LABORATORY MEDICINE AND PATHOBIOLOGY

Investigating Disease. Impacting Health.

VISION 2020: LMP Strategic Plan 2015–2020
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LMP occupies a unique place within the Faculty of Medicine and U of T. Our diversity, spanning the full spectrum of discovery, translational and clinical research, is an exceptional strength that positions LMP for outstanding success, especially in this difficult and challenging fiscal climate.

More than ever, collaboration between all LMP members — faculty, trainees, students, staff — will enable us to do great things, to be proud of our contributions and accomplishments, and to provide an exemplary role model to our profession.

The Department has an integral mandate to create, convey, translate and apply knowledge related to the causes and mechanisms of disease to improve the health of people around the world. The tagline, “Investigating Disease. Impacting Health.” succinctly and elegantly summarizes the “what” and “why” of LMP.

The current strategic planning process builds upon the work and successes of the previous LMP Strategic Plan 2010–2015 and the outcomes of the 2013 External Review. Led by a fantastic LMP Strategic Planning Steering Committee, the process ensured broad consultation across the Department and with key external stakeholders, culminating with a successful offsite retreat held in October, 2014. We are now well-positioned to convey our identity and unique place within the Faculty of Medicine and beyond, and articulate the core activities, key priorities and major aspirations to guide LMP toward 2020.

Given the major disruptive trends in education in the life sciences and health professions, together with fundamental shifts in the research funding landscape, changing expectations of the health care system and the installation of a new Dean in the Faculty of Medicine, the development of our updated LMP strategic plan could not be more timely. The strategic plan provides a framework designed to enable the exceptional talent and creativity within LMP to achieve even greater levels of performance and impact.

The first six months of 2015 will be crucial for fine-tuning details of the plan and firming up the implementation process. It is important to emphasize that flexibility and nimbleness will be key to LMP’s ability to anticipate, respond and adapt effectively to our ever-changing environment. This is where the talent and creativity within LMP become even more critical for effective implementation.

This document strives to achieve balance in addressing future overarching and practical considerations for LMP. It provides a reference point to assist thinking and action, especially in the face of the austere financial times anticipated for the foreseeable future. As you read through the plan, I trust you will be informed and feel inspired and energized as LMP continues on its journey in the relentless pursuit of excellence.

Thank you to the LMP Strategic Planning Steering Committee members for their hard work and dedication and to the intellect, engagement and good will shown by the LMP community throughout this process, and for everything done on a daily basis in support of LMP and the academic mission.

Richard G. Hegele, MD, FRCPC, PhD
Professor and Chair
Building from the accomplishments and successes of the LMP Strategic Plan 2010–2015, we used a five-phased approach consistent with the academic values of the Department. Led by the Chair and Steering Committee*, the process was initiated in the early summer of 2014; the final plan was shared with faculty in February, 2015.

## PROCESS OVERVIEW

<table>
<thead>
<tr>
<th>Phase</th>
<th>Key Activities</th>
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<tbody>
<tr>
<td>1. Getting Started</td>
<td>• Documentation review</td>
</tr>
<tr>
<td></td>
<td>• Development of Project Charter and Communications Plan</td>
</tr>
<tr>
<td>2. Identifying Strategic Issues</td>
<td>• Interviews with members of the Department and external stakeholders</td>
</tr>
<tr>
<td></td>
<td>• Meeting with Steering Committee to confirm key issues and opportunities</td>
</tr>
<tr>
<td>3. Confirming Issues and Developing Propositions</td>
<td>• Sub-groups led by Steering Committee develop propositions, reaching out across the Department for input and ideas</td>
</tr>
<tr>
<td></td>
<td>• Second Steering Committee meeting to review and refine; and discuss retreat design</td>
</tr>
<tr>
<td>4. Developing the Plan</td>
<td>• Department-wide retreat to test propositions and provide input into strategies and tactics</td>
</tr>
<tr>
<td></td>
<td>• Third Steering Committee meeting to review the draft strategic plan</td>
</tr>
<tr>
<td>5. Finalizing the Strategic Plan and Moving to Implementation</td>
<td>• Finalizing the strategic plan document</td>
</tr>
<tr>
<td></td>
<td>• Sharing with Department</td>
</tr>
<tr>
<td></td>
<td>• Establishing monitoring and review process and initiating implementation of Year 1 Priorities</td>
</tr>
</tbody>
</table>

* See Appendix for list
EXTERNAL ENVIRONMENT ASSESSMENT

Several forces and factors are signalling system-level change:

1. **Emergence of precision (also called personalized or individualized) medicine and emphasis on translational research** is increasing the demand for laboratory medicine in research, education and clinical care. With the advent of “big data” and precision medicine, the opportunity exists for scientists to advance knowledge and improve health outcomes using diagnostics as LMP’s unique strengths and expertise.

2. **Changing education environment:** Beyond the generic demographic shift and changing expectations among students and faculty, profound change is underway in the development and delivery of undergraduate and postgraduate medical education curricula. Life sciences education is placing increasing emphasis on the acquisition of knowledge and skills for diverse career paths.

