# FACULTY OF SCIENCE Meeting of Faculty Tuesday, May 24, 2005 Leacock Council Room - L232

ATTENDANCE: As recorded in the Faculty Appendix Book.

**DOCUMENTS:** S-04-31 to S-04-42

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

## (1) ADOPTION OF AGENDA

B.A. & Sc. Degree List, S-04-42, should be added as Item 4(d).

Prof. GowriSankaran **moved**, seconded by Prof. Mucci, that the amended Agenda be adopted.

The motion carried.

# (2) DEAN'S ANNOUNCEMENTS

- 902.1 Dean Shaver said that he had moved Dean's Announcements to early on the Agenda since the Faculty had much to celebrate. Various people would read the announcements.
- 902.2 Associate Dean James Nemes (Graduate & Postdoctoral Studies) read the following announcements of awards for graduate supervision and teaching:
- "The David Thomson Award is given each year to a McGill professor who best represents excellence in graduate student supervision and teaching. It is with great pleasure that I present this year's prize to Dr. Hong Guo, a professor in the Department of Physics in the Faculty of Science.

"Dr. Guo is well-known for his research in the area of Physics, so much so that he was awarded one of only two Killam Fellowships in Physics in 2004. Dr. Guo was also named a James McGill Professor in 2004. Through his research he has put McGill on the map in the field of theoretical nanoscience.

"Known for building strong relationships with the students he supervises, roughly two thirds of his graduate students have won fellowships at the national and provincial level. Current and former students write of Dr. Guo's pure enthusiasm for research and his ability to make complicated concepts easy. Many of his graduate students have been published in top journals, including the prestigious *Physical Review Letters*.

"Dr. Guo's "gung-ho" attitude towards teaching and research result in student evaluations which are well above the departmental average. His ability to teach a broad spectrum of courses, from introductory level Physics for pre-med students to advanced graduate courses, make him indispensable to the department.

"Of special note is Dr. Guo's teaching of the graduate level course Quantum Theory of Solids. He continually changes the topics covered in the course, providing a stimulating and challenging learning environment for both himself and his students. His students graduate with the confidence that they can build their own tools to solve complex problems.

"An outstanding lecturer, passionate researcher and involved supervisor, whose work ethic and enthusiasm rubs off on his students, Dr. Guo provides a nurturing and successful graduate environment in which his students thrive. On behalf of Graduate and Postdoctoral Studies at McGill, I would like to thank you, Dr. Guo, for your remarkable contributions."

(b) "The Carrie M. Derick Award is given each year to a McGill professor who best represents excellence in graduate student teaching and supervision in the early stages of a professor's career. It is with great pleasure that I present this year's prize to Dr. Peter Grütter, from the Department of Physics in the Faculty of Science.

"In addition to his duties as professor and graduate supervisor, Dr. Grütter is also the director of the CIAR nanoelectronics program and the NSERC Nano Innovation Platform. Despite the excellence of his outstanding research performance, he currently supervises the largest group of graduate students in the Department of Physics and has been instrumental in the development and rejuvenation of many courses in material science.

"Students frequently mention Dr. Grütter's openness and his ability to inspire and instill enthusiasm in their research. He makes students feel like they take priority despite his myriad other responsibilities. He provides them with world class equipment and lets them use it. His encouragement results in many of his graduate students presenting their research at major conferences worldwide.

"Encouraging his students to work independently, Dr. Grütter's creativity in addressing obstacles is passed-on to those he supervises. This creativity has also resulted in the creation of two new courses in material sciences taught jointly with the Department of Chemistry. In addition, his efforts have strengthened and enriched the Physics course Experimental Methods in Condensed Matter Physics.

"An exceptional mentor, pioneering world class researcher and enthusiastic lecturer, Dr. Grütter's rigorous high standards and encouraging attitude foster an atmosphere conducive to advanced education. On behalf of Graduate and Postdoctoral Studies at McGill, I would like to thank you, Dr. Grütter, for your remarkable contributions."

