



# QUICK FACTS ABOUT THE DEPARTMENT

## 56 FACULTY LOCATED AS FOLLOWS: ♥

HOSPITAL FOR SICK CHILDREN

**MEDICAL BUILDING**  **MOUNT SINAI** 

ST. MICHAEL'S HOSPITAL

UNIVERSITY HEALTH SUNNYBROOK NETWORK

U OF T SCARBOROUGH

RESEARCH THEMES

Cellular & Molecular Immunology

Development of the Immune System

Autoimmunity & Inflammation

Cancer Immunology & Immuno-therapy

Infectious Diseases

Mucosal Immunology

Primary Immunodeficiencies

Transplantation & Immune-Tolerance

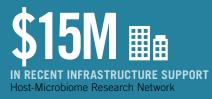
### **RESEARCH & FUNDING SUCCESSES**

OVER



**PUBLICATIONS** 

in past 10 years With over 37,000 citations



### **OUTSTANDING (** TRACK RECORD **OF ACHIEVEMENT**



Identification of early hematopoietic stem/progenitor cells

Isolation of genes for Crohn's disease

Identification of CTLA4 immune-regulatory function

Function of adipose tissue regulatory T cells

Characterization of tyrosine phosphatases, SHP1

immunodeficiency genes, CD3Õ

Mechanisms of T cell co-stimulation

Molecular characterization of positive selection of T cells

Description of an independent intestinal Immune system

Use of interferons for the treatment of SARS

Development of an in vitro system for the generation of T cells

### RESEARCH **TRAINING**



GRADUATE PROGRAM IN IMMUNOLOGY,

MSc and PhD program

POSTDOCTORAL FELLOWS,

**UNDERGRADUATE STUDENTS.** 

Major, Minor and Specialist programs

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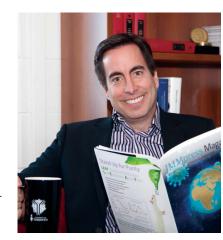
# **CHAIR MESSAGE**

of Immunology's Academic and Research Strategic Plan 2014–2018. I look forward to the next five years, and beyond, as we begin to implement the many exciting recommendations outlined within our plan.

Although the Department of Immunology will be 30 years old in 2014, this is the first formal strategic plan developed for our Department. We undertook broad consultations with our stakeholders and outside experts to develop a set of structured guiding principles for the operation, academic mission and research direction of the Department of Immunology. I am extremely thankful to the members of the steering committee for their insights and advice, and to Dr. Jane Cooke-Lauder for her guidance during the entire planning process.

Our Strategic Plan aligns well with the key themes of the Faculty of Medicine and the University of Toronto, as Impact, Innovation and Integration are part of the fabric of our plan.

I am pleased to present the Department This plan provides a singular vision for the future of the Department of Immunology, achieved through the much appreciated effort and dedication of the Strategic Planning Steering Committee. I am confident that with the implementation of this plan, we will continue to advance the research and academic mission of our Department, and secure a strong future for Immunological discoveries and their applications at the University of Toronto.



J.C. Zúñiga-Pflücker, Ph.D.

Professor & Chair Department of Immunology, University of Toronto Canada Research Chair in Developmental Immunology

Senior Scientist Biological Sciences, Sunnybrook Research Institute

# **EXECUTIVE SUMMARY**

The Department of Immunology undertook its first ever strategic planning exercise over the summer and fall of 2013 under the leadership of a Strategic Planning Steering Committee (SPSC) and with the support of an outside consultant. The SPSC was selected to reflect many of the different research and education interests of the Department and its stakeholders.

The strategy derived is ambitious, establishing expectations that the Department will continue to deliver first rate education in a way that is increasingly relevant to students at different stages of their learning journey. At the same time, the Department will seek to differentiate itself, building off its broad base of excellent basic and translational science, through the adoption of a small number of strategic research themes. These themes will be identified through a combination of input from faculty and the recommendations of a new, internationally excellent, Scientific Advisory Board. Once in place, these themes will guide recruitment and foster stronger collaboration across the Department (i.e., from bench to bedside to bench).

Key to success will be the Department's ability to collaborate with different partners and in different modalities. In particular, the Department's inclusive leadership approach will encourages participation across the Toronto Academic Health Science Network (TAHSN) community, positioning the Department and the Research Institutes as a single unit of immunologic excellence. Other enablers of success include attracting and retaining world class faculty, engaging alumni, raising the profile and reputation of the Department, expanding the resources available to the Department, and ensuring that the Department is managed efficiently and effectively.

The process used to develop the plan was guided by the strategic goals of the University of Toronto (UofT) Faculty of Medicine (FoM), namely: integration, innovation and impact. It was comprehensive and informed by evidence gathered from internationally regarded outside experts as well as from faculty and staff.

The five strategic themes outlined in the following two pages identify the way forward. A commitment to advance these themes was obtained from faculty at a meeting in November, 2013. Each strategic direction is divided into a number of goals with implementation strategies, metrics and supports outlined for each goal. Priorities for 2014 have been identified, together with accountable leads, and include the establishment of performance indicators. The Executive Committee will provide oversight to the implementation of the plan with update reports from the Chair being made available on a regular basis.

# SUMMARY OF STRATEGIC DIRECTIONS

# 1. Collaboration: Integrate and collaborate for global academic reach and impact

- 1.1 To promote the Department and Research Institutes internationally as a single unit of immunological excellence
- 1.2 To expand international, regional and national partnerships strategically at the institutional and individual level
- 2. Undergraduate Education: Maintain excellence by continuously improving the student and faculty experience
- 2.1 To strengthen academic innovation and excellence
- **2.2** To increase research opportunities for undergraduate students
- 2.3 To continue to build a highly engaged faculty and student body
- 2.4 To foster stronger ties with undergraduate immunology programs in other cities in Canada and in other countries
- 3. Graduate Education: Provide a graduate training program that produces exceptional, internationally competitive scientists
- 3.1 To strengthen the Department's reputation for high quality degrees achieved in a timely manner
- 3.2 To introduce a 2-year non-thesis Master's program
- **3.3** To develop graduate students prepared for a range of career options
- 3.4 To prepare post-doctoral fellows for their next career steps

- 4. Research, Knowledge Translation and Commercialization: Achieve international recognition as a dynamic comprehensive department that contributes to the discovery, dissemination and implementation of new basic science and translational applications
- 4.1 To identify and implement differentiating research strategic theme/s for the Department
- 4.2 To foster integration and collaboration among and between Department faculty, with faculty from other departments, and with clinicians
- 4.3 To facilitate the development of research supports and core infrastructure
- 4.4 To develop and implement a knowledge translation strategy
- 5. Enabling Strategies: Enable success through strategic investment in operational excellence
- 5.1 To recruit, develop and retain a world-class faculty
- 5.2 To raise the profile and reputation of the Department
- 5.3 To increase revenue
- **5.4** To develop and execute a focused alumni connection strategy
- 5.5 To manage the Department's core processes efficiently



DEPARTMENT OF IMMUNOLOGY STRATEGIC PLAN 2014-2018

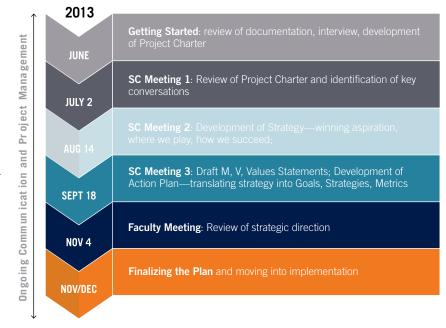
# **BACKGROUND**

### PROCESS OVERVIEW

With the appointment of a new Chair, the fourth in its history, the Department of Immunology ('the Department') has developed its first ever strategic plan. A Steering Committee was established in June, 2013 with a mandate to develop a draft five year Strategic and Academic Plan (2014–2018) for review by the faculty and ultimate approval by the Chair prior to the year end.

