

SENATE AGENDA

1:30 p.m., Friday, February 16, 2018
Arts and Humanities Building, Rm 1R40

The Land Acknowledgment will be read at the beginning of the meeting.

1. **Minutes of the Meeting of January 19, 2018**
2. Business Arising from the Minutes
3. Report of the President – **EXHIBIT I** (A. Chakma)
4. Unanimous Consent Agenda – **EXHIBIT II**
5. Reports of Committees:
Operations/Agenda – **EXHIBIT III** (M. Milde)
Nominating Committee – **EXHIBIT IV** (W. Pearson)
Academic Policy and Awards – **EXHIBIT V** (J. Hatch)
University Planning – **EXHIBIT VI** (D. Laird)
University Research Board – **EXHIBIT VII** (J. Capone)
6. Report from the Board of Governors – **EXHIBIT VIII** (R. Konrad/M. Wilson)
7. Announcements – **EXHIBIT IX**
8. Discussion and Question Period
9. New Business
10. Adjournment

Senate meetings are scheduled to begin at 1:30 p.m. and normally will end by 4:30 p.m. unless extended by a majority vote of those present.

APPROVAL OF MINUTES

REPORT OF THE PRESIDENT

**UNANIMOUS CONSENT AGENDA
FOR ACTION**

**OPERATIONS/AGENDA COMMITTEE
FOR ACTION**

Senate Memberships – Faculty of Arts and Humanities, and Faculty of Education

**NOMINATING COMMITTEE
FOR ACTION**

Selection Committee for the Vice-President (External)

**SENATE COMMITTEE ON ACADEMIC POLICY AND AWARDS (SCAPA)
FOR ACTION**

Faculty of Engineering, School of Biomedical Engineering: Introduction of the BEMSc in Biomedical Engineering (BME) Program

Faculty of Health Sciences, School of Kinesiology: Withdrawal of the Honors Specialization in Kinesiology - Fitness and Exercise Prescription Module

School of Graduate and Postdoctoral Studies: Introduction of a Graduate Diploma (GDip) in Applied Health Sciences

Brescia University College: Introduction of a Major in Power in History and Politics

Huron University College: Reorganization of the Theology Program

Huron University College and the Richard Ivey School of Business: Introduction of a Faculty of Arts and Social Science (Bachelor of Arts, Honors Specialization)/HBA Combined Degree Program

King's University College: Introduction of an Honors Specialization in Thanatology

FOR INFORMATION

SUPR-U Report: Cyclical Review – Chemistry

SUPR-G Report: Cyclical Review – Geography

New Scholarships and Awards

**SENATE COMMITTEE ON UNIVERSITY PLANNING (SCUP)
FOR ACTION**

Faculty of Engineering – Establishment of New Academic Units

2018 Entrance Standards for Undergraduate First-Year Admissions

Five-Year Enrolment Projections

FOR INFORMATION

Report on Year One Class and Entering Averages

Update on Open Space Strategy

National Survey of Student Engagement (NSSE)

Provost's Update on Planning Process

Question from Senate

UNIVERSITY RESEARCH BOARD (URB)

FOR INFORMATION

Annual Report of the Vice-President (Research)

Vice-President (Research) Response to the URB *ad hoc* Task Force on Support for Research in Non-Stem Disciplines

REPORT FROM THE BOARD OF GOVERNORS

FOR INFORMATION

Report on a meeting of the Board of Governors

ANNOUNCEMENTS

FOR INFORMATION

Standard Report



MINUTES OF THE MEETING OF SENATE

January 19, 2018

The meeting was held at 1:30 p.m. in Room 1R40, Arts and Humanities Building.

SENATORS: 77

A. Abuhussein	P. Jones	V. Radcliffe
P. Barmby	D. Jorgensen	A. Ray
G. Belfry	A. Katz	C. Roulston
P. Bishop	J. Kim	J. Rylett
M. Blackwood	L. Kim	P. Schmidt
A. Bowlus	K. Kontogiannis	V. Schwean
S. Burke	G. Kopp	K. Shuey
J. Capone	D. Kotsopoulos	Z. Sinel
T. Carmichael	K. Kwan	J. Siou
A. Chakma	D. Laird	W. Siqueira
E. Chamberlain	L. Logan	V. Staroverov
C.L. Chambers	E. Macpherson	C. Steeves
A. Chant	M. McDayter	T. Straatman
K. Clark	D. McDonald	G. Tigert
K. Cole	C. McLeod	S. Trosow
R. Collins	M. Milde	M. Vandebosch
R. Damji	K. Miller	M. Viczko
R. Datta	L. Miller	E. Walsh
J. Deakin	J. Mitchell	J. Wihlidal
I. Decoito	D. Moser	J. Wilson
J. Garland	S. Mumm	M. Wilson
C. Hardy	K. Myers	B.A. Younker
Y. Hassan	V. Nolte	S. Yousafzai
A. Hearn	C. Olivier	P. Yu
A. Holm	I. Paul	K. Zhou
C. Jones	W. Pearson	