- 902.3 Dean Shaver said that on behalf of the Faculty, he would like to extend congratulations to Professors Guo and Grütter for their achievements. He added that it was a compliment to the Department of Physics that these two winners were both from the department.
- 902.4 Associate Dean Henry Leighton then made two announcements of student awards:
- (c) The Lieutenant Governor's Award has been given to Ms. Asha Patel, a student in the Faculty Program in Physiology, Minor Concentration in World Religions.
- Associate Dean Leighton mentioned Ms. Patel's excellent academic record, and that she had been a teaching assistant in two large introductory physiology courses. Ms. Patel has also been involved in a number of extracurricular activities, including sitting on practically every committee of the Faculty of Science. She is currently the president of the Science Undergraduate Society. As

well, Ms. Patel has engaged in volunteer activities, and is an accomplished professional classic Indian dancer.

- 902.6 Dean Shaver said that he would like to add his thanks to Ms. Patel for all the outstanding work she had done for the Faculty.
- (d) Governor General's Silver Medals
- Associate Dean Leighton said that there were two Governor General's Silver Medals given each year to graduating students with the highest grades in a bachelor's degree. He was pleased to announce that one of these had been given this year to a student in the Faculty of Science: Mr. Marco Carone, Honours in Probability and Statistics, Minor in Management, who has done exceptionally well in a very challenging program.
- 902.8 On behalf of the Faculty of Science, Dean Shaver congratulated Mr. Carone.
- (e) Killam Prizes
- 902.9 Dean Shaver said that five Killam Prizes had recently been awarded, and that three of them had gone to professors at McGill:

# (3) <u>REPORTS OF COMMITTEES</u>

- a) Faculty of Science Excellence Award
- 903.1 Prof. T. Moore, Chair of the Faculty of Science Excellence Award Committee, announced the current year's winner:

"As in previous years, the Committee received a large number of nominations of excellent candidates, all of whom had performed well beyond the call of duty in their positions within the Faculty. Each is to be congratulated on their achievements, which are critical to the effective operation of the University.

"After considerable deliberation, the Committee recommends that the 2004-5 Award for Excellence in the Faculty of Science be awarded to Ms. Anne Comeau of the Department of Biology. Ms. Comeau has been an employee of the Department of Biology since January 1991, and is currently the Undergraduate Advisor. The Department of Biology is large and somewhat intimidating to students and Ms. Comeau's main role is to help students select their programs, to ensure that they have the qualifications to graduate and to ensure that the programs and policies within Biology are communicated to and transparent to the Faculty of Science and the Admissions Office.

"Ms. Comeau has an excellent grasp and understanding of the complex issues surrounding these programs and she has the personal skills to communicate them clearly to faculty, students and even administrators. She has shown sound judgment, can take and give criticism in a constructive manner and has been able to deal with personal issues. Her efforts extend beyond the normal schedule, to include her enthusiastic participation in Open House, the First-Year Experience Workgroup and other outreach events including the "Shave to Save" Breast Cancer Campaign. She has steadily built strong liaisons with other Faculty and University units dealing

with all aspects of student life. Particularly noteworthy in the nomination was the large number of accolades received from students past and present from Biology and the bio-medical field. The positive rapport she has developed with successive MBSU executives and her concern for student welfare has made her a legend amongst Biology students.

"It is this fundamental concern about the academic and personal welfare of students, and her highly effective manner of dealing with the day-to-day and exceptional situations of student life, that qualify Ms. Comeau for the 2004-5 Faculty of Science Excellence Award."

## 903.2 Anne Comeau expressed her thanks:

"To thank all the people who have participated in my receiving this award is not an easy task. This honours is not an individual achievement but a team effort.

"Firstly, I would like to thank Prof. Bob Carroll who was Chair when I first joined the department and Kathryn Peterson, the Administrative officer, who had the vision to see the amazing potential of undergraduate students and were brave enough to act on this vision by creating the Biology Undergraduate Office.

