

Minutes of the Annual Meeting September 25, 2009, Queen's University Club Conference Room

Chair: Bob Lemieux, Head, Chemistry Department

Attending: Jack Bikker (Wyeth), Walter Chan, Guy Dumont (Fisher Scientific), Lorenzo Ferrari (Lanxess), Rick Friesen (Merck), Cory Johnston (Fisher Scientific), Peter Kazmaier (XRCC), Din Lal (Gamble Technologies), Louis Lamontagne (PainCeptor), Steve Leach (Ridout & Maybee LLP), John Molloy (PARTEQ), Heinz Plaumann (BASF), Will Rogers (Imperial Oil), Walter Szarek (Queen's, Chemistry), Adi Treasurywala (ArrowCan), Danial Wayner (NRC), Natalie Cann (Queen's Chemistry), John Carran (Queen's Chemistry), Sean Conway (Queen's, Advancement), Bob Lemieux (Queen's, Chemistry), Greg Lessard (Queen's, Office of the Principal), Susan Marlin, (Queen's, Office of the VP-Research), Patty McHenry (Queen's, Advancement), Suning Wang (Queen's Chemistry), Mike Wells (PARTEQ).

Regrets: Burton Branch (Neill & Gunter), Jan Oudenes (Alphora), Dave Robins (Davos Pharma), Dave Thomas (AXYS Group), Markus Wicki (3M).

MORNING SESSION I: Departmental Updates

Bob Lemieux welcomed Council members and guests, and introduced the new Council members: Mr. Steve Leach, Barrister and Solicitor, Patent and Trademark Agent, Ridout & Maybee LLP, and Mr. Dave Robins, Vice-President, Davos Pharma Inc. He then read a message from the new QCIC Chair, Mr. Dave Thomas (see Appendix 1).

Bob Lemieux reviewed the activities and state of the Chemistry Department, including recent funding announcements for GreenCentre Canada, faculty and student awards, renewal of the Bader Chair in Organic Chemistry, and a budget update. Following the presentation, concerns were raised by Council members about the budget situation, including the negative impact of cuts in the TA budget on the graduate program. Council members commented about annual salary increases of 5-6% for Queen's faculty members, which were deemed unsustainable in the current budgetary climate. A question was also raised about whether energy savings in operations of Chernoff Hall could mitigate departmental budget cuts.

Bob Lemieux presented a progress report on GreenCentre Canada on behalf of Dr. Philip Jessop, who could not attend. The presentation focused on academic outreach and the process for technology disclosure, assessment and development through GCC.

Questions by Council members about the process of technology development, industry participation and what constitutes 'green chemistry' were fielded by John Molloy.

Mike Wells presented a progress report on Snieckus Innovations, which was recently granted 'service unit' status by the Senate Advisory Research Committee. Questions from Council members focused on the scale of custom syntheses (up to hundreds of grams), FTE cost (ca. \$140K), and management of IP (secure network, facilities, CDA), cross-talk within SI, and the need for postdoctoral fellows to pursue their own research projects along with contract research.

John Carran presented a progress report on the development of online Chemistry courses and professional programs as a new revenue source. Regarding the online 2nd year Organic Chemistry for Life Science course, Council members enquired about the feasibility of offering a short 'wet lab' summer session (possible, but likely to be prohibitively expensive given that students will cover a wide geographical distribution). One possible solution could be to create partnerships with industry, and have the lab component performed at local laboratory facilities. It was recognized that online delivery will become the most competitive area in post-secondary education, and that Queen's needs to get into the market now lest it rapidly falls behind other institutions like McGill.

MORNING SESSION II: QCIC Brainstorming, Part 1

Bob Lemieux introduced the two discussion facilitators, Mr. Sean Conway, Acting VP-Advancement, and Dr. Greg Lessard, a former Associate Dean for Chemistry and Chair of the Virtualization Task Force, who both gave introductory remarks to get the discussion started.

Sean Conway made the following remarks: (i) Fiscal challenges are everywhere, but initiatives in health care and the environment are well positioned going forward notwithstanding these fiscal pressures; Chemistry is therefore is a favorable position given its academic and commercial orientation. (ii) Change in response to fiscal challenges can work: look at the city of Pittsburg, for example, the "old steel capital" of America now transforming itself into a vibrant high-tech community based on its universities and their growing strengths in areas like health care and related research and commercialization. Change can bring with it exciting, though sometimes painful, possibilities. (iii) Governments are looking for universities to build and strengthen their partnerships with business and industry. (iv) A recent example of such partnership at Queen's is the creation of GreenCentre Canada. Queen's and Kingston are rapidly becoming the centre for much exciting research and development in green chemistry, which will likely have an enormous impact on our environmental choices going forward. (v) Bill Leggett, 17th Principal of Queen's University gave the following advice regarding donors: they are "willing to buy the vision but not the mortgage."

