.amia.org/). The intent is to enable research in and implementation of informatics across the full spectrum of research from analysis and interpretation of genomic/epigenomic/proteomic data, to evaluating the impact of personalized medicine on the health of communities.

b) Integrated Functional Imaging Cluster

The cluster will bring together imaging researchers and infrastructure from molecular (NMR X-ray diffraction) through single cell and tissue (electron & transmission/confocal microscopy) to whole body (PET, MRI). U of T Medicine/TAHSN are world leaders in functional imaging and the program will unite basic and clinical researchers with physicists and chemists to expand and diversify the implementation of imaging in the study of health and disease.

c) Knowledge Exchange/Translation and Commercialization

In the area of Knowledge Exchange the Wilson Centre for Educational Research and the Li Ka Shing Knowledge Institute focus on how to expand and improve our abilities to transfer new knowledge outside the circle of discovery. In the commercialization sphere MaRS Innovation will continue to take the most promising breakthroughs from U of T Medicine/TAHSN institutes, and commercialize them, in addition to this venture we will be expanding the training and opportunities for individual faculty to be involved.

Next Steps - Implementation Planning and Tactics

The above strategic priorities and intention to establish the infrastructure platforms, will guide the next steps in developing a specific implementation plan including tactics to enable successful. The Faculty of Medicine under the guidance of the Vice Dean Research and International Relations will work closely with Department Chairs and Vice Presidents Research from the fully-affiliated hospitals to identify tactics and feasible milestones. An Implementation Planning document will be prepared no later than mid-2012. Key performance indicators will be used to measure outcomes and impact. Importantly, the Research Strategic Plan and its implementation tactics fully integrate with and give specific direction to the U of T Medicine Strategic Academic Plan 2011-16.

Performance Indicators for Research

The success of the strategic plan requires evaluation of specific indicators, some of these are standard and information is currently being collected by Department/EDUs/Research Institutes, other areas will require development new metrics. These will be developed and collected in partnership with the TAHSN community.

Standard Metrics

- Core facilities/Space
- Grant/Contract Funding
- Clinical Trials activity
- Publications/Citations/Journal Impact
- Conference presentations and invited lectures
- Conferences organized
- Student & Faculty scholarships/fellowships (includes Endowed Chairs, CRCs)
- Student & Faculty honors
- Number of graduate students/PDF and destination (Academia/Industry/Health Care)
- Education innovation
- IP/Disclosures/Royalties/Spin-off companies

Non-standard Metrics

- Interaction with Media/Government (Provincial & Federal)
- Uptake & implementation of new Policies/Methodologies
- Economic Impact (will develop new measures)
- Participation in National and International Policy-setting Bodies
- Surveys of student/staff/faculty satisfaction/effectiveness
- Collaboration and outreach within and outside U of T Medicine/TAHSN

Clustered Areas of Emphasis

Bio-Engineering/Technology Development
Biomaterials | Nanotechnology | Innovation

Cancer
Neoplasia | Cancer-immunology | Retina-oncology | Gynaecologic-oncology | Cancer-biology

Cardiovascular
Ablation | Embolization | Heart | Cardiovascular Pharmacology | Hematology

Computational Biology
Bioinformatics | Biological Networks | Computational networks

Clinical Research
Cataract surgery | Clinical Pharmacology | Clinical Trials | Critical care | Dermatology | Emergency Medicine | Forensic Science Medicine | Gastroenterology | General internal medicine | General Surgery | Geriatrics | Glaucoma | Intensive care | Mechanisms of organ dysfunction | Movement Science | Nephrology | Oculoplastics | Oral dynamics | Oral pathology | Physiatry | Primary Health Care | Pulmonary | Rehabilitation health services | Renal Pathology | Respirology | Trauma Emergency Transplantation | Upper Airways| Urogynaecology | Voice

Development/Child/Maternal Health
Child language | Child psychiatry | Cystic fibrosis | Development| Developmental immunology | Infants | Infant health | Pediatrics | Pediatric-Adolescent gynaecology | Pediatric ophthalmology | Reproductive health | Women's Health (reproductive)

Education/Knowledge Translation
Faculty Development | Knowledge Transfer/Translation | Education

Genetics Genomics-Proteomics
Chemical Genomics | Clinical Genomics | Functional Genomics | Genetics | Gene expression and development | Genetics of development | Model organism genetics | Molecular medicine | Proteomics

Health Services/Health Policy
Advancing Practice | Bioethics | Child Health Evaluative Sciences | Comparative Health systems |Evaluation of care | Health economics | Patient safety |Performance management | Public Health Policy | Quality improvement | System design

Imaging
Imaging technology development | Ischemia imaging | Medical physics | Molecular imaging | Perfusion | Ultrasonography

Immunity/Inflammation/Infection
Adaptive immunity | Autoimmunity | Immunodeficiency | Immunopharmacology | Innate immunity | Infectious disease | Microbiology | Virology

Metabolism/Nutrition
Diabetes | Endocrinology | Metabolism | Nutrition

Musculoskeletal
Bone Health | Rheumatology

Molecular Cell Biology
Biomolecular structure and function | Cellular biomolecular | Interdisciplinary Cell Biology | Membranes and Transport | Molecular biology | Molecular structure and function | Protein folding | Receptor pharmacology | Signal transduction| Systems biology

Neuroscience and Brain Health
Anxiety disorders | Anesthesia |Audiology | Behavioural health science | Cornea and external disease | Dementia | Drug addiction | Healthy relationships | Language studies | Mental health | Mood | Neural | Neurobiology | Neurology | Neuro-opthalmology | Neurodegenerative diseases | Neuro-pharmacology | Neurophysiology | Neuro-rehabilitation | Pain | Psychotherapy | Psychiatry | Schizophrenia | Sensory systems | Sleep medicine | Social behavioural health | Speech fluency and production | Suicide studies | Swallowing