"I would also like to thank the entire Biology Department who, after the retirement of Professors Mel Goldstein, John Southin and Shirley Cahn, had the courage to believe that a non-academic could carry out the role of program advisor. Particularly to Professors Louis Lefebvre, Marty Lechowicz, Don Kramer and especially Valerie Pasztor who has become a dear and valued friend.

"Thanks must go to people outside the department who have assisted and guided me through the years and who have put up with my constant "I know I asked you this before, but just remind me". Here several names come to mind.

"Prof. Nick de Takacsy who showed me there really was a sympathetic ear at the Faculty level.

"Prof. Morton Mendelson who desperately tries to keep me in line.

"Dean Alan Shaver who, even though we didn't agree on every issue, has been an amazing Dean.

"And to the non-academic staff in the Faculty offices, all of you are so generous with your time and assistance that naming one would only do an injustice to the others.

"Prof. Rhonda Amsel who first invited me to join the First Year Experience Work Group.

"Leslie Copeland and her staff in the First Year Office.

"Nicole Allard from the Psychology Department, who has mentored me through the tough times.

"But most importantly, my heartfelt thanks go to the many students who have passed through my door. You have shown me that teens are not all self-absorbed. You have become a significant part of who I am and you are one of the main reasons I look forward to my day. This award should really go to you because your openness, trust, enthusiasm and joy of life have been the inspiration that helps me guide you to be the very best that you can be.

"And last but by no way least, to my twin sons Marc and Andy, who have persevered through the years with a Mom who often comes home tired and cranky because she gave a little too much at the office.

"THANK YOU"

903.3 On behalf of the Faculty of Science, Dean Shaver congratulated Ms. Comeau and thanked her for all she had done for Biology students and for the Faculty.

## b) Leo Yaffe Award

Dr. Edith Zorychta, standing in for Prof. Williams-Jones, listed the members of the Leo Yaffe Award & Principal's Prize for Excellence in Teaching Committee.

Anthony Williams-Jones, CHAIR, Earth & Planetary Sciences Edith Zorychta, Pathology Ann Wechsler, Physiology Kaleem Siddiqi, School of Computer Science Richard Koestner, Psychology Thomas Bureau, Biology Scott Bohle, Chemistry Rhonda Amsel, Psychology

#### Student Members:

Marina Lagodich, Microbiology &Immunology Kathryn Sparrow, Microbiology &Immunology

- 903.5 Dr. Zorychta said that on behalf of Prof. Williams-Jones, she would like to thank all the committee members for their hard work, and to thank Josie D'Amico for her superb organization.
- 903.6 The nominees for the Leo Yaffe Award were:

James Coulton, Microbiology & Immunology
Laurie Hendren, Computer Science
Barbel Knauper, Psychology
Carlos Morales, Anatomy and Cell Biology
Nilima Nigam, Mathematics & Statistics
Laura Nilson, Biology
Kenneth Ragan, Physics
John Silvius, Biochemistry
Hanadi Sleiman, Chemistry
John Stix, Earth & Planetary Sciences

- 903.7 Dr. Zorychta said that on behalf of the Committee, she would like to congratulate all the nominees, and to express her admiration for the excellence of the nominees' dossiers.
- 903.8 Dr. Zorychta announced that the winner of the 2005 Leo Yaffe Award was **Prof. Hanadi Sleiman**, Department of Chemistry. Dr. Zorychta then read the following citation:

"The Leo Yaffe Award for Excellence in teaching honours professors who make an outstanding and long-lasting impact on undergraduate education in the Faculty of Science. Hanadi Sleiman is such a professor.

