

# DEPARTMENT OF PHYSIOLOGY AND PHARMACOLOGY

Schulich School of Medicine & Dentistry



## Academic Plan 2012 - 2016



### PREAMBLE

This document summarizes discussions and consultations held in the Department of Physiology and Pharmacology as part of a formal planning process for the years 2012-16. It builds upon the Academic Plan developed by our Department for the years 2006-10, and coincides with planning documents prepared by other units across the University. Our updated Department Academic Plan should be viewed in context with the Strategic Plan “Optimizing Life-long Health” developed by the Schulich School of Medicine & Dentistry for 2001-21, the current Plans of the Lawson and Robarts Research Institutes, and the Western Strategic Plan “Engaging the Future” that was updated in September 2010. Components of this Academic Plan will be used in the development of our annual budget planning documents that are submitted each autumn.

July 2012 marks the 10-year anniversary of the creation of the Department of Physiology and Pharmacology. Over that time, we have seen increased recruitment of faculty members, staff and students and remarkable growth and diversification of our research and educational missions. We have drawn on the strengths of our former Departments, and evolved our academic programs and administrative functions into consistent operations. In identifying new strategic directions for our Department, the influences of changing environments at and beyond Western are considered. During the interval covered by this Plan, we will see considerable change in the funding models for research and education, the way we deliver our teaching programs and educational technology, the size and needs of our student population, and the cohort of faculty members. These changes present challenges and provide exciting opportunities for growth and renewal. It is imperative that we set out a framework for the next few years so we can respond to opportunities in a creative and proactive manner, and approach challenges in a thoughtful, consistent, fair and informed way.

The Department of Physiology and Pharmacology has many attributes that distinguish us from other academic units. These have allowed us to compete effectively for resource allocation and in the recruitment of both faculty and trainees. We have a history of leadership in teaching, research and administration, and promoting this leadership role is a focus as we move forward. A distinctive strength of our Department is our comprehensive focus on biological processes from the cellular-molecular to the integrative-systems level and on the effects of agents on these processes. This places our Department in an ideal position to spearhead advances at Western in *Functional & Integrative Biology & Medicine*. This can involve all Department members, fits well with strategic goals of Schulich and can lead to opportunities to build our capacity and reputation in translational research. Strength in this area and in preclinical models is instrumental in attracting and interacting with clinician scientists, a stated priority for Schulich. This is consistent with the changing research funding environment, utilizes and contributes to several research platforms locally [bioinformatics, proteomics, genomics and imaging], and offers an attractive training environment to facilitate increased graduate student recruitment in line with the mission of Western. Other examples of our unique foothold as a Department, and our positioning within the Western academic community, will be identified and developed during implementation of this Academic Plan.

## **MISSION**

The Mission of the Department of Physiology and Pharmacology is to carry out world-class scientific research and evidence-based teaching, expanding on our track record of innovation and excellence in both research and teaching.

## **VISION**

The Vision of the Department is to be a top-ranked research-intensive academic Department in the disciplines of Physiology and Pharmacology in Canada, and beyond.

## **VALUES**

### ***We support -***

- the highest standards of scientific research and teaching.
- leadership in innovation in research and teaching.
- free and extensive exchange of ideas through collaboration and collegiality.
- maximizing the impact of our research and teaching through communication.
- participation in a culture of collective responsibility for the quality and conduct of our graduate and undergraduate training programs.
- fostering and contributing to an *esprit de corps* that respects individual differences and needs.
- effective mentoring and ongoing career development for all Department members throughout their careers.
- principles of openness, collective management and ethical behaviour.

## ***STATUS of the DEPARTMENT***

### **Strengths:**

- 1) Our Department and members of our Department are well regarded in the Faculty and across the University, and respected for their leadership and innovation in teaching and research. Many faculty members are internationally-recognized for their research contributions, and several are award-winning educators.
- 2) We have a record of excellence and innovation in education, with award-winning teachers and students, and highly-rated courses and popular undergraduate and graduate programs.
- 3) There is a general collegiality and good-will amongst Department members, with an excellent system of mentoring and collaboration that is used as a model by the School, coupled with open communication and democratic decision-making process.
- 4) The size and diversity of our Department is an asset, with strong administrative and technical support teams. There is an enormous breadth and depth of expertise in research areas in our Department, and faculty members are well-connected through local, national and international research collaborations. There is also an increasing number of faculty members with expertise in Education Scholarship, providing a “critical mass” for interaction and collaboration.
- 5) Our Department has a strong cohort of young faculty members developing well-funded research programs and engaging in undergraduate and graduate student programs, and there is considerable potential for future recruitment.
- 6) We have recently had a major renovation to our teaching laboratory space which allows flexible space utilization and upgraded facilities.

