Strategic Goal 10

Develop Research and Scholarship Support Mechanisms

Rationale

Effective research requires well prepared scientists capable of designing their experiments, conducting the research and interpreting the results. These highly educated individuals have not had extensive experience in many of the operational and financial aspects necessary to manage the research enterprise in a laboratory. Off-loading of the business side of laboratory research to a central administrative unit will allow the scientists to focus on their area of strength, scientific investigation and allow administrative managers to conduct the support of laboratory research using their expertise. This shifting of responsibility will require Dentistry to organize a research/scholarship support core and manage this administrative burden.

Ultimately this will allow principal investigators and coapplicants time to focus on project design, fostering of collaborations, and increasing grant submissions. As these more widely structured research initiatives are developed additional support personnel will be required to help manage divergent applications associated with RFA’s in ever expanding areas of research. A Central biosciences core facility could effectively participate in several areas including purchasing in order to effectively run and manage expensive state-of-the-art bioimaging machinery used in modern day research.

As the goal of a state-of-the-art bioimaging facility becomes a reality and thus an asset to the greater university the need for a centralized administrative support service will be required to secure our role within the university. A clinical trial research facility will also be necessary to help develop the translational research to develop new therapies and a set of centralized support personnel is required to ethically manage and cost effectively run human clinical trials to test novel therapeutic products and services. A core support for statistical analysis would aid in the development of research protocols and the interpretation of the resulting data. A research/scholarship support service and clinical trial facility will guide inexperienced clinical faculty (part & full time) and junior research track faculty through the grant writing and management process. This centralized support could then serve as a resource information centre for the research community.

Enabling Activities

- Develop research space requirements based on cluster focus
  - Molecular and cellular biology
  - Population Health
  - Clinical Trials
- Research/scholarship Central office
  - Grant application
  - Grant management (budget, ethics, animal care)
  - Application for Graduate Student/Post-Doc scholarship programs
  - Support for proof-reading and grant/manuscript preparation
- Core Biomedical facility
  - Determine equipment in place (strength and weakness)
  - Determine 5 year requirements (personnel and equipment)
  - Recruit key individuals that support development of the facility
- Support Proteomics facility
- Clinical trial facility
  - Define cluster groups and members that may immediately benefit from this facility
  - Determine requirements of areas to be developed
  - Strategically recruit to develop facility
- Develop Communication Strategy to ensure community is aware of research activity (Grants/Results/Knowledge Translation)
- Develop a Statistical support function to assist investigators in the preparation of research proposals and interpretation of resulting data
  - Integrate statistical core with Research Design support
- Develop a cluster focus on Educational Research
  - Recruit an individual with expertise in Educational Research
  - Identify funding opportunities for Educational Research
- Develop a cluster focus for Population Health

**Resource Requirements**
- Personnel to staff Research Support Core – Grant manager, Accountant, Data manager, Purchasing Agent
- Personnel to staff Research Support
- Space renovation to match functions of core
- Grants management Software
- Accounting Software
- Database of purchasing/productivity
- Website development
- Funding for Statistical Support pre- and post-award
- Renovations for Clinical Research Centre
- Recruitment of a Faculty member for Clinical Research Centre
- Identification of grant opportunities

**Outcomes Assessment (Metrics and Qualities)**
- Ultimately more grants/publications/students
- To support development of these initiative funding to be secured from national agencies, corporate partners and private donors
- Increased facility use faculty, university and others
- Increase in the number of corporate funded clinical trials
- Evidence of public awareness (radio, TV & press)
- Increased investigator satisfaction with research/scholarship climate
- More effective management of grant budgets and fewer over-spent accounts

**Benchmarks**
- 2010: Support Core for grant submission
- 2010: Support core for grant management
- 2011: Central purchasing activity for research projects
- 2011: Database monitoring research purchasing and research productivity
- 2011: Research-intensive web site
- 2012: All research personnel engaged in research and business process management