A rigorous and evidence informed process was followed, as shown schematically below, resulting in a draft plan being provided for faculty review in early November, 2013. Interviews were held with internationally renowned experts and a thorough assessment of the external forces and trends affecting the Department was undertaken. Further details with respect to the process followed are included in the Appendix, together with a listing of the membership of the Steering Committee.

#### STRATEGIC PLANNING JOURNEY



# KEY QUESTIONS AND CHALLENGES

From the evidence collected, the Steering Committee identified a number of significant matters to be addressed as part of the strategic plan including:

- What is needed to be a world-class Department of Immunology, regarded as being among the best in the world both by international metrics as well as within the University of Toronto and its academic community?
- What will make the Department truly distinctive? What needs to be done to turn the Department into a 'magnet', continuing to attract the best and the brightest faculty and students?
- 3. The pace of research discovery is accelerating in such areas as biological science and immunology. What is the specific vision of the Department with respect to where different areas within immunology are going and the contribution to be made by the Department?
- 4. How might the Department strengthen the linkages between its basic and clinical faculty to the benefit of all, without losing its core competence in basic research?
- 5. Given the strength of the research institutes and hospital based research initiatives, what is the distinctive and valued role that the Department can play in advancing the immunologic research agenda? What is the role and contribution of the Department relative to the research activities of tenured and status-only faculty?

- 6. To be world class, the Department will need to engage the talent and expertise, the hearts and minds of all its members. What will it take for all members of faculty and students, including post-doctoral fellows, regardless of where physically located, to become fully engaged?
- 7. How does the Department continue to deliver a world-class graduate experience while increasing enrolment in a time of scarce resources, a tough job market and changing expectations?
- 8. What is the role of the Department in developing graduates for a changing job market, a world where academic appointments are reducing in number and availability?
- 9. At a time when undergraduate students appear to be selecting less intensive courses, how does the Department continue to graduate thinkers and writers with a passion for and commitment to research?
- **10.** What is the Department's role in increasing public understanding of and the value placed on immunology in order to have more influence on the setting of public and health policy?
- 11. With the straitened economic conditions and the pressure on research granting competitions, how might the Department access other funding sources to support its growth aspirations and research endeavors?

The five-year direction of the Department is expressed through high-level statements of vision, mission and values as well as the five-year strategy developed through a series of strategic choices made by the Steering Committee in such areas as research, education and operations. Four strategic directions, described in terms of success measures, goals and implementation strategies, are identified together with an enabling set of strategies.

## **OVERARCHING DIRECTION**

### VISION<sup>1</sup>

International leadership for improving health through innovation and excellence in immunological research, education and clinical translation

### MISSION<sup>2</sup>

To prepare future leaders in immunology to improve the health of individuals and populations through discovery, its application and the communication of knowledge

### **VALUES**<sup>3</sup>

**Ownership**: of results and of success, of moving things forward, of creating the culture and environment; being highly accountable individually, to colleagues, partners and funders

**Excellence**: at the individual level, across the Department and in partnerships whether local, national or international

**Engagement**: personal drive, focus and commitment, with a relentless pursuit of discovery and innovation

**Mentorship**: fostering the success of others; collaborating and sharing knowledge to move toward the vision

# **FIVE YEAR STRATEGY**

The five year strategy for the Department is articulated and depicted graphically below and then explored further through four statements of strategic direction and one of enabling structures:

- Create a culture that values collaboration and individual aspiration; and fosters both by encouraging innovation, excellence, engagement, sharing, professional development, mentorship and accountability
- Be inclusive in approach and actions, seeking to integrate all immunologic work across the city and to engage international experts in supporting success
- 3. Maintain a broad foundation of excellent research to support the education remit: excellence is expected of university based scientists as well as basic and clinical scientists in research institutes of the TAHSN hospitals

### **OUR STRATEGY**



- 4. Develop differentiating or distinguishing research excellence in a small number of areas that require collaboration across the bench to bedside to bench continuum. This includes the possibility of seeking out broader collaborations, either nationally and internationally as well as convergence with other sciences
- 5. For undergraduate education, continue to attract top students by refining and improving the learning experience by, for example, providing more research opportunities; adopting best practices in engaged learning; encouraging faculty development; and recognizing and rewarding both faculty and student achievement
- 6. For graduate education, retain existing excellence as student numbers grow by, for example, ensuring student's graduate in a timely manner while providing degree and course offerings that reflect the changing career landscape
- Strengthen relationships within the Department, within the immunologic community, with alumni, within the University, across the sectors, and nationally and internationally
- 8. Be socially and fiscally responsible: sharing knowledge and expertise and managing resources efficiently and effectively
- 9. Continue to monitor the implementation of the plan, scanning the environment and utilizing the expertise of the Scientific Advisory Group to ensure that the actions outlined continue to be relevant given the pace at which big science is moving.

<sup>&</sup>lt;sup>1</sup> Visions imagine the future, pointing to where the organization should go, the difference it wants to make in the world. Visions challenge organizations

<sup>&</sup>lt;sup>2</sup> A mission defines the mandate, purpose and scope

<sup>&</sup>lt;sup>3</sup>A values statement describe the behaviours or guiding principles valued and sought by the organization in fulfilling its Mission and pursuing its Vision

# STRATEGIC DIRECTION 1 COLLABORATION

### STRATEGIC ASPIRATION

Integrate and collaborate for global academic reach and impact

#### **SUCCESS WILL BE MEASURED BY:**

- Recruitment and retention of internationally renowned faculty across the different Departmental sites
- ncreased number of collaborative initiatives with industry, government and private philanthropist partners
- Strength of strategic international partnerships
- Expanded footprint and impact measured by contribution to global immunological breakthroughs

#### **KEY ISSUES AND OPPORTUNITIES:**

- Expectations of higher levels of integration exist in a number of arenas: UofT, FoM, clinically and in the research environment where funding is favouring team, multi-centre and interdisciplinary submissions. How might the Department best support these imperatives?
- Immunology is described as an international discipline. Breakthroughs are occurring through convergence and the closer alignment of the life sciences, physical sciences and engineering. Given UofT's international initiatives, how should the Department position itself for global as well as convergence opportunities?
- Given the number of demands being placed on the Department to deliver academic excellence in an environment of constrained resources, where are the opportunities to do things differently working in conjunction with others across local and international systems?
- The shift from being publicly funded to publicly-assisted has occurred, together with the expectation that those receiving public monies are accountable to share their knowledge and resources with others. How might the Department best demonstrate this accountability and share its extensive body of knowledge?
- Within the Department itself, there are additional opportunities for collaboration and integration: between basic and clinical researchers as well as between faculty, graduates and post-doctoral fellows. What strategies might be adopted to strengthen productive social and academic interchange?

# IMPLEMENTING STRATEGIC DIRECTION 1

This theme of collaboration is seminal to the Department's success and so is positioned upfront with its own discrete set of strategic activities. However, the work to be done pervades all strategic directions with the result that many of the questions posed here are addressed in a number of sections of the plan.