Drug Development/Toxicology
Behavioural pharmacology | Drug metabolism | Models of disease | Molecular toxicology | Pharmacogenetics | Pharmcokinetics

Population Health/Global Health
Clinical outcomes | Culture and Community health | Diversity and Inclusion | Epidemiology | Environment and Health | Enhancing participation| Observational and decision sciences | Occupational and Environmental Health | Health Promotion/Disease Prevention | Veterans

Regenerative Medicine
Stem cell biology | Tissue engineering

Strategy Implementation

Achieving these Strategic Goals will require the integrated efforts of our senior academic and administrative leaders in collaboration with the leaders of our affiliated hospitals/research institutes and cognate University of Toronto Faculties. Implementation tactics to attain our Goals and their specific Aims are supported by six pillars of positive change that include: leadership; innovation; balanced growth; resource; infrastructure; and, communication. Over the next five years, the Faculty will prioritize investments guided by the framework of these pillars. To assess the effectiveness of attaining our Goals and specific Aims, we are developing a set of Key Performance Indicators (KPIs) aligned with the pillars. Using relevant KPIs is a crucial step towards measuring outcomes relevant to the Faculty of Medicine academic units including our Departments, Education Programs and Extra-Departmental Units (EDUs), as well as the senior management portfolios. It will be through this measurement that we demonstrate, to all our stakeholders, the impact of our achievements.

Unit-level engagement with the strategic planning implementation

Successful implementation of the Strategic Plan will rely on full collaborative engagement of senior academic and administrative leadership. Over the past five years, the Dean has required every new or renewed Department Chair, EDU Director and Vice Dean to develop and implement a strategic plan reflecting with the *vision* and *mission* of the Faculty. Many exemplary and innovative strategic plans have emerged and are positively propelling these units and decanal portfolios. Implementation of the Faculty Strategic plan is meant to build on this momentum. Recently, the Vice Dean, Research and International Relations completed a strategic research plan relevant to all academic units and collaborators within and external to the University. In 2012 and beyond, those academic and administrative units now involved in strategic planning will be guided by and expected to align with the overarching goals and aims of the Faculty (also aligned with *Towards 2030*) supported by the Faculty's new Office of Strategy, Communications and External Relations. As the Dean completes several searches in 2012 for new departmental/unit leaders, we can be assured that each of these unit heads will embark upon their own strategic planning process within the first 12 – 18 months of their appointment.

Strategic Communications

Successful implementation of the Strategic Plan will require effective communication at all levels. To that end, the Faculty of Medicine has created an **Office of Strategy, Communications and External Relations** (OSCER) responsible for collaborating with all internal and external stakeholders to ensure effective and timely communication of all academic activities. In the short to medium term, this will include (but not be limited to) mounting and continuous updating of electronic screens across the Faculty's public areas, pictorial displays, revitalization of MedEMail and UTMedicine magazine, and renewed focus on our web and social media presence. Our **Dean's Report,** that will highlight KPIs, will be

published in summer 2012 as an additional, formalized presentation of the Faculty's achievements.

TRACKING OUR PROGRESS

Key Performance Indicators – Outcomes that Measure Innovation and Impact

The KPIs that the Faculty of Medicine will use to track academic activities fall under three broad categories: First, we will track data that are required by the University for its review and reporting requirements, e.g., graduate student enrolment (growth); federal research grant funding (resource); number of prestigious national and international academic awards (leadership). Second, our Faculty will monitor those KPIs that are relevant for global rankings, e.g., number of research publications, citations and "H"-index. Finally, the Faculty will also identify those KPIs that identify contributions to innovation and impact that specifically contribute to "improving health", "fulfilling our social responsibility" and "preparing leaders."

Strategic Plan Oversight Committee

The Faculty of Medicine's strategic plan implementation has been guided thus far by the **Strategic Plan Oversight Committee** (SPOC). SPOC has provided invaluable direction and expertise as the plan moved through the necessary stages of development. As per its terms of reference (Appendix E), SPOC will continue to meet (Appendix F), not only to review the Faculty's plan implementation progress, but also to share information and perspectives on various unit-level plans. This will promote the flow of information across our academic and administrative leadership and encourage development of synergistic strategic directions. In addition to SPOC, the **Faculty of Medicine Education Council** (FOMEC) has also determined that strategic planning is a critical activity to ensure the success of education program development and growth; their terms of reference have been revised accordingly and membership has expanded to include a representative from OSCER.

INTEGRATION & INNOVATION

The framework of our Strategic Plan is based on six pillars of positive change that support each Goal and its specific Aims.

1. Leadership

Successful leadership within the Faculty of Medicine relies upon a shared commitment to fulfilling its *Vision* and *Mission*. The Faculty's academic and administrative leadership play a critical role in empowering individual faculty members, students and staff to create the value of our institution for society.

We will continue to be a world leader in the provision of competitive and rigorous academic programs that will attract outstanding students who thrive in a challenging

education environment. We will address changing competency requirements for health professional students and trainees. We will promote innovation, invention, and discovery among our faculty members by providing frameworks for scholarship and enhanced research infrastructure, as well as encouraging international teaching and research partnerships, and flexibility and creativity in curriculum development. Finally, as part of our social responsibility, we will strive to become internationally recognized leaders in the study of global health and health promotion through the creation and expansion of graduate degree programs, inter-professional educational opportunities and encourage flexibility and creativity in curriculum development.