### **Weaknesses:**

- 1) Sometimes individuals are unable to adapt to and embrace change. We are often reactive in responses to demands, rather than proactive and poised to take optimal advantage of opportunities.
- 2) Parts of our teaching programs have not been subjected to sufficient planning and scrutiny, leading to redundancy in course content. Insufficient effort has been given to assessing the future developments and changing trends in teaching in our disciplines. There is some reluctance to commit to teaching as an important part of our mandate as academics.
- 3) The size and geographical dispersion of our Department makes communication and interaction a challenge. This requires development and implementation of programs that promote communication, and an investment and commitment on the part of participants.
- 4) Cutbacks have seriously eroded our Department budget, and reduced our options for innovation and recruitment. At present, we have limited ability to offer administrative support to faculty, are unable to offer short-term research support, and lack resources for highly-competitive recruitment packages.

### **Responses to our Weaknesses:**

- 1) We work to anticipate upcoming opportunities and needs, and to develop action plans that will allow us to respond in a timely manner consistent with our goals.
- 2) We have performed an internal curriculum review of our 4<sup>th</sup> year courses with close attention to content overlap, gaps in topic areas, methods of student assessment, the manner in which we engage our students in critical thinking, and to developing new courses. Many new courses involve our newer faculty recruits. This process of curriculum

evaluation has also been applied to our graduate studies program and is resulting in an enriched educational experience for these trainees.

- 3) We have been slow to implement videoconferencing and other modes of communication to facilitate involvement of faculty and students in teaching, meetings and seminars, largely because of limited availability of these resources. Additional effort must be made to overcome this at the Department level to facilitate interaction across the city.
- 4) While our financial situation has improved relative to the recent past, we still cannot offer additional resource or administrative support to individual faculty members. We have improved our financial base by competing successfully for new positions to obtain base-budget for new staff and tenure-track faculty positions. We have been successful in winning considerable PASF and other funding to improve teaching labs, and succeeded in space renovations.

## ***SHORT- and MEDIUM-TERM GOALS and ACTIONS***

### **1) Human Resources**

#### ***Strategic Issue***

A significant proportion of the Department's faculty members have recently retired and more are scheduled to retire within the next few years. Many of these individuals carry substantial teaching and administrative loads in the Department and beyond. Assessment of recruitment needs and successful recruitment of outstanding individuals to shape our future research and teaching programs is a top priority.

#### ***Overview of Principles***

##### **Recruitment of faculty members:**

- As established at the Department Retreats in 2011 and 2012, the strategy will be to recruit faculty members in areas that enhance our existing expertise or develop emerging areas of strength, rather than simply replacing the lost expertise or filling teaching gaps.
- Recruitment will be based on the demonstrated excellence in research and teaching of the candidates, and the potential to enhance and provide future leadership in the Department's research and teaching programs. We will assemble competitive salary and start-up packages to facilitate these recruitments and allow us to attract the best candidates.
- Our current search strategy, identified at our Department Retreat in Dec 2010, is to select the best candidates rather than showing preference for individuals with expertise in defined disciplines. However, this should also be in line with Department needs and consistent with priorities set for enhancing the critical mass in areas of research strength, supporting the development of new / emerging strengths, and meeting the needs in teaching. Some areas identified for recruitment include: pharmacology, reproductive physiology, drug metabolism, receptor biology and cell signaling, cardiovascular-renal physiology, developmental biology, functional genomics-proteomics, pharmacogenomics, and systems biology. This should be approached in a manner that promotes diversity and facilitates collaborations.
- Opportunities to partner with clinical research programs and research institutes will be fostered to promote and facilitate translational research.
- Full-time educators will be recruited to help develop our teaching programs and to fill specific teaching needs. This will be a career-track, with the potential to advance in the academic ranks based on excellence, scholarly activity and leadership in education.

##### **Retention of faculty members:**

- From the financial perspective, with the exception of market adjustments to salary, retention is generally a Faculty- or even University-level issue. However, it is our Department's responsibility, as appropriate, to be a driving force in ensuring that a retention package is available to provide an attractive opportunity for the faculty member at Western.