An inclusive and engaging leadership style will enable relationships across the immunologic system to be strengthened, leading to all of Toronto's academic expertise increasingly acting as one unit in areas of importance. The ability of the Department to work in tandem with the Research Institutes of the academic hospitals as well as with other UofT departments, will support recruitment efforts to attract world class leaders to Toronto as well as opportunities to create on-line education courses in immunology for other English speaking countries. In addition, it will foster the environment within which faculty members will reach across current institutional boundaries to form new relationships with the potential to expand the body of knowledge in innovative and exciting ways.

Moving beyond the geography of Toronto, working with the Vice Dean Research and International Relations of the FoM, the Department will strengthen its focus on existing and develop new partnerships in alignment with its strategic direction and identified research themes. An immediate opportunity exists, given the UofT's new strategic partnership with Sao Paulo University (Brazil), to identify areas of common immunologic scientific interest.

At the individual faculty member and student level, the Department will foster a culture of inclusiveness and collaboration including the encouragement of exchange and philanthropic opportunities. To support these collaborative activities, a new position, that of Research Projects Officer will be created, one of the responsibilities being to scan on an ongoing basis for international research/ education funding. The Department will also continue to support faculty engaged in leadership roles in national and international societies, such as the Canadian Society for Immunology (CSI) or the International Union of Immunology Societies (IUIS).

# In summary the following goals and strategies will be pursued:

- 1. To promote the Department and Research Institutes internationally as a single unit of Immunological excellence
- a. Foster relationships at the leadership level with Research Institutes and the Transplant Institute
- Share gap analysis and insights from the newly constituted Scientific Advisory Board
- c. Create online immunologic education content for English speaking countries
- 2. To expand international, regional and national partnerships strategically at the institutional and individual level

- a. Conduct an inventory of current partnerships and determine strategic alignment
- Establish connections with international universities in alignment with the efforts of the FoM and UofT
- **c.** Support collaborations aligned with strategic theme areas
- d. Support international philanthropic endeavours of individual faculty members
- e. Create international exchange opportunities for students without lengthening time to graduate

### **2014 PRIORITIES**

The Chair will lead the implementation of the following priorities:

- Hire a Research Projects Officer
- 2. Explore establishing a strategic partnership with Sao Paulo University, including the hosting of a symposium
- 3. Develop a partnership strategy based on a gap analysis/partnership inventory assessment
- Continue to build relationships with the Research Institutes

# **STRATEGIC DIRECTION 2** UNDERGRADUATE EDUCATION

### STRATEGIC ASPIRATION

Maintain excellence by continuously improving the student and faculty experience

### SUCCESS WILL BE MEASURED BY: KEY ISSUES AND OPPORTUNITIES:

- Rising incoming GPAs of second year students into the major and specialist programs in immunology as a measure of the popularity of the programs
- Improving outgoing GPAs of graduating students of the major and specialist programs in immunology as a measure of teaching efficacy
- Tracking enrolment numbers in programs as a measure of their popularity
- Tracking graduates through surveys and Linked-in to evaluate student's assessment of the programs, and to assess the impact of the education on their careers
- Tracking immunology students receiving provincial/ national research awards
- Evaluating upper level courses on a regular basis to determine satisfaction levels.

- As enrolment in immunology undergraduate programs is increasing, how does the Department maintain a high level of undergraduate teaching?
- How does the Department increase the research opportunities for undergraduate students at a time when research funding is more difficult to attain?
- How might the Department embrace a more interactive teaching approach to stimulate critical and creative thinking in the students?
- Today, not enough students identify the immunology programs as challenging and prestigious. How might the Department increase the visibility of the immunology programs amongst first year undergraduates?

### **IMPLEMENTING STRATEGIC** DIRECTION 2

The Department is well regarded for the quality of its undergraduate learning. Continuing to attract and engage the best and the brightest students will be a function of improving the in-classroom experience by, for example, adopting more interactive teaching methods; extending the important hands-on learning opportunities in the labs; and by supporting and encouraging less formal or different learning opportunities within the Department through increased faculty and student interaction and through student exchanges locally and internationally. Given the current challenges in obtaining research funding, the Department will grant stipend support, as necessary, to laboratories with a track record of hiring students and which then subsequently face funding cuts.

The engagement of faculty will be strengthened by providing support to increase their teaching skills and repertoire of teaching aids and by expanding the opportunities to celebrate teaching excellence. Over the next five years, increased usage of videos in lectures will be encouraged together with the introduction of more online tutorials. Fourth year faculty will be encouraged to adopt more

interactive teaching modalities that stimulate critical and creative thinking in the student body and to increase the focus on group discussions and problem-solving assignments. In all years, undergraduate courses will be selectively refreshed.

Success is dependent on the availability of additional financial resources to support the proposed initiatives as well as on being able to access technical support to address media outreach issues. Success will be measured not only through such traditional evaluation mechanisms as enrollment numbers and satisfaction scores, but also through finding ways to measure the difference in student knowledge and function at entry and on graduation. This implies over time that the Department will review how it assesses the accretion of knowledge by students.

### In summary the following goals and strategies will be pursued:

- 1. To strengthen academic innovation and excellence
- a. Support the development of additional short films that can be integrated into teaching material
- **b.** Develop online tutorial sessions with TAs and students
- c. Introduce more interactive teaching approaches
- d. Celebrate excellence in teaching through the promotion of teaching awards Develop competitive awards for undergraduate students to recognize academic excellence

- 2. To increase research opportunities for undergraduate students
- a. Expand the number of lab opportunities available by facilitating faculty members to accept undergraduate research students
- **b.** Provide stipends to laboratories that create student research positions and then experience a shortage of research funds
- c. Monitor on an ongoing basis the development of research skills among undergraduate students
- **3.** To foster stronger ties with undergraduate immunology programs in other cities in Canada and in other countries
- a. Establish strong links with immunology programs in foreign countries (aligned with the University of Toronto strategic plans) e.g., through student exchange programs in research, reciprocal guest lecturing, joint faculty retreats
- b. Expand online course offering and live streaming of lectures
- c. Continue to support OQUIC (Ontario-Quebec Undergraduate Immunology Conference)
- 4. To continue to build a highly engaged faculty and student body
- a. Support a strong social association that fosters close student relationships with each other and the Department
- b. Develop an improved website and/or media platforms to reach out and engage students

- c. Track and better showcase the research achievements of undergraduates (i.e. undergraduate awards, publications, conference awards).
- d. Enable interactions between undergraduates and undergraduate alumni with "career day" symposiums, social gatherings, and the use of social media.

### **2014 PRIORITIES**

The Associate Chair. **Undergraduate Studies** and the Undergraduate Committee4 will:

- 1. Engage with Trinity College to extend the number of research opportunities available to undergraduates
- 2. Support the development of additional short films/ videos starting with mucosal-immunology
- 3. Continue to support OQUIC
- 4. Support the creation of in-course achievement awards
- **5.** Expand the interactions between undergraduates, current graduates and Department alumni at the annual department retreat.

<sup>4</sup> See listing of Committee members in Appendix

THE WAY

### STRATEGIC ASPIRATION

Provide a graduate training program that produces exceptional, internationally competitive scientists

#### SUCCESS WILL BE MEASURED AS FOLLOWS:

- Decrease in average PhD time to completion with the goal being for all students to graduate in their 5th year
- Feedback on the graduate student experience (tracked, for example, through IMMpress/Website)
- Tracking graduate students post-graduation in a variety of fields with results also shared through IMMpress Magazine
- Increased enrollment for the graduate program achieved while maintaining the quality of the PhD program
- Post-doctoral fellow engagement. Year 1 milestone will be for the post-doctoral fellows to be engaged to explore this issue.