3. **Changing research environment:** Health researchers are experiencing funding pressures as a result of the recent “no-growth” scenario in research funding and shifts in federal government support. These factors have reduced the availability of individual investigator-initiated operating grants and have increased the focus on team, multi-centre and interdisciplinary grants. This may contribute to a lack of stable and sustainable career support mechanisms for established and developing investigators.

4. **Changing health care context:** Ontario's health care is experiencing significant cost pressures. Together with an increased focus on quality, accountability and performance measurement, this is creating sizable shifts in approaches to health care delivery and expectations placed on providers. This focus on cost containment also makes the achievement of the academic mission increasingly difficult. Technology continues to contribute to the change: with respect to diagnosis and intervention, and in enabling greater connectivity and transparency.

5. From the University of Toronto’s (U of T) perspective, the government is applying pressure to post-secondary institutions to differentiate their offerings. U of T’s President is demanding improvements to the undergraduate experience; that Departments extend their range of influence and impact through partnerships; and that they be more locally connected, leveraging the diversity of the city. The new Dean of the Faculty of Medicine has signalled a time of comparative austerity, increased integration and engagement among the basic science departments; closer relationships across the Toronto Academic Health Science Network (TAHSN); and finding novel funding mechanisms.

KEY ISSUES AND OPPORTUNITIES

1. The hybrid nature of LMP is both an opportunity and a challenge. LMP’s reputation is strong amongst most stakeholders. However, with few obvious peers, the value proposition of LMP requires clear and ongoing articulation. Why exactly is pathobiology important? What is the contribution of laboratory medicine (and the understanding laboratory medicine professionals have of mechanisms of disease) to creating better individual and population health outcomes? What LMP activities differentiate the profession from the contribution provided by internists, radiologists and other specialists? What is needed for LMP to continue to be seen as relevant and influential by academic, clinical and policy leaders?

2. The relevance and contribution of laboratory medicine are being challenged across the system. This situation requires LMP to give serious thought as to the competencies to be developed in graduates. How must curricula change, and how might LMP best influence perceptions of the profession?
3. How does LMP continue to attract the best students and trainees into its programs? What is the vision and where is the leadership to respond to and get ahead of the education change curve?

4. Closer integration between clinical and scientific faculty will lead to further synergies in translational research. Should LMP adopt a more focused and integrative approach to its research agenda by establishing strategic areas of excellence? Or should it continue to support a breadth of research activity?

5. The research funding landscape has changed — and continues to change — dramatically. Ensuring the continuity of research performance will be challenging, even without addressing the expectation of increased impact. In order to improve health and health system performance, how might LMP leverage its strong relationships across TAHSN to effectively share new knowledge within the academic community as well as policy and practitioner circles?

6. Financial resources will be more difficult to access. Finding ways to support the research goals of basic scientists is becoming increasingly difficult. LMP will be required to manage its affairs transparently and prudently, focusing on clear priorities while aggressively pursuing alternative revenue sources. How might clinicians be supported to deliver on their academic responsibilities? How might faculty and alumni mobilize to build the presence and acquire the resources for LMP to thrive?
### LMP Faculty by Geographical Distribution

<table>
<thead>
<tr>
<th>Location</th>
<th>Primary Appointed</th>
<th>Cross Appointed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On Campus</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>17</td>
<td>10</td>
<td>27</td>
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<tr>
<td><strong>Affiliated Hospitals</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mount Sinai Hospital</td>
<td>27</td>
<td>8</td>
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<tr>
<td>The Hospital for Sick Children</td>
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<td>15</td>
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<tr>
<td>St. Michael's Hospital</td>
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<td>15</td>
<td>37</td>
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<tr>
<td>Sunnybrook Health Sciences Centre</td>
<td>34</td>
<td>5</td>
<td>39</td>
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<tr>
<td>University Health Network</td>
<td>72</td>
<td>18</td>
<td>90</td>
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<tr>
<td><strong>Community Affiliated Hospitals</strong></td>
<td><strong>57</strong></td>
<td></td>
<td><strong>57</strong></td>
</tr>
<tr>
<td>Humber River Regional Hospital</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Lakeridge Health</td>
<td>5</td>
<td></td>
<td>5</td>
</tr>
<tr>
<td>North York General Hospital</td>
<td>13</td>
<td>13</td>
<td>13</td>
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<tr>
<td>Royal Victoria Hospital</td>
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<td>1</td>
<td>1</td>
</tr>
<tr>
<td>The Scarborough Hospital</td>
<td>2</td>
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<tr>
<td>Southlake Regional Health Centre</td>
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<td>St. Joseph's Health Centre Toronto</td>
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<td>6</td>
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<tr>
<td>Toronto East General Hospital</td>
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<tr>
<td>Trillium Health Centre*</td>
<td>20</td>
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<td>20</td>
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<tr>
<td><strong>Other</strong></td>
<td>29</td>
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<td>30</td>
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<td><strong>TOTAL</strong></td>
<td>293</td>
<td>72</td>
<td>365</td>
</tr>
</tbody>
</table>