##### **Recruitment of graduate students and postdoctoral fellows:**

- Increase the awareness of the opportunities in our Department and what we can offer to potential graduate students and postdoctoral fellows by promoting our research and training programs at conferences, and through open houses and out-reach opportunities.
- Facilitate the recruitment of postdoctoral fellows to laboratories in our Department, and encourage their involvement in the academic mission and activities of our Department.

##### **Administrative and technical staff:**

- Facilitate on-going training and networking by encouraging professional development and enrolment in the appropriate courses to increase skill development and keep abreast of changes in technology.

### ***Desired Outcomes***

The quality and commitment of the faculty members, staff and students are the life-blood of our Department and play a key role in determining its success. Recruitment of new members to our Department is critical to its evolution, with these opportunities for renewal potentially taking us in new directions.

### ***Action Plan***

#### **2012**

- √ establish the recruitment priorities for the Department through open discussion and analysis of changes, needs and opportunities
- continue a proactive approach to recruitment that allows us to take advantage of new opportunities as they arise. This should involve the development of written cases/proposals consistent with the established recruitment priorities that can be used when competitions for new faculty positions are announced within the university. Individuals or groups of faculty members are encouraged to assume the responsibility for the creation of one-to-two page proposals for each potential new recruitment initiative, and identify potential partners when appropriate. This can include interactions with clinical departments by increasing their awareness of our strengths and shared interests; for example, an initiative in Department of Medicine to enhance expertise in clinical pharmacology is an excellent opportunity for us to participate in joint recruitments that promote our research and teaching programs. Written proposals should also identify and highlight how the recruitment addresses and promotes priorities identified by Schulich and Western (e.g. enhancing graduate student enrollment, or partnering between basic science and/or clinical departments)
- faculty – recruit a CRC Tier II candidate in the area of developmental epigenetics in collaboration with the Department of Biology
- faculty – recruit a CRC Tier II candidate in the area of primate neuroscience in collaboration with the Department of Psychology
- √ faculty – recruit to a full-time limited-term contract teaching position
- faculty – recruit two faculty members to fill positions vacated by recent retirements [Cook, Kidder]
- initiate recruitment into positions arising from early retirements or departures [Hammond]
- √ staff – fill administrative position created by a maternity leave
- staff – review and re-assess job descriptions for the administrative and technical staff positions currently in the Department

#### **2013**

- faculty – initiate recruitment of two faculty members to fill positions vacated by retirements in 2012 and 2013 [Tepperman, Vilis]
- faculty - initiate recruitment into positions arising from early retirements or departures
- faculty – find opportunities to convert salary for full-time educator-scholar to base budget
- staff – review administrative support needs based on the increased enrolment in our undergraduate, graduate and postdoctoral training programs

#### **2014 - 2016**

- faculty – initiate recruitment of two faculty members to fill positions vacated by projected retirements in 2013 and 2014 [Narayanan, Lui]
- faculty - initiate recruitment into positions arising from early retirements or departures as they arise. This could include recruitment to the Leco and Tini positions that have been vacant since 2008 and 2011, respectively.

## 2) Research and Knowledge Creation

### ***Strategic Issue***

Our reputation as an academic Department, as research groups and as individuals is built in large part on our research accomplishments. Our Department will foster practices that facilitate research programs by providing an environment that allows individuals to achieve their goals in research, and succeed in competitions for research and infrastructure support. Recruitment of faculty members and graduate student and postdoctoral trainees is done in a manner that is consistent with promoting and strengthening research programs affiliated with our Department.

### ***Overview of Principles***

- promote a culture of research excellence, with appropriate rewards through the recognition and celebration of accomplishments. Nominate faculty members and trainees for awards that recognize their achievements.
- as much as possible, protect the time of faculty members for research to enable their programs. When possible, an alternative work assignment can be negotiated for a limited time when an individual's grant funding and research program are in jeopardy.
- situate individual's research laboratories in locations that facilitate interactions with other faculty members with shared research interests.
- support the development of shared research / equipment facilities for use by multiple lab groups. Develop a governance structure for the maintenance of these facilities, with clear reporting lines, user costs, user information and responsibilities.
- encourage participation in the range of new funding opportunities, and the formation of research collaborations.
- encourage faculty members to submit manuscripts to higher impact peer-review journals, and monitor the citations of publications as a metric for reporting productivity and impact.

### ***Desired Outcomes***

Promotion of a vibrant, interactive and collaborative research environment within and beyond our Department. This increases success in acquiring research resources and in recruitment, and supports individuals in their career and training goals.

