UNIVERSITY OF TORONTO
FACULTY OF APPLIED SCIENCE & ENGINEERING

Minutes of the Faculty Council Meeting

Thursday, October 6, 2011

12:10 – 2:00 p.m.

Michael E. Charles Council Chamber, Galbraith Building

Present:
Jonathan Rose (Speaker)
Raviraj Adve
Stewart Aitchison
Grant Allen
Cristina Amon (Dean)
Philip Anderson
Joe Baptista
Jason Bazylak
Kamran Behdinan
Vaughan Betz
Sharon Brown
Phil Byer
David Cheung
Cathy Chin
Tom Coyle
Chris Damaren
Edward Davison
Khuong Doan
Adam Doyle
M. Reza Emami
Carolyn Farrell
Jason Foster
Bruce Francis
Ashvin Goel
P. Glenn Gulak
John Harrison
Jennifer Hsu
Gina John
Bryan Karney
Mark Kortschot
Raymond Kwong
Chi-Guhn Lee
Alberto Leon-Garcia
Brenda McCabe
Susan McCahan
Barbara McCann
Paul Milgram
Olivia Molenda
Farid Najm
Jun Nogami
Graeme Norval
Austra Ozolins
Jeffrey A. Packer
Khoman Phang
Jane Phillips
Nelly Pietropaolo
Kim D. Pressnail
Doug Reeve
Paul Santerre
Shamim A. Sheikh
Lily H. Shu
Chandra Veer Singh
David Sinton
Adam Steinberg
Piero Triverio
Frank J. Vecchio
Peter Weiss
Christopher Yip
Safwat G. Zaky
David Zingg
Jean Zu

Guests:
Vanessa Andres
Christina da Rocha-Feeley
Sonia De Buglio
Bernie Fitzpatrick
Madelyn Herschorn
Sandra Hunt-Chomyn
Barbara Lavers
Dan Pettigrew
Geoff Wichert
Caroline Ziegler

Regrets:
Peter Birkemoe
Michael Branch
Jim Dawson
Levente Diosady
Sara Dolcetti
Molly Shoichet
Peter Stangeby
Chirag Variawa

1. Welcome/Adoption of the Agenda

The Speaker, Professor Jonathan Rose, thanked members joining the first Faculty Council meeting of the 2011/2012 academic year, and welcomed all present. He noted that members had received the agenda on September 28th.

On a motion duly moved, seconded and carried, it was resolved –

THAT the agenda be adopted.

2. Memorial Tributes

The Speaker acknowledged the recent passing of Professor and Dean Emeritus Gordon Slemon and said that a memorial tribute to Professor Slemon will be delivered at the December 2, 2011 Faculty Council meeting.

(a) Professor Emeritus Douglas Lavers

The Speaker acknowledged the presence of Mrs. Barbara Lavers, who joined the meeting to hear the memorial tribute to her husband, the late Professor Emeritus Douglas Lavers of The Edward S. Rogers Sr. Department of Electrical and Computer Engineering.

The Speaker called upon Professor Farid Najm to read the memorial tribute:

"After completing his PhD degree at the University of Toronto, Professor Lavers worked in industry in Germany for a few years. He then returned to Toronto and was appointed in 1974 to the Department of Electrical Engineering, now the Edward S. Rogers Sr. Department of Electrical and Computer Engineering. He was cross-appointed to the Department of Metallurgy and Materials Science, now Materials Science and Engineering, for many years. He had an outstanding career teaching and conducting research, during which he inspired a large number of undergraduate and graduate students in both departments.

"The research interests of Professor Lavers spanned many aspects of electromagnetic field analysis and its application to electrical machines and to the development of heating and stirring techniques in metallurgical processes. He made many contributions to the use of numerical methods, particularly those known as finite-element methods, in field calculations. Despite its theoretical nature, his research had a strong focus on industrial applications, such as the use of rotating magnetic fields to stir molten metal. His research earned him an excellent international reputation and the highest level of recognition granted by the Institute of Electrical and Electronics Engineers. He was elected Fellow of the IEEE in 1994 for his contributions to the modeling of electrometallurgical systems and electroheat devices, later becoming a Life Fellow. He was heavily involved in the Magnetics Society of the IEEE. He chaired its Fellow Evaluation Committee and was an active member of the society's Executive Committee and the Editorial Board of the IEEE Transactions on Magnetics. The strong applications focus of his research also led to many consulting engagements with industry, particularly in the field of metallurgy.

