

**FACULTY OF SCIENCE
Meeting of Faculty
12 November 2019
Leacock Building, Room L232**

ATTENDANCE: As recorded in the Faculty Appendix Book

DOCUMENTS: S-19-11, S-19-12

Dean Lennox called the meeting to order at 3:00 p.m., and welcomed members to the third Faculty of Science meeting of the year.

1) ADOPTION OF AGENDA

Prof. Roulet **moved**, seconded by Prof. Lydon, that the Agenda be adopted.

The motion carried.

2) MINUTES OF 15 OCTOBER 2019 S-19-11

Prof. Fussmann **moved**, seconded by Prof. Lydon, that the Minutes be approved.

The motion carried.

3) BUSINESS ARISING FROM THE MINUTES

- **Item #6 (a) Academic Committee Report (S-19-8)
PHYS 447, Applications of Quantum Mechanics (AC-19-4)**

The above item was withdrawn from the Agenda pending final consultation with the Faculty of Engineering, given that PHYS 447 affects two programs in Engineering. This item will be considered at a future Faculty meeting.

4) OFFICE OF SCIENCE EDUCATION (OSE) UPDATE

- (i) Science Education Conference Awards (SECAs) <https://www.mcgill.ca/ose/funding>
Application Deadline: 1 December 2019**

Director Marcy Slapcoff updated members on two upcoming events from the OSE. The first event is about new conference awards, the SECAs. The rationale for their creation came about in informal conversations with individuals about teaching and learning at McGill which were usually based on personal experiences, and although meaningful, they are limited by individual experiences. In order to move in a more scholarly direction, it is important to bring in new ideas from the field of higher education, i.e., from a field of research, that students, faculty and staff can tap into and learn from, build on, and contribute to.

The OSE will be offering a total of 10 SECAs, and the award amount is up to \$2,000 to attend a conference that has a science education component at the local, national or international level. Candidates will be selected based on three criteria: (i) degree of interest in evidence-based science education; (ii) willingness to share experience upon their return from the conference; and (iii) representation of a variety of departments and units from the Faculty of Science. Director Slapcoff said that there are many conferences, especially related to education, and she named some of the different

conferences that are held. Since these awards are being run for the first time, Director Slapcoff welcomed members' ideas and feedback.

**(ii) Undergraduate Poster Showcase - Academia Week, February 2020
(www.tiny.cc/poster20)**

Director Slapcoff announced the second event, named the "Undergraduate Poster Showcase" (UPS), which will replace the Undergraduate Research Conference (URC) held in previous years. The UPS will be held at 5 p.m. on 11 February 2020 during Academia Week (10-14 February 2020), and will be open to all Science undergraduate students who would like to present their research, projects, and assignments, as well as other student work such as work done in class, through an award, or through some other avenue. In the previous years, only students that were nominated by their department could take part in the URC, but feedback received from students, faculty, and staff indicated that students wanted a more inclusive event that would not be just for the top students. For the first time, the OSE is partnering with the Science Undergraduate Society (SUS), and the Teaching and Learning Services (TLS). Students interested in the UPS must register by attending the registration session, where they will be introduced to the basics of making a meaningful and short poster presentation. The purpose of the registration sessions is to allow students to start thinking about what they would like to present and to develop some tools during the sessions. At the end of January 2020, there will be a couple of workshops about poster design and presentation skills. Director Slapcoff encouraged members and students to share this information with their peers, and added that Faculty members will be receiving an email about the UPS event. In reply to a member, Director Slapcoff said that there would be space for about 75 posters.

Dean Lennox said that the UPS will be replacing the previously held URC, which was no longer evolving. Although the UPS is experimental and being tested for the first time, the Faculty is very aware that students are doing great work through their research projects. It will be interesting to see the mix of work, and it is anticipated that there will be more than 75 poster presentations. Dean Lennox said Mr. Dylan Wong, President of the SUS, and his colleagues approached the Faculty about this initiative, and this is very important because it is the right type of program for the SUS to co-develop and be co-responsible for.