### ***Action Plan***

#### **2012 [Focus on Individuals]**

- reassess current and emerging research strengths/groups involving Department members. Identify ways that our Department can promote these and facilitate interactions.
- √ begin the recruitment of world-class researchers into positions that will be vacated by retiring faculty members during the timeframe of this Academic Plan. Emphasis will be to bolster our existing strengths and to seed emerging areas of research.
- apply for new faculty recruitment programs
- √ develop partnerships with other Departments and research institutes that could facilitate joint recruitments related to areas of research needs
- Identify and promote emerging research teams in our Department (i.e. Stem Cell Group) by focusing new faculty recruitments, and developing strategies for consolidating research space, sharing resources and equipment
- establish a system to reward research accomplishments
- √ continue to promote submission of all grant proposals for internal peer-review in a timely manner, and participation of Department members as reviewers
- establish a database on research productivity, granting success etc. - in comparison to Schulich in general as well as to national data

- continue to facilitate greater integration with the south campus, for example video conferencing of seminars, committee meetings and collaborative research groups. Some Department meetings and seminars could be held off campus each year

### **2013 [Focus on Infrastructure]**

- plan infrastructure and group grant proposals and identify leaders to take advantage of opportunities as they arise
- implement a core facility database to facilitate equipment usage
- develop a plan for over-sight of Department equipment, and a program for its on-going maintenance and renewal
- with partners, continue to lobby towards more research support from the central administration. For example, related to animal care costs, indirect costs and graduate student support, research space and infrastructure programs. This could involve support sought from CFI, ADF or other sources
- establish a dedicated research group to help with the completion of Animal (AUS) and Ethics (Protocol) forms
- continue to facilitate greater integration with the south campus, for example video conferencing of seminars, committee meetings and collaborative research groups. Some Department meetings and seminars could be held off campus each year

### **2014 – 2016 [Expanding research boundaries]**

- encourage and support focused translational and cross-pillar (CIHR) research initiatives and the development of strategic links with clinical investigation units
- promote/expand interdisciplinary research programs (i.e. Musculoskeletal Health) by developing new research initiatives between Physiology and Pharmacology research groups and those in other Western departments to apply for group research funding
- encourage Department members to participate in the planning and submission of major grants (e.g. CFI, Teams, STIHRs) related to their research expertise and directed toward enhancing our research infrastructure and increasing collaborations
- communicate our Department research achievements to others and demonstrate that our actions may achieve societal benefit. Utilization of enhanced communication including the new social media resources is imperative for this initiative

## **3) Teaching Excellence and Innovation**

### ***Strategic Issue***

The cornerstone of our academic mission within the university is to offer a range of high-quality educational programs using a variety of delivery modalities at both the undergraduate and graduate levels. Our Department has earned a reputation of excellence in teaching and has several award-winning educators. Among our current challenges is the large increase in undergraduate enrollment that will be sustained for the foreseeable future, and the stated mission of the university to continue to increase graduate student numbers and programs. This occurs at a time when several senior members of our Department have recently retired or are approaching retirement, and when success rates for competitive grant funding from federal agencies are near an all-time low. In addition, based on the recent Three-Cubed proposal by the provincial government, there will likely be an emphasis to increase the number of on-line courses offered to students by universities.

### ***Overview of Principles***

- as established at recent Department Retreats, Department members are expected to share in teaching and service roles as needed with adequate planning and mentoring.

- promote and reward innovation and excellence in teaching.
- monitor our teaching programs with outcomes research to ensure that we are offering courses that meet the educational needs of our students. Encourage increased participation by faculty members in the programs that “Teach the Teachers” innovative educational approaches and evaluate their teaching skills.
- encourage interaction and collaboration with teaching programs in other Departments.
- infuse excitement about research in our disciplines into our courses at all levels. This should include the promotion of Department seminar series, symposia/workshops and our Stevenson-Gowdey lecture series and Department Research Day.

### ***Desired Outcomes***

Deliver high-quality educational programs at both the undergraduate and graduate levels that prepare our students for the future, and establish our Department as having the experts at Western in the disciplines of physiology and pharmacology. The Graduate Program in Physiology and Pharmacology aims at expanding and disseminating scientific knowledge, and training professional physiologists and pharmacologists to make significant contributions to the advancement of science, biotechnology, health services, public policy and knowledge dissemination. We train students at both the undergraduate and graduate levels to develop critical thinking skills for basic, applied and translational research, and to promote innovation, integrity and scholarship. This is accomplished through fostering creativity, collegiality, leadership and rigorous work ethics.