* Merged with Credit Valley

** Includes Ontario Agency for Health Protection and Ontario Forensic Pathology Service

### LMP Faculty Distribution by Rank

- Professor (69)
- Associate Professor (50)
- Assistant Professor (123)
- Lecturer (51)

### $30.15 million in Research Funding (April 2013–March 2014)

- Tri-Council (8.52)
- Federal Government (0.77)
- Provincial Government (1.973)
- Charities (9.431)
- NIH & US Government (1.285)
- Industry (3.294)
- Other (4.876)

Source: Synopsis of Research Activities, Faculty of Medicine University of Toronto
### LMP Students & Trainees

<table>
<thead>
<tr>
<th>Program</th>
<th>Total</th>
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<tbody>
<tr>
<td>Specialist Program in Pathobiology (A&amp;S)</td>
<td>63</td>
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<tr>
<td>Graduate Program</td>
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<tr>
<td>MSc</td>
<td>68</td>
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<tr>
<td>PhD</td>
<td>114</td>
</tr>
<tr>
<td>Residents (Postgraduate Program)</td>
<td>45</td>
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<tr>
<td>Postdoctoral Diploma Trainees</td>
<td></td>
</tr>
<tr>
<td>Clinical Biochemistry</td>
<td>5</td>
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<tr>
<td>Medical Microbiology</td>
<td>3</td>
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<tr>
<td>Clinical/Research Fellows</td>
<td>42</td>
</tr>
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</table>

### Faculty Distribution by Appointment Type

<table>
<thead>
<tr>
<th>Appointment Type</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tenured/Tenured Stream</td>
<td>15</td>
</tr>
<tr>
<td>Clinical Faculty</td>
<td>207</td>
</tr>
<tr>
<td>Clinical (MD) Full Time Appt.</td>
<td>146</td>
</tr>
<tr>
<td>Clinical (MD) Part Time Appt.</td>
<td>47</td>
</tr>
<tr>
<td>Clinical (MD) Adjunct Appt.</td>
<td>14</td>
</tr>
<tr>
<td>Scientists</td>
<td>64</td>
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<tr>
<td>Adjunct</td>
<td>7</td>
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<tr>
<td><strong>TOTAL</strong></td>
<td>293</td>
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</tbody>
</table>

### Home Department of Cross-Appointed Faculty

<table>
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<tr>
<th>Faculty of Medicine</th>
<th>Total</th>
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<tbody>
<tr>
<td>Biochemistry</td>
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<tr>
<td>Immunology</td>
<td>1</td>
</tr>
<tr>
<td>Medical Biophysics</td>
<td>3</td>
</tr>
<tr>
<td>Medicine</td>
<td>25</td>
</tr>
<tr>
<td>Molecular Genetics</td>
<td>5</td>
</tr>
<tr>
<td>Obstetrics &amp; Gynaecology</td>
<td>1</td>
</tr>
<tr>
<td>Ophthalmology &amp; Vision</td>
<td>6</td>
</tr>
<tr>
<td>Otolaryngology</td>
<td>1</td>
</tr>
<tr>
<td>Paediatrics</td>
<td>10</td>
</tr>
<tr>
<td>Pharmacology</td>
<td>1</td>
</tr>
<tr>
<td>Surgery</td>
<td>11</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>72</td>
</tr>
</tbody>
</table>

### Faculty Distribution by Gender

- Female (135)
- Male (158)

All data as at July 1, 2014 unless specified otherwise.
Vision:
International leadership in research and education in laboratory medicine and pathobiology.

Mission:
We prepare future leaders in laboratory medicine and pathobiology, contribute to our communities, and improve the health of individuals and populations through discovery, application and communication of knowledge.

Values:

**UNIQUE POSITION**
LMP bridges the gap between the health of patients and populations and research into the pathogenesis of human disease. Pathobiology provides the theoretical, scientific basis of medicine. A clinical focus on diagnostics is the connecting point between patients and their caregivers and the underlying basic science enables breakthroughs in diagnosis and treatment.

**UNIQUE EXPERTISE**
Advances in technology and “big data” are transcending the boundaries between traditional disciplines requiring sophisticated content expertise. LMP’s collective level of knowledge and interpretive skill covers the full spectrum from basic research to clinical practice.

**UNIQUE ROLE**
LMP translates new knowledge made from discoveries in basic science to advance diagnostic laboratory medicine and to answer the needs of patients and populations. Diagnostics is LMP’s domain and differentiator.
STRATEGIC DIRECTIONS

STRATEGIC DIRECTION 1: EDUCATION
Lead the evolution of laboratory medicine and pathobiology education to develop excellent future practitioners, scholars and scientists.

STRATEGIC DIRECTION 2: COLLABORATION AND RESEARCH
Strengthen collaboration to increase research impact.

