

S-11-12

FACULTY OF SCIENCE
Meeting of Faculty
Tuesday, October 18, 2011
Leacock Council Room – L232

ATTENDANCE: As recorded in the Faculty Appendix Book.

DOCUMENTS: S-10-37, S-10-38 S-11-1 to S-11-11

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

Dean Grant said that traditionally, new professors were invited to the first Faculty meeting and introduced to their colleagues. He said that these new professors were the emerging leaders of the Faculty.

Dean Grant read out the names of recently hired professors in the Faculty. Those present were introduced by their Chairs or by the Chair's Delegate, and a short description of their academic background given. The professors then briefly summarized their research.

Atmospheric & Oceanic Sciences	Assistant Professor Yi HUANG
Atmospheric & Oceanic Sciences	Assistant Professor Daniel KIRSHBAUM
Atmospheric & Oceanic Sciences	Assistant Professor Jaime PALTER
Biology	Associate Professor Simon READER
Biology	Assistant Professor Jon SAKATA
Biology	Assistant Professor Sarah WOOLLEY
Chemistry	Assistant Professor Tomislav FRISCIC
Chemistry	Assistant Professor Jean-Philip LUMB
Earth & Planetary Sciences	Assistant Professor Yajing LIU
Earth & Planetary Sciences	Assistant Professor Christen ROWE
Geography/McGill School of Environment	Assistant Professor Adam MILLARD-BALL
Mathematics & Statistics	Assistant Professor Sergey NORIN
Mathematics & Statistics	Assistant Professor Michael PICHOT
Mathematics & Statistics/ Physics	Assistant Professor Johannes WALCHER
Physics	Assistant Professor David COOKE
Physics	Assistant Professor Tamar PEREG-BARNEA
Physics/Mathematics & Statistics	Assistant Professor Johannes WALCHER
Psychology	Assistant Professor Jennifer BARTZ

The following recently tenured professors and recently promoted full professors were acknowledged, and introduced if present at the meeting

Chemistry	Associate Professor Gonzalo COSA
Chemistry	Associate Professor Anthony MITTERMAIER
Geography	Associate Professor Benjamin FOREST
Geography	Associate Professor Navin RAMANKUTTY
Physics	Associate Professor Matt DOBBS
Psychology	Associate Professor Heungsun HWANG

Chemistry	Professor Youla TSANTRIZOS
Chemistry	Professor Hanadi SLEIMAN
Chemistry	Professor Bruce ARNDTSEN
Geography	Professor Oliver COOMES
Geography	Professor Wayne POLLARD

(1) **ADOPTION OF AGENDA**

Dean Grant said that the Report of the Committee on Student Standing would be considered under Item #7, Reports of Committees.

Prof. Moore **moved**, seconded by Prof. Zuroff, that the amended Agenda be adopted.

The motion carried.

(2) **RESOLUTION ON THE DEATH OF J. BRIAN BIRD, PROFESSOR OF GEOGRAPHY**

Prof. Tim Moore, Chair of the Department of Geography, read the Resolution on the Death of Professor J. Brian Bird.

It is with regret that I must inform Faculty that Professor J. Brian Bird passed away on August 20, 2011, at his Fitch Bay home.

Born in Birmingham, England in 1923, Brian Bird was a student at Cambridge University, whose education was interrupted by the Second World War. He served as a Captain in the Royal marines from 1942 to 1945 and completed his B.A. degree in Geography in 1947 and M.A. degree in 1949. He moved to Canada in 1947, first as Lecturer at the University of Toronto and then as an Assistant Professor of Geography at McGill University in 1950, being promoted to Associate and Full Professor in 1954 and 1961, respectively.

At McGill in the 1950s and 1960s, he was one of a group of faculty responsible for forging the very high reputation of the Department of Geography. He taught physical geography, supervised 35 Masters and Ph.D. theses and conducted field-work primarily in the Canadian Arctic, southern Canada and Barbados, mainly from the perspective of geomorphology and how that fashioned the landscapes we see today. The research generated numerous papers and monographs and two books, one on the *Physiography of the Canadian Arctic* and the other on the *Natural Landscapes of Canada*.

Brian Bird also played a key role in the development of Geography at McGill, Canada and internationally. He served as Chair of Geography from 1967 to 1974 and from 1980 to 1987, and was instrumental in establishing the McGill network of field stations at arctic Axel Heiberg, subarctic Schefferville and tropical Barbados, which continue to today. He was a founding member of the Canadian Association of Geographers, served as President in 1958-1959 and was honoured with its Award for Service to the Profession of Geography. He was active in the organization of the International Geographical Congress held in Montreal in 1972 and served on numerous Canadian and international commissions.

