



## DIVISION OF RESPIROLOGY STRATEGIC PLAN 2013-2017

### VISION

*International leadership and productive world class respiratory research and training programs.*

### INTRODUCTION

On September 24 and October 22, 2012 an invited group of 17 members of the Division of Respiriology, representing leadership from all sites and a balance between educators, researchers and academic ranks met to confirm the Division's vision and research agenda. These events provided a forum for meaningful discussion focused on building the research enterprise, strengthening the residency training program and increasing the profile of the Division overall. Strengths and weaknesses, the impact of new environmental influences and preparations for the April 2013 Accreditation site visit were also considered.

Informing discussion were status presentations from the Division Director and leaders of research, education and quality programs and two key planning documents - a comprehensive strategic plan resulting from a city-wide planning process led by Dr. Gregory Downey in 2005 and a document designating areas of research excellence and emerging opportunities identified in 2008 by the Research Advisory Committee under the leadership of Dr. Elizabeth Tullis. Both documents are available via the Division's website at <http://www.utoronto.ca/respirology/>

A Division-wide retreat was held on June 10, 2013 to confirm the appropriateness of the strategic goals developed from this process. Overall priorities were carefully reviewed and steps for implementation developed based upon short term goals to be achieved over the next 12-18 months. This document presents a reflection of the current status of the Division and specific long and short term goals designed to enable the achievement of our research agenda over the next five years and better position the Division overall in the areas of education, quality and faculty.

### DIVISION STATISTICS

The Division of Respiriology has a faculty compliment of 90 including 28 located in community affiliated hospitals. The great majority of faculty members appointed in the past five years have been clinician-teachers and clinician-investigators and the Division has healthy numbers of these actively engaged in the academic enterprise. One clinician-scientist has been recruited in this period.

A general decline in interest in the scientist and clinician-scientist career paths is a particular concern for the Division. The Residency Training Program has produced only four clinician-scientists over the past 15 years<sup>1</sup> and enrolment of Respiriology trainees in the **Clinician Scientist Training Program** has also declined. In 1993, the Division had the second highest enrolment in the program but is now in 9<sup>th</sup> position.

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<sup>1</sup> Two are engaged in respirology research and two have entered critical care.

In its marketing, the Residency Training Program specifically seeks highly motivated, dedicated, residents with a keen interest in respirology and advancing the field through research and education. Over the past 15 years, 64 residents have completed the program. Tracking information available on 53<sup>2</sup> shows most have remained in Ontario, that 43% entered community practice and 34% became academic clinician teachers/educators. Taken together, these data raise the concern that the Division of Respirology may not be fulfilling its vision as a world leader in research training and productivity.

## **ENVIRONMENTAL INFLUENCES**

Government has a new mandate to ensure excellent and efficient care for all Canadians and with it new, and not insignificant, funding opportunities have been introduced through various agencies (MOHLTC, PHAC, and the Canadian Thoracic Society etc). This mandate aligns with the priorities of the affiliated hospitals and may align with the Division's areas of opportunity and compliment areas of research excellence.

One of the major challenges in our healthcare system is caring for patients with complex chronic disease who frequently transition between multiple settings of care including the hospital, outpatient clinics, family doctors' offices, and community services. Successfully addressing this challenge requires system-wide solutions to understand and manage interplay between health care settings and care providers where critical information about patients often falls between the cracks. In the last year, the UofT Department of Medicine, in collaboration with the Department of Family & Community Medicine, created a major new program to address this problem. *BRIDGES*, funded by the Ontario Ministry of Health and Long-term Care, has provided a new funding opportunity (nine grants of \$200,000 to date) to enable the development and testing of new models of care which link hospitals, primary care clinics and community services to provide comprehensive care to patients with complex chronic disease. Ultimately, the goal is to take the most effective interventions, based on rigorous evaluation, and disseminate them throughout the province.

Seven years ago, there was little mention or consideration of quality improvement and patient safety within the Toronto Academic Health Sciences Network. Today, our teaching hospitals are deeply invested in this area and numerous funding opportunities exist. We have a University of Toronto Centre for Patient Safety. Formal training programs have been introduced for faculty and trainees and a new faculty job description has been created to recognize and align academic contributions to this new field with the UofT promotions process.

Significant investments in research and innovation are being made by the UofT Department of Medicine. *Department of Medicine Integrating Challenge Grants* of up to \$250,000 were introduced in fall 2012 to engage faculty members across institutions and departments and more fully integrate research within our academic enterprise. The unique facet of this funding initiative is the desire to facilitate the creation of multi-disciplinary teams where excellence and implementation are top priorities. The goals are to facilitate exciting new research discoveries and to see this new knowledge applied in order to make the strongest possible impact on health and health care. Proposals that include at least two other Departments in the Faculty of Medicine beyond the Department of Medicine, may be eligible for matching funds of up to \$250,000 from the Faculty of Medicine.

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<sup>2</sup> Eleven were foreign graduates and they have not provided information.