2. Discovery, Invention and Innovation

Innovation is a core concept of our Strategic Plan. We must apply the full scope of our discipline-based and inter-disciplinary capability to answer complex health and biomedical questions. Engagement of our faculty, staff, and students in innovation, discovery and invention will enable them to transcend barriers of subject, community, and nation contributing to improved health in Canada and around the world.

Our education and research enterprise benefits significantly from collaborations outside the health and biomedical disciplines, including engineering, applied sciences, social and political sciences, education, arts and humanities. These strategic partnerships drive innovation by capacity building and synergism.

Stakeholders outside our university and affiliated hospitals look to our research and education programs to lead the innovation agenda. We will drive discovery and invention by interfacing our priority research and education initiatives with selected international institutions to create mutually beneficial partnerships.

3. Balanced Growth

As the University of Toronto expands graduate enrolment over the next four years, the Faculty of Medicine has committed to targeted growth, particularly in professional and course-based Master of Science and PhD programs. Our basic biomedical sciences departments have major programs in all disciplines and continued increase in enrolment is anticipated. The Faculty has also indicated to the Ministry of Health and Long Term Care that it will accept further expansion of postgraduate medical education trainees over the next five years as the expanded cohort of medical students enters postgraduate MD training. The number of part-time clinical faculty will likely continue to increase as distributed medical education continues to evolve among our community-affiliated hospitals. Other education programs, e.g., undergraduate Arts & Science teaching, may remain constant or grow only in strategic fields, e.g., public health. Faculty numbers are likely to remain constant, although continual recruitment of new faculty is necessary to renew the ranks of top quality researchers and educators.

4. Resources

The support of our strategic academic endeavors requires focused new investment and simultaneous prudent management of resources. We must strike a balance between enabling innovation and enhanced performance while seeking every opportunity to achieve economies, shared investment and optimal returns.
The Faculty has targeted improved research grant competitiveness and new sources of external research grants. Improved federal grant-in-aid success will be accompanied by new indirect cost funds. We will improve our acquisition of private sector research contracts with appropriate overheads. Net revenues from licensing intellectual property and commercialization will emerge toward the end of this five year Strategic Plan.
Our fund-raising efforts will be targeted at funding medical student bursaries and graduate student stipends, faculty salaries through endowed and term chairs, professorships, capital renovations and the new research building.

5. Infrastructure

Continued infrastructure renewal is essential for our on-campus research and education programs, as well as the ongoing efficient operation of the Faculty overall. Our infrastructure plans include a number of capital projects – renovations of existing space as well as construction of new space – as well as investment in information technology, administrative management systems, human resources, and staff development.

6. Communication

The Faculty of Medicine is committed to significantly enhancing its profile, or brand recognition, both at home and abroad. We endeavor to build a culture of pride in university appointment recognized on all publications and in every presentation made by our faculty members and students. We must work closely and effectively with our TAHSN partners to ensure the success of this objective. Our TAHSN-related communication strategies will strive to highlight the unique and unifying role that U of T Medicine plays in the landscape of research, teaching, and health improvement not only in Toronto, but also provincially, nationally, and internationally. Internal communication among our extended family of faculty, students and staff on- and off-campus will be bolstered through targeted, informative messaging that keeps them connected and valued.
The Faculty is now investing in a new Office of Strategic Communications and External Relations, including an administrative Office of Global Health. By developing our brand and enhancing our internal and external communications, we will ensure that the strength of our faculty, the excellence of our research, and the meaningful contributions made by U of T Medicine in communities at home and abroad, are publicized and understood. The Faculty must articulate regularly and broadly how it is fulfilling its *Vision* and *Mission* through all available media sources.

IMPLEMENTATION PROCESS

Specific Actions to Achieve Aims

Each of the six goals of the Strategic Plan is accompanied by a set of implementation tactics. These charts outline the specific steps now underway to address the Goals and Aims of the Strategic Plan 2011-16 that provide a guide for the senior academic and administrative leadership. The specific tactics outlined under each aim provide action steps with measurable outcomes that directly relate fulfillment of the overarching Goals. For instance, under **Goal 1,** the Education Deans are charged with establishing dual-degree programs for MD students and trainees within the next 3 years. The Graduate Department Chairs are asked to work with the Director of Alumni Affairs to track the career paths and impact of our graduates. Under **Goal 3** the decanal team is charged with developing robust metrics to benchmark outcomes of inter-disciplinary education, novel research directions and programs against specific objectives to understand the impact of knowledge mobilization, translation and application. To ensure continued long term investments towards sustaining basic science research, the Basic Science Department Chairs will work with the Advancement Team in fund-raising for support of faculty, graduate students and postdoctoral fellows. Another example, under **Goal 5,** is to realign the Faculty of Medicine operating structures and processes to fast-track implementation of TAHSN-shared education, research and clinical care goals is targeted at the Office of Strategic Communications and External Relations with oversight of the Dean. The action is to review and optimize each point of interface between the Faculty of Medicine and its affiliated hospital and U of T partners. Commencing in early 2012, these specific actions and their time frame will be incorporated into the strategic directions of all the decanal, department and senior management implementation plans and reported as part of the annual performance review to the Dean, starting at the end of the 2011-12 academic year.