"Professor Lavers was a gifted teacher who loved teaching and cared deeply about his students and about educational standards. Students were quick to realize that he cared and to feel his passion for the material. As one of his former students observed 'I can still remember his lectures for the dreaded electric and magnetic fields course. He was so good and so well-liked that soon the aisles and stairs were filled with students.'

"Doug was also a natural mentor to his younger colleagues, often advising them on funding proposals or on teaching. One colleague recalled his early years as a faculty member and the difficulties he encountered in teaching: 'Half my class had stopped coming to lectures. Doug sat me down and chatted with me for a good long time about teaching strategy and communication, and met with me every week for the rest of the term.'

"What is particularly special about Doug was his passion for exploring and participating in the grand beauty and majesty of nature. The love he had for the wilderness only matched the love he had for his family. He lived for the next big trip and enjoyed the preparation for such trips as much as the trips themselves. To him, it was a spiritual journey, not just a trip. A sampling of Doug's yearning to taste the magnificence of nature included adventures in Chile, the Grand Canyon, Lake Superior, the Hood River canoe trip in the Yukon, the Dempster Highway, and of course his last Yukon canoe trip made this summer.

"Doug was a man of kindness and joy. Those who knew him will remember his warmth, his generosity of spirit and, above all, his humanity. He will be dearly missed by all."

On a motion moved by Professor Farid Najm and seconded by Professor Emeritus Safwat Zaky, it was resolved –

> THAT the Council of the Faculty of Applied Science and Engineering record with deep regret the death on July 11, 2011 of Professor Emeritus Douglas Lavers.
>
> Be it further resolved that a record of his service be inscribed in the minutes of this Council, and that a copy be sent to his family as an expression of the respect and gratitude of the members of Council.

(b) Professor Emeritus Patrick J. Foley

The Speaker called upon Professor Jean Zu to read the memorial tribute to the late Professor Emeritus Patrick J. Foley of the Department of Mechanical and Industrial Engineering:

"Patrick J. Foley, Professor Emeritus, died peacefully at Toronto Grace Hospital on May 14, 2011 after a long, determined struggle with cancer and stroke. Born July 25, 1926 in Stirling, Scotland, son of Daniel Foley of Waterford City and Margaret Prendergast of Kells, Co. Kilkenny, Ireland, Professor Foley was predeceased by brothers (Msgr) Donal and Colum Foley and beloved first grandchild Lauren Foley. He leaves a daughter and a son by his first wife, Mary Joan (Hendry) Barsvary, Caroline Stephens (Peter) and David Foley; sons by his second wife Joan (Mason) Foley, Brian and Colin Foley; and grandchildren, Julia, Patrick, Caitlin and Melinda. He will be missed by brothers John (Barbara), Brendan (Jenny), and Michael (Alice) Foley, sisters Sheila Tierney and Margaret Foley, all of the UK; and by dear friends Vera Mraz and Anna MacIver of Toronto.

"Professor Foley spent many happy school holidays with family at his grandparents' farm in Kells. At 17, he interrupted his studies at Glasgow University to join the RAF as an aircrew cadet (having flown solo already with his University Air Squadron) but, finding the flying training program was being wound down, joined the British Army, serving as a captain in the Argyll and Sutherland Highlanders in Europe and the Middle East, later completing an M.A. in Psychology. In 1954, Professor Foley brought his family to Canada and joined the Human Factors Group at Defence Research Medical Laboratories at Downsview, where he undertook basic research in vision and reaction time in addition to applied human factors projects for all

three Canadian armed forces. In 1966, he joined the University of Toronto's Industrial Engineering Department, where he was the first to teach Human Factors Engineering. In 1989-90, he received the Faculty of Applied Science and Engineering Teaching Award. Popular with students, Professor Foley was celebrated for an annual lecture on Human Factors Engineering given to the whole first-year engineering class in Convocation Hall. He supervised many graduate and undergraduate theses. He was Chair of the Department of Industrial Engineering in 1980-85; the second President of the Human Factors Association of Canada in 1972-73; a member of the RCAF Institute of Aviation Medicine; and a Fellow of the Royal Society for the Encouragement of Arts, Manufactures and Commerce.