He was a strong, rugged character who provided clear leadership, was caring and supportive of his colleagues and firmly nurtured the development of Geography and McGill University.

During the 1950s and 1960s, Brian was involved in the McGill Geography Department summer school based at Stanstead College, Québec. From this experience grew Brian's fondness for the region. In 1974 he purchased a country home in Fitch Bay and spent much of his time there enjoying vegetable gardening.

The Faculty of Science and the wider academic community extend deep condolences to Prof. Bird's children, Colin, Neil and Joanne.

The resolution was adopted unanimously.

(3) SEATING OF STUDENT MEMBERS S-11-1

Dean Grant welcomed the student members, and asked them to introduce themselves.

(4) CANDIDATES FOR DEGREES

104.1 Director Allard thanked everyone involved with the graduation process.

a) Bachelor of Arts and Science S-11-2

104.2 Director Allard said that there were 9 students currently graduating with the B.A. & Sc. degree, whereas there had been 15 students in October 2010.

Director Allard **moved**, seconded by Prof. Zuroff, that the above degree list be recommended to the Senate Steering Committee for the Bachelor of Arts and Science degree.

The motion carried.

b) Bachelor of Science S-11-3

104.3 There were 86 students approved for graduation. There were 88 students in October 2010.

Director Allard **moved**, seconded by Prof. Franklin, that the above degree list be recommended to the Senate Steering Committee for the Bachelor of Science degree.

The motion carried.

c) Diploma in Environment S-11-4

d) Diploma in Meteorology S-11-5

104.4 There were no candidates for the Diploma in Environment or the Diploma in Meteorology.

Director Allard further **moved**, seconded by Prof. Zuroff, that the Dean be given discretionary power to make such changes in the degree list as would be necessary to prevent injustice.

The motion carried.

(5) MINUTES OF MAY 24, 2011

Prof. Franklin **moved**, seconded by Mr. Verma, that the Minutes be approved.

The motion carried.

(6) BUSINESS ARISING FROM THE MINUTES

There was no business arising from the Minutes.

(7) REPORTS OF COMMITTEES

a) Nominating Committee S-11-6

1. Science Nominating Committee (for information):

The Nominating Committee consists of the Science Senate Representatives; the Convenor was Prof. Peter Grütter.

2. Science Chairs' Council (for information):

The Science Chairs' Council serves as an advisory committee to the Dean, and consists of the Dean, the Associate Dean (Academic), the Associate Dean (Research and Graduate Education), the Director of Advising Services, and the heads of all units in the Faculty of Science, including the MSE and the Redpath Museum.

3. Tenure Committee (for information):

4. Committee on Student Standing (for approval):

The Committee on Student Standing reviews student appeals of decisions made by the Director of Advising Services.

Prof. Zuroff **moved**, seconded by Prof. Moore, that the membership of the Committee on Student Standing be approved.

The motion carried.

5. Academic Committee (for approval):

The Academic Committee reviews and approves all academic content taught in the Faculty of Science.

6. Scholarships Committee (for approval):

The Associate Dean of Research and Graduate Education serves as the Chair of the Scholarships Committee.

7. Leo Yaffe & Principal's Prizes Committee (for approval):

The Leo Yaffe and Principal's Prizes Committee recommends candidates for these awards for excellence in teaching.

8. Council of Graduate and Postdoctoral Studies (for approval):

Representatives of all faculties sit on the Council of Graduate and Postdoctoral Studies.

9. B.A. & Sc. Program Administration Committee (for approval):

The B.A. & Sc. PAC reviews changes and coordinates the administration of the B.A. & Sc. degree programs. Only the Science membership is for approval by the Faculty of Science.

Prof. Ramankutty **moved**, seconded by Prof. Moore, that the membership of Committees #5 to #9 be approved.

The motion carried.

b) Scholarships Committee

(i) In-course Scholarships Report **S-10-38**

107.1 Associate Dean Peter Grütter said that the In-course Scholarships Report lists awards given to continuing students based on their grades for the 2010-2011 academic year. The SGPA cut-off for receiving a monetary award was 3.98, and for the Dean's Honour List, 3.94.

107.2 Associate Dean Grütter thanked Dean Grant for providing "top-up" money from the Faculty of Science for additional awards.

(ii) New Awards **S-11-7**

- **Vivian Astroff Science Undergraduate Research Award**
- **Kenneth Eade Fellowships in Science**
- **David Noble Harpp Fellowships in Chemistry**

107.3 Associate Dean Grütter introduced the above new awards, and thanked the donors for their generous donations.

c) Academic Committee **S-11-8**

The Academic Committee approved the following on Tuesday, September 27, 2011:

SECTION A: PROGRAM REVISIONS

1) Major Program in Neuroscience AC-11-1

107.4 Associate Dean Hendren briefly described the changes to the Major Program in Neuroscience, and the reasons for them.