Introduced in 2009, the *Strategic Planning Innovation Fund* has successfully invested funding to seed city-wide innovative new models of care. These investments enable ideas to get off the ground and provide the opportunity to leverage funds from other sources such as the AFP Innovation Fund. Each of these initiatives inject new funding opportunities into the academic arena enriching the community overall and enabling growth in many areas albeit they may not be sustainable in the long term.

## **STRENGTHS AND WEAKNESSES**

The strengths of the Division are numerous and include large, diverse institutions with clinical expertise in many areas and a collegial atmosphere. We have excellent teachers, we attract outstanding residents and we offer a thriving and robust training program. Our faculty members are actively engaged in education scholarship and faculty development programs. Two have graduated from the *Clinician Educator Training Program*, several are engaged in research in education and 11 have graduated from the *Master Teacher Program*.

Weaknesses focus mainly around recruitment to support basic and clinical research (discussed below) and the impact of a declining profile of Respiriology within our affiliated hospital environments. Some of the Division's key challenges relate to our lack of alignment with stakeholder priorities. Respiriology is not a stated priority program of any of the affiliated hospital institutions, with the possible exception of St. Michael's Hospital, and some are known to be attempting to discard pulmonary medicine (with the exception of transplant) due to cost. Government too is distancing itself from many aspects of Respiriology for reasons of finance, albeit funding is flowing to some areas of chronic disease such as COPD. Ultimately, respiratory disease has become unpopular and, not unexpectedly, this is translating into difficulties getting salary and infrastructure support and maintaining an all important critical mass of researchers.

Although it isn't clear how this might be overcome, there has been some success in aligning areas of research excellence with hospital priority areas within other disciplines. For instance, Respiriology could become a strategic priority of Government by aligning with chronic disease where COPD is recognized as a major problem. Grants like the *DoM Integrating Challenge Grant Competition* offer tremendous opportunities for the Division to build cross-department/cross disciplinary team proposals possibly partnering with the Ministry of Health and the School of Public Health Sciences to do something exciting and meaningful in this and other areas.

## **I RESEARCH**

Basic and biomedical research in Respiriology is considered to be in serious decline warranting focused discussion. This is not the position expected of a Division with a glorious history of innovation and attests to a serious shortage of both PhD scientists and clinician-scientists and an urgent need for targeted recruitment strategies. The Division boasts a solid base of clinician-investigators who for the most part are actively engaged in clinical, physiological and health outcomes research but clearly articulated tangible goals are needed to successfully reposition the Division and build upon past biomedical achievements.

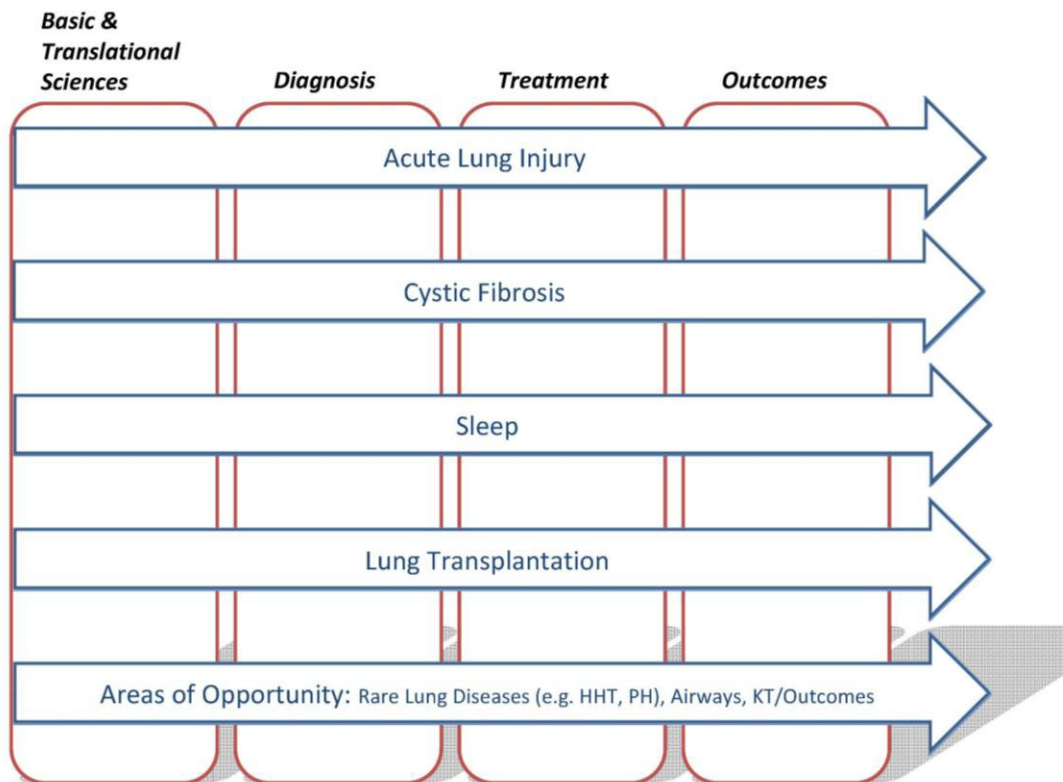
Growing and retaining a critical mass in our areas of research excellence is critical as is engaging a sufficient number of residents in research training (providing new funding opportunities may help to address the latter).