### **KEY ISSUES AND OPPORTUNITIES:**

- Average time to completion for MSc and PhD is exceeding the recommended length. How might the Department reduce time to completion whilst maintaining high standards for thesis content?
- Re-classification standards are unclear; without the threat of failure, the exam is seen as a rubber stamp by students. What steps are needed to reposition the re-classification process to enable identification of students with a high potential to complete quality doctoral level research on time?
- Graduates indicate that they do not feel career ready; that their experience is still heavily skewed to an academic career path when, in reality, there are few academic job opportunities available. What is the role of the Department in creating more job-ready graduates?
- Ongoing pressure to increase graduate student numbers is anticipated. How might the Department best meet admissions goals while retaining high recruitment standards?
- Post-doctoral fellows (PDF) appear to expect the Department to provide meaningful career preparation opportunities. What is the role of the Department in preparing PDFs for a range of future career options?

# IMPLEMENTING STRATEGIC DIRECTION 3

The Department is known internationally for the caliber of its graduates. As pressure to increase enrolment numbers continues, the Department is committed to maintaining quality while reducing the time to completion. This will require action on a number of fronts.

More rigorous feedback, support and assessment processes will be adopted to guide the PhD five year journey with particular attention being paid to the crucial fourth year. Consistent guidelines will be introduced that require committee meeting dates to be arranged a year in advance, with compliance being monitored of both student and faculty. The extended use of technology will also be helpful to provide much needed support, for example, by generating automatic meeting reminders.

More rigour will be introduced into the selection of students wishing to shift from the masters into the doctoral stream in order to maintain a high standard of excellence. The rubric 'success through failure' will be adopted. The performance bar will be set at a level that is supported by faculty and students. Stronger performance evaluation tools that include multiple sources of evaluation data will be formed into a detailed reclassification rubric and the overall management of the logistics of the reclassification process will be strengthened.

Finally, a new Master's program will be introduced. The pressure to expand the program is at odds with current funding and job openings, and necessitates a rethinking of the current Master's program to include the addition of a 2-year non-thesis Masters offered to 4th year students. This presents the opportunity to increase enrolment without impacting on the graduate students and to prepare these students better for a career in the technology-based sector. The additional revenue generated could be used to support the PhD program.

In addition to working on reducing the time to graduate, the Department will pay renewed attention to developing students to be more ready for the range of roles they are likely to play over their careers, whether in the academic, public, private or not-for-profit sectors. The Department will implement a set of classes to facilitate graduate professional development, to be coordinated by an experienced lecturer in the field of career development.

A recent study by the Canadian Association of Post-Doctoral Scholars (CAPS) on the status of post-docs in Canada indicates that the key problems of postdocs across the nation are administrative ambiguity, low compensation and benefits, and insufficient training<sup>5</sup>. While these are assumed to be relevant for our purposes, further engagement of PDFs is needed in order to understand more fully their needs and expectations of the Department.

Notwithstanding the above, in order to move forward on a timely basis, graduate students and post-doctoral fellows will be supported in attaining broader career development exposure through for example, the development of a listing of course offerings currently available for both clinical and basic scientists; the availability of advice and coaching from an experienced career development faculty member; and the development of a database of internship opportunities with related funding requirements. Resource support from the Research Projects Officer will be made available to scan for opportunities. Other attempts will be made to move, where feasible, from entirely theoretical lecture based course delivery to a more practical modality, partnering clinical immunology courses with grand rounds.

<sup>&</sup>lt;sup>5</sup> Mitchell, J.S., Walker, V.E., Annan, R.B., Corkery, T.C., Goel, N., Harvey, L., Kent, D.G., Peters, J., Vilches, S.L. 2013. The 2013 Canadian Postdoc Survey: Painting a Picture of Canadian Postdoctoral Scholars. Canadian Association of Postdoctoral Scholars and Mitacs

### In summary the following goals and strategies will be pursued:

- 1. To strengthen the Department's reputation for high quality degrees achieved in a timely manner
- a. Improve reclassification approach to support the selection of Masters students likely to succeed with their PhD studies within the prescribed timelines
- b. Develop and publicize expectations and clear requirements for graduation for both students and faculty
- c. Strengthen current processes and paperwork and develop mechanisms for tracking student success at the early stages of the program, including logistics associated with committee meetings
- 2. To introduce a new 2-year non-thesis Master's program
- a. Explore options and develop proposal
- **b.** Monitor and evaluate changes
- 3. To create graduate students prepared for a range of career options
- a. Introduce course offerings in support of graduate professional development (GPD)
- b. Take advantage of existing course offerings (both clinical and basic) e.g. in rheumatology
- c. Catalogue and communicate opportunities for internships
- d. Develop support infrastructure, including availability of career development advice, to help identify opportunities
- 4. To prepare PDFs for their next career steps
- a. More information is required in this area. Year 1 milestone will be for the post-doctoral fellows to be engaged to explore how to meet this challenge.

### **2014 PRIORITIES**

The Associate Chair. Graduate Studies and the Graduate Committee<sup>6</sup> will:

- 1. Formulate and publicize clear requirements for graduation for both students and faculty
- 2. Create performance evaluation tools to be integrated into the reclassification exam in the form of a detailed rubric
- 3. Explore options for the introduction of a new 2-Year Masters program
- 4. Implement a graduate professional development course
- 5. Explore concerns of PDFs and develop an action plan

# STRATEGIC DIRECTION 4 RESEARCH, KNOWLEDGE TRANSLATION AND COMMERCIALIZATION

### STRATEGIC ASPIRATION

Achieve international recognition as a dynamic comprehensive department that contributes to the discovery, dissemination and implementation of new basic science and translational applications

### **SUCCESS WILL BE MEASURED AS FOLLOWS:**

- 1. Productivity:
- Publications (acknowledging UofT and Department): number and quality
- Research grants: number of grant awards, number of grant applications (including infrastructure grants); number of patents
- 2. Knowledge Translation (KT):
- Media coverage, highlights covering Department's original work
- Invitations to international conferences
- Invitations to organize conferences
- Invitations to review other Departments
- 3. Collaboration:
- Number of key collaborative initiatives; number of successful collaborative initiatives
- Number of leadership and participation roles in collaborative and national/international consortia outside of the Department
- Number of co-branding/co-recognition initiatives, including publications
- 4. Ability to translate research findings:
- Track the transitions of research findings from basic (preclinical) findings to clinical utility and commercialization<sup>7</sup>
- 5. Impact on health outcomes and the health system

<sup>6</sup> See listing of Committee members in Appendix

<sup>&</sup>lt;sup>1</sup> Commercialization of immunology findings may have application beyond clinical (e.g., diagnostic kit, research kit or technology for research)

### **KEY ISSUES AND OPPORTUNITIES**

- What are the implications for grant writing and revenue development given a changing funding landscape (including the CIHR reform) where less funding is available for fundamental research and more funding can be found for pharmaceutical and business related research? Opportunities exist for clinician investigators to leverage research including partnerships with pharmaceutical companies.
- How might the Department be positioned to harness the discoveries taking place outside of the academic sector given the increasing resources being positioned in the private and public sector: for example, in public health laboratories, ICES, Pfizer, biotech?
- High impact publications involve multidisciplinary teams and high level of collaboration. How might the Department develop initiatives to create multidisciplinary teams that will develop comprehensive studies that result in high impact publications?
- New/emerging technologies are being identified regularly, requiring scientists to stay abreast of developments and integrate innovations into their work on a proactive basis. How might the Department create infrastructure that is able to develop and integrate cutting edge technologies and maintain common cores?

