

**FACULTY OF SCIENCE
Meeting of Faculty
Tuesday, April 5, 2011
Leacock Council Room - L232**

ATTENDANCE: As recorded in the Faculty Appendix Book.

DOCUMENTS: S-10-24 to S-10-26

Dean Grant called the meeting to order at 3:05 p.m.

(1) ADOPTION OF AGENDA

Prof. Gyakum **moved**, seconded by Prof. Harpp, that the Agenda be adopted.

The motion carried.

(2) MINUTES OF FEBRUARY 15, 2011

S-10-24

Prof. Harpp **moved**, seconded by Prof. Hynes, that the Minutes be approved.

The motion carried.

(3) BUSINESS ARISING FROM THE MINUTES

There was no business arising from the Minutes.

(4) REPORTS OF COMMITTEES

a) Academic Committee

S-10-25

The Academic Committee approved the following on Tuesday, March 15, 2011:

SECTION A: PROGRAM CHANGES

(1) BIOCHEMISTRY (B.Sc. Programs)

- Major Program in Biochemistry **AC-10-59**
- Honours Program in Biochemistry **AC-10-60**

Prof. de Takacsy **moved**, seconded by Prof. Zuroff, that the changes be approved.

The motion carried.

(2) BIOLOGY (B.A. & Sc. Programs)

- Major Concentration Biology – Cell and Molecular **AC-10-61**
- Major Concentration Biology – Organismal **AC-10-62**

Prof. de Takacsy **moved**, seconded by Prof. Levine, that the changes be approved.

The motion carried.

SECTION B: PROGRAM RETIREMENT**COMPUTER SCIENCE**

- Minor in Computational Molecular Biology

AC-10-63

Prof. Kemme **moved**, seconded by Prof. de Takacsy, that the above program be retired.

The motion carried.

SECTION C: NEW COURSE**ANATOMY & CELL BIOLOGY**

ANAT 323

Neuroanatomy
3 credits

AC-10-64

Prof. de Takacsy **moved**, seconded by Prof. Levine, that the course be adopted.

The motion carried.

SECTION D: MINOR COURSE CHANGES (For Information Only)

- Report on Minor Course Changes

AC-10-58

b) Scholarships Committee

S-10-26

New Awards:

(i) Celia Hendler Scholarship in Psychology

(ii) W. Manson and Dorothy A. Catterson Science Undergraduate Research Award

(iii) Dixie Park Science Undergraduate Research Award

804.1 Prof. de Takacsy introduced the above awards. He said that the Hendler Scholarship should be available to offer in Summer 2011, the Manson and Catterson SURA in Summer 2012, and the Park SURA in Summer 2014.

804.2 Prof. de Takacsy said that about half of the Science undergraduate students had taken at least one undergraduate research course by the time of graduation.

804.3 Dean Grant said that the SURA awards were worth about \$2500, the same amount as the regular Summer undergraduate research awards. He added that the endowment required for these awards, \$50,000, was a good amount for donors, and that the award program was popular with both students and donors, and had been copied by other faculties.

Prof. de Takacsy **moved**, seconded by Prof. Zuroff, that the above awards be approved.

The motion carried.

(5) DEAN'S BUSINESS

- Budget Issues

805.1 The meeting moved into the Committee of the Whole with Prof. de Takacsy as Chair.

- 805.2** Dean Grant said that McGill was having budget issues, and that it had been necessary to cut 2.5% from the budgets of all faculties for the current year. This had been implemented in various ways in the Faculty of Science. A similar cut may occur next year, and there was the possibility of further cuts beyond that. Dean Grant said he would appreciate feedback from Faculty members. Where should resources be placed, and which new resources should be developed? What was it necessary to maintain in the Faculty? What items would be candidates for pruning or elimination? Dean Grant said that it helped to have faculty opinions, in order for him to be better informed.
- 805.3** Prof. de Takacsy asked to what degree cuts could be offset by increasing enrolment.
- 805.4** In reply, Dean Grant said that the issues involved enrolment-based budgeting and research-impact-based budgeting. In both instances, the Faculty of Science is strong, so he was encouraging those approaches as much as possible. Enrolment-based revenue would be arriving before the coming semester. This revenue was needed by the Faculty for laboratories, teaching assistants, etc., in order to handle the large influx of students who will be coming in the Fall.
- 805.5** It was pointed out that the Department of Earth & Planetary Sciences had taken its 2.5% cut, which had been very difficult to perform. It was questionable whether the Department could sustain such a cut in the next year. The university should be very aware of the effect of such cuts on its component departments.
- 805.6** Dean Grant said that the Faculty was in a strong financial position compared to other faculties, so he hoped that it would not be necessary to make huge cuts.
- 805.7** A member pointed out that in the previous year there had been a surprisingly large increase in enrolment in several of the early Chemistry courses. Could there be assurances that this would not happen again in the coming year?
- 805.8** In reply, Dean Grant said he was happy that the Faculty pulls more than its weight in terms of providing early courses for students from other faculties. The number of UO students taking courses in departments such as Chemistry and Mathematics & Statistics will be fewer than in the previous year.
- 805.9** In reply to a further question concerning whether the entry grade had changed, Dean Grant pointed out that the entrance requirements were different for different areas. The entry grade for the life sciences in the previous year was 91.5% overall. For the physical sciences, it was 85% overall. Entry grades were adjusted on a rolling basis depending on the number of acceptances of McGill's offers. He mentioned that Associate Dean Laurie Hendren, who was currently on sabbatical at Oxford University, was looking after the admissions process remotely.
- 805.10** In reply to a member, Dean Grant said that activity-based funding would be disbursed by formula.