Ad hoc local recruitment practices are considered to have been particularly detrimental to building the Division’s biomedical research enterprise, as has the Division’s inability to recruit PhD scientists in the Department of Medicine. Mechanisms for the joint recruitment of PhD scientists with the Basic Sciences sector are being explored as are local strategies to enable the targeted collaborative city-wide recruitment of clinician scientists aligned with areas of research excellence. The declining clinician-scientist is a major challenge though not unique to the Division, the discipline or indeed the University of Toronto. It is an internationally recognized problem. However, as the largest Department of Medicine and Division of Respiriology in the country the resources exist to do something about it.

Historically, the Division has designated areas of **research excellence** based upon research programs that have a city-wide critical mass of researchers and met benchmarks of productivity and grants. Areas of research excellence include acute lung injury, cystic fibrosis, lung transplantation, and sleep. Areas of **opportunity** are based upon infrastructure or emerging research opportunities. The only financial implication of these designations is that of recruitment, which must also fit with the needs of the affiliated hospitals and as a consequence can vary between institutions.

Many methodologies, tools and approaches are brought to bear on our areas of research excellence and opportunity, and embraced within the broader context of the Division’s research enterprise (e.g., basic and, translational sciences, outcomes research, knowledge translation, epidemiology, managing chronic disease, rehabilitation etc.). The visualization of our complex research enterprise is important and we are indebted to Drs. John Granton and Richard Horner for providing us with Table 1 – a simple graphic that provides an effective and easily digested blueprint of our overall plan.

**Table 1. A BLUEPRINT OF THE DIVISION’S RESEARCH ENTERPRISE**



While all researchers can flourish within this model, the only way to achieve national and international prominence in our areas of excellence is to work together and for members to participate in Divisional activities and initiatives aimed at achieving these goals.

By growing a critical mass in our areas of research excellence the Division's reputation will grow and resources will flow not only from peer reviewed granting agencies but also from donors. The rising tide of resource allocation for the Division, even if targeted to areas of research excellence and opportunity, will lift all boats and create opportunities in other areas. Once a critical mass has been achieved in our areas of research excellence – hopefully within the next five years – our plan will be re-evaluated.

## Discussion

- **Promote research metrics to effectively profile the Division**
  - *Grants, publications and research awards*
- **Recognize and encourage champions within each research theme to build these areas incorporating training and education**
- **Encourage thinking across Divisions, Departments and Institutions to enable a team structured approach to develop large group grant proposals**
  - *Identify champions that can be supported to step up and provide leadership of group grants.*
  - *Explore the TRI model where small budgets and some infrastructure support has been provided; all applications are internally reviewed and improved before submission; Investigators are invited to present their projects to the entire group once/month and receive direct feedback as to whether the ideas are good or not or how they might be expanded/improved; other key people are identified who might be included to strengthen applications. The Division is positioned to provide something similar with the support of the DoM and also the opportunity presented by the Integrated Challenge Fund.*
  - *Adopt a team structure but maintain sufficient flexibility to react to a changing landscape.*
  - *Introduce an annual competition to seed fund city-wide research projects and leverage external funds.*
- **Engage residents and junior faculty in the research enterprise**
  - *Meet 1:1 with residents and faculty to facilitate an “experience of research” aligned with research interests that would inform residents about opportunities that exist and ensure appropriate mentorship.*
- **Implement a mandatory research rotation of 2-3 months within the first two years of training to enable an “experience” of research**
  - *The UofT Divisions of Gastroenterology and Endocrinology have each implemented mandatory research rotations for all residents with some success. Although models differ in each Division both have resulted in a small number of residents going on to do full time research for at least a year afterwards. Both models comprise a research advisory committee that meets with residents and functions as advisors. The Division provides small amounts of seed money; expertise help to define research questions, write-up project proposals and prepare applications for ethics review boards; and opportunities to present projects at a dedicated resident research event. Given the number of mandatory rotations in the Respiriology training program, blocked time might work better than a longitudinal approach but details will need to be fully flushed out with the residency program committee. Careful planning from the start of the rotation and good research mentoring will be key elements for success.*
- **Explore funding for Y3 Research Fellowships**
  - *Explore the possibility of restructuring the residency training program to reflect elements of the Australian model where there is an expectation of academic activity. In this model 2-3 months of research in Y2 are skills based. Trainees are aligned with a mentor, they select a methodology, develop a protocol and put it in place. They then write it up and present the protocol to the group and try to get funding to support it. The third year is then spent doing the work that ultimately may be rolled into a masters or PhD program. The effort is supported because it prepares trainees to submit grant applications for fellowship funding which is critical.*