- Translation of pre-clinical<sup>8</sup> findings has proven challenging even though there is a receptive clinical community in multiple hospitals and Research Institutes. Given the challenge of integrating faculty located in multiple sites across the city, including at the university, how might the Department develop cross departmental collaborations to improve translational research?
- While commercialization and knowledge translation are clear expectations, the Department as a whole does not understand KT and commercialization very well. The Department must find ways to work with the UofT in this regard. How might the Department develop or gain access to information and guidelines for knowledge translation and commercialization?

# IMPLEMENTING STRATEGIC DIRECTION 4

Building from the current strength in basic and translational/clinical research, the main opportunity to distinguish the Department moving forward is in focusing on a small number of research themes. Given the pace at which the science is advancing, creating this level of focus will be important if the Department is to have a major impact on the field moving forward. These themes will be identified through faculty engagement, engagement with other health professionals working in this space, as well as the input of an internationally renowned Scientific Advisory Board. The process will include identifying the future challenges facing immunology, understanding patient needs and wants, identifying what expertise and know-how the Department has to address future challenges: and then determining appropriate bench to bedside to bench collaborative opportunities. Potential recruits, internationally prominent scientists, will be identified based on the alignment of their work with these identified research themes.

Collaboration will be required at many levels for success. Mechanisms to support higher levels of engagement in the affairs of the Department and wider sharing among faculty will be introduced such as an annual faculty retreat and regular opportunities for sharing ideas and work in progress. In future years, the inclusion of non-Departmental faculty and clinicians should be considered at the annual retreat. The addition of thematic retreats will be considered once

Given the importance of introducing new technologies and methodologies into research endeavours, junior faculty and PDFs will be encouraged to act as champions, hosting learning sessions to disseminate such new knowledge and providing ongoing support through the adoption process. More formal orientation and mentoring programs for junior faculty will be introduced to help them understand expectations, resource availability and cultural norms.

The Department also has a distinct role to play in creating supports and infrastructure such as support for grant writing as well as providing database analytic support. Given scarce resources, the opportunity to coordinate infrastructure acquisition and best practices across the different nodes of the Department will be pursued, perhaps through the introduction of a coordinating committee. The Research Projects Officer will be able to provide admin support for the development of grant applications and will keep faculty informed about funding changes and funding opportunities. Opportunities to have grant applications of junior faculty reviewed prior to submission will also be introduced.

The Department will work with the Research Institutes and hospitals to determine how best to meet such identified infrastructural needs as creating a database of human healthy donor tissues and specimens; and creating an accessible up-to-date listing of mouse strains available within the Department and across the GTA. These are not small initiatives and require careful and inclusive planning to create a practical and accessible result. Other mechanisms to enable the sharing of resources, such as the development of a listing of the expertise available within labs (e.g., techniques, assays and models, state of the art equipment) will also be created.

The Department will use the existing commercialization and translational resources available through the University and the Faculty of Medicine. In addition, the Department will strengthen efforts to ensure that relevant publications and other translation initiatives appropriately reference the Department and the FoM, and that opportunities to use innovative technologies and channels for dissemination of new knowledge are explored. This will require revamping the website

# In summary the following goals and strategies will be pursued:

- To identify and implement differentiating research strategic theme/s for the Department
- a. Engage clinicians and those with complementary expertise globally (e.g., public health experts) to define their interests and patient needs
- b. Provide the opportunity for Department members to define strategic initiatives: flagship initiatives that are inclusive and have the cachet to attract funding. Identify areas of historical and recent success. Identify areas of growth
- **c.** Establish a Scientific Advisory Board with international authorities to give input and advice
- d. Recruit new expertise as defined by strategic opportunities
- 2. To foster integration and collaboration among and between Department faculty, with faculty from other departments, and with clinicians
- a. Implement mechanisms for faculty to share ideas e.g., hold an annual faculty retreat; hold regular meetings to share work in progress
- Provide seed funding to develop emerging ideas prior to grant submission based on Departmental priorities
- **c.** Encourage the engagement of PDFs in support of stronger collaboration by providing them with opportunities to showcase ideas and new technologies
- **3.** To facilitate the development of research supports and core infrastructure
- a. Provide support for grant writing success, such as: monitoring and identifying funding opportunities for Department faculty and/or teams; providing admin support for development of grants; opportunities for junior faculty to have applications reviewed prior to submission; keep faculty informed about funding changes such as recent CIHR reforms<sup>8</sup>
- b. Facilitate the acquisition and banking of tissues and specimen from human healthy donors working in collaboration with Research Institutes/ hospitals

strategic themes have been identified. On a regular basis, 'chalk talks' will be held to share emerging ideas. Working together on collaborative opportunities may be supported by the provision of seed funding by the Department.

<sup>8</sup> Pre-clinical defined as including animal findings, invivo and invitro

<sup>&</sup>lt;sup>9</sup> These activities will be conducted primarily by the Research Projects Officer



- c. Develop an evergreen accessible listing of mouse strains available within the Department and TAHSN hospitals, and possibly a list of know-how within labs (techniques, assays and models, state-of-the-art equipment)
- d. Make available capacity to analyze and manipulate large data sets e.g., a bioinformatician
- Confirm priority of this once strategic theme/s identified in context of strategic initiatives
- 4. To develop and implement a knowledge translation strategy
- a. Ensure Department linkages to resources at FoM. UofT and Research Institutes
- **b.** Implement an annual progress reports stories/successes to be used for communication as well as advancement
- c. Ensure there are immunologic skills positioned to inform major public policy initiatives in Ontario
- d. Develop required tools and supports, including updating the website
- e. Ensure that mention is made of the Department in all announcements of PI success
- f. Acknowledge publications of faculty and ensure they are publicly accessible. e.g., on website; monthly newsletter; IMMPress Magazine

### **2014 PRIORITIES**

The Chair, working with Faculty, will:

- 1. Identify at least one research theme and begin mobilizing around it
- a. Develop and execute a process to define research themes/ potential focus areas
- **b.** Hold the first annual faculty retreat to share new discoveries and thinking and identify possible research themes (May, 2014)
- c. Recruit a Scientific Advisory Board and hold at least one meeting
- 2. Design and implement a process to acquire a bank of healthy human tissues and specimen
- 3. Publish the first annual knowledge translation progress report, revamp the website and profile all of UofT faculty.

### **ENABLING STRATEGIES**

### STRATEGIC ASPIRATION

Enable success through strategic investment in operational excellence

### SUCCESS WILL BE MEASURED BY:

- Expanding available resources: number of Endowed Chairs; increase in research funding; increase in funded academic fellowships; increase in infrastructure funding
- Number of times faculty profiled or Department mentioned in media
- Increased level of alumni engagement
- Improvement in faculty and staff well being
- Improved efficiency measures such as: harnessing the resources of the FoM and UofT; level of support provided to education leaders; capacity to respond to new initiatives

### **KEY ISSUES AND OPPORTUNITIES:**

- In a crowded environment, what are the opportunities for the Department to increase its reputation in support of attracting and retaining the very best faculty, students and resources?
- The Department, given its relative youth, does not have a large number of alumni. However, they do represent an important asset that is currently underutilized on a number of fronts. How might the Department engage more strongly with its alumni to mutual advantage?
- How might the Department provide support and mentorship to junior faculty as they strive to find their feet and make a contribution?
- How might advancements in technology be embraced to accelerate and change how the Department conducts its activities? What changes are needed to current Department structures and processes to enable the implementation of the strategic directions?
- Advancement is challenging given the competition within the university as well as with the Research Institutes who are closer to the grateful patient. There is also little in the way of a track record off which to build. What approach should the Department adopt to draw upon the expertise of the FoM Office of Advancement as well as faculty members?