"Professor Sleiman joined the Department of Chemistry as an assistant Professor in 1998, and immediately served notice that she would soon become one of the University's star teachers, receiving a remarkable 4.6 on 5 evaluation from students for

Physical Chemistry 203, her very first course at McGill. In 1999, Professor Sleiman took over the lion's share of teaching Introductory Organic Chemistry, a high enrolment course, which students are warned by senior undergraduates "is the toughest course that you will take at McGill". Professor Sleiman received a grade of 4.5 from the students that first year and during each of the next three years a stunning 4.8 on 5. As one student noted "She changed the way I felt about Organic Chemistry". In a similar vein another student remarked, "her enthusiasm is so contagious that organic chemistry is now my favourite branch of chemistry"

"As well as being a superb lecturer, Professor Sleiman is also a remarkable mentor of students. According to one of her former B.Sc Honours thesis students "she has the ability to change lives - she changed mine. Instead of stopping at a B.Sc., I am now in the second year of my Ph.D, and am already planning postdoctoral studies" In 2002, Professor Sleiman's extraordinary contributions to teaching were formally recognized when she was awarded the prestigious McGill University Principal's Prize for Excellence in Teaching at the Assistant Professor level. That same year she was made a Cotrell Scholar by US-based "Research Corporation" for her excellence in research and teaching, and in 2004 was made a Dawson Scholar by McGill University to recognize her outstanding scientific contributions.

"In summary, Hanadi Sleiman is a teacher-scholar of the very highest calibre and a most worthy recipient of the Leo Yaffe Award for Excellence in Teaching."

Dean Shaver said that on behalf of the Faculty of Science, he was pleased to congratulate Prof. Sleiman, and to thank her for her achievements in teaching.

## c) Scholarships

## - Scholarships Committee

S-04-32

903.10 Associate Dean Leighton, Chair, Scholarships Committee, moved, seconded by Prof. GowriSankaran, that the Scholarship Report be approved.

The motion carried.

903.11 Dean Shaver ceded the Chair to Associate Dean Mendelson.

## - Alan Shaver Scholarship

S-04-33

903.12 Associate Dean Leighton announced the above new scholarship, and read the terms of the scholarship. He said that two scholarships would be awarded each year to students in the Faculty of Science.

Associate Dean Leighton **moved**, seconded by Prof. GowriSankaran, that the Alan Shaver Scholarship be approved.

## The motion carried.

903.13 Associate Dean Leighton moved, seconded by Prof. GowriSankaran, the following motion:

The Faculty of Science extends its appreciation to Prof. Alan Shaver for serving as Dean of Science over the past 10 years. In large part due to his exemplary leadership, the Faculty has enjoyed an expansion of interdisciplinary and inter-faculty

programs, the arrival of many talented new professors, a growth in research, the addition of the Lorne M. Trottier Building, and the development of plans for a new Life Sciences Building. The Faculty of Science wishes Prof. Shaver continued success in all his endeavors.

# The motion carried unanimously.

- 903.14 Dean Shaver thanked faculty members, students and alumni, and said that the progress the Faculty of Science had made over the years was due to their efforts.
- 903.15 Dean Shaver resumed the Chair.

## (4) <u>CANDIDATES FOR DEGREES</u>

## a) Bachelor of Science

S-04-34

Associate Dean Leighton **moved**, seconded by Prof. GowriSankaran, that the above candidates be recommended to the Senate Steering Committee for the Bachelor of Science degree.

The motion carried.

## b) Diploma in Environment

S-04-35

Associate Dean Leighton **moved**, seconded by Prof. GowriSankaran, that the above candidate be recommended to the Senate Steering Committee for the Diploma in Environment.

The motion carried.

# c) Diploma in Meteorology

S-04-36

Associate Dean Leighton **moved**, seconded by Prof. GowriSankaran, that the above candidates be recommended to the Senate Steering Committee for the Diploma in Meteorology.

The motion carried.

## d) Bachelor of Arts and Science

S-04-42

Associate Dean Leighton **moved**, seconded by Associate Dean Mendelson, that the above degree list be recommended to the Senate Steering Committee for the Bachelor of Arts and Science degree. The degree list represented the first candidate for the B.A. & Sc. degree.

#### The motion carried.

Prof. GowriSankaran further **moved**, seconded by Prof. Paquette, 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.