Performance Indicators

The University has articulated specific performance indicators for academic and senior administrative performance. These include, but are not limited to, annual tracking of enrolment targets, external research grant funding, philanthropic fund-raising, national and international prestigious awards to faculty, specific education-related measures such as application rates and percent of offers that are accepted, and time to graduate degree completion. The health professional programs in the Faculty of Medicine must undergo periodic accreditation by Canadian and American bodies. This process necessitates comprehensive and rigorous self-study and external review. Sustaining the highest level of accreditation performance is an essential quality index. In addition, the Faculty of Medicine aspires to expand performance indicators to include new measures that will assess the overall performance in achieving our *vision* and *mission*. For instance, in addition to overall research publication rate, we will track citation rates and the "H"-index across departments and institutes utilizing WebCV data. Therefore, achieving complete engagement of all full time faculty members in WebCV by the end of the calendar year 2012 will be necessary. Qualitative measure of innovation and impact across all Departments will be instituted. For

example, the application of new diagnostics for small tumors using minimally invasive methods and high resolution imaging is being pioneered in Toronto in collaboration among scientists and clinicians in Radiation Oncology, Medical Imaging and Medical Biophysics. Tracking and analyzing the success of such a method, in collaboration with colleagues in the Institute of Health Policy, Management and Evaluation will identify the economic benefit to individuals with cancer and the health system.

The measurement and reporting of performance indicators across the decanal portfolios, individual Departments, Centers and Institutes, and senior management portfolios will be the responsibility of every senior academic and administrative leader. The Office of Strategic Communications and External Relations will assist in the preparation of standardized reports that will also be used for periodic university academic review. The Office of Research and International Relations will assist in the reporting of research-related performance indicators. Each Education Dean will provide specific standardized reports that relate to accreditation and standardized periodic appraisal relevant to each education program. In collaboration with the Dean, the senior leadership and the Office of Strategic Communications and External Relations will also coordinate the reporting of qualitative measures of integration, innovation and impact that align with priority research and education goals and aims. Both quantitative and qualitative performance indicators will appear in widely disseminated communications including Departmental and Faculty annual reports. As well, this material will be used by the Office of Advancement for the preparation of cases for co-investment by philanthropic donors, the private sector and international partners.

IMPLEMENTATION TACTICS

The Faculty of Medicine's strategy implementation tactics identify actionable items and provide projected timeframes for completion. Responsibility is assigned for the actionable items, with consideration for areas that may play a secondary or peripheral role in a given task. It is evident that many actions are already in progress and the momentum must be captured in the ongoing Strategic Plan Implementation. Our goal is to further develop and populate this chart to ensure we have the tools to clearly track and articulate our progress in implanting our Plan over the next five years.

IMPLEMENTATION TACTICS: U OF T MEDICINE STRATEGIC PLAN

GOAL 1: *Prepare tomorrow's leading scientists and scholars, clinical professionals and academic administrators who will contribute to fulfilling the goals of U of T Medicine.*

<u>AIM</u>: U of T Medicine will be recognized for top-ranked, innovative education programs that apply leading-edge teaching and learning models and new knowledge relevant to all health professional and graduate students.

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
1.1 Drive innovation, discovery and invention through pilot initiatives that reflect inter-disciplinary integration and novel research directions.	•Establish dual (MD)-degree programs within three years. These will include MD-MPH, MD-Masters of Health Administration, MD-MBA, MD-MEd, MD-PhD (Engineering) •Establish joint PhD programs will a limited number of top-ranked universities in priority research fields (e.g., Hong Kong University, University College London, University of Edinburgh, Karolinska Institute, Peking University) within three years	Vice Dean of UME; Directors of DLSPH, IHPME, IBBME, IMS, Wilson Centre; Associate Dean, Physician Scientist Training Vice Deans RIR, Graduate Affairs; Graduate departments Executive Director of Advancement	•Establish MD Dual-Degree joint program committees among relevant MD program and graduate degree program partners to establish program proposals including curriculum goals, funding and partnership terms •Plan for sequential approval through all levels of governance up to Academic Board no later than the end of academic year 2013-14 •Establish university –wide and joint PhD program agreements with selected institutions over the next 3 years. Agreements signed with funding agencies (i.e. Chinese Scholarship Council) to support joint studentships and research grants. Provide opportunities for key researchers in FoM and selected institutions to meet and develop joint research grants to foster the collaborations essential for joint PhD student supervisions	1 year 3 years 3 years
1.2 Ensure availability and utilization of education tools and techniques including information	•Upgrade education tools with cost efficiency (shared expense and optimal utilization) integrating all U of T and TAHSN	Education Deans; Deputy Dean; Department heads of health professional and graduate	•A formal needs assessment, conducted by all education program committees, with oversight by appropriate Education Dean or Department Head reporting to the Council of Education Deans, TAHSN-	2 years

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
technology and simulation in all education programs	resource to specifically address and exceed accreditation and academic review standards	educational programs; Director, Discovery Commons	E and CHS-E by end of 2011-12 •Working with the Discovery Commons and leads of the curriculum committees (and designated leads for use of IT and simulation) prepare an overall implementation plan for shared upgrades, innovation and necessary faculty training with milestones of achievement between 2013 and 2016	5 years
1.3 Enable enrolment of a more socio-economically and internationally diverse student population	•Major shift in student enrolment demographics, from higher to medium and lower income families in all health professions programs •New opportunities are established for international students in health professions education programs aligned with the vision and mission of the Faculty of Medicine	VD UME; Associate Deans of Equity and Professionalism, Admissions & Student Finance; Health Professions Student Affairs; Department leads; ED of Advancement	•Gathering of data on student diversity, by all education programs, using the Diversity Statement as the guide •Establish program-specific promotion of education programs to priority student groups identified in the Diversity Statement •Focus new resources on targeted international student recruitment aligned with the strategic plans of Departments and Programs	1 year 2 years 3 years
1.4 Create inter-professional and inter-disciplinary education opportunities with Health Sciences and other U of T Faculties (e.g., Arts & Science, Applied Science and Engineering, OISE/UT, UTM, UTSC)	•Firmly establish learning goals and objectives in all health professional programs at all levels including PGME (aligned with CanMEDS and equivalent standards across the professions) by end of 2012-13; these goals and objectives should emphasize the pursuit of novel research directions and inter-disciplinarity •Identify and work toward shared learning goals and objectives with cognate disciplines focused on strategic priorities between Faculties manifested by joint course development, joint faculty	Education Deans; Department Chairs; Centres for IPE and Ambulatory Education; CFD; Wilson Centre; TAHSN-E, CHS-E	•Critically evaluate current approaches to health professions education with clarity on learning goals and objectives that satisfy or exceed accreditation and academic review standards with report to Primary Leads no later than end of the academic year 2011-12 •Set out revised or new health profession learning goals that take advantage of and engage the communities of inter-disciplinary and inter-professional practice, e.g., family health care teams, inner-city clinics, Centre for Ambulatory Education (Women's College Hospital) to be launched no later than the end of 2012-13 •Establish new opportunities for faculty development based on best practice that are shared	1 year 2 years 3 years