- *The continuing of a third year of Respiriology training is unanimously supported but a sustainable funding model, although important, has not been developed. Fundraising opportunities and options to alternate half-day ambulatory clinics with research activity to increase longitudinal research exposure will be explored.*
- **Reach out to undergraduate students to generate interest in Respiriology research**
  - *Increase investigator presence in the CREMS catalogue.*
- **Expose residents to ongoing research in the Division**
  - *Introduce an annual research fair or “meet the investigator evening” where faculty present short “snapper” overviews of their research so that incoming trainees can quickly get a sense of the breadth of research in the Division and who is doing it.*
- **Implement targeted joint recruitment strategies for clinician scientists**
  - *The Division lacks a critical mass in any one area and with very few or no fellows coming up through the ranks with the credentials to become successful clinician scientists it is necessary to look outside to recruit people. New blood would also enrich the Division.*
  - *There are areas where we need to build and it may be necessary to go out and aggressively approach the best people.*
  - *It is recommended that formal - open and external - joint search processes be run for all clinician scientist positions. Joint search processes ensure commitment and buy-in from all relevant stakeholders, they increase transparency, and they ensure alignment with hospital clinical priority areas and hospital research institutes. They also enable a coordinated start up for new recruits including mentorship, space and infrastructure support.*
- **Create a repository of funding opportunities for research training**
  - *Explore new funding opportunities and set priorities. Self-funding options are not favoured because people get torn and distracted by finances. It would be preferable to create two funded positions/year aligned with research priorities – this might be a Divisional commitment to the resident. Systematic fund raising efforts may be required to fulfill this objective.*
  - *Explore the development of financial packages with other groups or partners. For example, critical care or other potential and as yet unrealized partners who might share research interests and be willing to help foster a complex skill set in an individual.*
- **Increase community engagement & research collaboration**
  - *The Division houses a relatively large cohort of community-based faculty with adjunct and part-time academic appointments. Their long term contributions have focused mainly on teaching Family Medicine and sub-specialty residents but they have expressed a keen desire to engage in clinical research. A unique opportunity therefore exists to reach out to our community-based colleagues across Toronto and create a clinical research network, greatly expanding patient populations and bringing together all interested parties, particularly those with a stake in clinical research in respirology. A virtual forum where faculty can discuss concepts and bring trials forward may serve to collectively move our unified Division forward.*

### Long Term Goals for Research

1. Profile and promote the Respiriology research enterprise
2. Establish a targeted city-wide joint recruitment strategy into areas of excellence (lung transplantation, sleep/control of breathing, acute lung injury and cystic fibrosis) to achieve critical mass
3. Enable a city-wide team structured approach for the development of large group grant proposals; engaging champions in each research theme and effectively building them to incorporate research training.
4. Engage residents and junior faculty in the research enterprise and increase their exposure to ongoing research in the Division

5. Explore funding for Y3 Research Fellowships
6. Increase community engagement & research collaboration
7. Reach out to undergraduate students to generate interest in Respiriology research

## II EDUCATION

The *UofT Respiriology Training Program* trains close to a quarter of all Respiriology trainees in Canada, accepting between five and seven people into the program each year. This robust program meets Royal College of Physicians and Surgeons of Canada (RCPSC) requirements, providing a mandatory 14 months of clinical adult respiriology (which includes five months of ambulatory rotations); two months sleep; two months ICU and six months of self-selected elective experience.

Trainees rotate through programs at the University Health Network/Mount Sinai Hospital, St Michael's Hospital, and Sunnybrook Health Sciences Centre. Community rotations are provided by Credit Valley Hospital, Toronto East General Hospital and Etobicoke General Hospital. The Trillium Health Centre is a potential future site. Training in pulmonary rehabilitation is provided by West Park Healthcare Centre. PGY5 residents participate in a very successful one half day/week longitudinal clinic where they benefit from having the same supervisor throughout the year.

Tracking of self-selected elective opportunities revealed that residents chose at most two months of community rotations and two months of research. Trainees have often elected to do at least one month of pulmonary hypertension and ILD and one month of radiology. Interventional electives have been sought elsewhere and Ottawa has been particularly popular for EBUS.

A new requirement of the RCPSC to include formal training in quality improvement (QI) in the core content of all subspecialty training programs, posed a significant challenge for the Department of Medicine as insufficient capacity existed at the time to teach these new skills. The directive effectively expanded medical education from teaching residents to treat patients to preparing them to address system inefficiencies in their daily work. A novel and practical solution designed for the Department of Medicine by Dr Brian Wong - the '*Co-Learning*' Curriculum –is helping the Division to meet this mandate and simultaneously build a cadre of faculty members with skills and knowledge to teach QI. This exciting new curriculum is truly a co-learning experience with senior trainees (PGY5) and faculty members attending formal teaching sessions together and working together in teams to provide solutions to system-based medical and related problems.

### ***Accreditation Visit April 2013***

Of fundamental importance to the Division, the Department and the Faculty of Medicine is the full accreditation of our education program. The RCPSC *Accreditation Survey* provides an opportunity for the Division to demonstrate how we are fulfilling the mandate. A key focus of the *Survey* is the effective integration of CanMEDS in our teaching. As we prepared for the 2013 accreditation visit, faculty members were reminded of the importance of clearly articulating the goals and objectives of lectures and taking every opportunity to teach non-expert and advocate roles.