Dean Lennox thanked Director Slapcoff and encouraged members to check out the website (www.tiny.cc/poster20) for more information.

5) REPORTS OF COMMITTEES

a) Academic Committee

S-19-12

The following proposals were approved at the Academic Committee meeting held on 29 October 2019:

I. Course Revisions

(1) McGill School of Environment

ENVR 495

Honours Research
Changes in restrictions
6 credits

AC-19-12

Associate Dean Hundemer explained that the changes to ENVR 495 were due to omissions when ENVR 496 and ENVR 497 (two three-credit courses) were retired and ENVR 495 (6 credits) was revised in the 2018-2019 academic year. The restrictions

should have been updated to include students in the B.Sc. (Ag.Env.Sc.) degree, as well as students in the B.A. & Sc. Honours Program in Sustainability, Science and Society.

Associate Dean Hundemer **moved**, seconded by Prof. Hurtubise, that the changes be approved.

The motion carried.

(2) Physics

PHYS 331

Topics in Classical Mechanics
Change in description
3 credits

AC-19-16

Associate Dean Hundemer said the course description was being updated to include topics to better reflect the current course content.

Associate Dean Hundemer **moved**, seconded by Prof. Jeon, that the changes be approved.

The motion carried.

(3) Biology

BIOL 314

Molecular Biology of Cancer
Changes in title and prerequisites
3 credits

AC-19-17

Associate Dean Hundemer said that course title was updated for two reasons: (i) that the title may be unclear to students, and (ii) the scope of the course is broader than the title would suggest. The changes in prerequisites involve including BIOL 219 as an alternate course to BIOL 200 and BIOL 201.

It was agreed to table BIOL 314 to a future meeting after a member pointed out that since the course title was revised, the description should also be updated to reflect the new title.

II. Program Revisions

(1) McGill School of Environment

- Environment Major (B.Sc.) – Land Surface Processes & Environmental Change

AC-19-13

- Environment Major (B.Sc.) – Water Environments & Ecosystems (Biological stream)

AC-19-14

- Environment Major (B.Sc.) – Water Environments & Ecosystems (Physical stream)

AC-19-15

Associate Dean Hundemer described the changes to the above MSE domains. The changes were largely housekeeping in nature. A preamble concerning Statistics courses was added to the programs to provide clarification.

Associate Dean Hundemer **moved**, seconded by Prof. Roulet, that the above changes be approved.

The motion carried.

For Information Only

B.Sc. (AgEnvSc):

- Environment Major (B.Sc.) – Land Surface Processes & Environmental Change
- Environment Major (B.Sc.) – Water Environments & Ecosystems (Biological stream)
- Environment Major (B.Sc.) – Water Environments & Ecosystems (Physical stream)

(2) Chemistry

- B.Sc. Liberal; Core Science Component in Chemistry – General **AC-19-18**
- B.Sc. Liberal; Core Science Component in Chemistry – Biological **AC-19-19**
(Program Option Retirement)

Associate Dean Hundemer said that the Department currently offers two Liberal programs, and both programs are extremely rigid in that they include very few Complementary courses, which results in substitutions in courses at graduation, and the enrolment is very low. The aim is to retire the Biological Option from the Liberal Core Science Component in Chemistry, and increase flexibility in the General Option.

Associate Dean Hundemer **moved**, seconded by Prof. Perepichka, that the changes to B.Sc. Liberal; Core Science Component in Chemistry – General be approved, and that the B.Sc. Liberal; Core Science Component in Chemistry – Biological be retired.

The motion carried.