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
	hires and joint programs (See above 1.1)		among Departments and programs	
<u>AIM</u>: Integrate research experience and scholarship development into all education programs.				
1.5 Renew existing curricula to reflect new knowledge that emerges from novel research directions, inter – disciplinary research, and translational themes and methodologies	•Continue renewal of curriculum among all health professions programs that reflect the cutting-edge scholarship in basic, clinical, public and population health research	Education Deans; Department Chairs; Curriculum committees; Vice Chairs Research; Education leads in inter-disciplinary EDUs; Student and trainee representatives	•All education curriculum committees assess and inventory new knowledge content and the processes undertaken to incorporate thinking reflecting novel and inter-disciplinary research themes and methods by end of calendar year 2012 •Working with primary leads and collaborators, identify new approaches to continually renew the curriculum including the recruitment and training of faculty who teach •Shared resources and inter-disciplinary teaching among Departments and Faculties must be established by end of 2012-13 •Annual evaluation by faculty, students and trainees must be established for iterative feedback and renewal	1 year 2 years 2 years 3 years
<u>AIM:</u> Build capacity to address local and global health-related system gaps.				
1.6 Incorporate concepts of social responsibility into curricula they apply to innovation, and knowledge translation	•The Faculty of Medicine will build a culture of social responsibility that is identified as the core value among faculty, students/trainees and staff •The concepts of social responsibility will be evident the curricula of the health professional programs	Education Deans; Deputy Dean; Department Chairs (Clinical Departments & DLSPH); Directors of Joint Centre for Bioethics and Global Health Equity and Innovation	• Establish a Department level social responsibility committee to establish points of intersection between existing curricula and concepts of social responsibility •Prepare a framework for incorporating concepts of social responsibility into teaching, creative professional activity and applied research that contribute to improving health	1 year 1 year 2 years

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
			•Evaluate the valuing of social responsibility its impact by 2013-14	
1.7 Championing with government and private sector leaders the importance of integrating the education mission of U of T Medicine with provincial, national and international health and biomedical/technological human resource needs.	• Revised and new curricula, including new health professional programs, that will support building capacity for improving health locally and globally and strategic public and private sector investment in Canada	Decanal team; Department Chairs; OSCER; Alumni Affairs	•Identify all potential platforms for engagement with provincial, national and international sector leaders •Develop collateral materials to make a case for support of new or expanded initiatives •Recruit alumni volunteers to participate in advocacy	1 year 2 years 3 years
1.8 Aggressively expand graduate enrolment and training programs aligned with strategic planning for filling local and global health-related system gaps.	•Fulfill the target enrolment expansion agreed to between the Faculty of Medicine and the Provost over the next four years •Contribute to new health system models that have demonstrably improved community-based services focused on disease prevention and health promotion	Decanal team; Department Chairs	•Define health system challenges in collaboration with stakeholder/partners and design education and training programs to effectively address these challenges (e.g., public health in Ontario) •Identify opportunities for targeted expansion of existing and new undergraduate (Arts & Science) and graduate programs	4 years 5 years
1.9 Continually evaluate the contribution of our graduates to improving health and prosperity locally and globally	•Establish a retrospective analysis of the contributions of our graduates over the last two decades contributing to the reputation of the U of T and Faculty of Medicine	Manager of Alumni Affairs; OSCER; VDs, UME & PGME; Department Chairs	•Establish information technology assisted tracking system for graduates/alumni communications for all education programs within two years •Work with alumni association and hospital partners to improve relations with alumni including on-going education and Faculty volunteer opportunities, e.g.,	2 years 3 years

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
	•Tracking of new graduates' career paths and contributions to society •Building alumni relations and increased engagement of alumni in the Faculty's strategic directions		mentoring students, fund-raising	

GOAL 2: *Lead research innovation that answers questions of societal relevance.*

<u>AIM</u>: Establish and promote overarching research themes and methodologies that address major societal challenges.