The reputation of the Department is key in enabling both recruitment and the aligned resources. The visibility of the Department will be raised both within the University and TAHSN community as well as more broadly by a carefully designed and delivered multi-faceted communications program that highlights human interest stories, celebrates faculty and is sensitive to existing or developing situations such as AIDS Day or the selection of the new Dean.

A strong working relationship with the Office of the Alumni and the Office of Advancement as well as with the foundations attached to the Research Institutes in the TAHSN hospitals, are crucial to the development and successful execution of a revenue generating plan that will provide much needed additional financial resources. Beyond the traditional donor requests, the Department will seek ways to generate revenue from its core expertise in education and research, enlisting alumni in the quest.

The Department is committed to strengthening its relationship with its alumni. The creation of a database of the location of current alumni will provide opportunities for networking. Keeping the alumni close and connected creates the opportunity for a mutual learning: alumni benefitting from the research findings while sharing their diverse knowledge and expertise with faculty and students. Alumni are part of the 'real world' connectivity and expertise that will enable the Department to prepare graduates and post-docs for a range of job opportunities.

Efficiencies in operations will be sought as part of the implementation. The ongoing search for new facilities for the university based faculty and staff will continue. On a regular basis, the understanding is renewed of faculty, graduate and staff with respect to their accountabilities regarding the administration and spending associated with grants. There is need to review alignment of the current structure with this new strategic direction and situate full-time and part-time staff accordingly. Development plans and the alignment of incentives will also be undertaken.

# In summary the following goals and strategies will be pursued:

- 1. To recruit, develop and retain a world-class faculty
- a. Work with Research Institutes to recruit tenured and status-only faculty
- b. Develop a formal mentoring program for leadership development and for new and/or junior faculty with expectations of performance and progress
- **c.** Foster a culture of collegiality, including socializing, and aspiration, rewarding excellence
- d. Provide bridge funding for tenured faculty or for grad students within the lab of a faculty member should the need arise
- 2. To raise the profile and reputation of the Department
- Develop and implement a sophisticated external communications strategy using diverse channels (website, spokespersons, stories, use of social media)

- **3.** To develop and execute a focused alumni connection strategy
- a. Create a comprehensive program to draw alumni closer to the Department, support continuing education, assist in networking and build fundraising capacity
- b. Engage alumni in the education remit: as teachers, mentors, sites for visits, and possible providers of internships and job opportunities
- 2. To increase revenue
- a. Establish a robust advancement strategy that includes a portfolio approach (grant funding, philanthropic funding, product revenue, alumni funding, industry, etc)
- b. Strengthen grant writing capacity
- c. Identify targets and programs for funding
- **d.** Determine approaches to industry partners
- e. Establish working relationships with hospital based foundations and related charities funding research
- f. Identify and pursue other nontraditional approaches (e.g., revenue from external courses; accepting international immunology students with scholarship funding)

- **5.** To manage Department core processes efficiently
- a. Seek a new space for the Department that supports a more collaborative and efficient working environment
- **b.** Ensure compliance with FoM and funder policies
- c. Align administration structure and upgrade infrastructure, including administration systems, databases, etc
- d. Access UofT and FoM administration support resources to avoid duplication
- e. Foster a positive work environment by, for example, identify staff development needs and implement a development plan; recognizing performance by nominating staff for administration awards

### **2014 PRIORITIES**

The Chair and Office Manager will:

- Initiate (with Appointments and Promotion Committee<sup>10</sup>) the recruitment process for a tenure stream faculty member
- 2. Develop a departmentwide communications plan in collaboration with OSCER
- 3. Host a homecoming or open house event for alumni
- 4. Introduce alumni as teachers for new courses designed to create broader job readiness among graduates
- 5. Develop and start to implement advancement strategy and materials in concert with the Office of Advancement
- **6.** Restructure the administration group in alignment with the strategic direction
- Document all operating processes and procedures

<sup>&</sup>lt;sup>10</sup> See membership listing in Appendix

# IMPLEMENTING THE PLAN

### **ROLES AND RESPONSIBILITIES**

- Executive Committee<sup>11</sup> provides oversight to the overall implementation of the plan, monitoring progress against targets and course correction as necessary on a monthly or bi-monthly basis. The Executive Committee may issue an internal report card every quarter and will also identify the implementation priorities each year
- Chair leads implementation of the plan; informally and formally provides support and monitors progress on a regular basis; performs (or arranges to have it performed) any required modeling of financial implications of proposed changes and tracks funding against priorities; determines deployment of resources. Reports back to faculty on a regular basis with respect to progress against plan
- Accountable Leads accountable for achieving the targets and deliverables. Executive Committee identifies Leads for each of the strategic priorities or implementation priorities on an annual basis. That individual develops a more detailed work plan that is tabled with the Executive Committee, outlining key deliverables, timelines and any resource requests. Reports progress against plan to Executive Committee on a regular basis
- Faculty and Staff utilize concepts and directions set out in this plan to prioritize work.

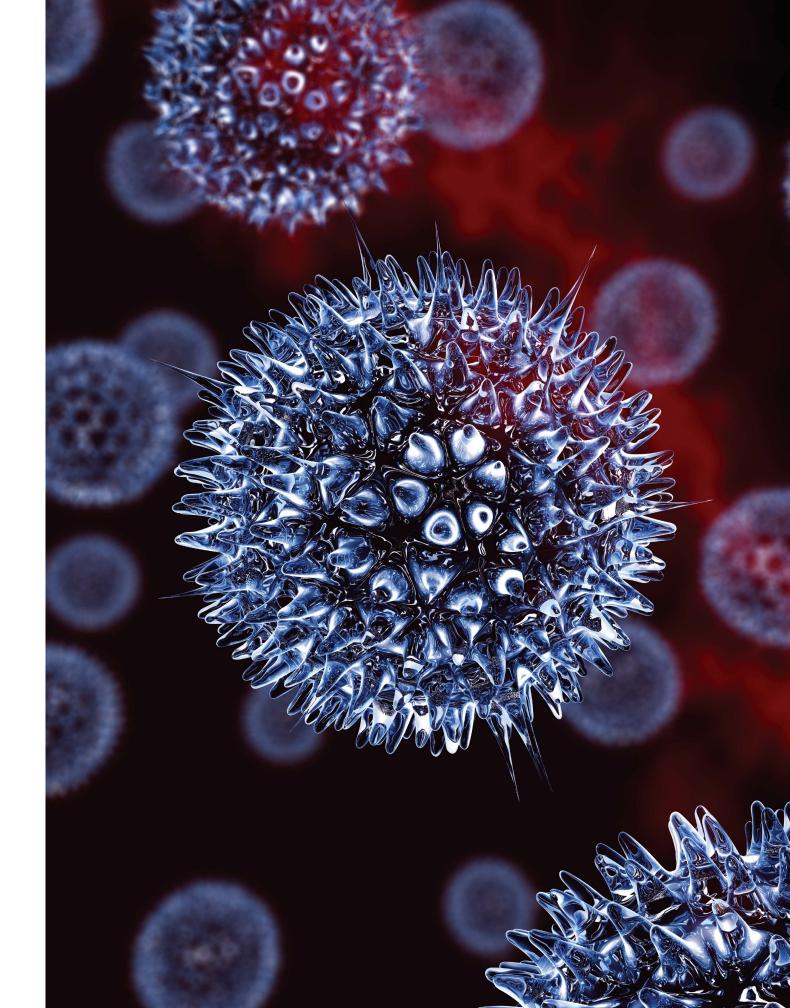
### **IMPLEMENTATION AND MONITORING PROCESS**

The implementation of the plan will commence on January 1, 2014. From a project management standpoint, accountable 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 take place at each regularly scheduled Executive meeting, with three major annual milestones:

- Each year following the initiation of the implementation, on or about the beginning of December, the Executive Committee will issue a retrospective report to the Department, outlining achievements, performance against key metrics, and identifying the priorities for the upcoming year
- 2. In April, the Chair and the Executive Committee will issue a progress update to the Department.
- 3. In September, the Executive Committee will hold a longer meeting at which it reviews progress to-date, resource deployment, underpinning assumptions and the emergence of other internal or external factors. A proposed set of priorities for the upcoming year are developed and accountable leads identified. These individuals are asked to develop work plans and resource requests, which then inform the decisions of the Executive Committee at its November meeting.