Observers: D. Belliveau, K. Campbell, R. Chelladurai, J. Doerksen, J. Esseltine, J. Sadler, J. Weese

By Invitation: L. Cechetto, P. Eluchok, J. Meister, M. Workentin

Land Acknowledgement

K. Zhou read the Land Acknowledgement.

S.18-01

MINUTES OF THE PREVIOUS MEETING

The minutes of the meeting of December 8, 2017 were approved as circulated.

BUSINESS ARISING FROM THE MINUTES

S.18-02 **Reorganization of the Western Libraries** [S.17-259]

A member referred to the question raised at the December Senate meeting regarding the reorganization of Western Libraries and asked if this matter had gone to the Board of Governors for approval. J. Deakin, Provost & Vice-President (Academic), reported that the Board has not seen the proposal. The member sought guidance as to how the item could be presented to Senate for further discussion. J. Deakin stated that the matter was not within the remit of Senate, which had been confirmed with legal counsel. Dr. Chakma said that the question regarding the reorganization of Western Libraries could be referred to SCUP. With Senate's agreement, the matter involving the reorganization of the Western Libraries was referred to SCUP.

S.18-03 **REPORT OF THE PRESIDENT** [Exhibit I]

The President's report, distributed with the agenda, contained information on the following topics:

- Strategic Mandate Agreement (SMA2) approved by the Ministry of Advanced Education & Skills Development (MAESD)
- Major donation supports Management & Organizational Studies
- Federal Ministers' visits to campus
- Western launches new hub for community-based Indigenous health training
- Western leadership update

In addition to his written report, the President highlighted receipt of the major donation from alumnus Aubrey Dan that supports the DAN Department of Management & Organizational Studies noting that this fund helps protect the future of the program given that provincial funding is gradually declining. He thanked the many individuals for their efforts in organizing the Prime Minister's Town Hall meeting held on Thursday, January 11, 2018, including staff from Campus Police, Facilities Management, Ceremonies Office and the Office of Government Relations. He also acknowledged the work of Deb Matthews, outgoing Minister of Advanced Education and Skills Development, who was elected by London North Centre to the Ontario Legislature, for her commitment and service as a member of Parliament and as a Minister. He reported that Mitzie Hunter took over the role of Minister of Advanced Education and Skills Development.

S.18-04 **UNANIMOUS CONSENT AGENDA** [Exhibit II]

It was moved by A. Chant, seconded by P. Bishop,

That the items listed in Exhibit II, Unanimous Consent Agenda, excluding item 7. Office of the Ombudsperson Annual Review 2016-17, be approved or received for information by Senate by unanimous consent.

CARRIED

REPORT OF THE SENATE OPERATIONS/AGENDA COMMITTEE [Exhibit III]

S.18-05 **Senate Membership – Faculty of Health Sciences Constituency**

It was moved by A. Chant, seconded by P. Bishop,

That the seat held by L. Charland, representative of the Faculty of Health Sciences constituency, be declared vacant as a result of his resignation and that Shauna Burke be elected to fill this vacancy for the remainder of the term (January 1, 2018 to June 30, 2019).

CARRIED (By Unanimous Consent)

S.18-06

Information Items Reported By The Senate Operation/Agenda Committee

The Report of the Senate Operations/Agenda Committee, detailed in Exhibit III, contained the following items that were received for information by unanimous consent:

- Officers of Convocation
- Order of Ceremony – Autumn Convocation 2018

REPORT OF THE SENATE NOMINATING COMMITTEE [Exhibit IV]

S.18-07

Selection Committee for the President & Vice-Chancellor

The Report of the Senate Nominating Committee, detailed in Exhibit IV, contained the following slate for membership of the Selection Committee for the President & Vice-Chancellor: Erik Mandawe (ugrad/Schulich), Robyn Masters (Grad/Educ), Louise Koza (Staff), Bipasha Baruah (AH), Alison Hearn (FIMS).