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
2.1 Develop and facilitate inter-disciplinary and novel research directions working with existing researchers and collaborations emerging as a result of strategic investments by the Faculty of Medicine and partners.	•Effective integration of researchers in Extra-Departmental Units spanning UofT FoM and partners (e.g. Institute of Human Development). •Environmental scan of existing infrastructure resources and gaps completed and pro-active planning initiated to ensure effective use of current resources and procurement of new resources. •New integrated translational training programs developed and implemented.	Vice-Dean Research and International Relations; Department Chairs; EDU Directors; Vice-Dean Graduate Education	•Establish database to provide continual updates of research investment and utilization (major equipment, availability of high quality personnel, effective training programs). •Identify key methodological and technical platforms and ensure availability to research community across UofT FoM and TAHSN. •Create incentives for inter-disciplinary research through support for new and existing EDUs and Departmental units. •New graduate and highly qualified personnel training programs will be designed and implemented to cover the translational research continuum.	1 year 2 years 2 years 3 years
<u>AIM</u>: Support research innovation.				
2.2 Expand graduate and post-doctoral program enrolment to build research capacity in both cognate and inter-disciplinary fields – preparing the next generation of scientists and leaders.	•Establish internationally recognized research training programs that prepare leaders who focus on innovation, discovery, invention, and knowledge translation relevant to societal challenges •Contribute to improved prosperity by preparing leaders who develop new	VD, Graduate; VD RIR; Chairs of Graduate Departments; Directors of Research-intensive EDUs; ED of Advancement	•Align targeted graduate enrolment expansion and new curriculum development with strategic research themes and fund-raising efforts, including new external grant support •Design faculty-wide leadership and entrepreneur-focused curriculum enabling career preparation beyond traditional research skills	3 years 4 years

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
	health-related products and processes			
2.3 Encourage joint recruitment among Departments, Faculties and TAHSN hospital Research Institutes	New CRC chairs are selected using an open competition process across FoM and Research Institutes involving Department representation. New recruits are selected for excellence in research, fit with strategic goals of the faculty, department and research institute. Academic units and Research Institutes are sharing hiring plans and where appropriate engaging in joint recruitments.	Department Heads; Vice Dean Research and International Relations	•Academic Unit Strategic Research Plans align with the FoM and Research Institute priorities. •Pool resources between the Faculty of Medicine (Departments, Academic Practice Plans, Restricted funds/Endowments) and Research Institutes to optimize recruitment quality and success. •Establish joint fund-raising initiatives for shared recruitments.	2 years 1 year ongoing
2.4 Identify major gaps in research infrastructure, e.g., Phase 1 and 2A human subjects' research unit support capacity.	New integrated research core infrastructure is available and accessed by researchers across the UofT FoM/TAHSN system. Clinical Trials and Integrated Team research is significantly increased.	Vice-Dean Research and International Relations; Department Chairs; EDU Directors	•Identify the major gaps in infrastructure particularly for translational research Develop common core facilities with integrated Standard Operating Procedures and sharing of Best Practices. •Identify and access funding opportunities and new partnerships, to support the necessary infrastructure and sustainable management plans.	1 year 2 years ongoing
2.5 Increase revenue generation for priority research themes and leverage peer-reviewed, industry and philanthropic funding.	Annual targeted increases in overall research revenue exceed inflation. Industry funding is increased by a minimum of 50%. Significant cross-sectoral partnerships are in place to support FoM strategic research priorities.	Vice Dean Research and International Relations; Department/EDU Leadership	•Expansion of Grant editing services across FoM/TAHSN to increase the rate of success of peer-reviewed research funding. Establish surveillance for large grant/contract opportunities from non-traditional funding sources and match with appropriate researchers/teams. •Build convincing cases for support necessary for fund-raising and cultivate donors to co-invest in research faculty, graduate students and infrastructure	1 year ongoing ongoing

GOAL 3: *Translate discoveries to improve health and prosperity in our community and around the world.*

<u>AIM</u>: Align collaborative education and research outcome-based objectives with identified societal needs

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
3.1 Develop curricula to address the changing competency requirements of health professionals and provide researchers with the tools to translate new knowledge into practice	•Establish curricular goals across health professions that focus on patient needs, team practice and competencies that include leadership in health system reform •Researchers focused on improved quality, safety, community-based access to health care work directly with health system leaders to develop and evaluate new models of care driven by performance measures	Vice Deans of Education; Chairs of Health Professions Curriculum Committees; Chairs of Clinical Departments; Directors of IHPME and DLSPH	•Evaluate current health professions teaching and learning goals and competency requirements and revise as necessary to focus on patient-needs curriculum •Include all levels of health professions education, particularly continuing education and professional development •Re-train health professions educators and work closely with affiliated health care institutions and clinical settings to address patient needs	1 year 3 years
3.2 Create practical education and research programs that put knowledge into action to bridge the quality gap in health care	•New models of health are designed through application of evidence and innovation in health professional team practice that effectively address the gaps in patient-centered care. This includes health promotion and disease prevention in populations at high risk for chronic disease	Course Directors; Directors of EDUs including: Wilson Center; CFD; Centres for IPE, Patient Safety, and Ambulatory Care Education	•Engage new stakeholders/partners in health professional education curriculum development, e.g., Ontario Public Health; patient focus groups; MOHTC •Utilize expertise from education EDUs to advise about new program development across the spectrum of health disciplines from entry level to continuing education	2 years 2 years
3.3 Build on the success of existing academic units that promote collaboration among Departments, Faculties	• Collaborative research and evaluation teams are effectively addressing societal health care needs. • New research methodologies,	Vice-Dean Research and International Relations; Department Chairs; EDU Directors	•Interdisciplinary teams will be established spanning the full spectrum of health research from Discovery to Population Health and Health Policy. •Research priority areas will develop specific deliverables and agreed metrics to follow	Ongoing 2 years

