The Department of Geography and Environmental Management (GEM) continues to be ranked in the top 100 of the QS World University Rankings of Geography departments and maintains its position as fourth in the country. This is due to the strong commitment of its faculty, staff and students to academic excellence and its vibrant, supportive and engaging environment within the Faculty.

Academic Plans
The department continues to offer undergraduate plans in Geography and Environmental Management (GEM), Geomatics, and Geography and Aviation; all but the Aviation program are available as regular and co-op streams. There is continued activity in the 2+2 undergraduate plans with Chinese Universities, including Nanjing University, Wuhan University, China University of Geosciences (Wuhan) and Capital Normal University (Beijing). In addition, we have a new 1+2+1 program with Capital Normal University (Beijing). We expect students from Chang’an University (X’ian) to begin enrolling in our program in the fall of 2017. In total, this year we welcomed 17 new 2+2 students and 4 new 1+2+1 students into our plans. Our new graduate 1 + 1 + 1 program with Wuhan University saw two new students this year. The Masters in Climate Change (MCC) program continues to build admitting its third class of 19 students in the fall.

The department partners with a number of other academic units in the delivery of undergraduate and graduate plans. The Department makes a significant contribution to the running of the MAES program in Local Economic Development (changing to Masters of Economic Development and Innovation), based in the School of Environment, Enterprise, and Development. Through our partnership with the Department of Geography and Environmental Studies at Wilfred Laurier University, the Waterloo-Laurier Graduate Program in Geography continues to thrive.

Faculty and Staff
GEM is home to two Canada Research Chairs (Tier 2), Sarah Burch (SSHRC) and Maria Strack (NSERC) and two University Research Chairs (Daniel Scott and Claude Duguay). In addition, a new hire in cryospheric sciences, Christine Dow, was appointed in 2016 and has been nominated for a third Canada Research Chair (Tier 2). We are very happy to report that three further appointments were made, two in the field of economic geography (Daniel Cockayne and Nancy Worth) and a new hire in the field of Aviation (Suzanne Kearns). There were four applications for promotion and tenure in 2016. All four were successful with Sarah Burch, Chris Fletcher, Peter Johnson and Derek Robinson being promoted to the rank of tenured Associate Professor.

We have had a mostly stable year on the staff front. Susie Castela continues as the Department Administrator. Alan Anthony and Teresa Wilson continue as Graduate Program Administrators. Sara Stewart and Heather Dorken continue as Undergraduate Program Advisors and with Sara’s move to the Dean’s office in July, we welcomed Miljana Kovacevic to take over Sara’s role in the Department.

Research
Research continues to be a high priority activity, as faculty participate in research projects representing close to $3.8 million in funding. Major ongoing funding sources include SSHRC,
NSERC, CIHR and several other departments or government agencies (Canadian Space Agency, Indian and Northern Affairs Canada, Alberta Innovates, Ontario Ministry of Agriculture, Food and Rural Affairs, Natural Resources Canada, Meteorological Service of Canada, The European Space Agency, The Japan Aerospace Exploration Agency, and Environment Canada). Provincial sources of funding include the Ontario Centres of Excellence. Geographers also participate in collaborations (e.g. SSHRC Partnership, Networks of Centres of Excellence [AllerGen, ArcticNet and Meopar], CFI, NSERC CRF) based at other universities. Private sector research partnerships continue to be important, as funding is received both directly and through NSERC and OCE collaborations. Some of our private sector partners are Suncor Energy, Syncrude Canada, the Canadian Oilsands Innovation Alliance, DeBeers Canada, and Climate Change Emissions Management Corporation. Our international research partnerships continue to grow. Ongoing exchange visits with our partners at Nanjing University are leading to a growing slate of activities that include student and faculty exchanges for the purposes of research cooperation and a student field trip in Spring 2016. An EU Erasmus project resulted in an approved exchange funding faculty and students between Geography and Jena University (Germany) in 2017-18.