### ***Action Plan***

#### **2012**

- review model for assignment of Chair position in Undergraduate and Graduate Studies. Could be three-year terms with a member of the respective Executive Committees moving into the Chair position. Executive Committee membership rotates annually, generally with one member of the Committee being replaced each year. The objective is to get more faculty members actively involved in development and administration of the teaching programs, and to develop leadership for the future. Ensure that the Undergraduate and Graduate Studies Committees meet at least every second month

#### ***Undergraduate Studies***

- on-going updating and assessment of course delivery and teaching assignments, with integration of cross-appointed faculty members as appropriate
- to meet the on-going increases in undergraduate student enrolment, assess 4<sup>th</sup> year course composition and gaps for development of new courses. Offer new 4<sup>th</sup> year courses in Respiration, Early Development, Digestion and Metabolism, and Neuroendocrinology
- √ revamp Pharmacology 3580y laboratory course with new modules and improved organization to correspond with Pharmacology 3620 lecture course
- √ involve postdoctoral fellows in teaching 4<sup>th</sup> year lectures and 3<sup>rd</sup> year laboratories
- evaluate how many teaching laboratory sections should be offered weekly now that we will have expanded lab space
- √ create timelines for retirements / departures / changes in faculty member complement, and the impact that this will have on our teaching programs. This will show us where the gaps will be in the future.
- √ as senior professors retire, progressively shift assignment of teaching in 2<sup>nd</sup> and 3<sup>rd</sup> year courses to individuals who excel at teaching at the introductory level and in larger classes

#### ***Graduate Studies***

- assess overall performance of each graduate student on an annual basis

- √ transition to a single Physiology and Pharmacology program with evolution to reflect the culture and broad nature of research in our Department
- create of a database to systematically record time to graduation and where our graduate students go following graduation (exit questionnaires). This information is critical for accountability of our programs and as a recruitment tool
- √ assess each year changes in graduate student recruitment, and in the proportion of MSc students that convert to the PhD program, as well as times to completion of degree
- √ provide Graduate Student Representatives (GSR) with ongoing support and information to ensure consistent operation of graduate student advisory committees
- √ ensure appropriate dissemination among 4<sup>th</sup>-year students of information regarding scholarship opportunities (e.g. CIHR, NSERC, OGS)
- increase participation by faculty members in graduate courses. This should become a part of individual annual workload assignments, and annual performance evaluations should consider participation in graduate courses to be as important as undergraduate education
- offer the new critical-thinking graduate course Phys/Pharm 9553 (“Translational Research – Bench to Bedside”)
- improve the visibility of our programs to increase the recruitment of top-quality students. This should included continued participation in the Schulich and Western Graduate Student Open Houses, increased “marketing” aimed at Western 4<sup>th</sup> year students and targeting of undergraduate students from other institutions through open houses, invited seminars for faculty, and web-based information. Graduate program web site to be updated yearly, and linked to multiple sources to enhance visibility. Tracking of graduates of the program, to allow measurements of success, assessment of changes in working environments and needs, and as a tool to further promote the program
- assess other measures of student success during and after training, such as publications and presentations at research meetings, building and maintaining appropriate databases
- provide training for graduate students applicable to career paths outside academia, including teaching, business/biotechnology/industry etc.

## **2013**

### ***Undergraduate Studies***

- follow up the 4<sup>th</sup> year curriculum review to ensure recommended changes were made
- assess emerging needs for new distance education courses
- seek financial, technical and pedagogical support for distance course development and begin their development
- develop methods to better evaluate students in 4<sup>th</sup> year courses with large enrollments
- assess how to maximize the teaching contributions of research-intensive faculty members. This may involve new rewards or recognition for teaching excellence. Review involvement of all faculty members in teaching in relation to our Department Workload Standards document and ensure that each faculty member is involved in the appropriate teaching assignments
- establish a Department teaching mentoring system, and strongly encourage faculty members to attend teaching workshops as appropriate to improve teaching skills
- review involvement of faculty members in 3<sup>rd</sup> year teaching laboratories and determine if new lab modules should be developed

### ***Graduate Studies***

- provide appropriate training for career paths outside academia, the program would offer or make use of existing Western teaching workshops. With increased resources, providing opportunities to deliver short lectures can be implemented. Extending support towards existing Graduate Student Council-initiated activities (speaker series with former graduate

studies working in various sectors), and offering “Where are they now?” seminars as part of our Department Seminar Series. This would include inviting graduate alumni working in various positions, within and outside academia