W. Pearson, Chair of the Nominating Committee, provided an overview of how the committee determined the slate, which is constituency driven and asked if Senate wished to consider informally how the composition of the membership for this committee could be determined. On a motion duly moved and seconded, Senate agreed to consider informally how the composition of the membership of this committee could be determined. The first consideration was that only one member from a faculty/unit shall be appointed, consequently, it was moved by W. Pearson, seconded by A. Chant,

That only one member shall be appointed from a faculty/unit.

CARRIED

Secretary's Note: This motion does not pertain to students or staff.

Following a lengthy debate, it was moved by W. Pearson, seconded by D. Jorgensen,

That the composition of the members named by Senate to the Selection Committee for the President & Vice-Chancellor will include one student, one staff and three faculty.

CARRIED

In addition to the slate of nominees contained in the Report of the Nominating Committee, the following nominations were received from the floor for membership on the Selection Committee for the President & Vice-Chancellor:

Students: Yazan Hassan, Ayesha Khanna, Ariana Magliocco

Faculty: Audra Bowlus (SS), Jayne Garland (HS), Manina Jones (AH), Michael Milde (Dean/AH), Brent [Ahnungoonhs] Debassige (Education), Kevin Shoemaker (HS), Liana Zanette (Sci)

Staff: Arzie Chant

Senators were advised that an e-vote would be conducted to determine which nominees would be elected to the committee.

REPORT OF THE SENATE COMMITTEE ON ACADEMIC POLICY AND AWARDS [Exhibit V]

S.18-08 **Don Wright Faculty of Music: Revisions to the Admission Requirements of the Bachelor of Music (BMus) Honors Programs**

It was moved by A. Chant, seconded by P. Bishop,

That effective September 1, 2018, the admission requirements for the Bachelor of Music (Honors) (BMus) programs be revised as shown in Exhibit V, Appendix 1.

CARRIED (By Unanimous Consent)

S.18-09 **Faculty of Science, Department of Statistical and Actuarial Sciences: Revisions to the Admissions Requirements of Data Science Modules**

It was moved by A. Chant, seconded by P. Bishop,

That the admission requirements of the Data Science Modules be revised as shown in Exhibit V, Appendix 2, effective September 1, 2018.

CARRIED (By Unanimous Consent)

S.18-10 **Revisions to the International Dual-Credential Degree Programs Policy**

It was moved by L. Miller, seconded by C. Jones,

That the International Dual-Credential Degree Programs Policy be revised effective January 1, 2018 as shown in Exhibit V, Appendix 3.

A Senator questioned the change in the approval process of these agreements. The current policy mandates that all dual-credential degree program proposals must be approved by SCAPA and Senate before execution. The proposed amendments to the policy shown in Exhibit V, Appendix 3, reflect a new approval process for doctoral and research master's international dual-credential degrees. The revisions will place the responsibility for approving these on the Vice-Provost (SGPS) (and other signatories as required by legal requirements) and not be sent to Senate for approval.

L. Miller, Vice-Provost (SGPS) said that SCAPA questioned why approval is required given that these agreements do not involve credit transfers, and students must fulfill the currently existing requirements at both institutions before receiving their degrees. She added that since the existing programs at Western have already been approved by SCAPA and Senate previously, there is no need for SCAPA and Senate to approve the academic merits of these programs. The Office of the Vice-Provost (SGPS) is fully responsible for the development of these agreements in alignment with existing programs and their corresponding requirements. The credentials of the partnering institutions are reviewed by the Vice-Provost (International) and Western International. These agreements would be reported for information to SCAPA and Senate annually.

The question was called and CARRIED.

REPORT OF THE SENATE COMMITTEE ON UNIVERSITY PLANNING [Exhibit VI]

S.18-11 **Salamander Chair in Environmental Engineering – Revised Terms of Reference**

It was moved by A. Chant, seconded by P. Bishop,

That the terms for the Salamander Chair in Environmental Engineering be updated as described in Exhibit VI, Appendix 1.

CARRIED (By Unanimous Consent)

S.18-12 **Report on Faculty Recruitment and Retention**

The report on Faculty Recruitment and Retention, detailed in Exhibit VI, Appendix 2, was received for information.