- 904.1 Associate Dean Leighton thanked the unit advisors and the Student Affairs Office for their outstanding work in preparing the degree list.
- Dean Shaver said he would like to thank and congratulate Associate Dean Mendelson for being the prime mover in the development of the B.A. & Sc. degree program.

# (5) MINUTES OF APRIL 5, 2005

S-04-31

Prof. GowriSankaran **moved**, seconded by Prof. Ewing, 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 (continued)

d) Committee on Student Standing

S-04-37

Due to lack of business, there was no CSS report.

e) Academic Committee

S-04-38

The Academic Committee approved the following on Tuesday, April 19, 2005:

#### SECTION A: NEW PROGRAMS

BIOLOGY/PHYSIOLOGY/PSYCHOLOGY

- B.Sc. Major in Neuroscience

AC-04-148

- 907.1 Associate Dean Mendelson said that modifications should be made to List D, Upper Level Courses. The lower heading should read "A maximum of 9 credits from:." Also, BIOL 301 and BIOL 389 should be removed from this lower list.
- 907.2 A member pointed out that Item #7, Description, was an older version that did not take account of changes that had been made to the course lists. The description should be updated.

Prof. Chase **moved**, seconded by Prof. Levine, that the program be adopted with the above changes.

The motion carried.

## SECTION B: MAJOR PROGRAM CHANGES

None

## SECTION C: NEW COURSES

1) ANATOMY & CELL BIOLOGY

ANAT 499 Supervised Library Research 1 credit

AC-04-146

Associate Dean Mendelson **moved**, seconded by Prof. Chase, that the course be adopted.

The motion carried.

2) BIOLOGY

BIOL 510 Advances in Community Ecology AC-04-141(REV) 3 credits

 ${\tt Prof.}$  Chase  ${\tt moved},$  seconded by  ${\tt Prof.}$  Levine, that the course be adopted.

The motion carried.

## SECTION D: MAJOR COURSE CHANGES

None

## SECTION E: MINOR COURSE CHANGES (For Information Only)

- Report on Minor Course Changes - Report on Minor Course Changes

AC-04-144 (Revised 2)

AC-04-159

## SECTION F: MINOR PROGRAM CHANGES (For Information Only)

- Report on Minor Program Changes

AC-04-P6

Dean Shaver said that if there were any questions concerning the 907.3 above Minor Reports, members should contact Associate Dean Mendelson.

## SECTION G: OTHER (For Approval)

- Admission Standards for Canadian High-School Applicants

AC-04-155

907.4 Associate Dean Mendelson briefly described the above document. He said that the changes were intended to bring McGill's admissions standards for Canadian students from outside Québec and Ontario into line with those of other Canadian universities, and into line with McGill's standards for Ontario students.

> Associate Dean Mendelson moved, seconded by Prof. GowriSankaran, that the above document be approved.

The motion carried.

# SECTION H: For Information Only

1) Academic Program Review - Program Study Group Memberships AC-04-156

Associate Dean Mendelson said that the document listed the committee membership for the Faculty Review Group and for four 907.5 Program Study Groups. He said that due to delays by the central administration in providing relevant data, the reviews were now expected to be completed by the end of the 2005-2006 academic year, rather than by the end of calendar year 2005.

2) Admissions Data AC-04-157

907.6 Associate Dean Mendelson described the salient point of Document AC-04-157, which was that there had been a very large number of applications for the new B.A. & Sc. degree, far more than the number of places available. Much of the increase came from U.S. students.

## Other Reports or Academic Business

- Work Group on Women Professors' Academic Careers S-04-39

- 907.7 Prof. Laurie Hendren, Chair of the Work Group on Women Professors' Academic Careers, thanked the members of the Committee for their work, and thanked Dean Shaver and Associate Dean Mendelson.
- Prof. Hendren briefly gave the highlights of the report, and 907.8 emphasized that it was a draft report. She encouraged members to read the full report, and asked members for feedback. One of the recommendations of the report was that the mandate of the workgroup be extended for one more year.