“An accomplished poet and always ready to entertain with a song, Professor Foley also loved sailboats. His last years were spent happily at Hazelton Place Retirement Residence with the companionship of new friends and excellent support from staff and caregivers.”

On a motion moved by Professor Jean Zu and seconded by Professor Paul Milgram, it was resolved –

> THAT the Council of the Faculty of Applied Science and Engineering record with deep regret the death on May 14, 2011 of Patrick J. Foley.
>
> Be it further resolved that a record of his service be inscribed in the minutes of this Council, and that a copy be sent to his family as an expression of the respect and gratitude of the members of Council.

Members of Council stood and observed one minute of silence in honour of the late Professors Emeriti Lavers and Foley.

3. Approval of the Minutes of the Previous Meeting

On a motion duly moved, seconded and carried, it was resolved –

> THAT the minutes of the meeting of April 28, 2011 be approved as circulated.

4. Introduction of New Members

The Speaker called upon Chairs and Directors to introduce their new faculty members.

Professor Grant Allen of the Department of Chemical Engineering and Applied Chemistry introduced Professor Cathy Chin.

Professor Farid Najm of The Edward S. Rogers Sr. Department of Electrical and Computer Engineering introduced Professors Vaughn Betz and Piero Triverio.

Professor Jun Nogami of the Department of Materials Science and Engineering introduced Professor Chandra Veer Singh.

Professor Jean Zu of the Department of Mechanical and Industrial Engineering introduced Professors David Sinton and Kamran Behdinan, and lecturer Matthew McKay.

Professor David Zingg of the Institute for Aerospace Studies introduced Professor Adam Steinberg.

The Speaker then welcomed the undergraduate and graduate Faculty Council student members present and thanked them for attending the meeting.

5. Report of the Dean

Dean Cristina Amon welcomed members to Faculty Council and provided remarks.

(a) Workload Policy

As a result of the University-UTFA agreement at the last round of bargaining and the subsequent development of the Workload Policy and Procedures for Faculty and Librarians (WLPP), units within each Faculty are required to create their own Unit Workload Policy.

Over the past few months the Faculty, with input from its departments and institutes, has created a Framework for Developing Unit Workload Policies, which provides guidelines for the creation of unit policies.

Each department and institute is now establishing a committee, chaired by the unit Chair or Director, to develop their Unit Workload Policy which will be provided to the Dean by the end of November for review and approval. The Unit Workload Policies will go into effect in January 2012.

(b) UTFA Memorandum of Agreement

UTFA wishes to change the current Memorandum of Agreement, which can greatly affect the way the Faculty pursues tenure and its academic mission. The Dean encouraged faculty members to write to UTFA and copy the Provost to express their views.

(c) Possible Teaching Assistant Strike

There is a possibility of a teaching assistant strike, as a result of a dispute between the University and the teaching assistants' union, CUPE 3902.

The earliest strike date would be the beginning of November. It is likely that the teaching assistants will not be locked out, allowing those who want to work to do so.

The Faculty is developing a contingency plan based on work done two years ago in response to H1N1, where it was made possible to provide an overall course evaluation even though not all homework was graded.

Professor Chris Damaren and Barbara McCann are representatives on the committees dealing with the possible strike.

(d) Annual Report, 2010-2011

The Faculty is in the last stages of finalizing the 2010-2011 Annual Report. It is a rich report, building upon the success of the last two Annual Reports, which were well received.