K. Campbell, Vice-Provost (Academic Planning, Policy and Faculty), provided an overview of the report using overhead slides attached as **Appendix 1** to these minutes. She highlighted slides focused on probationary and tenured faculty, limited-term faculty, part-time faculty and full-time clinical faculty.

Discussion included the following:

- Student/faculty ratio – the overall ratio is 1 faculty/21.5 students which has remained consistent over the past eight years. However, the ratio is different across the faculties.
- A project underway involves conducting a survey to determine the percentage of part-time faculty that rely on Western as their primary income source. K. Campbell said this project should be completed in the next couple months and will include this information in the next report.
- K. Campbell agreed to investigate the percentage of retired faculty that are being replaced with probationary and tenured faculty.
- Given the recent strike by this fall by college faculty in Ontario, a Senator asked if Western has a strategy to replace part-time faculty with full-time faculty. K. Campbell said that the majority of money is spent on hiring full-time faculty.

S.18-13 **Office of the Ombudsperson Annual Review 2016-17**

A Senator asked about the level of compliance when recommendations are sent to Faculties. J. Meister, Ombudsperson, said that she uses diplomacy and is not heavy-handed regarding recommendations adding that in the 7.5 years she has served as the Ombudsperson, two formal written recommendations have been made, one of which was not followed because of a misunderstanding she had with regard to the process being followed by the area of the university impacted.

S.18-14 **Information Items Reported By The Senate Committee On University Planning**

Exhibit VI, Report of the Senate Committee on University Planning, contained the following item that was received for information by unanimous consent:

- Chairs Approved by SCUP for Senate

S.18-15 **REPORT OF THE ACADEMIC COLLEAGUE** [Exhibit VII]

Exhibit VII, Report of the Academic College, was received for information. The following items were included in the report: OCAV Task Force on Quality Indicators, Graduate Programs Outcomes Survey, Faculty at Work Project, Landscape of Accessibility Project.

S.18-16 **ANNOUNCEMENTS** [Exhibit VIII]

Exhibit VIII, Announcements, contained the following items that were received for information by unanimous consent:

- Election Results – Selection Committee for the Vice-President (External)
– student member (Haishan Qian)
- Academic Administrative Appointment

DISCUSSION AND QUESTION PERIOD

S.18-17 **PROPOSED INTELLECTUAL PROPERTY POLICY AND PROCEDURES** [Exhibit IX]
[S.17-213]

L. Cechetto, Executive Director, WORLDDiscoveries and P. Eluchok, University Legal Counsel, were present to respond to questions.

L. Cechetto explained that she and S. Jarrett, former University Legal Counsel, developed a new MAPP policy regulating the commercialization of intellectual property at Western.

The new policy will amalgamate

MAPP 7.3 – Copyrights http://www.uwo.ca/univsec/pdf/policies_procedures/section7/mapp73.pdf and

MAPP 7.4 – Patents http://www.uwo.ca/univsec/pdf/policies_procedures/section7/mapp74.pdf.

She said that these policies had not been reviewed for a long time and that they needed to be brought in line with the regulations stipulated in the UWOFA Collective Agreement. The goal was to combine the policies into one that is clearer and more transparent. The development process involved extensive consultation with many constituencies including Research Western, Deans, PVP, Associate Deans (Research), University Research Board, Campus Council and other groups on campus. Feedback was received and considered.

Discussion included the following:

- Western members fall under this new policy. Institutions such as London Health Sciences Centre and Lawson Health Research Institute have their own policies.
- Clause IV.9 gives significant latitude to the Vice-President (Research). UWOFA asked that there be explicit recognition of the importance of consultation. L. Cechetto advised UWOFA received a response to this concern noting the Vice-President (Research) understands the importance of consultation.
- Whether Clause IV.6 was consistent with the Faculty Collective Agreement or the Librarians and Archivists Collective Agreement. There is no explicit requirement in those collective agreements to make the disclosure provided for in clause IV.6 in certain situations. L. Cechetto said that this concern has been discussed with the President of UWOFA and Legal Counsel. This requirement is found under Section I: Copyright, Clause 2 and in Section II: Patents, Clause 11 of the UWOFA Collective Agreement.
- The draft policy only deals with copyright in commercialized materials and no threshold is suggested due to the difficulty in ascertaining what commercialization values might be, and to ensure that Western also meets its reporting requirements.
- Concerns were presented regarding the definition of *Intellectual Property*. L. Cechetto acknowledged that point noting that when the policy was being drafted definitions at other universities were considered.
- The policy needs to resonate with external partners of the University.