Associate Dean Hendren **moved**, seconded by Prof. Franklin, that the changes be approved.

The motion carried.

- 2) Pharmacology & Therapeutics
 - Major in Pharmacology AC-11-4
 - Honours in Pharmacology AC-11-5
- 107.5** Associate Dean Hendren described the revisions to the Major and Honours Programs in Pharmacology.
- 107.6** There was a question regarding whether CHEM 503 could be added to the programs. Associate Dean Hendren suggested that the proposals be voted on as is, and that she would check with the relevant departments to see if they agreed to the addition of CHEM 503. If the departments agreed, Associate Dean Hendren would add CHEM 503 to both programs without the need for the proposals to go back to the Academic Committee.
- 107.7** Associate Dean Hendren **moved**, seconded by Mr. Blayney, that the changes be approved, and that Associate Dean Hendren be given discretionary power to add CHEM 503 after consultation with the departments.

The motion carried.

Secretary's Note: *The Department of Chemistry and the Department of Pharmacology & Therapeutics agreed to the addition of CHEM 503 in the list of Complementary Courses for the Major and Honours Programs in Pharmacology.*

- 3) Computer Science
 B.Sc. Programs:
 - Minor in Computer Science AC-11-6
 - Core Science Component in Software Engineering AC-11-7
 - Major in Computer Science AC-11-8
 - Joint Major in Computer Science and Biology AC-11-9
 - Honours in Computer Science AC-11-10
 B.A. & Sc. Program:
 - Major Concentration in Computer Science AC-11-11
- 107.8** Associate Dean Hendren summarized the changes to the above Computer Science programs.
- Associate Dean Hendren **moved**, seconded by Prof. Zuroff, that the above changes be approved.

The motion carried.**SECTION B: MINOR COURSE CHANGES (For Information)**

Report on Minor Course Changes AC-11-3

Associate Dean Hendren highlighted the minor course changes.

SECTION C: OTHER (For Approval)

Graduate Interest Groups (FIGI GIG1) AC-11-13

- 107.9** Associate Dean Hendren said that Graduate Interest Groups would be like the Freshman Interest Groups in that they would be non-credit, non-transcript courses for final-year

undergraduates and beginning graduate students. The GIGS would be based around a topic. The proposed topic for January was Entrepreneurship. There would be about 10 lectures over the term. Associate Dean Hendren said that the aim was to have one or two GIGS courses in Winter 2012, and to hold more beginning in the Fall. She asked members to let her know about possible topics and whether members would be willing to host GIGS.

Associate Dean Hendren **moved**, seconded by Mr. Verma, that the Graduate Interest Groups be adopted.

The motion carried.

SECTION D: OTHER (For Information Only)

- 1) Zero Enrolment Science Courses AC-11-12
- 107.10** Associate Dean Hendren said that the administration had sent to the Faculty a list of Science courses that had had zero enrolment over the previous five years. The Faculty had been asked to retire unneeded courses. Units had been sent a list of their courses, and asked to retire or keep courses as appropriate. The Faculty would compile a list of these and send it to the administration. Associate Dean Hendren added that it was a good thing to tidy up unneeded courses from time to time.
- 2) Computer Science B.A. Program Changes:
 - Supplementary Minor Concentration in Computer Science
 - Major Concentration in Computer Science
- d) Committee on Student Standing S-11-9**
- 107.11** Director Allard said that there had been one request, namely, to have a grade removed from a student's CGPA. The request had been denied.
- (8) DEAN'S BUSINESS**
- a) Dean's Multidisciplinary Undergraduate Research List S-11-10**
- 108.1** Director Allard said that the DMURL recognizes students who have completed at least 9 credits of graded research-based courses in a minimum of two departments. She said that one student would be graduating with this honour. Director Allard thanked Mr. Victor Chisholm for his valuable work on the DMURL.
- b) Enrolment S-11-11**
- 108.2** Associate Dean Hendren said that the quality of incoming students was very high.
- 108.3** Associate Dean Hendren described McGill's admission process. Different pools of students apply to McGill: students from CEGEPs, Ontario high schools, rest-of-Canada high schools, U.S. high schools and overseas high schools. Each pool is assigned a grade-based admission threshold, which, based on past experience, should generate approximately the desired number of offers. Offers are made on a rolling basis, with different deadlines for different pools, and with students having higher grades receiving earlier offers.
- 108.4** The 2011-2012 academic year was the third year making use of admission groups. High school students applied to one of three groups:

(i) Biological, Biomedical and Life Sciences (BBL) group — students planning to major in the Departments of Anatomy & Cell Biology, Biochemistry, Biology, Microbiology & Immunology, Physiology or Psychology.

