Ontario Veterinary College
Biomedical Sciences Integrated Plan

Animal-Human Health Links

2012-2017

2006-2012 Highlights

• The $26million CFI-funded research lab redevelopment project, started in 2000-2005, was completed: the facilities formally opened in 2006.

• The graduate program has more than doubled in size (from 33 in 2005 to, currently, 72 students).

• The Biomedical Sciences B.Sc. has increased enrolment from its historic “cap” of 60/annum to the present 150-170/annum.
2006-2012 Highlights

• A new inter-collegiate graduate Neuroscience program was established, based in Biomedical Sciences.

• Comparative Anatomy teaching has been strengthened. B.Sc. teaching has increased.

• Low enrolment B.Sc. courses were eliminated, some high enrolment 2-semester courses were consolidated to single semester, the number of graduate courses offered annually has more than doubled.

2006-2012 Highlights

• Our 6 new fourth year B.Sc. Courses are now recognized as some of the most innovative (and sought after) on campus.

• Growth in the department’s salary costs and teaching contributions has been achieved without a concomitant increase in faculty teaching time, or creation of ongoing budget deficits. Most faculty have been able to take research/study leave during the last 5 years, the rest probably in the next 2-3 years.
Planning Environment

- The faculty met in the summer of 2011, with the acting chairs (Jon Lamarre and Glen Pyle), to develop the first draft of the department Plan.
- Meetings with faculty and with the Biomedical Sciences chair’s advisory group continued in January and February, leading to the current version of the Plan.

Theme 1: Values, Relationships, Communication

Goal 1: To better integrate Biomedical Sciences and with other units in the College and the University.

Objective 1: Development of research and teaching programs that cross traditional departmental boundaries.

Actions: (1) Development of an Integrated cancer biology program, linked to Clinical Studies (Coomber, Mutsaers).
Theme 1: Values, Relationships, Communication

Actions: (2) Further enhance departmental cancer research lab facilities (Coomber, Petrik).
Actions: (3) Develop enhanced stem cell biology and regenerative medicine research lab space (Koch).
Actions: (4) Further enhance the relationships between the department and other University teaching programs (HHNS, Integrative Biology, Psychology).

Theme 2: BSc and DVM Classroom and Laboratory Learning

Goal 1: To streamline and improve the courses offered by Biomedical Sciences
Objective 1: To decrease the amount of teaching time used in the Phase 1 curriculum, reducing redundancy and overlap in course offerings.
Actions: (1) Veterinary physiology and veterinary biochemistry are currently being integrated (Lamarre, Moorehead).
Theme 2: BSc and DVM Classroom and Laboratory Learning

Actions: (2) Decrease the amount of didactic teaching time in the Phase 1 basic science courses. Integrate current case-based learning “module” into the main phase 1 courses.

Actions: (3) Better integrate Biomedical Science Phase 1 courses with later elements in the DVM curriculum, to reduce redundancy and increase student learning opportunities.

Actions: (3a) Integrate elements of surgical skills into Phase 1 anatomy (Thomason, liasing with Clinical Studies).

Actions: (3b) Integrate Veterinary Histology with Pathobiology POD teaching, allowing elements of the current Phase 2 to transition back to Phase 1 (Coomber, Yamashiro & department of Pathobiology).
<table>
<thead>
<tr>
<th>Theme 3: Patient/Client-based Learning, Research and Healthcare (College IP 8.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goal 1:</strong> Increase opportunities for graduate student training in clinically-oriented projects.</td>
</tr>
<tr>
<td><strong>Objective 1:</strong> Create “streams” within the MBS program that focus on development of marketable skills.</td>
</tr>
<tr>
<td><strong>Actions:</strong> (1) Appoint a faculty coordinator specifically for the MBS program (Bettina Kalisch; May 1, 2012).</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Theme 3: Patient/Client-based Learning, Research and Healthcare (College IP 8.2)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Actions:</strong> (2) Develop and expand training opportunities in assisted reproductive technologies (King, Madan).</td>
</tr>
<tr>
<td><strong>Actions:</strong> (3) Capitalize on student interest in being involved with clinical projects to develop an MBS stream that focuses on experiential learning, clinically-oriented MBS projects and potentially clinical trial participation (Kirby, Johnson).</td>
</tr>
</tbody>
</table>
Theme 4: Research and Graduate Program

Goal 1: Further develop Research Laboratory Facilities serving intercollegiate, interdisciplinary programs
Objective 1: Obtain additional funding to support lab renovations
Actions: Funding applications already submitted. (discussed previously, Theme 1).

Goal 2: Increase scope and prestige of graduate programs in the department
Objective 1: Develop intercollegiate graduate programs, to capitalize on our existing areas of research strength (College IP 8.1).
Actions: Develop intercollegiate graduate program in Cancer Biology (Coomber, faculty in Pathobiology, Clinical Studies and MCB).
Theme 4: Research and Graduate Program

Actions (2) : Develop intercollegiate graduate program in Cardiovascular Biology (Pyle, Martino and faculty in HHNS).

Theme 5: Fiscal Viability

Goal 1: To maintain fiscal stability in the face of declining inflation-adjusted Provincial support and rapidly rising costs.

Objective 1: To develop additional sources of revenue for the department and College

Actions: (1) Translate existing core didactic B.Sc. Courses to DE format, to increase flexibility in the B.Sc. curriculum and enhance income.
Theme 5: Fiscal Viability

Actions: (2) To further increase graduate enrolment, in both the MBS and thesis-based graduate programs. Through the various initiatives already outlined, an eventual target of 100 graduate students (MBS, M.Sc. and Ph.D.) in Biomedical Sciences could be realistic.

Are these goals realistic?

The goals laid out in 2005-2006 for Biomedical Sciences were ambitious. We met them, in less than 5 years, increasing income, establishing new programs (MBS, Neuroscience Graduate) while decreasing costs.

Many of our current initiatives are already under way. Funding for the DE course conversions was obtained in March 2011, via an Open Learning grant.
Are these goals realistic?

The Reproduction “stream” in the MBS program is already running. CFI proposals for redevelopment of the cancer biology and stem cell labs have already been submitted.

Departmental matching funds to support the local institutional component of these initiatives have already been set aside.

Biomedical Sciences Integrated Plan

• Questions?