(6) REPORT ON ACTIONS OF SENATE

Please note that the entire Minutes of Senate are available on the Web at <http://www.mcgill.ca/senate/minutes/>.

Senate Meeting of February 16, 2011

Prof. C. Gale will report at a future Faculty of Science Meeting.

Senate Meeting of March 23, 2011 – Prof. D.N. Harpp in place of Prof. P. Lasko

There was a **Resolution on the Death of Professor Emeritus William M. Williams of Engineering.**

1. Chair's Remarks

The Chair spoke about the crisis in Japan, noting that McGill has a number of ties with Japan through various program areas. She told Senate that the University has been reassured of the safety of McGill students who are participating in programs in Japan.

She expressed her disappointment with the Quebec government in relation to the University's MBA program noting that in a short amount of time the Desautels MBA program jumped 38 spots to 57th place in the Financial Times Global MBA rankings for 2011. In addition, the program has a generous student aid program, averaging \$12,000 per student next year. Yet, a fine was levied against the program. The University is in talks to reclassify the program from a renegade to a normal self-funded program since such programs exist at many universities in Quebec.

The Chair emphasized the seriousness of the government levying a fine against a university, especially since other universities have implemented changes to their campuses and programs that are against government regulation, but did not incur fines.

The Chair noted that the Provincial budget brings significant new annual revenue into the system. The government will increase university funding by \$430M per year by 2016-17; Quebec students and their families will pay an additional \$1625 per year by 2016-17 (\$325 increase per year over five years starting in 2012-13).

The Chair expressed concern about the new student aid program, which levies taxes against all tuitions paid in Quebec, then redistributes those taxes only to students from Quebec. Furthermore, the Chair noted that McGill is one of two universities in Quebec that do not qualify for Special Mission Grants, which are awarded based on a university's importance related to various themes. This has caused the administration to reconsider its position concerning government relations, which will be reported back to Senate.

The Director of Teaching and Learning Services, Professor Weston, delivered a short presentation that overviewed learning, teaching, and educational technology.

Dean Aitken noted that educational technology needs to be better defined since a quill or chalk can be considered educational technology. Professor Weston replied that in the current context educational technology is generally understood to mean the hardware and software used in the classroom and in our everyday lives. These include, but are not restricted to, computers, clickers, and cell phones.

The Provost commented that evidence based responses are important, but students are arriving on campus with an increased awareness of educational technology on their lives and on the way they learn. Students have perceptions about this technology and social psychology teaches us that if people think things are real, then they are real in their consequences. Furthermore, our professors tend to not be well informed about the things that students are doing and our physical spaces are ill adapted for providing depth learning. He noted that McGill's programs need to be aware about educational technology that students expect their professors are going to deliver.

A student senator noted that deep learning is facilitated by lecture recording because it allows students to review lectures at their leisure. In addition, posting the notes before the class allows students to come better prepared for the lecture. Lecture recording provides students with more venues for learning that may suit their person learning style.

Another student senator said that, in his experience, the more you shift the learning out of the class, the deeper the student's learning becomes.

It was argued that the inverted classroom will have fundamental implications on how educators are trained and how they communicate with students

The "inverted classroom" refers to students going over past lectures online and then spending time in class doing problems.

There were several reports:

Presentation on Libraries and Senate Committee on Libraries by the new Head, Colleen Cooke.

Strategic Enrolment Management Plan - uppage of students by a small percentage.

Strategic Reframing Initiative Progress Report

Budget Considerations

Academic Calendar of Dates 2011-2012

- 806.1** In reply to a member who suggested that recording of classes renders them more like Web-based courses, and reduces attendance, Dean Grant said that Prof. de Takacsy and Director Allard were looking into the pattern, and preliminary findings indicated that the people who did not attend classes were not the same people each time.
- 806.2** Prof. Harpp pointed out that in looking at courses that were not recorded, there was a tremendous fluctuation in attendance level. As well, there were great differences in attendance level depending on the time of day the course was given, and a general decrease in attendance as the term wore on.

(7) MEMBERS' QUESTION PERIOD

There were no members' questions.

(8) OTHER BUSINESS

- 808.1** Dean Grant invited members to the last Faculty meeting of the year, scheduled on May 24, 2011 in Redpath Museum. He said that there will be a reception to follow with entertainment.

There being no further business, the meeting adjourned at 3:38 p.m.