Strategic Goal 8

Increase Research and Scholarly Activity

Rationale

*UBC is a major research intensive university and it is the expectation that all faculties will have an emphasis on original research and scholarship in their portfolio of activities.* This expectation, “the generation of new knowledge” is a critical aspect of all faculty members who are reviewed for tenure and promotion and thus it is critical for the Faculty of Dentistry to insure that there is an emphasis on establishing the foundation for continued excellence in research. This responsibility also extends to the need to address CIHR’s mission statement. The new information generated from this research is critical in generating the evidence to support the content contained in our curriculum, consequently individuals engaged in research can become more effective educators as the students will be learning at the cutting-edge of any discipline. Active research laboratories also provide career training to graduate students interested in developing a balanced academic career of research, service and teaching. In particular there is an emphasis at UBC on graduate education at the PhD and MSc levels and these graduate students require access to productive research laboratories to complete their thesis and dissertation research projects. The university environment expects the Faculty of Dentistry to be productive in research and that criterion is a critical outcome measure in evaluations of the Faculty by the central administration.

New knowledge generated by research advances patient care. It is critical to keep our curriculum current that the faculty members are active in the generation of new knowledge. Evidence-based clinical practice is based on research and UBC should be actively engaged in generating that evidence. Research in the effective strategies for teaching and learning is also a critical area of scholarship to help in faculty development, insure an effective curriculum and graduate students as the forefront of their profession. Advancements in teaching, research and service are all directly related to the generation of new knowledge in these areas by faculty members active in research and scholarship.

Increasing research and scholarly activity can be represented by multiple measures that could include more research active faculty, more research space, more grants, more publications and greater research eminence. Increased efficiency in the processes can increase capacity by providing valuable time to researchers without requiring major recruitments or renovations. Increased research funding will increase recovery of indirect costs that in new UBC budget model would directly support research initiatives.

Enabling Activities

- Support cluster development (who and where are we)
  - Define research focus of each cluster
  - Define strengths and relative weaknesses of each cluster
  - Define current infrastructure in place
  - Develop a 5-year working model of cluster development
  - Define support requirements (ie people, equipment and space)
- Develop faculty recruitment plan based on strengths and weaknesses
- Develop a faculty research space renovation plan based on clustering of research foci
- Recruit senior investigators in key areas of development
- Formulate hiring plan for junior investigators in area requiring further enhancement (naturally enhance strengths)
  - Develop faculty development program for junior faculty
  - Establish faculty mentors for junior faculty
  - Support to attend conferences and events to build potential
- Faculty development plan – mentoring, writing, grants, time preservation
- Seed money to facilitate research activities of junior faculty and foster development of senior faculty new initiatives/collaborations
- Tangible rewards to senior faculty for mentoring
- Encourage participation in TAG programs to master the fundamentals of the Scholarship of Teaching and Learning
- Development of approaches to foster collaborations and increase interdisciplinary research
- Creation of a Statistical support function either through recruiting an individual or creation of a “virtual” statistical support network
- Identify research/scholarship funding opportunities outside the traditional areas of support

**Resource Requirements**

- Research Faculty Recruitment
- Endowed Chairs for Faculty
- Research Faculty Start-up funds
- Research Equipment to facilitate projects – Core development
- Seed/Pilot project funds for jr faculty and new initiatives
- New/Additional Laboratory Space, biomedical, biomaterials, epidemiology, clinical research
- Clinical Research Centre – facility and support core
- CFI Phenogenomics Bioimaging Core
- Development of DMD-PhD and Specialty-PhD programs
- Post-Doctoral Research Fellow awards
- Support to attend conferences and training sessions
- Renovation funding to improve/increase space for research/scholarship
- Mid-Career retraining support
- Grant facilitator/writer to assist in identifying funding opportunities and submitting proposals
- Statistical support/individual for all research projects

**Outcomes Assessment (Metrics and Qualities)**

- Number of grants submitted and ultimately funded
- Number of co applicants on submitted grants
- Number of grants funded by local, national and international granting agencies
- An increase in the number of publications with an associated increase in journal impact factor
- An increase in the citation index of published manuscripts
- An increase in the number of Undergraduate, Graduate and Post Doctoral fellows working at our institution
- An increase in the number of agency funded graduate students
- An increase in number of successful patents filed
- Relative position of dentistry’s research productivity in Vice President’s Research Report
- Increased numbers of MSc and PhD graduates
- Alumni in research/scholarship position in other institutions
- Faculty presentations reporting research/scholarly accomplishments
- Numbers of collaborations, local, regional and international supporting the research/scholarship activities

**Benchmarks**

- 2013: Double Research Funding in Faculty of Dentistry
- 2013: Highest level of funding of Canadian Faculties of Dentistry
- 2013: 90% of Faculty of Dentistry faculty actively engaged in productive research projects
- 2013: Double the number of publications from the Faculty of Dentistry
- 2013: Double the impact factor of publications from the Faculty of Dentistry
- 2013: All DMD and DH students have the opportunity to engage in a research project
- 2013: DMD-PhD program developed and implemented
- 2013: Dental Specialty – PhD programs developed and implemented with students enrolled
- 2013: Increase the total number of funded projects supporting Faculty research and scholarship
- 2013: Increase funding from sources not traditionally used to support research/scholarship in the Faculty of Dentistry