This annual review is particularly important given the revolution that is occurring in biological science and the general pace of change in the area of immunology. Should the assumptions underpinning the strategy no longer hold, consideration should be given to initiating a new strategic conversation about Departmental focus and priorities.



# **APPENDIX**

### STEERING COMMITTEE MEMBERSHIP

Individual	Role
JC Zúñiga-Pflücker	Chair
Lucy Chau	Member
Eleanor Fish, UHN	Member
Jennifer Gommerman, MSB	Member
Eric Gracey, UHN/TWH	Member
Michael Julius, SRI	Member
Kelly MacDonald, Mt Sinai	Member
Thierry Mallevaey, MSB	Member
Alberto Martin, MSB	Member
Pam Ohashi, CFIBCR/UHN	Member
Tania Watts, MSB	Member
Joan Wither, UHN	Member
Sherry Kuhn (Department Business Officer)	Ex-Officio Member
Meera Rai (OSCER)	Ex-Officio Member
Raissa Espiritu (Advancement)	Ex-Officio Member
Jane Cooke-Lauder, Bataleur Enterprises	Consultant

### STEERING COMMITTEE WORK PLAN

Phase One: Getting Started - May, 2013

Date	Proposed Activities	Accountable	Deliverables
May 23, 2013	Meet with Chair to finalize work plan	JCL/JCZP/SK	1. Final detailed Work Plan for
Wks of May 27 and June 3	Identify and review relevant background documentation	JCL/JCZP	circulation, including meeting dates, due within two weeks
Wks of May 27 and June 3	Finalize SPSC kick-off meeting and Retreat dates	JCZP	of signing the contract  2. Project Charter including
Wk of June 3	Develop communication plan <sup>12</sup> to keep Department and relevant stakeholders informed during the process	JCL	Communication Plan

### Phase Two: Identifying Strategic Issues –June-August, 2013

Proposed Activities	Accountable	Deliverables
Conduct interviews with each member of the Steering Committee		Semi-structured guide for SPSC interviews
Meet with Chair to develop materials and agenda for first SPSC meeting	JCL	2. Agendas and pre-meeting
SPSC Kick Off Meeting (4 hours)	JCZP/JCL	materials for SPSC meeting
Data gathering and engagement process  — Between meeting and retreat: identified sub-groups of the SPSC engage with Department and stakeholders, gather input and additional data via interviews and focus groups, synthesize, analyze and document	JCZP/JCL	<ol> <li>Meeting notes and action items within 10 days of SPSC meeting</li> <li>Templates/tools to support the work of the sub-groups prior to the retreat</li> <li>Summary of stakeholder input</li> </ol>
<ul> <li>Consultant conducts interviews with key stakeholders (six in total) to provide an outside perspective<sup>13</sup></li> </ul>		<ul><li>6. Possible benchmarking results</li><li>7. Sub-group propositions</li></ul>
Chair executes communication plan: Town Hall; release of Communique 1	JCZP	Orank kaskasanana
	the Steering Committee  Meet with Chair to develop materials and agenda for first SPSC meeting  SPSC Kick Off Meeting (4 hours)  Data gathering and engagement process  — Between meeting and retreat: identified sub-groups of the SPSC engage with Department and stakeholders, gather input and additional data via interviews and focus groups, synthesize, analyze and document  — Consultant conducts interviews with key stakeholders (six in total) to provide an outside perspective <sup>13</sup> Chair executes communication plan:	Conduct interviews with each member of the Steering Committee  Meet with Chair to develop materials and agenda for first SPSC meeting  SPSC Kick Off Meeting (4 hours)  Data gathering and engagement process  — Between meeting and retreat: identified sub-groups of the SPSC engage with Department and stakeholders, gather input and additional data via interviews and focus groups, synthesize, analyze and document  — Consultant conducts interviews with key stakeholders (six in total) to provide an outside perspective <sup>13</sup> Chair executes communication plan:  JCL  JCL  JCL  JCZP/JCL  JCZP/JCL

<sup>12</sup> To support inclusion and to make the process transparent, Steering Committee also provided guidance into the development of a communication and engagement strategy. Examples of some of the communication vehicles used included: brief written updates circulated to faculty following each of the meetings of the Steering Committee; town hall meetings conducted by the chair; and the establishment of a unique and confidential mailbox, the content of which was automatically forwarded to the outside consultant. All inputs received over the course of the development of the strategy have been shared with and taken into consideration by Steering Committee

<sup>13</sup> Paul Allen, Graduate Program Director, Dept of Pathology and Immunology, Washington University; Brian Barber, VP Technology Development and Commercialization, UHN; Michael Krangel: Chair, Dept of Immunology, Duke University; Michelle Letarte, Senior Scientist, HSC, Toronto; Chris Paige, VP Research, UHN, Toronto; Calvin Stiller, Chair of the Board, Ontario Institute for Cancer Research (OICR)

#### Phase Three: Confirming Issues and Generating Hypotheses – August/September, 2013

Date	Proposed Activities	Accountable	Deliverables
August	<ul> <li>Synthesize materials and prepare agenda for second meeting of SPSC</li> <li>Meet with Chair to review materials and agenda for SPSC retreat</li> </ul>	JCL	Agenda and design for the retreat meetings, together with proposed pre-reading
August 14/ September 18	SPSC Retreat - two half days:	JCZP/JCL	2. Meeting notes and action items
	Chair continues to execute communication plan - release of Communiques 2 and 3	JCZP	3. Input from Department members

### Phase Four: Testing Hypotheses and Developing Action Agenda – September-October, 2013

Date	Proposed Activities	Accountable	Deliverables
September	Meet with Chair to confirm key messages from the Retreat	JCL	
October	Develop first draft of strategy and proposed action agenda	JCL/JCZP	1. Draft strategic plan
October/ November	SPSC requested via email to provide input into the draft strategy	JCZP	
November 4	Share proposed strategic plan at faculty meeting to get feedback and develop ownership of the plan	JCZP	<ol> <li>Second iteration of strategic plan</li> <li>Agenda and support materials for faculty meeting</li> </ol>

### Phase Five: Finalizing the Strategic Plan- November-December, 2013

Date	Proposed Activities	Accountable	Deliverables
December	Finalize the strategic plan document incorporating inputs from Department members and Dean, FoM	JCL/JCZP	Final Strategic Plan (including monitoring and oversight process)
December/ January	Develop implementation approach	JCL	2. Implementation advice to Chair for the months of December and January
January	Develop reporting templates and monitoring and review process	JCL	
January	Circulate strategic documentation within Department and initiate deployment into all work plans and performance management processes	JCZP	3. "The end of the beginning"