Greg Lessard described the following initiatives relevant to the discussion: (i) The Principal's Innovation Fund, which provides start-up funds to try new ideas aimed at cutting costs and/or generate new revenues. (ii) The Virtualization Task Force, which is

exploring new, innovative ways to deliver our curriculum in a more cost-effective manner. For example, the Biology Department is experimenting with delivering the same lecture by one instructor to three different sections via video capture i.e., virtual lectures. (iii) The growing importance of carefully measuring our progress. For example, Queen's makes use of the National Survey of Student Engagement (NSSE; for details, see http://www.queensu.ca/irp/accountability/surveys.html) which asks students about facets of their engagement in and out of the classroom. This survey has revealed that while we do very well in terms of our out-of-classroom experience, and while we do at least as well as our Ontario peers in terms of in-classroom experience, rising student numbers and class sizes are making it more difficult to provide a personalized experience. Our challenge in the future is to find ways to do this with available resources. He also noted that members of the Innovation Council have a role to play by providing feedback on what the sorts of training and educational experience are most valuable in today's world.

The session began with members asking about goals of the brainstorming exercise: (i) to close a big revenue gap? (ii) setting a new agenda for the department to move forward? (iii) QCIC members to help create new philanthropic opportunities?

Initial discussions centered on the budget situation. There was general agreement that the planned horizontal cuts will likely caused serious harm to the institution. Instead, cuts need to be more strategic and vertical; some tough choices are needed.

At the end of the morning session, Dan Wayner presented an initial summary of the discussion: The strategy sought by the QCIC should be a set of actions that support a vision and goals.

The Vision:

- (i) Queen's Chemistry will provide Canada's most exciting and comprehensive graduate and undergraduate learning experience, and
- (ii) Queen's Chemistry will be recognized internationally for its research in biological/medicinal, computational, environmental/green, and materials chemistry.

The Strategy:

- (i) Build a community to continue to engage Chemistry and Engineering Chemistry alumni after graduation
- (ii) Focus research activities to build critical mass in key areas of impact
- (iii) Take leadership in the use of emerging technologies to enhance the student learning experience
- (iv) Develop a business plan for revenue generation that does not compromise access by faculty and students to departmental infrastructure and services for the purpose of research and teaching
- (v) Develop a communication plan to attract new students and encourage donations

AFTERNOON SESSION: QCIC Brainstorming, Part 2

Following the lunch break, the discussion resumed and focused primarily on the idea of building an online community of Chemistry and Engineering Chemistry students, alumni, faculty and QCIC members as a new *LinkedIn* group, with the primary goal of extending the student experience beyond graduation and create a stronger sense of allegiance to the Department. Members identified the following potential benefits of this online community, which could be promoted as added value to a Queen's Chemistry degree:

- (i) allow alumni to stay better connected to the Chemistry Department via online version of the annual Chemistry Newsletter and/or periodic updates
- (ii) provide useful information to the Department about career development of Chemistry and Engineering Chemistry alumni (how are Chemistry degrees used, in what businesses?), which can be used in improving curriculum development
- (iii) give Chemistry and Engineering Chemistry alumni access to employment opportunities posted by other alumni, QCIC members
- (iv) create an online "mentorship bank" composed of QCIC members, faculty and alumni who are willing to volunteer their time in mentoring students and recent graduates entering the workforce
- (v) provide opportunities for alumni to change career (retooling) by eventually offering a suite of online technical courses
- (vi) enhance departmental fundraising via direct appeals to the online community

Moving forward, the following steps will be taken to create the online Queen's Chemistry Community (QCC):

- (i) Create a new LinkedIn group to serve as the foundation of the QCC. Bob Lemieux will contact the Queen's School of Business to learn of their experience with a similar online community
- (ii) With the assistance of the Office of Advancement, invitations to join the QCC will be sent by email to all Chemistry and Engineering Chemistry graduates and current Chem and EngChem majors
- (iii) Survey the QCC subscribers to find out what they would like to see on the LinkedIn site

The afternoon session ended with a discussion of opportunities to expand online course offerings to other universities, especially in developing countries. Lemieux mentioned that the Canadian Society for Chemistry has been accrediting Chemistry programs in the Middle East and is looking at expanding these activities to India, among other developing countries. Opportunities for Queen's may lie in the fact that some of those programs often lack adequate courses to meet CSC accreditation requirements, which could be met via online offerings from Queen's.

Lemieux closed the afternoon session by urging QCIC members to subscribe to the QCIC LinkedIn group and continue the discussions that have been started during this

meeting. Greg Lessard added the analogy that leading an academic department is like driving in the dark with hundreds of deer around the road, and that any source of light, no matter how faint, is useful.

Adjournment: 3:00 pm by Bob Lemieux.

Appendix 1

22 September, 2009

A MESSAGE FROM THE CHAIR, QCIC

Dear Fellow Council Members

First of all, I would like to apologize for not being present at this meeting. I had agreed to attend to an important matter elsewhere before the date for this meeting was set and before I accepted the chairmanship of the Council.

I remain excited about the Council and the role it can play in providing advice and support to the Department during the current challenging times. I will strive to make a difference as Council Chair.

My view is that the Council should be more than merely a group that meets once per year. I would like to see the activities of the Council make contributions throughout the year as required. I would like to see the Council generally regarded as a relevant, responsive and productive advisory board—an acknowledged and important asset to the Department of Chemistry and ideally a role model for other departments within Queens.

I look forward to working with all of you.

During the next weeks I will contact each of you to discuss your views on the goals, vision, and priorities of the Council with particular emphasis on how we can focus and strengthen the Council to be current, relevant and most importantly strategic in addressing the needs of the Department.

Today's meeting promises to be very important in brainstorming towards a strategic plan.

I wish you all a productive time.

With warm regards,

David Thomas