The 2010-2011 Report discusses last year's activities and outlines this year's initiatives. It adds additional metrics in some areas and provides data for the last 10 years, allowing us to assess our progress and measure against our goals.

Dean Amon said that we should be proud of our accomplishments: we are in a solid financial situation, and our consistently high position in academic rankings helps us to recruit the best and brightest students and faculty from around the world.

The Annual Report will be published online in the next week or so, with print copies available shortly thereafter. The Dean welcomed members' input.

(e) Campaign Preparation

The University's campaign steering committee has completed its work of establishing goals and themes and creating a timeline and positioning message. Although no official announcement has been made, the University goal will be $2 billion, the largest ever in Canada, with almost half the funds in hand when the campaign is officially launched on November 20.

The theme of this campaign includes Building the University's Global Leadership, with the sub-themes of meeting global challenges and preparing global citizens. Included in the theme of meeting global challenges are invention and innovation, human development and health, and energy, sustainability and the environment – all areas where Engineering is strong.

Our Faculty will be launching its campaign shortly after the University launch. This is a great opportunity for us to address space needs, create opportunities through philanthropic funds for endowed chairs and undergraduate and graduate fellowships, and to seed new programs.

(f) Engineering Business Minor

The new Engineering Business Minor, a joint effort with the Rotman School of Management and our Faculty that consists of three core courses being taught by Rotman exclusively to our undergraduate students and over ten elective courses, is off to a great start. It has attracted considerable interest and is currently oversubscribed.

(g) Admissions

Engineering has had an excellent undergraduate admission year, and is slightly over target with larger than forecasted yields. The OSS average rose by 1.6% to 90.9%; about one-quarter of our incoming students are international; and 24.1% of our students are female. The Dean thanked members for their recruitment efforts and for raising our visibility in different ways.

(h) CEAB Accreditation

The Faculty is starting to prepare for the CEAB accreditation visit in the fall of 2012 and will be making our best efforts to achieve the maximum accreditation of six years. In addition to the traditional AU count, CEAB has added an outcome-based approach for reviews that requires the demonstration and assessment of 12 attributes for students graduating from our undergraduate programs. To allow universities to transition to this new method of assessment, compliance with the graduate attributes will not be enforced until 2014; however, CEAB has already begun evaluating the graduate attributes and our progress will be evaluated at our 2012 review and noted in subsequent CEAB decisions. Professor Susan McCahan is leading the CEAB review efforts, and the Dean thanked members in advance for their cooperation.

(i) Provincial Graduate Expansion

Phase III of the graduate expansion initiative was announced by the province earlier this year. Of the 6,000 graduate spaces in Ontario, our University will account for approximately one-third of the graduate population. Departments have been asked to submit graduate enrollment targets for the next five years by the end of October (assessing appropriate combinations of research streams and professional programs, and international and domestic students, based on their goals). These targets will be forwarded to the Provost to meet the November 1, 2011 deadline. This is an opportunity to increase graduate enrollment in our Faculty and to work toward our Academic Plan's goal of balancing the number of graduate and undergraduate students by decreasing the undergraduate population to what it was prior to the double cohort numbers, and at the same time, increasing the number of graduate students.

(j) Dean's Town Hall

The next Dean's Town Hall for undergraduate students will be on October 7 at noon in the Council Chamber. The Dean looks forward to speaking with students about our Faculty and hearing their thoughts, questions and concerns.

(k) Academic Leadership

Dean Amon concluded by introducing new academic leadership appointments and thanking them for their service to the Faculty. These include Chair First Year, Professor Kim Pressnail; Vice-Dean Undergraduate, Professor Susan McCahan; Chair, Engineering Science, Professor Mark Kortschot; Chair, Chemical Engineering and Applied Chemistry, Professor Grant Allen; and reappointed Director of UTIAS, Professor David Zingg.

6. Business Arising from the April 28, 2011 Faculty Council Meeting

The following information items are updates from the April 28, 2011 Faculty Council meeting.