Although the Division's primary method of evaluation has been in-training evaluation reports (ITERs) a centralized practice oral examination was added in 2012. Resident portfolios were also introduced in 2012 specifically to address a weakness identified in the 2011 internal review that indicated we could do better in evaluating how residents were learning medical expert and non-scholarly CanMEDS roles.

A CanMEDS annual retreat was recently held by the Respiriology Program in Kingston designed to collectively teach residents some of the non-medical expert CanMEDS roles. A strategic priority of the residency program committee over the next two years will be developing a curriculum map to ensure CanMEDS roles are adequately covered in the goals and objectives and that ITERS are rotation specific. This work will enable the Division to identify where and how things are taught in the residency program and where and how they are evaluated. It will be key to making sure the goals and objectives are linked to the evaluation methods and that everything is covered in a way that is digestible and identifiable.

In terms of weaknesses, the 2007 Accreditation site visit highlighted inadequate experience in chest tube insertion. Although this has improved somewhat by a move to St. Joseph's Health Centre more work is needed. Enhancing procedural teaching in respiriology is a strategic priority of the residency program committee. Specific goals include clarifying the goals and objectives for community rotations. There is a need to maximize our use of academic sites as there is a perception that the procedural clinics are underutilized and also look for opportunities for resident exposure to procedures in the community as well, recognizing there may be some aspects of community rotations that might be more conducive to exposure to procedures; there being fewer learners around and consequently less competition.

### ***Strengths & Weaknesses of the Training Program***

Strengths of the program include a well organized core curriculum and a good breadth and depth of clinical experiences available in terms of general and sub-specialty experiences. We have a dedicated and effective teaching staff - our city-wide teacher evaluation scores are excellent - around 4.5-5.0 on average – and there is a comprehensive Training Program Committee dedicated to improving the program and providing very effective leadership.

In terms of challenges, the Division is committed to enhancing procedural training. Although EBUS and bronchoscopy are not part of the RCPSC training objectives at this point we can anticipate this happening, thus new opportunities in these fields at St. Michael's and Sunnybrook Hospitals are being explored. Improving the research output of our trainees is a particular challenge. Both the Program Director and the Division Director are investing time and energy nurturing and mentoring trainees to the importance of research and promoting the benefits of a research career. Effective role modeling is important to support these efforts. This goal does, to some extent, compete with other RCPSC mandated rotations, and presents an organizational and management challenge to the division.

Graduate exit interviews indicate most are happy with the education they have received but training has become long and debt ratios have increased, influencing many to seek clinical staff positions rather than pursue additional research training and academic careers.

Concern about the lack of opportunities for funding to do academic research may not stop people who really want to do it but the *perception* of dwindling resources is having an impact. Job security is a key concern. There are no assurances that there will be jobs for individuals who invest several years in research training in their preferred fields and locations. A lack of jobs in some fields is known to be driving some trainees to seek additional research training but ultimately their goal is to strengthen their chances of obtaining a clinical position, not necessarily to enhance their chances of obtaining an academic position with a significant research component.

The community is actively recruiting well-trained clinicians with clinical research exposure because they can drive innovation, and also provide an understanding of quality improvement that can lead to changes in medical management in the community.



These characteristics are very attractive to community recruiters and are often deciding factors on who gets hired, yet they do not have prominence in the training program.

### ***Educational Scholarship***

There is a commitment to embrace opportunities that exist to increase faculty engagement in educational scholarship. Program innovation and new initiatives are constantly ongoing but how can we capitalize on these efforts and make sure we are taking that extra step to turn them into scholarly endeavours through dissemination, evaluation or publication? Leadership in this endeavour will be provided through the residency program committee.

### ***Continuing Education***

The Division has an active program of continuing education but a bigger stage is needed to meaningfully profile and promote U of T programs. While the Division will continue to support successful events like the annual “Day in Respiriology” there is interest, and indeed an appetite, to explore something much bigger, better utilizing the significant powerhouse of expertise available at the University of Toronto. An example is the U of T’s annual international critical care meeting which has generated a high profile internationally and attracted first class trainees from around the world seeking excellent quality clinical and research fellowships.

The critical care annual meeting was started by a core group of interested faculty members who decided to host a high quality meeting and invite equally interested people to come. The objective has always been to provide a high quality program that people would be willing to pay for. It has morphed into an international event attracting more than 1,000 people/ year from across North America, Europe, China and Australia and is now recognized as one of the premier critical care meetings in the world. Revenues generated by this “not for profit” event (approximately \$120,000 /year *gross*) are used to support fellowships and research activities where no other budget exists. After the payment of costs and UT CEPD management fees there isn’t a huge amount of revenue remaining but events of this nature help to profile the Division and support recruitment efforts.

Of course, it isn’t necessary to physically bring people to Toronto for large events like this to be successful. Experts can be identified in selected areas and invited to participate via web-based “green screen” presentations offered within a framework of defined education goals and evaluation criteria. A well planned web-based conference - once secured with appropriate registration - can reach worldwide audiences. To some extent the Division is already embracing this model – e.g. Sleep Rounds are hooked up to 28 centres across Ontario are well attended and highly evaluated.