STRATEGIC DIRECTION 3: VISIBILITY AND INFLUENCE
Leverage expertise in diagnostics to extend visibility and influence in support of improved patient care and health outcomes.

STRATEGIC DIRECTION 4: ENGAGEMENT, CREATIVITY AND ALIGNMENT
Enable Department success through engagement, creativity and alignment.
STRATEGIC DIRECTIONS

STRATEGIC DIRECTION 1: EDUCATION

Lead the evolution of laboratory medicine and pathobiology education to develop excellent future practitioners, scholars and scientists.

Expected Outcomes and Measures

- Extended exposure of undergraduate life science students to laboratory medicine disciplines.
- Increased LMP presence and visibility in undergraduate medical education (UME).
- Increased interest in laboratory medicine disciplines from Canadian Resident Matching Service (CaRMS) applicants.
- Introduction of foundational curricula for residents.
- Shift to competency-based training and assessment for residents.
- Higher levels of satisfaction with course offerings among masters and doctoral students.
- Increased revenue from continuing education (CE).
- Increased development of faculty leaders in education.

Background

- LMP is committed to teaching excellence. Students select LMP for a superior education experience. Continuing to attract the best students will require ensuring relevance of curricula; evaluating and implementing change where needed; improving teaching skills and modernizing approaches; ensuring faculty are motivated, recognized and valued for teaching excellence.
- There is a need to create the laboratory medicine and pathobiology leaders of the future — those who can influence positive outcomes when decisions are being made about the profession.
- The current unprecedented level of change in undergraduate and postgraduate medical education presents an opportunity for repositioning and leadership — and also a threat if LMP is not strongly represented and influential.
- Building ongoing student/trainee competence in digital laboratory medicine is a given.
- There is an expectation of commitment to ongoing improvement of the student experience at all levels.
- MSc and PhD students are seeking support to make informed career choices.

Goals and Implementation Strategies

1. Strategically participate in the life sciences curriculum

- Enhance students’ laboratory medicine experience.
- Reinforce the key differentiating characteristics of LMP.
- Provide students with targeted exposure to laboratory medicine.

Implementation:

- Provide undergraduate life sciences students with targeted exposure to laboratory medicine to reinforce the concepts of pathobiology and expose them to career choices in the field.
- Enhance the LMP Summer Student Program seminar series to reflect unique departmental strengths and roles.
- Selectively engage clinical faculty in strengthening LMP’s presence in the life sciences curriculum, e.g. guest lecturer opportunities and lab visits.

Year 1:

- Establish an LMP Undergraduate Life Sciences Working Group to determine the design and incorporation of relevant laboratory medicine experiential opportunities into the life sciences curriculum.
  
  Lead: Doug Templeton
2. Create a continuous targeted presence for LMP over the four-year UME curriculum

- Seek out and discover new ways to educate students.
- Develop an understanding in these students of the crucial clinical role of laboratory physicians and scientists.
- Increase the pool of high quality candidates for selection into postgraduate training.

**Implementation:**
- Seek out ways to maintain a presence over the four-year UME curriculum through conversations with others who have experienced similar changes.
- Work with major players such as the Departments of Medicine and Surgery to have laboratory medicine embedded as a visible presence within their teaching blocks over the entire length of the curriculum.
- Ensure students understand the crucial role of laboratory physicians and scientists in patient health and outcomes and professional career opportunities available within the discipline.
- Find opportunities to educate students on public policy issues such as the wise use of laboratory resources.

3. Provide leadership to the introduction of competency-based training for residents in alignment with CanMEDS 2015

- Introduce competency-based training.
- Adequately prepare residents for “real world” responsibility.
- Create opportunities for faculty and trainees to network.
- Provide residents with career support.
- Strengthen the clinician-scientist stream.
- Enhance the clinical fellows’ experience.

**Implementation:**
- Conduct a pilot program to position LMP as a leader in competency-based PGME.
- Conduct assessments for pilot programs in other laboratory medicine specialties to establish optimal methods for determining competency.
- Implement foundational core curricula for all LMP first-year trainees (PGY-1) that encompass basic foundational elements common to all laboratory medicine disciplines in fulfillment of CanMEDS 2015 and in support of competency-based curricula.
- Introduce improved approaches for graduated responsibility for residents and clinical fellows.
- Review and strengthen support for residents in their employment search and job expectations.
- Create opportunities for mentorship and leadership development for residents and faculty.
- Review processes and outcomes for the clinician-scientist stream and revise as warranted.
- Identify additional Areas of Focused Competencies (AFCs) for clinical fellows, e.g. in paediatric pathology.

**Year 1:**
- Establish an LMP UME Working Group to develop proposals for consideration by the Curriculum Renewal Committee. This same Working Group is to support the existing LMP Interest Group in undergraduate medicine to foster an interest among students in laboratory medicine and pathobiology and to promote career opportunities. **Lead:** Eleanor Latta

**Year 1:**
- Establish an LMP PGME Working Group to address development of foundational core curricula aligned with competency-based training. **Lead:** Shachar Sade
4. **Update graduate MSc/PhD programs**

- Upgrade courses ensuring relevance to students.
- Provide career support.