6) DEAN'S BUSINESS

a) Announcements

- The Wares Science Innovation Prospectors Fund

Associate Dean (Research) John Stix announced the five winners of the inaugural awards of the Wares Science Innovation Prospectors Fund. This very generous gift was provided by **Bob Wares**, an alumnus of the Department of Earth & Planetary Sciences, and a donor in the Faculty of Science, with a particular focus on his home department. The winners are:

- Professor Jessica Flake (Department of Psychology)
Project Title: Building a Global Psychological Science: An evaluation of Measurement Equivalence in 23 Languages
- Professor Daryl Haggard (Department of Physics)
Project Title: Prospecting for Cosmic Gold
- Professor Pat Kambhampati (Department of Chemistry)
Project Title: Nonlinear Electronic Resonance Imaging (NERI)
- Professor Tomislav Friscic (Department of Chemistry)
- Professor Thomas Preston (Department of Physics)
Team Project Title: HOT Science: Chemistry and Materials Science through Direct Holographic Optical Manipulation
- Professor Tony Mittermaier (Department of Chemistry)
- Professor Nicolas Moitessier (Department of Chemistry)
Team Project Title: Overcoming Metabolic Drug Resistance by Rational Design

On behalf of the Faculty, Associate Dean Stix congratulated the winners, and thanked the selection committee, Prof. Yajing Liu (Earth & Planetary Sciences), Prof. Tim Merlis (Atmospheric & Oceanic Sciences), and Prof. Jacalyn Vogel (Biology), for the hard work and diligent efforts.

Dean Lennox added that the Wares Science Innovation Prospectors Fund represents only a portion of the \$5 million gift to the Faculty of Science in 2018. The fund will provide funding for students and faculty members annually. For the current year, there were a total of 18 submissions. Dean Lennox said that Dr. Wares will be speaking at the

annual Faculty of Science Scholarship Reception on 12 November 2019 in the Faculty Club Ballroom. Dr. Wares is a geologist and discovered one of Canada's largest gold deposits in Quebec, and he is the Executive Vice-President of newly formed Osisko Mining Inc. and Executive Chairman of Osisko Metals.

7) SCIENCE EQUITY AND CLIMATE COMMITTEE (SECC)

Associate Dean (Graduate Education) Laura Nilson gave an overview of the SECC. The goal of the SECC is to focus on equity, diversity and inclusion, and institutional climate. The underlying rationale is that by being more equitable, diverse and inclusive, the climate in our Faculty could be improved. Furthermore, by improving workplace climate for everyone, the Faculty could be more equitable, diverse, and inclusive.

Subsequent to the last Faculty meeting on 15 October 2019, Associate Dean Nilson reported that the SECC set up a professional development series for pre-tenure Faculty. The aim is to improve their work climate by organizing a series where Faculty will hear speakers on different topics related to learning their role and to providing them with a sense of community and peer support throughout the session. In the previous week, the speaker was Prof. Christopher Buddle, Dean of Students, who gave a very engaging presentation about different aspects of his portfolio, introducing faculty members to different regulations concerning working with undergraduate and graduate students, as well as the spectrum of resources available to support students in the University. After Dean Buddle's presentation, there were discussions of different case studies, followed by a very lively discussion that allowed members to discuss different situations they themselves had come across, and learn how to handle them.

In response to Dean Lennox, Associate Dean Nilson replied that there are departmental representatives from each department on the SECC, plus student and support staff representatives, and one important role of each committee member is to act as a liaison to their department and/or other relevant constituents. Members would bring information from the SECC to disseminate to their departments/constituents, and conversely, the departments could bring issues to the SECC. There will be a review of the members' roles at the next SECC meeting, taking place on 13 November 2019.

8) THE NEW VIC PROJECT UPDATE

Dean Lennox updated members on the New Vic project. He said that the architects have been mandated to deliver three drafts of the Functional and Technical Program (FTP), with Draft #3 being the final version. It was anticipated that Draft #2 would be submitted on 24 October 2019 (this date was omitted in the Minutes of the Faculty meeting of 15 October 2019); however, Draft #2 was delayed until 14 November 2019. This was mainly due to McGill's delay in providing the information that the architects required regarding space usage, types of facilities, etc. The 14 November 2019 submittal will be reviewed by the project team, and it will be presented to the user groups on 2-3 December 2019, and then discussed for revisions on 9-10 December 2019. Meetings of the appropriate user groups have been called, which will allow McGill to submit revisions to Draft #2 to the architects. The architects will then prepare Draft #3 to be submitted to McGill on 12 January 2020. The project is four weeks behind schedule, but it is anticipated that this time can be made up in Spring 2020. The target date for McGill is 15 June 2020, in order to meet the submission deadline for review by the government, and the final decision will be made by 1 October 2020 for government funding for the project.