With little immediate investment, the opportunity exists to ***promote fellowship training programs in Respiriology internationally through a web-based repository*** of potential offerings. Specifically, a webpage comprising clearly articulated descriptions of training opportunities accompanied by direct contact information would greatly help potential trainees to navigate the system more effectively and encourage them to explore possibilities offered by the University of Toronto. A basic information page could be added to the Division’s current website at very little cost through existing IT resources provided by the Department of Medicine. A more sophisticated and interactive site would require the purchase of external servers and as such require a more significant investment by the Division.

International trainees often have their own funding and as such fellowship training could become a new revenue stream for the Division. Although there may be some associated infrastructure costs, it is expected that most training experiences could be managed within the current clinical structure.

The opportunity also exists to collaborate on inter-professional initiatives. For example, a CIHR city-wide research and training program (sleep and biological rhythms) run by Richard Horner is set to launch a big web-based interactive inter-professional education event comprising approximately 26 lectures from every discipline that will be multi-departmental, multi-faculty and multi-institutional.

### Long Term Goals for Education

1. Enhance procedural teaching in Respiriology
2. Ensure CanMEDS roles are adequately covered by the residency training program
3. Profile and promote University of Toronto fellowship training programs
4. Establish an international presence in continuing education/professional development
5. Improve scholarly output from the Residency Training Program

## III QUALITY

A key goal of the DoM strategic plan is to develop a robust community in quality improvement and patient safety (QIPS). Key principles of the *Sub-Specialty QI Curriculum* implemented across the Department in 2012 include faculty and residents learning together and working together in teams on projects that are integrated and aligned with Divisional priorities for quality. New faculty development training programs have also been introduced through the Centre for Patient Safety and include:

- *Certificate in Patient Safety and Quality Improvement*
- *Veterans Affairs Quality Scholars Advanced Fellowship*. Led by Chaim Bell, Toronto is the seventh and only non-American site of the VAQS program
- *MSc in Health Policy, Management and Evaluation with a concentration in Quality Improvement and Patient Safety*. Introduced in Fall 2012, the structure of this program would align nicely with a third year funded training program. The issue would be funding – not only the tuition of the MSc but also the third year in Respiriology. The good news is that funding for quality improvement exists in various pockets at the moment and successful implementation may secure future growth.

Quality improvement projects in Respiriology have tended to focus on the development of new models of care for patients to reduce length of stay and re-hospitalization while increasing patient satisfaction and reviews of discharge summaries (reviewing them post-discharge and considering how things might have been done differently avoiding waste and re-admission). Other areas might include transitions from critical care to rehabilitation and from rehabilitation to home especially in diseases like COPD where people often don't do well. Themes might include functional disability; mental health problems, mood disorders; new models of transitions of care and meeting invisible needs of patients and their families that are important barriers to reintegration from the hospital back into the family and society. Transitions and chronic disease management are two easy areas in which Respiriology could get involved.

Although framing scholarly activity and related outputs in QIPS can be a challenge, important changes are being made to make it easier - the DOM recently introduced a new job description – the *Clinician in Quality and Innovation* – and the creative professional activity pathway for promotion has been seen to align well with this activity. Ultimately, QIPS is a new career pathway but one the Department of Medicine considers important.

Significant resources are being invested to overcome barriers and as a result increasing numbers of residents and junior faculty are starting to become interested and excited about the possibilities. QIPS isn't new but there is now a formal way to recognize contributions and a dedicated career path is emerging.

QIPS is an evolving area warranting engagement and serious discussion in the Division. A philosophical commitment will be articulated and attempts will be made to find new resources to facilitate meaningful engagement. Of course, QIPS will need to lobby for funding in the same way as everyone else but it may be an especially attractive area for donor support. Establishing an appropriately supported Division lead is a goal we aspire to achieve. Such leadership would certainly help to position us to successfully compete for hospital, government and provincial agency funding.

### Long Term Goals for Quality

1. Demonstrate a commitment to Quality Improvement and Patient Safety
2. Increase the number of Quality Improvement Scholars in the Division
3. Encourage education and research scholarship in QIPS amongst residents and faculty members

## **IV FACULTY**

Mentorship is critically important for faculty through all phases of their careers but especially so for new recruits subject to the 3-year review process. All Division Directors in the Department of Medicine are required to identify a formal mentor for all new faculty members. They need then to facilitate a conversation with the faculty member and the assigned mentor(s) to ensure alignment between the new recruit's clinical area and research interest is appropriate and that linkages are made with "best fit" research teams/groups across the city. This conversation must include the need for, and access to, content-specific mentorship such as the requirements for 3-year review. For example, a 3-year review mentor - who they can meet with an individual at fairly regular intervals to ensure they are on track during this critical time and receive really practical guidance about how to put their materials together - would be particularly helpful.

Over the next five years, the Division will invest in building a structured and nurturing environment that will help new faculty achieve individual grant success and an awareness of opportunities to engage in collaborative research - key metrics in the 3-year review process - and quality mentoring for all faculty members throughout each phase of their careers.