- increase course offerings and course development, periodic and systematic assessments of present offerings and size of graduate student population will be conducted to determine areas of need. New offerings to be included as part of the individual workload defined yearly
- implement additional strategies to attract high-caliber students, such as “recruitment” incentives and/or “visiting” incentives for those applicants to our program with outstanding academic backgrounds
- organize workshops on topics of interest/relevance for students whose future career goals focus on activities outside academia
- optimize course offerings and workshops aimed at training graduate students for multiple career paths following graduation and accommodating increased graduate student enrollment
- adjust graduate course contents according to the continually changing environment related to student backgrounds and future career paths
- increase graduate student enrollment in line with the strategic plan of the University of Western Ontario and Province of Ontario
- increase the visibility of the Graduate Programs, leading to growth through recruitment of top-quality students
- ensure appropriate average times for degree completion and student retention
- increase sources of graduate student support. (e.g. graduate teaching assistantships, increased success in securing external scholarships, development of internal training programs)

## **2014 - 2016**

### ***Undergraduate Studies***

- continue to assess the needs for online courses and encourage faculty to incorporate online components and blended learning to existing courses
- with updated information about projected student enrolment numbers, redesign methods for delivering courses and laboratories.
- reassess our contributions to the undergraduate medical and dental curricula and determine where we can and should be making contributions. Interact with the Preclinical Transition Committee in Medicine to ensure that we have Department representation at the various levels of Undergraduate Medical Education decision-making and have input and involvement on individual course committees. Develop a succession plan for moving more junior faculty members into medical curriculum to ensure ongoing – increased contributions in this area
- reassess our undergraduate course offerings, and prioritize our teaching based on what is essential, what is important and what would be nice. This could help in identification of core needs for faculty members compared to other teaching roles. For example, how do we fulfill our responsibilities in 3<sup>rd</sup> year teaching laboratories?

### ***Graduate Studies***

- maintain critical evaluate the structure of our graduate student training program, course offerings, educational goals and training practices, adjusting periodically as necessary
- update and revise Graduate Student Handbook in an ongoing manner along with all other written materials that relate to graduate education, including program requirements and procedures, and roles and responsibilities of supervisors, students and Department. All students and supervisors are required to indicate, by their signature, that they have read

and discussed the contents of the Graduate Student Handbook within two weeks of the student beginning their program

- ensure evolution of course contents according to need and future work opportunities, through yearly student and faculty evaluations of the compulsory CCT course, followed by appropriate adjustments
- as there are increases in the graduate student population, meet the need for Increased laboratory and trainee office space, and additional funding sources directed to graduate student stipends (teaching assistantships, external scholarships, internal training programs)
- identify and/or increase endowments and annual gift funds, and earmark fundraising initiatives in support of studentships, assistantships and support for travel to scientific meetings
- develop a network of graduate student alumni donors, including recipients of Department, Faculty or Western awards.
- promote and/or expand program participation in interdisciplinary graduate programs (e.g. CaRTT, JUMP, Developmental Biology, Neurosciences)
- develop initiatives between Department research groups and others within and outside Western to apply for opportunities for graduate training programs (e.g. NSERC CREATE, CIHR Strategic Training Program).

#### **4) Communication and Collegiality**

##### ***Strategic Issue***

The Department of Physiology and Pharmacology is large and geographically dispersed with this leading to challenges for interaction and communication amongst its members. Moreover, faculty members and trainees have extremely diverse interests, backgrounds and expertise, thereby adding to the challenges of achieving an operational level that is, and is seen to be, equitable and facilitating for their many goals and needs.

##### ***Overview of Principles***

- uphold effective communication as a top priority in our Department, along with fostering collegiality and promoting an environment that is conducive to collaboration and interaction.
- Strategic Planning Retreats held at least annually are a proactive approach to ensuring collective discussion and decision-making on critical topics, and can promote buy-in to the decision-making process.
- endorse and provide support for Department social events, such as the Fall Corn Roast, Christmas Party and Spring Golf and BBQ, as these activities promote collegiality and interaction, and welcome new undergraduate and graduate students to our Department.