**Implementation:**
- Develop short module-based courses offering students more choice relevant to their research interests. Consult the Departments of Biochemistry and Molecular Genetics who have experience with this approach.
- Continue to evaluate usefulness of graduate courses (e.g. LMP1001 and LMP1404) and make necessary adjustments.
- Develop and pilot a career guidance course.
- Provide supplementary career support to students while continuing to encourage them to access Faculty and U of T career planning resources.

**Year 1:**
- Establish an LMP Graduate Working Group to evaluate the LMP graduate studies curriculum and co-curriculum activities.
  
  **Lead:** Harry Elsholtz

5. **Continue to develop CE offerings that leverage LMP expertise**

- Provide alternative mechanisms for CE.
- Leverage the Digital Laboratory Medicine Library.
- Increase revenue streams.

**Implementation:**
- Evaluate opportunities for developing online, modular education offerings in areas such as laboratory management, informatics, big data, ethics, quality, laboratory utilization and development of precision diagnostics.
- Identify leadership to develop an implementation plan that focuses on current activities such as "slide clubs."
- Utilize the Digital Laboratory Medicine Library where applicable.
- Seek out opportunities to increase revenue streams through CE offerings.

**Year 1:**
- Connect faculty to the Centre for Faculty Development (CFD) and U of T Centre for Teaching Support and Innovation and increase faculty awareness of the range of available support.
- Establish clear expectations and link education contributions more directly to academic promotion.
- Encourage faculty to increase teaching leadership through various avenues, e.g. pursuing Master’s of Education degrees; participation in education programs; engaging in scholarly activity and publishing education research; new course development and coordination.
- Provide senior residents with more opportunities to teach as part of their postgraduate medical education.

**Year 1:**
- Engage with CFD to develop an education scholarship and teaching action agenda that will support education innovation relevant to LMP.
  
  **Lead:** Richard Hegele
STRATEGIC DIRECTION 2:
COLLABORATION AND RESEARCH

Strengthen collaboration to increase research impact.

Expected Outcomes and Measures

• Increased number of collaborative grants and projects that synergize expertise in the different domains of LMP.
• Increased number of active graduate faculty.
• Working with TAHSN members, a minimum of three LMP collaborative initiatives that focus on high-impact areas.
• Increased activity and impact in translational research.

Goals and Implementation Strategies

1. Enhance collaboration to foster basic/clinical integration across LMP.

   • Encourage networking and interaction.
   • Leverage expertise and enhance LMP activities.
   • Seek out Department level collaboration initiatives with TAHSN members.
   • Work closely with TAHSN leadership to eliminate barriers to academic collaboration.
   • Explore new models of compensation and protected time for clinical faculty, in conjunction with TAHSN and other partners.
   • Grow graduate faculty and increase student intake, ensuring quality.
   • Provide financial incentives.

Implementation:

• Continue to develop thematic interest groups and annual conferences.
• Increase graduate faculty through cross appointments from other departments.
• Further promote the UT Research Accelerator (http://medicine.utoronto.ca/research/ut-research-accelerator), a website enabling faculty, staff and learners to request and share resources such as cell lines, antibodies, reagents and transgenic animals.
• Promote city-wide groups and support larger collaborative initiatives with TAHSN hospitals.
• Hold networking and social events to share ideas and work, and identify novel collaborative opportunities.
• Seek out solutions to facilitate material sharing; obtaining ethics approval; promoting focused networking. E.g., hiring a research coordinator funded by research grants and overhead funds.
• Continue to address issues across TAHSN such as multiple ethics approvals, sharing of data and protected academic time for clinical faculty and laboratory scientists.

Background

• LMP has a number of strong assets including accomplished, well-funded investigators; top calibre students; highly trained staff; and diversity in research areas and approaches.
• LMP must continue to gain access to high calibre students and further enrich research activity.
• LMP is well positioned to contribute to thematic areas across the basic science sector thereby providing a focus for fund development and supporting core facilities.
• Clinician scientists from other departments consider LMP students to be excellent.
• Research infrastructure within the Medical Sciences Building (MSB) is lagging behind.
• LMP is uniquely positioned to foster further integration between basic and clinical research to improve quality and impact, particularly given the current focus on precision medicine and translational research.
• LMP will be required to better use clinical fellows in research, and to attract strong postdoctoral trainees.
• LMP must be able to respond creatively to changing environmental conditions such as shifts in grant funding and an ever expanding bureaucracy.
**STRATEGIC DIRECTIONS**

### Year 1:
- Establish and develop terms of reference for a reinvigorated LMP Research Committee, the initial task of which will be to develop a three-year schedule for the Annual Thematic Conference.
  **Lead:** Michelle Bendeck

### 2. Strengthen presence of Campus-based faculty within LMP
- Support the identification of basic science themes.
- Provide input to the planning of a new MSB.
- Identify priorities around equipment and state-of-the-art technology, including funding mechanisms and novel ways to access existing equipment.
- Partner with industry as warranted.