While, the Division Director is always going to be a key person in terms of trying to be the matchmaker by suggesting possible individuals to be mentors, it is recognized that a role exists for someone who would be a resource for mentors and potential mentors within the Division in terms of advising how to actually do that job. A strategic priority of this plan is to identify someone willing to develop this expertise and function in this way.

Mentors need to be aware of their responsibilities if they are to be effective. Over the past five years, the Department of Medicine has made significant investments in faculty mentorship and provides annual training workshops for mentors. Training is also offered at the FOM Centre for Faculty Development. Enrolment will be encouraged. Mentorship stories and shared experiences with peers outside of the Division are valuable.

Sharing these stories through the Division newsletter will be both interesting and helpful, especially to junior members of the Division, in terms of understanding how senior Division members were mentored in their own careers.

Finally, increased opportunities to bring the Division together around common events would be extremely helpful for both new and established faculty enriching a nurturing environment and stimulating the building of teams and new collaborations. Respiriology Research and Grand Rounds offer an excellent forum for this activity and although attendance had dipped, due to competing priorities, they have recently been successfully reinvigorated. A consistent timeframe (Friday morning) has been established for Respiriology Research and Grand Rounds, and Sleep Medicine Rounds and specific strategies to continue to increase attendance at these rounds will continue to be explored. Incentives might include “evidence of good citizenship” and “evidence of professionalism” in support of the 3-year review and promotion processes. Specialty rounds are popular and also benefit from online connectivity in some instances.

### Long Term Goals for Faculty

1. Ensure new faculty members are appropriately mentored, that there is alignment between clinical and research interest and they are well connected across the Division
2. Structure the 3-year review mentorship process and in general the mentorship process in a more organized way
3. Stimulate interactions and new collaborations
4. Enhance collegiality and sense of belonging

### **LEADERSHIP AND IMPLEMENTATION**

Members of the Division Executive will function as the planning advisory board for the Director helping to overcome implementation barriers. Academic leads identified for each pillar of the plan will be invited to strike small working groups to help implement the goals and priorities. They will present progress reports at the quarterly meetings of the executive committee which will be recorded on a virtual table of goals and priorities posted on the Division’s website.

<b>STRATEGIC PILLAR</b>	<b>ACADEMIC LEADS</b>
Quality	<i>Kieran McIntyre</i>
Education	<i>Christopher Li</i>
Research	<i>Niall Ferguson</i>
Faculty	<i>Doug Bradley</i>

STRATEGIC PRIORITIES	LONG TERM GOALS	GOALS	SHORT TERM GOALS 12-18 MONTHS
<b>Build the Research Enterprise</b>	1. Profile and promote the research enterprise	1. Promote research metrics 2. Profile landmark research	<ul style="list-style-type: none"> <li>Establish a Research Advisory Committee in the Division with formal mandate and terms of reference</li> </ul>
	2. Establish a targeted city-wide joint recruitment strategy into areas of excellence (lung transplantation, sleep/control of breathing, acute lung injury and cystic fibrosis) to achieve critical mass	1. Implement a joint city wide recruitment strategy 2. Establish formal search processes for all basic and clinician scientist positions	<ul style="list-style-type: none"> <li>Include in the Division Executive terms of reference a clearly articulated need for planned, non-competitive, city-wide recruitment</li> <li>Develop annual city-wide recruitment projections</li> <li>Identify a mechanism to recruit non-MD PhD scientists into the Division</li> </ul>
	3. Enable a city-wide team structured approach for the development of large group grant proposals; engaging champions in each research theme and effectively building them to incorporate research training.	1. Provide seed funding to support group grant development 2. Implement an internal grant review framework	<ul style="list-style-type: none"> <li>Identify champions to lead the development of group grants</li> </ul>
	4. Engage residents and junior faculty in the research enterprise and increase their exposure to ongoing research in the Division	1. Create a web-based repository to promote funding opportunities that exist for research training 2. Develop a strategy to ensure effective mentorship and role modeling 3. Introduce an annual “meet the investigator” event where faculty present “snapper” overviews of their research	<ul style="list-style-type: none"> <li>Implement a mandatory research rotation within the first two years of training to provide an “experience” of research</li> <li>Feature faculty research publications and awards in the Division Newsletter</li> </ul>
	5. Explore funding opportunities with the Office of Advancement	1. Produce a prospectus for donor support	<ul style="list-style-type: none"> <li>Secure a Chair in Respiriology</li> <li>Raise Funding to support a Y3 Research Fellowship.</li> <li>Provide grant writing support for trainees to increase their rates of success when competing for fellowship funding</li> </ul>
	6. Increase community engagement & research collaboration	1. Create a virtual clinical research network	<ul style="list-style-type: none"> <li>Feature research/scholarship of community-based faculty in the Division newsletter</li> </ul>
	7. Reach out to undergraduate students to generate interest in Respiriology	1. Increase the number of Respiriology research electives in CREMS	<ul style="list-style-type: none"> <li>Explore opportunities for increased engagement with the Director of CREMS</li> </ul>