##### ***Desired Outcomes***

The environment in our Department encourages participation, communication and collegiality by its members. This would ensure a level of communication that would provide sufficient and relevant information to Department members who wish to be informed. It would also encourage individuals who wish to be involved in decision-making processes to become actively engaged. While individuals or groups may not agree with specific decisions or processes, the goal is to retain collegiality and academic integrity.

##### ***Action Plan***

###### **2012**

- √ increase the involvement of Department members in decision-making processes by promoting their membership on Department committees and by providing an open forum

- for input. Encourage and facilitate additional input to the processes of the elected (collective agreement-mandated) committees
- √ distribute the weekly “News in Physiology and Pharmacology” newsletter to all Department members, and encourage open participation and input from all Department members
  - re-instate a bi-monthly meeting equivalent to the P,P & P (Planning, Policy & Priorities) Committee as an open forum for discussion of selected current topics. Encourage the identification and development of these discussion topics by faculty members
  - √ hold an annual Department Retreat in May or June with attendance by all faculty members, and staff, graduate student, postdoctoral fellow and staff representatives
  - undergraduate, graduate students and postdoctoral fellows – The “Communications & Outreach Committee” has a mandate to lead and coordinate our Department involvement in open houses, outreach events and scientific conferences as appropriate, and to oversee the ongoing development of promotional materials for distribution at events. This Committee needs re-focusing and re-invigoration to take a larger role in this area.

### **2013**

- identify and implement ways to increase discussion and interaction amongst Department members, such as involving more people in activities such as seminars or Department meetings through videoconferencing, or through new features on the website

### **2014 – 2016**

- assess need for revisions to modes of communication and incorporation of new features to Department website. Development of a monthly discussion forum?
- encourage active participation and input from all Department members in all aspects of the academic life of the Department

## **5) External Marketing of the Department**

### ***Strategic Issue***

Opportunities for obtaining resources for research and teaching programs arise both within and outside of Western, often at very short notice. Moreover, recruitment of the best graduate student and postdoctoral trainees and faculty members is increasingly competitive. We must have a program for ongoing development of strategies and marketing that identify our strengths and demonstrate our competitive edge.

### ***Overview of Principles***

- showing a slide at the end of invited and plenary lectures at national and international meetings can identify the opportunities available in our Department and can serve as an effective recruitment advertisement for potential trainees and faculty members.
- holding symposia and workshops that are based around our research strengths can flag our Department and showcase our research programs and trainees.
- trainees and faculty members are encouraged to participate in local research activities, such as the London Health Research Day. Department members are also encouraged to participate in educational outreach activities and community service events.
- Department members are encouraged to volunteer to serve on Faculty, School and University-level committees as this raises the profile of our Department.

### ***Desired Outcomes***

Establish a program for outreach and communicating the strengths of our Department in various venues and to diverse audiences, including to undergraduate and graduate student groups, postdoctoral applicants, potential faculty and staff recruits, and potential donors. The

form of this communication and the tools used will vary depending on the need, but will serve to highlight the unique aspects of our Department and its offerings for research and training.

### ***Action Plan***

#### **2012**

- √ continue ongoing weekly renewal of our website to provide Department members and other visitor with current information on Department members and activities
- √ continue to improve our Department website to be informative and accessible, particularly in regard to research activities of faculty members and opportunities for research trainees. Identify new resources to add to our website to make facilitate day-to-day work needs of Department members
- develop template PowerPoint slides that contain information about our Department and Western for distribution to Department members for use in research presentations.
- identify new ways to market our Department that will increase our pool of graduate student and postdoctoral applicants. Identify resources that can be obtained to facilitate trainee recruitment.
- promote publically the deliverables of a graduate education in our Programs for recruitment purposes within and outside Western
- √ generate recruitment material with information regarding career opportunities for students upon completion of the graduate programs, including where have our graduates gone
- prepare written outlines of cases that can be used in competitions for resources that arise at Western or beyond. These may also be useful for fundraising in consultation with the Western and Schulich fundraising teams
- reinstate our Department newsletter for bi-annual production and distribution to former graduates and friends of Physiology and Pharmacology. This could also include a fundraising theme as appropriate.

#### **2013**

- encourage participation by a larger group of faculty members, postdoctoral fellows and graduate students in open houses where the Department and its teaching and research programs are show-cased
- identify ways by which the Department can engage in and benefit from the Western mandate to enhance internationalization. How can this be used to increase enrollment of high-quality graduate students (e.g. targeting recruitment efforts to universities abroad where we have good contacts or that now employ some of our former graduates)?