(a) Update on Academic Appeals Board Nominations

The appointments to the Academic Appeals Board for 2011-2012 were approved by Council as a regular motion on April 28, 2011. Report 3300 Revised has been updated to include members nominated since April and was circulated in advance for Council's information.

(b) Update on Composition of Standing Committees

The appointments to the Faculty's Standing Committees for 2011-2012 were approved by Council as a regular motion by email vote on May 13, 2011. Report 3293 Revised was updated to include members appointed since May and was circulated in advance for Council's information.

The following information items are Business Arising from the April 28, 2011 Faculty Council meeting, where quorum was lost before they could be raised.

(c) Faculty Council Meeting Dates, 2011-2012

Report 3294, circulated in advance, was received for information.

(d) Engineering Alumni Honours & Awards Candidate Recommendations

Report 3298, circulated in advance, lists candidates for the induction into the 2011 Engineering Alumni Hall of Distinction, the Engineering Alumni Medal, the T5 Mid-Career Award, and the 7T6 Early Career Award. There were no questions and the Report was received for information.

(e) Admissions Update

The Admissions Committee's Report 3295 Revised, circulated in advance, describes the total number of applications, offers, refusals and acceptances as of April 8, 2011. A complete report summarizing the 2011 admissions cycle will be presented at the December 2, 2011 Faculty Council meeting. There were no questions and the Report was received for information.

(f) Proposed Curriculum Changes for the 2011-2012 Academic Year

The Undergraduate Curriculum Committee's Report 3296, circulated in advance, describes proposed curriculum changes for the 2011-2012 academic year. There were no questions and the Report was received for information.

(g) Engineering Graduate Education Update

The Engineering Graduate Education Committee's Report 3297, circulated in advance, describes new courses approved and courses renamed. There were no questions and the Report was received for information.

(h) Recognition of Service

The Speaker acknowledged four faculty members who retired in 2010-2011 and thanked them for the contributions they have made to the Faculty. These are Professor Levente Diosady of Chemical Engineering and Applied Chemistry, Professor Andrew Goldenberg of Mechanical and Industrial Engineering, and Professors James Gottlieb and Peter Stangeby of the Institute for Aerospace Studies.

Dean Amon acknowledged two academic administrators who completed their terms last year: Professor Doug Reeve, who served as the Chair of the Department of Chemical Engineering and Applied Chemistry from 2001-2011; and Professor Grant Allen, who served as Vice-Dean, Undergraduate from 2007-2010. Dean Amon thanked the professors for their service to the Faculty and presented them each with a gift of an engraved jade plaque.

(i) Teaching Assistant Award

Dean Amon recognized Bernie Fitzpatrick for winning the inaugural Teaching Assistant Award in 2010-2011.

7. Academic Plan, 2011-2016

The Speaker reminded members that Faculty Council meetings are formal and our Rules of Order and standard parliamentary procedure require that a motion be seconded before discussion ensues.

Noting that the following is a regular motion, he called upon Dean Amon to present the Academic Plan, 2011-2016, which was circulated in advance as Report 3308.

At the conclusion of her presentation, Dean Amon moved and Professor Grant Allen seconded the motion –

> THAT the proposed Academic Plan, 2011-2016 be approved.

The Speaker invited discussion. A member congratulated the Dean on the quality of the Academic Plan, stating that he liked the specificity of the action items and metrics. He suggested that the title "academic plan" might be too broad, and that the document might be more accurately called a "strategic plan." The Dean responded that some components are in addition to the requirements of an Academic Plan, for example philanthropy; they are enablers to achieve the academic goals and have been placed in the Plan's appendix. Another member said that the Academic Plan would not be inconsistent with the final draft of the Centre's framework for academic planning.

The Speaker called the question. The motion was carried.