9) REPORTS OF DIRECTOR AND ASSOCIATE DEANS

a) Director (Advising Services) Nicole Allard

(1) December Final Examinations

Concerning final examinations, Director Allard reminded Chairs/Directors, instructors, and members of the following:

- that instructors should be present at the final examination venue
- that instructors have their mobile turned on in case invigilators need to reach the instructor to answer students' questions
- that instructors be available for students who may be writing examinations with the Office for Students with Disabilities (OSD), and that they provide the OSD with contact information, i.e., cell phone number
- if the instructor is unavailable, ensure that the associate examiner could answer questions from students

Dean Lennox emphasized the importance that associate examiners be knowledgeable about the examination. The above procedures will be disseminated to departments before the start of the final examination period.

(2) Deferred Examination (<https://www.mcgill.ca/exams/dates/supdefer>)

Director Allard asked student members to check out the new web page on deferred examinations. She encouraged students to share the information widely in order to be better prepared and more familiar about deferred examinations.

- b) Associate Dean (Academic) Axel Hundemer
There was no report for the current meeting.
- c) Associate Dean (Graduate Education)
There was no report for the current meeting.
- d) Associate Dean (Research) John Stix

(i) New Frontiers in Research Fund (NFRF) Transformation Projects - \$24 million

Associate Dean Stix said the NFRF Transformation Projects are progressing and the official announcement will be made in several weeks. The Notice of Intent and Letter of Intent is expected to be launched soon.

(ii) Open Call

Associate Dean Stix informed members that an open call has been made for Tier 1 and Tier 2 Canada Research Chairs (CRC), James McGill Professors (JMP), and William Dawson Scholars (WDS). These awards are available to everyone, and the details of these awards will be circulated to Chairs/Directors and to members of the Faculty shortly. The Faculty deadline is 11 December 2019, and the University deadline is 29 January 2020. For the current year, a limited number of awards are available to the Faculty.

10) REPORT ON ACTIONS OF SENATE

Senate Meeting of 23 October 2019 – Senator David Harpp

In her remarks from the Chair, Principal Fortier reported that McGill has taken the top spot in the medical/doctoral category for the 15th straight year in the Maclean's ranking of Canadian universities. Homecoming, which was held at the end of September, was well attended, and McGill's new capital campaign of \$2 billion was launched at that time.

A question regarding the "Made by McGill" capital campaign and its impact on McGill Student Services was asked and the response was provided by V.-P. Weinstein who outlined the \$2-billion amount to be raised is to be distributed to four priority key areas suggested by the university: \$600 million towards increased bursaries and scholarships,

\$250 million towards funding hands-on experiences for students, \$750 million towards research, \$100 million for seed funding innovative faculty projects, and another \$300 million to support facility expansion.

Senate received for information the 2018-2019 annual report on the Code of Student Conduct and Discipline Procedures, which was presented by Dean Buddle. The number of offensives was consistent with other reports in the past few years and not out of line in any obvious way.

Senate also received for information the 2018-2019 annual report of the Senate Committee on Physical Development which was presented by Cameron Charlebois in which he announced that the Main Road is almost complete; the Fiat Lux Library project is underway with delivery in 2021; Wilson Hall will have only the interior renovated with \$35M of the \$45M provided by the Government and the RVH has a new Executive Director, Paul Landry, and architects have been selected.

The Secretary-General presented the notice of the annual Joint Board-Senate Meeting, which will be held on November 14 with the topic "How can McGill be a Model of an Open, Connected and Purposeful University?"

As the final agenda item, Senate moved into confidential session to discuss the report of the Honorary Degrees and Convocations Committee.

11) **MEMBERS' QUESTION PERIOD**

There were no members' questions.

12) **OTHER BUSINESS**

There being no further business, Prof. Roulet **moved**, seconded by Prof. Hurtubise, that the meeting be adjourned at 4:04 p.m.

The motion carried.