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
and affiliated institutions and establish new inter-disciplinary teams with TAHSN partners and U of T Faculties to undertake local and national knowledge exchange and translation.	health care and technological advances are effectively commercialized and/or translated into practice. •FoM and TAHSN partners are internationally recognized as leaders in the implementation of effective health care solutions.		performance; e.g. the Institute for Human Development will establish effective integration of National and International birth cohort studies. •Initiatives focused on enabling research teams to span the two "valleys of death" (between discovery and clinical trials and between proof of principle and full implementation) will be expanded and resourced. •Communication strategies focused on promoting uptake of new, effective solutions will be developed and implemented.	1 year 2 years
3.4 Identify new opportunities for strategic partnering with other (Canadian) Universities to advance health professions education and research	•An integrated National strategy for Health Professional research is developed and implemented	Health Professions Leadership; Vice-Dean Research and International Relations	Identify key Canadian University partners and develop common goals and deliverables.	3 years
<u>AIM</u>: Understand the impact of knowledge mobilization, translation and application and adjust strategic investment to optimize impact.				
3.5 Develop robust metrics to benchmark outcomes of education and research programs against specific objectives and targets	•A robust evaluation tool, based on quantitative and qualitative measures, is deployed across FoM to track accomplishments and to compare effectiveness to selected peer-institutions. •The impact of health research on global health and prosperity is effectively assessed and communicated.	Vice-Dean Research and International Relations; Department Chairs; EDU Directors; Office of Strategic Communication and External Relations	•Establish KPIs that address strategic plan goals and aims •Develop qualitative health outcomes measures to track impact of health research on care delivery/population health. •Data from the evaluation/outcomes tools will be used to inform future health research investment by FoM and partners. •Web and hard-copy communication strategies will be developed and deployed focused.	1 year 2 years 3 years 2 years
3.6 Direct investment of resources to outcomes-driven education and	• The strategic research initiatives are recipients of significant new resources and the teams are	Vice-Dean Research and international Relations; Department Chairs;	•The KPI are used to direct discretionary investment to highly successful academic units to enhance effectiveness.	ongoing

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
research programs that demonstrate impact in improving health and prosperity	implementing new breakthrough discoveries. •Success of the research community is leveraging additional investment and attracting top quality faculty, staff and students.	EDU Directors	•Under performing academic units will be identified and where possible remedial action undertaken or support discontinued.	ongoing
3.7 Ensure continued long term investments towards sustaining basic science research.	•Curiosity-driven, inventive biomedical science is a hallmark of research within the Faculty of Medicine •The benefits of discovery science are clearly described and communicated.	Department Chairs; EDU Directors; Vice-Dean Research and International Relations; OSCER	•Enhance and optimize the support for basic science research across all disciplines. •Develop an economic model that demonstrates the impact of excellent basic science research. •Deploy the economic model to leverage suppprt/funding from public and private investment to sustain discovery research.	ongoing 2 years 3 years

GOAL 4: *Share our innovations and expertise globally through strategic partnering to advance global health and international relations.*

<u>AIM</u>: Create a strategic and coordinated global health program.

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
4.1 Engage with and gain the endorsement from faculty, staff and learners for a global health vision and mission	• Global Health Strategic Plan approved by Faculty Council that includes a new global health vision and mission for the Faculty of Medicine •Development of clear implementation plan	Deputy Dean; Department Chairs; Director of the DLSPH; OSCER	•Establish the Office of Global Health within OSCER managed by a Director of Global Health Strategy for the Health Sciences •Collaborate with faculty to prepare for teaching and learning opportunities in developing countries	1 year 2 years
4.2 Establish the structures and processes that optimize ongoing collaboration and exchange in global health	•All clinical and rehab departments will incorporate global health strategic directions within their academic plans in conjunction with the overall academic plan within the Faculty of Medicine •Shared investment in infrastructure support locally and for specific projects in developing countries will be coordinated within the Faculty and in partnership with the affiliated hospitals and cognate U of T Faculties	Deputy Dean; Department Chairs; Office of Global Health	•Enable departments and education programs to work directly with their collaborators in developing countries by creating the appropriate university-agreements, risk management protocols and necessary training of faculty and students coordinated by the Office of Global Health •Engage in strategic planning and relationship building with guidance and coordination by the Director of Global Health Strategy	2 years 3 years
4.3 Advance research scholarship in global health	• The Institute of Global Health Equity and Innovation is effectively addressing the needs of underserved populations.	Deputy Dean; Director of IGHEI	•Faculty Council approval of the proposal for the Institute of Global Health Equity and Innovation •Recruit an Interim Director and fund-raise for the Institute to establish a permanent Director and	1 years 2 years

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
			academic strategic plan Initial projects identified and KPI for tracking effective implementation established.	 2 years
<u>AIM</u>: Create a strategic and coordinated international relations agenda				
4.4 Engage in and nurture effective, sustainable partnerships with specific Universities in targeted developing countries, encouraging integration of groups working in the same countries and avoid duplication of effort.	•Measurable improvement in health of populations in developing countries resulting from targeted FoM interventions. •Capacity of local communities to undertake relevant health research expanded through collaborative programs.	Director IGHEI; Department Chairs; EDU Directors; Vice-Dean Graduate Studies; Associate Dean, Clinical Investigator	•Launch strategic capacity-building partnerships led by U of T faculty who collaborate effectively with university departments and programs in targeted developing countries •Seek new funding for these projects from public and private sources	2 years 3 years
4.5 Interface international activities with core strategic academic activities and promote mutually beneficial and sustainable international partnerships with top-ranked Academic Institutions that exhibit strength in areas identified as strategic priorities for U of T Medicine.	•Key partnership agreements with selected international academic institutions signed. •Collaborative research programs in strategic areas established and resourced.	Vice-Dean Research and International Relations; Department Chairs; EDU directors; OSCER	•International Relations Strategic plan completed and approved. •Priority areas aligned with existing and new relationships with top-ranked research-intensive universities and academic health science centers. •Local champions for strategic collaborations identified and resources identified. •Define specific collaborative projects and programs that are value-add for both parties, feasible, fundable and sustainable •Establish specific timeline for necessary university agreements and subsequent program agreements	1 year 2 years 4 years On-going