8. Revision to the Procedures for Committees of Council

The Speaker reminded members that the following is a regular motion. He called upon David Cheung, President of the Engineering Society, to present Report 3303, previously circulated

At the conclusion of the presentation, Dean Amon moved and David Cheung seconded –

> THAT the Procedures for Committees of Council of the Faculty of Applied Science and Engineering be revised from:
>
> *P1.1 Committees shall be appointed at the May meetings of Faculty Council (elections for student representatives shall take place in the Fall).*
>
> to:
>
> *P1.1 Committees shall be appointed at the Spring meeting of Faculty Council. Undergraduate student representatives shall be appointed by the Engineering Society Executive by the end of September.*

The Speaker invited discussion. The following amendment was moved and seconded –

> THAT the Procedures for Committees of Council of the Faculty of Applied Science and Engineering be revised from:
>
> *P1.1 Committees shall be appointed at the May meetings of Faculty Council (elections for student representatives shall take place in the Fall).*
>
> to:
>
> *P1.1 Committees shall be appointed at the Spring meeting of Faculty Council. Undergraduate and graduate student representatives shall be appointed by their respective societies and associations by the end of September.*

The Speaker invited discussion on the amended motion.

Members said that the language in the proposed amendment was unclear as to which "respective societies and associations" were meant. It was suggested that the original motion be reinstated and that the Procedures for Committees of Council be further revised for clarity and brought back to Council at a later date.

The proposed amendment was withdrawn and the original motion was carried.

9. Division of Environmental Engineering & Energy Systems

Professor Bryan Karney, Division Chair, updated Council on the closure of the undergraduate component of the Division of Environmental Engineering & Energy Systems, explaining that it is being closed because it has grown into the Environmental Engineering Minor and the Sustainability Energy Minor, which are both under the jurisdiction of the Cross-Disciplinary Programs Office. The graduate portion of the Division of Environmental Engineering & Energy Systems still exists under the jurisdiction of Professor Karney.

10. Annual Report of the Academic Appeals Board

Report 3309, circulated in advance, describes the responsibilities of the Academic Appeals Board and summarizes the appeals it heard from September 2010 through September 2011. There were no questions and the Report was received for information.

11. Standing Committee Goals, 2011-2012

The Speaker reminded members that the following reports are for information.

(a) Scholarships and Awards Committee Goals

Report 3306, circulated in advance, describes the Committee's goals for the academic year, which include a review of the manner in which confidential information is handled and further enhancements to the current e-portfolio system. There were no questions and the Report was received for information.

(b) Undergraduate Curriculum Committee Goals

Report 3307, circulated in advance, describes the Committee's goals for the academic year, which include the completion of the Committee's handbook and the drafting of rules for handling Advanced Standing. There were no questions and the Report was received for information.

(c) Examinations Committee Goals

Report 3310, circulated in advance, describes the Committee's goals for the academic year, which include a review of the criteria for awarding Honours Standing at graduation, a review of the requirements for clearing probation, and the development of a set of guidelines to aid instructors in determining when course mark adjustments would be appropriate and what types of adjustments are consistent with the University's and the Faculty's Grading Polices. There were no questions and the Report was received for information.

(d) Teaching Methods and Resources Committee Goals

Report 3310, circulated in advance, describes the Committee's goals for the academic year, which focus on teaching awards, course evaluations and educational technology. There were no questions and the Report was received for information.

12. Reports and Recommendations of Standing Committees

The Speaker reminded members that the following reports are for information.

(a) Engineering Graduate Education Update

The Engineering Graduate Education Committee's Report 3304 Revised was circulated in advance for Council's information.

Professor Chris Damaren, Chair, presented the Report, stating that the original proposal for the flex-time PhD program in the Department of Mechanical and Industrial Engineering, as circulated to members on September 28, had been removed and will be re-submitted at a subsequent Council meeting.

There were no questions and the Report was received for information.

(b) Proposed Curriculum Changes for the 2011-2012 Academic Year

The Undergraduate Curriculum Committee's Report 3305, circulated in advance, lists a number of minor curriculum changes for the academic year.

There were no questions and the Report was received for information.

13. Other Business

There was no other business.

14. Date of Next Meeting

The next meeting of Faculty Council is December 2, 2011.

15. Adjournment

The Speaker thanked members for attending and participating in the meeting. The meeting adjourned at 1:33 p.m.

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