	research		
<b>Promote Respirology education through flexible training opportunities and increased scholarly output</b>	<b>1. Enhance procedural teaching in respirology</b>	1. Improve access to, and quality of, procedural skills training	<ul style="list-style-type: none"> <li>• Incorporate increased use of high fidelity simulations in procedural training</li> <li>• Provide faculty development around chest tube insertions</li> <li>• Clarify goals and objectives for procedural training</li> <li>• Maximize use of procedural clinics in academic teaching sites</li> <li>• Seek increased opportunities for procedural skills training in community sites</li> <li>• Identify a lead in procedural skills training</li> <li>• Identify content experts in each teaching site</li> </ul>
	<b>2. Ensure CanMEDS roles are adequately covered by the residency training program</b>	1. Develop a curriculum map	<ul style="list-style-type: none"> <li>• Develop a curriculum map</li> <li>• Make ITERS rotation specific</li> </ul>
	<b>3. Profile and promote University of Toronto fellowship training programs</b>	1. Create a web-based repository of educational experiences for international fellows describing training opportunities that exist	<ul style="list-style-type: none"> <li>• Create a web-based repository of training opportunities with direct links to key faculty contacts</li> </ul>
	<b>4. Establish an international presence in continuing education/professional development</b>	1. Develop annual international event(s) addressing an area(s) of unmet need where UofT can provide leadership 2. Explore opportunities to collaborate in multi-discipline and inter-professional initiatives 3. Produce/market web-based education offerings for multidisciplinary faculty, especially community-based practitioners and trainees, including hot topic APPs	<ul style="list-style-type: none"> <li>• Initiate an environmental scan of national/international CE/PD offerings in Respirology and identify opportunities that exist</li> </ul>
	<b>5. Improve scholarly output from the Residency Training Program</b>	1. Increase opportunities for faculty engagement in educational scholarship 2. Highlight the importance of educational research	<ul style="list-style-type: none"> <li>• Identify a lead in education scholarship</li> <li>• Profile the <i>Collaboration of Researchers, Educators, Scholars and Teachers</i> (CREST) in the Division newsletter to encourage faculty engagement</li> </ul>

<b>Increase scholarship in Quality Improvement &amp; Patient Safety</b>	<b>1. Demonstrate a commitment to Quality Improvement and Patient Safety</b>	1. Identify resources to support the development of QI across the Division	<ul style="list-style-type: none"> <li>• Produce a clearly articulated definition of quality in the Division</li> <li>• Identify a Division lead in QI</li> </ul>
	<b>2. Increase the number of Quality Improvement Scholars in the Division</b>	<ol style="list-style-type: none"> <li>1. Profile faculty and resident engagement in QI in the Division newsletter</li> <li>2. Promote training opportunities that exist</li> </ol>	<ul style="list-style-type: none"> <li>• Support the enrolment of faculty in QI training programs</li> </ul>
	<b>3. Encourage education and research scholarship in QIPS amongst residents and faculty members</b>	1. Develop a strategy to successfully imbed QI in activities, aligned with hospital priorities, across all sites of the Division	<ul style="list-style-type: none"> <li>• Publish highlights of faculty/resident co-learning curriculum projects in the Division newsletter</li> <li>• Implement a quality component to Research in Progress Rounds</li> </ul>
<b>Invest in mentorship and a structured and nurturing environment to ensure faculty success</b>	<b>1. Ensure new faculty members are appropriately mentored, that there is alignment between clinical and research interest and they are well connected across the Division</b>	1. Facilitate meetings between new faculty members, DDD, mentorship lead and mentor(s)	<ul style="list-style-type: none"> <li>• Establish a Division newsletter</li> <li>• Introduce all new faculty via the newsletter and profile their academic and clinical interests</li> </ul>
	<b>2. Structure the 3-year review mentorship process and in general the mentorship process in a more organized way</b>	<ol style="list-style-type: none"> <li>1. Promote the value of mentorship</li> <li>2. Establish an internal review panel to guide new faculty</li> <li>3. Enroll faculty in mentorship training workshops provided by the DoM and the Centre for Faculty Development</li> <li>4. Clearly articulate the requirements and processes for 3-year Review and Promotion</li> </ol>	<ul style="list-style-type: none"> <li>• Identify a content specific mentor for the 3-year review process</li> <li>• Provide samples of successful 3-year Review and Promotion dossiers</li> <li>• Promote the role and accountability of mentors</li> <li>• Enroll faculty in mentorship training workshops</li> <li>• Appoint a mentorship lead</li> <li>• Publish personal mentorship stories of senior faculty members</li> <li>• Introduce a Mentor of the Year Award</li> </ul>
	<b>3. Stimulate interactions and new collaborations</b>	1. Nurture internal and external partnerships and encourage participation in co-sponsored rounds	<ul style="list-style-type: none"> <li>• Promote attendance at Divisional and related rounds</li> <li>• Feature research and scholarly work in the Division newsletter</li> </ul>
	<b>4. Enhance collegiality and sense of belonging</b>	<ol style="list-style-type: none"> <li>1. Utilize video conferencing for rounds</li> <li>2. Bring people together around common themes</li> </ol>	<ul style="list-style-type: none"> <li>• Host annual social events to nurture relationships and stimulate effective team building</li> </ul>