### **SETTING THE CONTEXT**

Important external environment factors needing to be taken into account in developing the strategic plan were identified as follows:

- 1. Changing Academic Environment
- a. Expectations of alignment with UofT's FoM Strategic Plan that focuses on Innovation, Impact and Integration. Other key areas include: human development; global health; neurosciences & brain health; complex disorders; system management
- b. Engagement is occurring of broader academic enterprise across TAHSN and community affiliates: commonalities identified across all TAHSN strategic plans with that of the FoM: health; research; medicine; innovation; strategic
- c. Expectations of alignment with FoM and UofT Research Strategy: plans: train and mentor; research excellence; knowledge into action; global partnering; integration; strategic investment
- d. Strategic infrastructure platforms identified off which to build: health informatics; population health/epidemiology; functional imaging; cell & systems biology; omics (genomics/proteomics/ metabolomics); knowledge exchange/translation
- e. Addition of Mississauga Academy
- f. Educational programs seeing growth in numbers

- g. Traditionally academic institutions have done very little with respect to human resource planning. The system of tenure creates some challenges in terms of identifying opportunities for younger faculty and for succession planning. Increasingly, the need for some form of guiding principles is being identified to handle these situations
- 2. Changing Education Environment
- a. Increasingly diverse Canadian population
- b. Innovative approaches being introduced: impact of Future of Medical Education in Canada (FMEC) and other frameworks and studies
- c. More robust assessment and evaluation strategies, competency based curricula and nontraditional experiential methods. Increased use of simulation, etc
- d. Changing expectations of learners: expanded use of technology: what learners look for in education and how they see their role. Changing professional expectations of students and the changing job market suggest that students should be exposed to different experiences during their academic careers – exposures that may be outside of the expertise of current faculty. Generational differences in evidence in the workplace

- 3. Changing Research Environment
- a. Funding: shift in government funding to translational and applied research; and to cure research. Major changes in the granting approach by CIHR and NSERC. Increasingly limited availability of operational grants; growth in team, multi-centre and interdisciplinary grants.
- b. Some evidence of foreign governments desire to build local capacity by paying to expose their scientists to top research abroad
- c. New initiatives introduced in Ontario, such as those of the Ministry of Research and Innovation, to position the province as a place to collaborate with a highly educated work force in a productive research environment
- d. Lack of stable and sustainable career support mechanisms for established and developing scientists; clinician scientists and clinician investigators
- e. R&D and commercialization in Canada: strategic shift among many major pharmaceutical companies from doing R&D inhouse to forming partnerships with academic institutions/researchers.
- f. Increasing challenge of finding early financing to commercialize innovations: large corporations are only willing to buy technology companies once there is evidence of a proven revenue stream

### **APPENDIX**

- 4. Changing Healthcare Context
- a. Concerns about the ongoing funding of health care and the ability of the province to sustain a high quality, cost-effective health care system
- **b.** Focus on accountability and performance measurement
- c. Requirement for quality improvement: Excellent Care for All (ECFA) Act
- d. Increasing attention being paid to chronic disease prevention and management and measurement-based care

- e. Enhanced scopes of practice for some regulated health professionals (e.g. pharmacist, nurse practitioner, physician assistant)
- f. Emergence of personalized medicine
- g. Potential enabled by electronic health records for greater connectivity
- h. Emphasis on interprofessionalism, efficiency and value, integration and patient centredness

- Changing Global and International Context
- i. In an increasingly interconnected world, expanded expectations from UofT and FoM to advance an international agenda with research and educational linkages as a means to fulfill social responsibility.

# SUMMARY OF YEAR ONE PRIORITIES AND ACCOUNTABILITIES

Co	llaboration	
1.	Hire a Research Projects Officer	Chair
2.	Explore establishing a strategic partnership with Sao Paulo University, including the hosting of a symposium	Chair
3.	Develop a partnership strategy based on a gap analysis/partnership inventory assessment	Chair
4.	Continue to build relationships with the Research Institutes	Chair
Ur	dergraduate Education	
5.	Engage with Trinity College to extend the number of research opportunities available to undergraduates	Undergraduate Associate Chair and Committee
6.	Support the development of additional short films/ videos starting with mucosal-immunology	Undergraduate Associate Chair and Committee
7.	Continue to support OQUIC (Ontario-Quebec Undergraduate Immunology Conference)	Undergraduate Associate Chair and Committee
8.	Support the creation of in-course achievement awards	Undergraduate Associate Chair and Committee
9.	Expand the interactions between undergraduates, current graduates and Department alumni at the annual department retreat	Undergraduate Associate Chair and Committee

DEPARTMENT OF IMMUNOLOGY Strategic Plan 2014-2018

RATEGIC PLAN 2014-2018

Graduate Education	
10. Formulate and publicize clear requirements for graduation for both students and faculty	Graduate Associate Chair and Committee
Create performance evaluation tools to be integrated into the reclassification exam in the form of a detailed rubric	Graduate Associate Chair and Committee
12. Explore options for the introduction of a new 2- Year Masters program	Graduate Associate Chair and Committee
Create a comprehensive listing for graduates and PDFs of existing career support course offerings	Graduate Associate Chair and Committee
14. Implement a graduate professional development course	Graduate Associate Chair and Committee
15. Explore concerns of PDFs and develop an action plan	Graduate Associate Chair and Committee
Research, Knowledge Translation and Commercialization	
16. Identify at least one research theme and begun mobilizing around it	Chair, working with faculty
a. Develop and execute a process to define research themes/potential focus areas	
<ul> <li>b. Hold the first annual faculty retreat to share new discoveries and thinking and identify possible research themes</li> </ul>	
c. Recruit a Scientific Advisory Board and hold at least one meeting	
17. Design and implement a process to acquire a bank of healthy human tissues and specimen	Chair, working with faculty
18. Publish the first annual knowledge translation progress report, revamp the website and profile all of UofT faculty.	Chair, working with faculty
Enabling Strategies	
19. Initiate recruitment process for tenure stream faculty member	Advancement and Promotions Committee
20. Develop a department-wide communications plan in collaboration with OSCER	Chair and Officer Manager
21. Host a homecoming or open house event for alumni	Chair and Officer Manager
22. Introduce alumni as teachers for new courses designed to create broader job readiness among graduates	Chair and Officer Manager
23. Develop and start to implement an advancement strategy and materials in concert with the Office of Advancement	Chair and Officer Manager
24. Restructure the administration group in alignment with the strategic direction	Chair and Officer Manager
25. Document all operating processes and procedures	Chair and Officer Manager

### **APPENDIX**

### **DEPARTMENT STANDING COMMITTEES**

### **EXECUTIVE COMMITTEE**

JC Zúñiga-Pflücker	Chair
Jennifer Gommerman, MSB	Associate Chair, Graduate Studies
Michael Julius, SRI	SRI VP Research
Chris Paige, UHN	UHN VP Research
Alberto Martin, MSB	Associate Chair, Undergraduate Studies

### **GRADUATE COMMITTEE**

Dr. Jennifer Gommerman, Associate Chair
Dr. Michele Anderson
Dr. Stuart Berger
Dr. Jayne Danska
Dr. Philippe Poussier
Dr. David Williams

### **UNDERGRADUATE COMMITTEE**

Dr. Alberto Martin, Associate Chair

IMM undergraduate course coordinators

### APPOINTMENTS AND PROMOTION COMMITTEE

Juan Carlos Zúñiga-Pflücker, Chair

Pamela Ohashi

Chris Paige

Michael Ratcliffe

Katherine Siminovitch

Tania Watts

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# IMMUNOLOGY



