

**FACULTY OF SCIENCE  
Meeting of Faculty  
Thursday, 21 May 2015  
Leacock Council Room L232**

**ATTENDANCE:** As recorded in the Faculty Appendix Book.

**DOCUMENTS:** **S-14-22** to **S-14-29**

Dean Grant called the meeting to order at 3:00 p.m.

**(1) ADOPTION OF AGENDA**

Item #9, Reports on Actions of Senate, on behalf of Senator Masad Damha, Senator David Harpp will report on the Senate meeting of March 18, 2015, after Item #6.

Prof. Mucci **moved**, seconded by Prof. Lydon, that the amended Agenda be approved.

**The motion carried.**

**(2) RESOLUTION ON THE DEATH OF SHEW-KUEY (TOMMY) MARK, SIR WILLIAM C. MACDONALD PROFESSOR EMERITUS OF PHYSICS**

**902.1** Professor Charles Gale from the Department of Physics, read the Resolution on the Death of Emeritus Professor of Shew-Kuey (Tommy) Mark.

Dear colleagues of the Faculty, it is with regret that I inform you of the passing of Macdonald Professor Emeritus of Physics Tommy Mark, on Friday March 13<sup>th</sup>, 2015, at the age of 78.

Tommy was an undergraduate and graduate student at McGill, and obtained his PhD in Physics here in 1965. After a postdoctoral stay at the University of Manitoba, he returned to McGill as a Faculty Lecturer in 1966, and was appointed Assistant Professor the following year. He rose through the ranks and was but a central theme of his academic studies remained the many fascinating properties of the atomic nucleus and of nuclear matter. Early on in his career, his careful measurements of nuclear reactions fueled the development of the theoretical nuclear optical model. In 1971

have reshaped the department and indeed, much of Canadian physics. This influence is still felt today. His stellar career as an academic administrator was not limited to Physics: in addition to several positions at McGill, he was an elected member of the MAUT Council, and he served on the University Senate and on many of its sub-committees. Outside McGill, he has also served in various capacities in a number of scientific and professional organizations, learned societies and government agencies. After his terms as Chair, Tommy rolled up his sleeves, concentrated on research and entered the new field of relativistic heavy-ion physics. He was an active member of two successive experimental collaborations at the Brookhaven National Laboratory, in the US, before retiring in 2004. Tommy's lifetime of accomplishments was recognized in 2002 when he was named W. C. Macdonald Professor of Physics.

devoted himself to our university. His scientific and academic leadership are renowned. Throughout his career, he remained a source of inspiration to his students, be it in the lab or in the classroom. We have lost a colleague who greatly enriched the life of our institution. The Faculty of Science at McGill extends its condolences to his wife Pearl, and to his son Terence.

**The resolution was adopted unanimously.**

**902.2**

Dean Grant thanked Prof. Gale for the resolution

further developed these laboratories on his own initiative to create a novel hands-on 'tinkerer' style of environment that involves designing and building lab machines from Arduino modules and in-house programming, rather than using specialized equipment. The committee appreciated this approach to teaching and the advanced involvement of students to actual problems and solutions in laboratory studies.

**903.2** Dean Grant congratulated Mr. Orchard-Webb and presented him with a framed certificate.

**903.3** Mr. Orchard-Webb said that he was completely surprised to receive Dean Grant's telephone call informing him of the award. He thanked the Department of Physics, and the Faculty of Science Excellence Committee, and he added that Physics was the best department in the Faculty.

**b) Leo Yaffe Teaching Award Prof. Edith Zorychta, Chair**

**903.4** Prof. Edith Zorychta, Chair, Leo Yaffe Award/Principal's Prizes Committee thanked the Committee for all their work.

**The**

teaches anatomy, the main focus being a large undergraduate class in histology where students learn the structure and function of tissues and cells knowledge that is fundamental to all of the biomedical sciences.

When describing Professor Morales, students consistently emphasize the organization, clarity and elegance of his lectures that convey a passion for histology and its relevance to molecular biology and to everyday life. They appreciate his many strategies to make learning enjoyable, even in classes of close to 400 students. He creates analogies to help them remember details, he has a gentle sense of humor, and he finds creative ways to keep everyone alert and interested, by providing questions, provoking discussions, and adding the unexpected, including music. In the words of one of his students:

*an amazing teacher! His lectures were clear, interesting and he made them fun and dynamic. I have never had a professor that was able to explain material so well. I appreciated when he found other ways of explaining concepts to ensure*

Teaching histology has always been a challenge, because classes and textbooks must be supplemented by hours of examining tissue specimens, traditionally using a light microscope. In 2006 Dr. Morales began the process of totally transforming this aspect of the curriculum. He digitized the entire collection of histological slides, using a precision scanner combined with state-of-the-art software that simulates the use of a microscope, so that students could examine a section of tissue using a computer. The histology laboratory now promotes interactive learning, with computer stations where groups of students and a demonstrator jointly examine histological slides and discuss their observations. Students can subsequently study and review the material at any time on their own. The experience is conveyed by a typical comment:

*course. At the beginning, I was looking at the histological slides thinking I would*

*the end, I*

Through the dedication and determination of Carlos Morales, McGill became the first university in Canada to implement digital histology, and the advantages are now universally recognized.