J. Capone, Vice-President (Research) said that in drafting the new policy, extensive consultation occurred, including opportunities for input from various constituencies.

Members asked that Senate be given another opportunity to discuss this new Intellectual Property Policy. In order to facilitate the discussion at the next meeting, the President asked that Senators send their questions in advance to L. Cechetto or the University Secretary.

S.18-18

Consultation with Students

A student Senator spoke about a concern amongst students regarding the lack of involvement and consultation with students regarding major academic decisions and asked if going forward students can be properly informed about changes to programs and any program cuts.

J. Deakin agreed that students should be consulted however, faculties have autonomy and make their own decisions. It is important that the leadership of faculties look at processes and include students on committees or provide notification of academic decisions. She agreed to bring this concern to the deans at their next meeting.

ADJOURNMENT

The meeting adjourned at 4:07 p.m.

A. Chakma
Chair

K. Kwan
Secretary

Report to SCUP on Faculty Recruitment and Retention

Office of the Vice Provost (Academic Planning, Policy and Faculty)

January 2018

Western  Faculty Recruitment and Retention
January 2018 1

Report pertains to:

- Probationary and Tenured Faculty (n=1046)
- Limited-Term Faculty (n=230)
- Part-Time Faculty (n=879)
- Full-Time Clinical Faculty (n=845)

and includes data on:

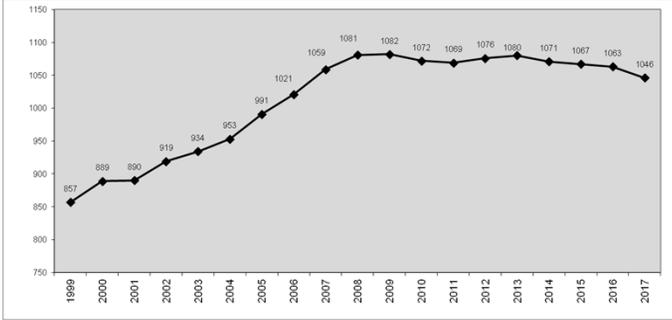
- Description of faculty complement
- Recruitment/retention/retirement
- Teaching contributions