#### **2014 - 2016**

- on-going updating of our Department website with attention to incorporating new technologies as appropriate
- produce twice-yearly Department newsletter for maintaining contact with graduates and friends of Physiology and Pharmacology, and for use in promotional and fundraising initiatives
- target 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> year undergraduate students for recruitment to our senior undergraduate and graduate student training programs. This could include encouraging them to apply for competitive undergraduate awards for summer research [e.g. HSFO and NSERC]. Take advantage of opportunities to participate in recruitment open houses both in London and outside of the city. Send our promotional materials to conferences to advertise our programs and facilitate recruitment of students and postdoctoral fellows.

## **MEASURES OF SUCCESS**

### **Research**

- # of successful grant applications, total amount of funding and success rate of grant applications.
- proportion of faculty holding peer-reviewed, competitively-funded research grants.
- percent success rates for CIHR, NSERC, Heart and Stroke etc. compared to other Schulich Departments and National Average and have these rates publically advertised
- # of successful research contracts.
- research awards and salary awards.
- total number of journal articles published and their impact factors, number of citations on publications in the last 5 years.
- total number of patents applied and awarded
- # of invitations to speak at national and international meetings.
- successful research collaborations based on # of multi-investigator grants held and # of papers published by Department members as a result of collaboration among laboratories.
- membership on national and international editorial boards and participation in international grant reviews. This can serve as one measure of national and international standing in research contributions.
- enhanced interactions between members of research clusters.

### **Teaching**

#### **--- Undergraduate**

- enrollment in courses.
- quality of students competing for entry into our undergraduate courses.
- diversity, uniqueness and comprehensiveness of course offerings.
- rating of courses and instructors.
- long-term career choices of our graduates.
- proportion of our undergraduate students continuing to graduate programs.
- # and type of teaching awards.

#### **--- Graduate / Postdoctoral**

- effectiveness of recruitment of graduate students and postdoctoral fellows.
- total number of postdoctoral fellows and graduate students, and the proportion of Ph.D. versus M.Sc. students in the program.
- proportion of M.Sc. students that transfer/continue into the Ph.D. program.
- # of graduate students winning competitive studentships (salary awards).
- completion time for graduate students.
- long-term career choices of our graduates.
- # of postdoctoral fellows winning competitive fellowships (salary awards).

### **Service**

- invitations to serve on peer-review panels for granting agencies or foundations and/or election-appointment to leadership roles in professional or learned societies.
- serving as member or Chair of Departmental or Faculty / School or University committees.
- outreach activities – liaison with the public as representative of an academic society or agency (e.g. public lectures), invitations and consultations with the news media, other forms of public recognition of expertise.

**Note:** Much of these data are available and can be formatted for reporting, or for comparison with national and other data. A Self-Study will likely need to be prepared in 2015 in advance of a Department Review that will take place as the current term of the Chair ends in July 2016.

## **MECHANISMS FOR ASSESSING “MEASURES OF SUCCESS”**

### **Monitoring involves:**

- tracking of pertinent information for evaluation of programs and personnel will be facilitated by establishing and maintaining up-to-date and diverse databases. Some of this occurs already, but will be expanded to capture a wider range of information. This information will also be used in reports solicited at the Faculty and University-level, or for other purposes such as fundraising.
- tracking our measures of success relative to those of other institutions / departments.
- Department meetings and annual retreats with open discussion on current issues, review of status of Department, progress in relation to the Strategic Plan, and future planning.
- assuming collective responsibility for on-going monitoring of standards of the educational programs of the Department rests with all faculty members.
- ensuring effective mentoring of our faculty members, particularly junior members, and consistent and effective function of graduate student advisory committees.
- ensuring accountability in our operations and resource utilization.
- ongoing communication between the Chair, members of the Executive Committee and Chairs of Department Committees and all members of the Department.

### **Follow-up involves:**

- responsibility for ensuring that Department operations are consistent with the Strategic Plan. This rests with the Chair and members of the Department committees. As appropriate, specific groups will be identified and charged with ensuring the success of a particular initiative.
- using the Strategic Plan as a working document and guideline, with the understanding that it should undergo reassessment to keep it current and be responsive to change.
- on-going vigilance for local, provincial, national and international funding opportunities for our faculty members and trainees.
- on-going assessment of operations, leadership and administration of the Department to ensure that it is functioning optimally and achieving our goals.

**Dated:** 21-Oct-2012

**Adopted:** 11-Feb-2013

**Revised:**