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
4.6 Determine regional differences in criteria for Institutional Partnerships that acknowledge the diversity of resources among countries (e.g., developed vs. developing nations).	•Clear articulation of the purpose of establishing institutional partnerships and the contributions that both parties will make to enable successful outcomes •Risk management is articulated for each project and clarity about the shared investment between institutions appears in all formal agreements	Decanal team	•Academic leaders develop specific relationships with international collaborators aligned with strategic priorities with approval of the Dean, Deputy Dean and/or appropriate Vice Deans •All university-related agreements, including applications for research or education funds, must be reviewed and approved by the Faculty of Medicine decanal team	2 years 4 years

GOAL 5: *Create a collective vision for a shared academic future with TAHSN, University of Toronto Faculties, especially Health Sciences, and community partners.*

<u>AIM</u>: Realign the Faculty of Medicine operating structures and processes to fast-track implementation of TAHSN-shared education, research and clinical care goals

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
5.1 Critically evaluate current governance and operations structures against the best international models within research-intensive university and academic health science organizations	•Understand the Faculty of Medicine's (including TAHSN's) competitiveness in light of current governance and institutional structures	Dean; Deputy Dean; Vice-Dean Research and International Relations	•Recognize the barriers and limitations of individual corporations supported by singular hospital foundations •The Faculty of Medicine with TAHSN leadership will facilitate collective strategic planning across institutions and support integrated research platforms, e.g., integrated health and bioinformatics infrastructure	1 year ongoing
5.2 Review and optimize each point of interface between U of T Medicine and its partners within the University and with university affiliates	•Convergence of education and research programs that network seamlessly across institutions taking advantage of complementarity, unique contributions and eliminating unnecessary duplication •Opportunities for improved collaboration and synergism leading to a new level of academic productivity, discovery and knowledge translation	Dean; Deputy Dean; Vice-Dean Research and International Relations	•Critically analyze the current points of convergence and disparities in governance and infrastructure for research and education across the TAHSN hospitals and the Faculty of Medicine •Identify how joint oversight and governance can be structured to improve academic performance of faculty and students. Use existing governance committees of TAHSN and the Faculty of Medicine to develop new models and approaches to optimize strategic and collaborative relationships and oversight	2 years 4 years

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
5.3 Work with the University to review the goals, academic oversight and support for the interdisciplinary collaborating EDUs to ensure they are positioned for optimal outcomes and maximum impact	•Updated listing and understanding of the EDUs under the jurisdiction of the Faculty of Medicine •Periodic deliberate strategic planning aligned with the Faculty Strategic Plan, academic review and annual reports are normal procedures •Impact of investments and evolution of sustainable funding established for all EDUs with a long term academic mandate	Dean; Deputy Dean; Vice-Dean Research and International Relations; CFO	•Dean's Office, working with the Provost's Office and Directors of the EDUs, update the list of recognized (Faculty Council or Academic Board approved) EDUs •Develop standard operating procedures for management, financial planning, governance and strategic planning for EDUs	1 year 2 years
<u>AIM</u>: Collaborating with the TAHSN hospitals and Health Science Faculties, develop a shared vision for a renewed network with specific academic priorities to be pursued over the next three years				
5.4 Identify and address the perceived and actual barriers to enable a more integrated collective environment of innovation, discovery and invention.	•Eliminate the perceived and actual barriers to achieving a higher level of innovation, discovery and invention in research and education among the Faculty of Medicine, the TAHSN partners and Health Science Faculties	Dean; Deputy Dean; Vice-Dean Research and International Relations; Department Chairs; EDU Directors	•Develop criteria for the evaluation of integrated performance among academic units reflecting both cognate and inter-disciplinary education and research pursuits •Articulate the perceived and actual barriers to improved performance and outcomes. These should focus on collective strategic priorities shared among the Faculty of Medicine Departments and Programs, TAHSN partners and Health Science Faculties	3 years 2 years
5.5 Identify incentives and rewards to recognize individuals, programs and departments that create effective networks	•Individuals, programs and departments value creation of effective education and research networks that enhance academic performance, innovation and impact on improving health	Dean; Deputy Dean; Vice-Dean Research and International Relations; Department Chairs; EDU Directors	Implement TVAP 1& 2 recommendations	2 years

GOAL 6: *Invest strategically in academic priorities in support of our learners, faculty and staff to provide for their success.*

Sub-Aim	Expected Outcomes	Primary Leads	Tactics	Time frame
6.0 Expand existing enabling platforms and develop new ones as a foundation for organizational excellence	• Sustained renewal of enabling infrastructure and administrative support for optimal performance of learners, faculty and staff	CAO; Senior Management Group; Dean; Deputy Dean	***a) Academic and Administrative Structures*** Critically evaluate major management portfolios to identify gaps in infrastructure and personnel Provide professional skill development for existing personnel Optimize management service Develop orientation and leadership skills training processes for new academic leaders ***b) Advancement*** Ensure appropriate capacity and skill spectrum to optimize performance for fund-raising targets alumni relations building. Evolve donor management strategic plan with shared investments by academic units across the Faculty and in close collaboration with central U of T Advancement ***c) Communications & External Relations*** Establish OSCER with an acceptable budget ***d) Infrastructure & Fiscal Responsibility*** Complete plan to develop integrated 'infostructure' for academic systems Complete Master Plan for space on campus. Ensure balancing of 5- year projected budget	1 year 4 years 3 years 1 year 1 year 2 years 1 year 1 year 2 years 3 years