**Academic Programs**

Prestigious new developments are underway in our academic programming. Susan Elliott and Johanna Wandel, with members of the Water Institute, were instrumental in securing a Canadian Queen Elizabeth II Diamond Jubilee – Advanced Scholarships award during 2016. The scholarship funding, awarded by Rideau Hall Foundation, Community Foundations of Canada and Universities of Canada seeks to promote the activation of “a dynamic community of young global leaders around the world”. We anticipate this effort developing in the 2017-18 timeframe. In addition, the Department was successful in securing funding from eCampus Ontario to develop a suite of online courses for a Graduate Diploma in Climate Risk Management which is planned for launch in 2019. Teaching innovation is also an acknowledged dimension of GEM’s teaching and learning activities with Su-Yin Tan (international education and learning activities) and Derek Robinson (technological innovations) both announced as the Faculty’s Teaching Fellows.

**Graduate** – Brent Doberstein continued as Associate Chair, Graduate Studies this year with Rich Petrone assisting in an interim role as Brent took sabbatical leave. Alan Anthony continued as the Graduate Program Administrator for MES, MSc, MA and PhD programs while Theresa Wilson continues this role for the MCC program. Despite our masters in tourism program being deactivated, our graduate programs continue to be in demand. This year, 9 new PhD and 49 Masters students entered the grad program (29 in GEM programs, 19 MCC, 2 China 1+1+1), making the total current enrollment 88 Master’s (including MCC) and 56 PhD students in our graduate program for a total of 144 students (full time and part time). The list of UW geography graduate students receiving external awards increased to 7 NSERC, 4 SSHRC and 8 OGS. During the 2016-17 academic year, 33 students received their Master’s Degree in Geography and 6 students received a PhD. Additionally, the total number of MCC students receiving their degree was 15.

**Undergraduate** – Ian McKenzie continued to serve as Director for Aviation, Geomatics, and 2+2 plans. Merrin Macrae is in the role of Associate Chair, Undergraduate Studies for GEM. Miljana Kovacevic joined the Department to work with Heather Dorken serving as Undergraduate Program Advisors, handling GEM and Geomatics/Aviation plans respectively. A total of 122 first year students entered Geography plans (34 GEM Co-op, 7 GEM regular, 63 Geomatics Co-op, 5 Geomatics regular, and 13 AVIA) in the 2016-2017 academic year. These first year admits were supplemented by 17 new 2+2 and 4 1+2+1 international students, and 18 internal transfer students, bringing the overall total number of new students to 161. The demand from students seeking to transfer into Geography plans was reduced this year. In total, across all
years and plans, there are 673 students enrolled in GEM. The Department’s Committee on Undergraduate Recruitment continues to conduct significant outreach to high schools and through social media strategies. In addition, a comprehensive undergraduate curriculum review has been started through a newly constituted Curriculum Review Committee. This will allow us to continue to refine our curriculum identity for outreach and in-reach purposes.

At Convocation ceremonies in June of 2016, 10 students graduated with a General Degree in Geography, 91 received an Honours Degree in GEM, Aviation, or Geomatics, and 88 students received a minor in Geography. An additional 31 students convocated in the fall (with an additional 3 students receiving a minor). A total of 132 students (majors) graduated in 2016.

In 2016-17, the department has begun developing a significant online teaching presence. Four undergraduate courses are in development at the Centre for Extended Learning (CEL): Climate Change Fundamentals; Global Environmental Health; Global Environmental Systems (Processes and Change); and an Introductory GIS/Geomatics course. All are expected to serve a significant service teaching function. In addition, with field trips to Indonesia, China and the Rouge Urban National Park, there is clearly a strong demand for experiential learning opportunities.

**Administration**

Contributions in the past year to University and Faculty level administration include: Jean Andrey continuing as the Dean of the faculty. Mike Stone completed his term as the interim Associate Dean Research on Dec. 31, 2016 when Claude Duguay took over this role from January 2017. Dan Scott continues as the Director of the Interdisciplinary Centre on Climate Change.

At the Departmental level, Johanna Wandel completed her role as interim Department Chair on Dec. 31, 2016. Richard Kelly took over as Chair on Jan. 1, 2017. Brent Doberstein continues as Associate Chair Graduate Studies, and Ian McKenzie continues to serve as the Director of Geomatics, and 2+2 plans and Director of the Aviation Program for GEM and Science. Merrin Macrae continues her role as Associate Chair for Undergraduate Studies of the Geography and Environmental Management program. Finally, Brent Doberstein kindly stepped in as the Interim Director of the WLJPG between January 1 and July 1, 2016. The Directorship has now passed to Wilfrid Laurier Department of Geography and Environmental Studies.