**Implementation:**
- Link to the Faculty’s MSB Task Force, including establishing membership on committees.
- Work with other basic science departments and the Faculty to develop an equipment/core facilities plan for the MSB including analysis of what is needed/wanted; what currently exists and where; and what the gaps are.
- Determine what opportunities exist to leverage resources of other basic science departments and partner with them.
- Contribute to the work of the current TAHSN BioBank Task Force.
- Explore ways to partner effectively with industry.

### Expected Outcomes and Measures
- Increased requests from multiple stakeholders to act as the authoritative voice on diagnostics.
- Extended health and public policy influence at multiple levels.
- Expanded number of targeted international partnerships.
- Improved international standing among comparable departments.

**Background**
- LMP is distinguished by its broad range of excellence across all of the laboratory medicine disciplines and involvement with multiple affiliated hospitals, institutes and agencies. There is an ongoing need for dialogue about specific issues that are impeding collaboration.
- LMP is well regarded where it is known; however, its sphere of influence could be enhanced, nationally and internationally. The present state limits LMP’s influence.
- LMP should play a greater leadership role in a number of areas, e.g. broader translational research opportunities, the ‘next-generation’ of education, precision medicine, and further integration of research into curricula.
- The opportunity exists to partner with U of T and the Faculty on international initiatives.

### STRATEGIC DIRECTION 3: VISIBILITY AND INFLUENCE

*Leverage expertise in diagnostics to extend visibility and influence in support of improved patient care and health outcomes.*

**Expected Outcomes and Measures**
- Increased requests from multiple stakeholders to act as the authoritative voice on diagnostics.
- Extended health and public policy influence at multiple levels.
- Expanded number of targeted international partnerships.
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**Background**
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- The opportunity exists to partner with U of T and the Faculty on international initiatives.
Goals and Implementation Strategies

1. Extend influence and presence locally, provincially and nationally
   - Continue to develop LMP’s identity.
   - Broadcast LMP’s value proposition, including the critical role laboratory medicine physicians and scientists play in the health of patients and populations, and the importance of pathobiology as the scientific foundation of medicine.
   - Strengthen linkages to TAHSN, working in conjunction with the Faculty leadership.
   - Increase ties to national and provincial agencies for educational outreach and to position LMP as a leader in diagnostics.
   - Build stronger connections with other professional schools.

Implementation:
   - Influence education approaches, the development of quality standards and advancement of health policy through the strength of LMP’s academic credentials and multiple relationships and networks.
   - Enhance LMP’s identity by reinforcing, both internally and externally, the strength of our unique basic science/clinical combination and what we have to offer.
   - Adopt a greater advocacy role on numerous faculty-wide committees such as: MD Curriculum Committee, PGME Committee, Life Sciences Committee and Communication Committees.
   - Add value by strengthening relationships with other professional schools such as pharmacy, dentistry, nursing and law, e.g. through cross appointments.
   - Clarify LMP’s role and that of laboratory medicine physicians and scientists in the health of patients and populations, thereby leading to opportunities to influence health professionals, policy makers, patients and the public.
   - Inform key players and agencies, e.g. Cancer Care Ontario, about LMP’s activities and advances.
   - Participate in committees and groups that are setting standards of practice and quality measures.

Year 1:
   - Working with TAHSN Chiefs, support system change initiatives that align LMP with precision medicine and laboratory utilization.
   - **Lead:** Richard Hegele

2. Build international profile
   - Develop greater international presence leading to being viewed as one of the “Top Ten.”
   - Identify international strategic partners.
   - Take on more international activities relating to knowledge transfer.
   - Leverage our location.

Implementation:
   - Work with U of T and the Faculty of Medicine to develop targeted international partnerships.
   - Encourage faculty to strengthen international presence through outreach, societies and academic professional activities.
   - Encourage hosting of international meetings of relevant academic and professional societies, with an embedded LMP presence.
   - Investigate reciprocal student exchange opportunities with other national and international institutions.
   - Continue to host internationally-renowned guest lecturers.

Year 1:
   - Develop speakers’ kit for international conferences, including presentation and poster templates that include the identities of U of T, LMP and the health institution.
   - **Lead:** Christine Kreutzer
STRATEGIC DIRECTIONS

STRATEGIC DIRECTION 4: ENGAGEMENT, CREATIVITY AND ALIGNMENT

Enable Department success through engagement, creativity and alignment.

Expected Outcomes and Measures

- Higher levels of faculty and student satisfaction and engagement.
- New revenue sources.
- Higher levels of alumni engagement.
- Re-energized leadership and administrative teams.

Background

- There are more supports and infrastructure available than most faculty are aware of.
- Faculty require support throughout their academic careers — early, mid and late.
- Focus must be placed on succession planning and growing faculty leaders.
- The current funding constraints reinforce the importance of accessing new funding sources and ensuring optimal productivity and efficiency in utilizing LMP resources.