(ii) Physical, Earth, Math and Computer Science (PEMC) group — students planning to major in the remainder of the units in Science.

(iii) Education group — students planning to take the concurrent B.Sc./B.Ed. (Science for teachers) program. Since the B.Sc./B.Ed. is to be retired in 2012, the 2011-2012 year will be the last year in which students are admitted to this group.

- 108.5** At the end of the freshman year, students can freely choose a program from within their group, apply for an intrafaculty transfer to change groups, or apply to Microbiology & Immunology or Neuroscience.
- 108.6** Incoming CEGEP students are able to choose from any of the three groups, or apply to the Microbiology & Immunology or Neuroscience programs. Students can freely change majors within their group or change groups via an intrafaculty transfer.
- 108.7** Associate Dean Hendren said that the CEGEP cut-offs for all admission groups were very high and respectable. She added that for the last several years the cut-offs for the BBL and Microbiology & Immunology pools had been the same, so she was intending to merge those two groups.
- 108.8** Regarding admissions from Ontario and the rest-of-Canada high schools, the cut-offs for the BBL group were extremely high - too high. The cut-offs for the PEMC group and for the B.A. & Sc. were both high, but acceptably high.
- 108.9** Associate Dean Hendren said that the reason for the higher cut-offs in the BBL, Microbiology & Immunology, and Neuroscience groups, is that there is more interest among students in majoring in these areas. The groups were introduced with the aim of balancing enrolment more evenly across the Faculty of Science, and the last three years had seen an increase in PEMC enrolment in U0, from 19% to 30%. She said that 40% would be a good target.
- 108.10** She said that PEMC registrations could be increased, (1) through recruitment activities, particularly in Ontario and rest-of-Canada high schools, (2) by enabling and encouraging intra-faculty transfers to the PEMC pool, especially at the end of the U0 year, (3) by interesting pre-medical students in the PEMC majors and joint majors, and by emphasizing the Interdisciplinary Life Sciences Minor for PEMC students.
- 108.11** Associate Dean Hendren said that admissions to both the B.Sc. and the B.A. & Sc. for the current year were very close to the Faculty's target admissions.
- 108.12** Since 2004, the number of Science students had increased by 21% and the number of U0 students by 27%.
- 108.13** Interfaculty transfers into the B.Sc. were healthy, but too many students were transferring out of the B.A. & Sc.
- 108.14** Associate Dean Hendren summed up by listing a number of points to consider:
- The high school pool historical yield was not very good at predicting future yields, and a more agile admission process was needed.
 - A better way of predicting the fraction of applicants over a given threshold was needed.

- There was a need to ensure that international students were of the same quality as Canadian students.
- The issue of interesting more high school applicants in the PEMC pool should be further addressed.
- The proportion of CEGEP students coming to McGill needed to be increased, as did interest in Science at the high school and CEGEP levels within Québec.
- Because of the baby boom echo, the next few years should see an increase in the number of graduates from CEGEPs. McGill should try to get more excellent CEGEP students, especially for the PEMC pool.
- McGill should be prepared for further pressure on the UO courses as these enrolments were likely to continue to increase as a proportion of admissions.

108.15 Associate Dean Hendren answered members' questions.

108.16 Dean Grant thanked Associate Dean Hendren for the very informative presentation.

(9) REPORT ON ACTIONS OF SENATE

Please note that the entire Minutes of Senate are available on the Web at <http://www.mcgill.ca/senate/senate2011-2012>.

Senate Meeting of May 18, 2011 - Prof. G. Dudek –to be submitted

Prof. Gale will report on the Senate meeting of September 22, 2011 at the next Faculty meeting.

(10) MEMBERS' QUESTION PERIOD

110.1 Dean Grant said he wanted to recognize the hard work in difficult circumstances that was being done within departments by professors and by valuable administrators and support staff. He said he thought he could express the wish on behalf of the Faculty that the strike would be over sooner rather than later so that striking colleagues could return to help the Faculty with its research and teaching, and work with the students.

(11) OTHER BUSINESS

111.1 Dean Grant invited members to the traditional Beginning-of-Year Reception, to meet and mingle with their colleagues.

111.2 Associate Dean Hendren thanked Prof. de Takacsy for projecting the documents for the Faculty meeting.

There being no further business, the meeting adjourned.