Carlos has extended his education to the public domain through a facebook site presenting digital images of cells and tissues as beautiful works of art. Each picture is accompanied by a clear explanation of the role of its cells in health and disease. The images are captivating, and uniquely effective in generating appreciation for the elegance and diversity of the cellular structures that we are made of.

Dr.

- 903.7 Unfortunately, Prof. Morales was unable to attend the meeting.
- 903.8 Dean Grant thanked Prof. Zorychta for her lovely citation. He congratulated Prof. Morales, in his absence, and said the award would be presented at Convocation.

**(4) CANDIDATES FOR DEGREES**

- 904.1 Director (Advising Services) Nicole Allard thanked everyone involved in preparing the degree lists.
- a) **Bachelor of Arts and Science** **S-14-23**  
 b) **Bachelor of Science** **S-14-24**

904.2 Director Allard said there were 96 graduands for the B.A. & Sc. degree, and 805 for the B.Sc. degree. The corresponding figures for 2014 were 86 and 822.

904.3 Director Allard said that the honorifics cut-offs for the B.A. & Sc. and B.Sc. degrees were:

**B.A. & Sc.:**  
 - First - 3.86 CGPA (same for 2014)  
 - Distinction 3.69 CGPA (3.70 for 2014)

**B.Sc.:**  
 - First - 3.93 CGPA (3.91 for 2014)  
 - Distinction 3.80 CGPA (same for 2014)

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

**The motion carried.**

Director Allard further **moved**, seconded by Prof. Gale, 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.**

- c) **Diploma in Environment** **S-14-25**  
 d) **Diploma in Meteorology** **S-14-26**

There were no students graduating with either Diploma.

**(5) MINUTES OF MARCH 17, 2015 **S-14-22****

Prof. Mucci **moved**, seconded by Prof. Hurtubise, that the Minutes be approved.

**THE MOTION CARRIED.**

**(6) BUSINESS ARISING FROM THE MINUTES**

**907.1**

Associate Dean Kaspi said that there were four candidates interviewed for the Moyse Travelling Scholarship, and the Sub-committee selected **Mr. Lou Beaulieu-Laroche**, First Class Honours in Neuroscience. In addition, she announced that the Governor **Mr. Alexander Gordon Hofkirchner**, First Class



Director Allard **moved**, seconded by Prof. Lennox, that the changes be approved.

**The motion carried.**

- (5) **BIOLOGY**  
BIOL 352                      Vert Evol: Dinosaurs & Mammals                      **AC-14-80**  
Changes: title, description, prerequisites  
3 credits

**907.13**                      The title and description changes better reflected the current course content. An alternative prerequisite was being added.

Director Allard **moved**, seconded by Prof. Green, that the changes be approved.

**The motion carried.**

- (6) **BIOCHEMISTRY**  
BIOC 404                      Biophysical Methods in Biochem                      **AC-14-86**  
Changes: title, description, restriction  
3 credits

**907.14**                      The changes better reflect the course as currently taught. Additionally, housekeeping changes were made.

Director Allard **moved**, seconded by Prof. Mucci, that the changes be approved.

**The motion carried.**

- (8) **DEAN'S BUSINESS**

**S-14-29**

**908.1**                      Director Allard said that the DMURL provides recognition for students who have completed at least 9 credits of graded research-based courses in at least two different units, and who have a minimum GPA of 3.00 on these courses. She said that the B.Sc. students and B.A. & Sc. students listed in Document #S-14-29 would be graduating with this honour.

**(b) Announcements**

**908.2**                      Dean Grant made the following announcements, and congratulated those recognized.

**908.3**                      - **Fessenden Professorships in Science Innovation**  
**Ranked 1<sup>st</sup>**  
Prof. Kaleem Siddiqi, School of Computer Science  
Project: The award recognizes Prof. Siddiqi's work in **Modeling Heart Wall Myofibers**

**Ranked 2<sup>nd</sup>**  
Prof. C.-J. Li, Department of Chemistry  
Project: The award recognizes Prof. Li's work in **Catalytic Conversion of Methane and Natural Gas into High-Valued Aromatics, Hydrogen, and Liquid Fuels**

**908.4**                      -  
Paul François, Department of Physics  
Joelle Pineau, School of Computer Science





The provincial government announced that it had granted approximately \$9M to McGill to support green chemistry. Principal Fortier indicated that these funds had been requested by McGill in connection with the recent establishment of a Canada Excellence Research Chair in Green Chemistry and Green Chemicals, and V.P. Goldstein added that the funds would be used to pay for infrastructure.

been acknowledged, he would like to point out that Dean Grant's role in Chairing Faculty meetings that were enjoyable, not boring and fun, particularly for the Science Senators who were recognized for their reports, had been greatly appreciated by Faculty members. For these reasons, and many more, Prof. Hurtubise said he would like to move a vote of thanks to Dean Grant on behalf of all Faculty members. Prof. Gale said he would like to second the vote of thanks to "*Dean Martin*."

Although Dean Grant suggested that the motion be adopted unanimously, a vote was called.

**The motion carried.**

There being no further business, the meeting adjourned at 3:50 p.m.