Goals and Implementation Strategies

1. Foster development of the LMP community

- Promote faculty engagement.
- Strengthen infrastructure to support department-wide interaction.
- Support student interaction both within the student body and with faculty.
- Provide career support to faculty, particularly those in early to mid-career.

Implementation:

- Develop a comprehensive orientation package for new members. Faculty development and support will be a standing agenda item on LMP Committee Meetings and included as an expectation of LMP Education and Research Leaders.
- Offer more relevant educational events and ensure appropriate CE credits are applied. Examples include: expanding city-wide rounds; utilizing the LMP Digital Laboratory Medicine Library for interesting cases and making these available through CE activities.
- Maintain the website and faculty research database with current and relevant information. Examine methods and approaches to communication and reduce barriers.
- Introduce department-wide thematic groups that are fluid, purpose-driven and reflect shared responsibility with partner hospitals, institutes and agencies.
- Provide support to LMP student leaders and associations to foster engagement and interaction amongst themselves and with faculty.

Year 1:

- Develop and implement a Department-wide communications plan that includes targeted emails, news updates, and promotes access to information and resources.

Lead: Christine Kreutzer
2. Identify new funding sources

- Develop a philanthropic strategy and plan.
- Establish the cases for support.
- Initiate approaches to connect with alumni.

**Implementation:**
- Develop an advancement strategy to bring increased focus and a sense of urgency, starting with how to connect more closely to alumni and to engage faculty more broadly.
- Consider piloting an initiative such as crowdsourcing.
- Develop a case for support celebrating and documenting the accomplishments of faculty and learners and showing the connectivity to patients and health outcomes.
- Seek out new grant opportunities.

**Year 1:**
- Develop an advancement strategy and plan; connect with and engage alumni.
  **Lead:** Avrum Gotlieb

3. Align Department resources in support of strategic priorities

- Review departmental structure.
- Review and renew leadership structure, including committees: clarify roles and responsibilities, and term limits.
- Provide leadership development opportunities.
- Strengthen performance management processes across LMP.

**Implementation:**
- Revisit the Departmental structure and ensure deployment of resources in support of the identified priorities.
- Review roles and responsibilities and ensure performance metrics and incentives continue to make sense and look at broader structural questions such as the current divisional structure and associated leadership roles.

**Year 1:**
- Implement administrative role to support Year 1 initiatives.
  **Lead:** Christine Kreutzer
- Establish an LMP Internal Working Group to review LMP structure and committee membership, clarifying roles and responsibilities, and term limits.
  **Lead:** Rita Kandel
MOVING TO IMPLEMENTATION

Introduction

Too many strategic planning initiatives do not achieve their promise because they do not make the transition from plan into action. LMP must assign accountability, identify milestones and develop a performance monitoring process in order to successfully implement this plan.

Roles and Responsibilities

- **Clinical Chiefs and Executive Committee (CCEC)*** — Provides general oversight and feedback to the overall implementation of the plan, monitoring progress against targets and suggesting adjustments as necessary.
- **Chair** — Leads implementation of the plan; informally and formally provides support and monitors progress; arranges to have any required modeling of financial implications of proposed changes and tracks funding against priorities; and determines deployment of resources. The Chair reports back to CCEC and garners feedback with respect to progress.
- **Leads** — Accountable for achieving the targets and deliverables. Each Lead develops a more detailed work plan that is tabled with the Chair, outlining key deliverables, measures, timelines and any resource requests. In developing the work plan, the Lead is expected to identify synergies with other initiatives and seek out opportunities for collaboration. The Lead is also expected to report progress against plan to the Chair on a regular basis.
- **Faculty and Staff** — Use concepts, directions and priorities set out in this plan to establish performance objectives and targets.

Implementation and Monitoring Process

The implementation of the plan will begin in 2015. Leads will be confirmed and work plans with milestones and deliverables will be developed. The monitoring process will be finalized and aligned with management and faculty meetings. Monitoring the implementation of the strategic plan will be a standing agenda item at each regularly scheduled CCEC meeting.

Each year, on or about the beginning of December, the Chair will issue a retrospective report to the Department, outlining achievements, performance against key metrics, and identifying the priorities for the upcoming year.

This implementation and monitoring process is particularly important given the revolution that is occurring in science and the general pace of change in such areas as precision medicine. Should the assumptions underpinning the strategy no longer hold, consideration should be given to initiating a new strategic conversation about Departmental focus and priorities.

* See Appendix for list of members
**APPENDIX**

### STEERING COMMITTEE

Dr. Richard Hegele (Chair)
Dr. Michelle Bendeck – Medical Sciences Building
Dr. Sydney Card – Anatomical Pathology Resident
Dr. Martin Chang – Mt. Sinai Hospital
Mr. Jonathan Cook – PhD Student
Dr. David Hwang – University Health Network
Dr. Rita Kandel – Mt. Sinai Hospital
Ms. Christine Kreutzer – Manager, Business and Administration, LMP
Dr. Jeff Lee – Medical Sciences Building
Dr. Susan Richardson – The Hospital for Sick Children
Dr. Shachar Sade – Sunnybrook Health Sciences Centre
Dr. Catherine Streutker – St. Michael’s Hospital
Facilitator – Dr. Jane Cooke-Lauder, Bataleur Enterprises Inc.