Dean Shaver urged members to read the report, and to provide Prof. Hendren with feedback. He said that the issue was important and would continue to be examined. Dean Shaver thanked Prof. Hendren and the members of the Committee for their work.

## (8) 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 April 13, 2005 - Prof. M. Mendelson will report at the next Faculty of Science meeting.

Senate Meeting of May 4, 2005 - Prof. M. Sutton

- I.1 Resolution on the death of Prof. William MacPhail Martin.
- I.2-3 Report of Steering Committee and adoption of minutes. It was mentioned that the budget which will be presented to Senate on May 25 (after the meeting of the Board of Governors) will be circulated by email, so senators can send comments to the senators which sit on the Board. It was requested that the full budget be sent to all senators.
- 1.4 The Principal introduced Ms. Johanne Pelletier who will become Associate Secretary-General during the summer and she welcomed the new student senators, thanking the outgoing ones.

The Principal updated Senate on her recent meetings about government relations at both the federal and provincial levels and she talked about the current state of academic renewal at McGill. Finally, she thanked Dean Fuks for extending his deanship until a new Dean of Medicine can be appointed.

- II.A-1 The administration was asked to provide an update on the current state of the changes in the librarian regulations. The Interim Provost reported that it was taking longer than he anticipated but work was in progress. He hoped it would be ready in Fall of 2005.
- II.A-2 A motion for academic amnesty for students who participated in the March  $16^{\rm th}$  strike was presented. It failed to carry.
- II.B-1 Confidential report on Honorary Degrees and Convocations was given.
- II.B-2 In the report on the Academic Policy and Planning Committee, new teaching programs were approved. It agreed by Senate to give a one year extension to the committee for the report on the implementation of the Graduate Student Thesis Questionnaire.
- II.B-3 The report on the Nominating Committee was received. The Statutory Selection Committee was approved and several members of other committees were recommended to the Board of Governors.
- II.B-4 A small wording amendment to the Charter of Students' Rights was passed.
- II.B-5 Several small wording amendments to the Code of Student Conduct and Disciplinary Procedures were passed.

II.B-6 A motion to adopt the new "Tenure Regulations for Full-Time Academic Staff" was presented. The new regulations will start on January 1, 2006 with the old ones no longer applying. The only exceptions are Sections 5.53 to 5.57 which will start immediately upon approval by the Board of Governors. In summary, these new regulations are a clarification and a rewording of the existing regulations and practices. Several friendly amendments (wording changes) were proposed and accepted. A further amendment that section 5.50.2 be changed to allow a further meeting, between the Principal or her delegate and the candidate, be allowed when tending to a negative decision. The amendment was passed and the main motion then passed.

# (9) <u>MEMBERS' QUESTION PERIOD</u>

There were no questions.

## (10) RESULTS OF SCIENCE ELECTION FOR SENATE

S-04-40

- 910.1 Dean Shaver said that the newly elected Science Senators were:
  - Prof. K. GowriSankaran (Mathematics & Statistics)
  - Prof. M. Mendelson (Psychology)
  - Prof. N. Roulet (Geography)

Their terms will end on August 31, 2008.

910.2 Continuing Faculty representatives on Senate, and remaining years to serve, are:

Prof. M. Baines (Microbiology & Immunology) - one year Prof. D. Harpp (Chemistry) - one year Prof. N. Kamran (Mathematics & Statistics) - two years Prof. C. Lin (Atmospheric & Oceanic Sciences) - two years Prof. M. Sutton (Physics) - two years Prof. S. Whitesides (Computer Science) - one year

# (11) SCHEDULE OF MEETING DATES

S-04-41

911.1 Dean Shaver noted the schedule of meeting dates for the 2005-2006 academic year.

#### (12) OTHER BUSINESS

Dean Shaver said that personally and on behalf of the Faculty, he would like to thank Josie D'Amico for the outstanding work that she has performed over the years for the Faculty of Science.

There being no further business, the meeting adjourned at 4:05 p.m.