### CLINICAL CHIEFS AND EXECUTIVE COMMITTEE

Dr. Richard Hegele (Chair)
Dr. Sylvia Asa – Medical Director, Laboratory Medicine Program (UHN)
Dr. Michelle Bendeck – LMP Research Director
Dr. Jagdish Butany – Head, Division of Pathology, LMP
Dr. Runjan Chetty – Interim Chief, Anatomic Pathology, Laboratory Medicine Program (University Health Network)
Dr. Eleftherios Diamandis – Head, Division of Clinical Biochemistry, LMP
Dr. Harry Elsholtz – Graduate Coordinator, LMP
Dr. David Hwang – Clinical Fellowship Director, LMP
Dr. Nadia Ismiil – Interim Chief, Department of Anatomic Pathology (Sunnybrook Health Sciences Centre)
Dr. Rita Kandel – Chief, Pathology and Laboratory Medicine (Mt. Sinai Hospital)
Ms. Christine Kreutzer – Manager, Business and Administrative, LMP
Dr. Eleanor Latta – Director, Undergraduate Medical Education, LMP
Dr. Tony Mazzulli – Interim Head, Division of Microbiology, LMP
Dr. Marciano Reis – Chief, Clinical Pathology (Sunnybrook Health Sciences Centre and Women’s College Hospital)
Dr. Susan Richardson – Division Head of Microbiology, Department of Paediatric Laboratory Medicine representative (The Hospital for Sick Children)
Dr. Shachar Sade – Director, Postgraduate Education, LMP
Dr. Andrew Simor – Head, Department of Microbiology (Sunnybrook Health Sciences Centre)
Dr. Doug Templeton – Undergraduate Coordinator, LMP
Dr. Victor Tron – Chief and Medical Director, Department of Laboratory Medicine (St. Michael’s Hospital)
Strategic Direction 1: Lead the evolution of laboratory medicine and pathobiology education to develop excellent future practitioners, scholars and scientists

<table>
<thead>
<tr>
<th>1. Strategically participate in the life sciences curriculum</th>
<th>Doug Templeton</th>
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<tbody>
<tr>
<td>• Establish an LMP Undergraduate Life Sciences Working Group to determine the design and incorporation of relevant laboratory medicine experiential opportunities into the life sciences curriculum.</td>
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<table>
<thead>
<tr>
<th>2. Create a continuous targeted presence for LMP over the four-year UME curriculum</th>
<th>Eleanor Latta</th>
</tr>
</thead>
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<tr>
<td>• Establish an LMP UME Working Group to develop proposals for consideration by the Curriculum Renewal Committee. This same Working Group is to support the existing LMP Interest Group in undergraduate medicine to foster an interest among students in laboratory medicine and pathobiology and to promote career opportunities.</td>
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<tr>
<th>3. Provide leadership to the introduction of competency-based training for residents in alignment with CanMEDS 2015</th>
<th>Sachar Sade</th>
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<tr>
<td>• Establish an LMP PGME Working Group to address development of foundational core curricula aligned with competency-based training.</td>
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<tr>
<th>4. Update graduate MSc/Phd programs</th>
<th>Harry Elsholtz</th>
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<tr>
<td>• Establish an LMP Graduate Working Group to evaluate the LMP graduate studies curriculum and co-curriculum activities.</td>
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<th>5. Continue to develop CE offerings that leverage LMP expertise</th>
<th>Nadia Ismiil</th>
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<tr>
<td>• Establish an LMP CE Working Group to evaluate opportunities for developing e-learning in LMP and identify a pilot project in e-learning for development and implementation.</td>
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<th>6. Strengthen faculty support for teaching</th>
<th>Richard Hegele</th>
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<tr>
<td>• Engage with CFD to develop an education scholarship and teaching action agenda that will support education innovation relevant to LMP.</td>
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Strategic Direction 2: Strengthen collaboration to increase research impact

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<tr>
<th>1. Enhance collaboration to foster basic/clinical integration across LMP</th>
<th>Michelle Bendeck</th>
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<tr>
<td>• Establish and develop terms of reference for a reinvigorated LMP Research Committee, the initial task of which will be to develop a three-year schedule for the Annual Thematic Conference.</td>
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<th>2. Strengthen presence of Campus-based faculty within LMP</th>
<th>Michelle Bendeck</th>
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<tr>
<td>• Establish priorities for equipment for Campus-based faculty. Identify Campus-based faculty representative to contribute to the Faculty’s MSB Building Task Force.</td>
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### Strategic Direction 3: Leverage expertise in diagnostics to extend visibility and influence in support of improved patient care and health outcomes

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