Western  Faculty Recruitment and Retention
January 2018 2

Probationary and Tenured Faculty

Western  Faculty Recruitment and Retention
January 2018 3

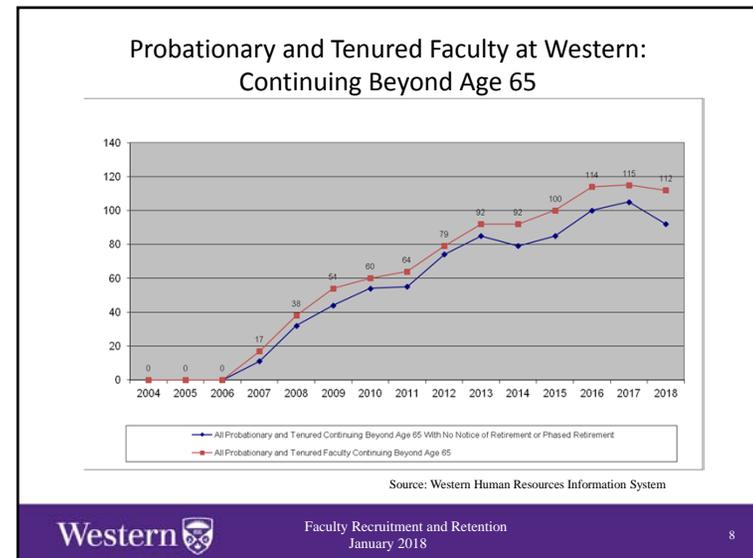
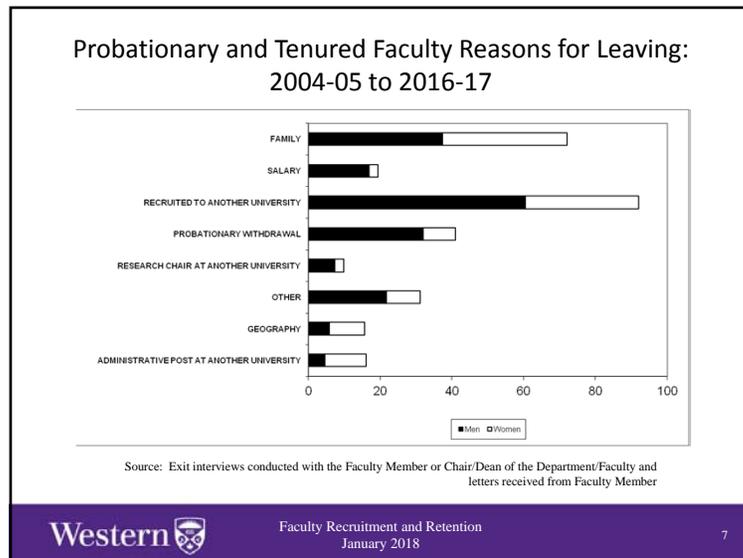
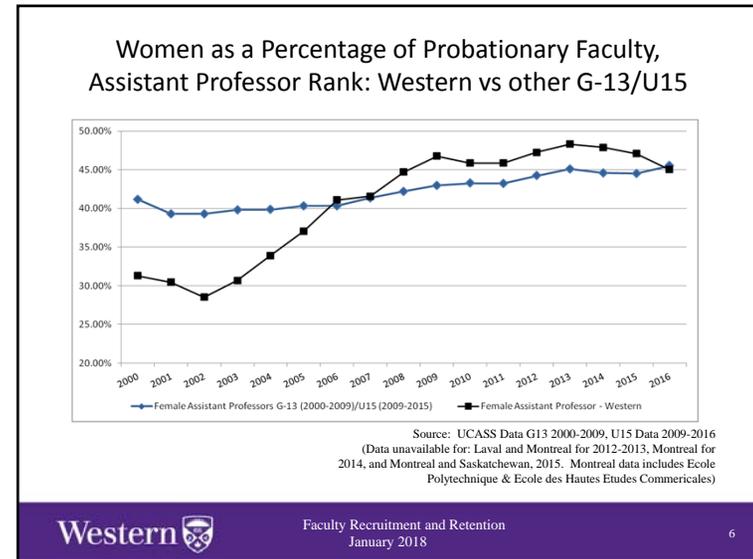
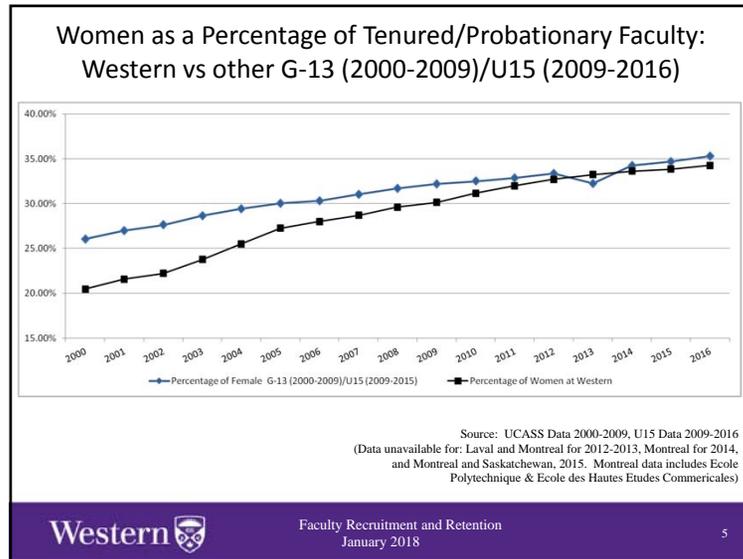
Probationary and Tenured Faculty at Western, 1999 to 2017



Year	Number of Faculty
1999	857
2000	890
2001	890
2002	919
2003	934
2004	953
2005	991
2006	1021
2007	1059
2008	1081
2009	1082
2010	1072
2011	1069
2012	1076
2013	1080
2014	1071
2015	1067
2016	1063
2017	1046

Source: UCASS Data for 1999 – 2010; U15 Data for 2011 – 2015, and Western HR Information System for 2017. The 2007 data and beyond includes Robarts Scientists who became Probationary and Tenured on July 1, 2007.

Western  Faculty Recruitment and Retention
January 2018 4

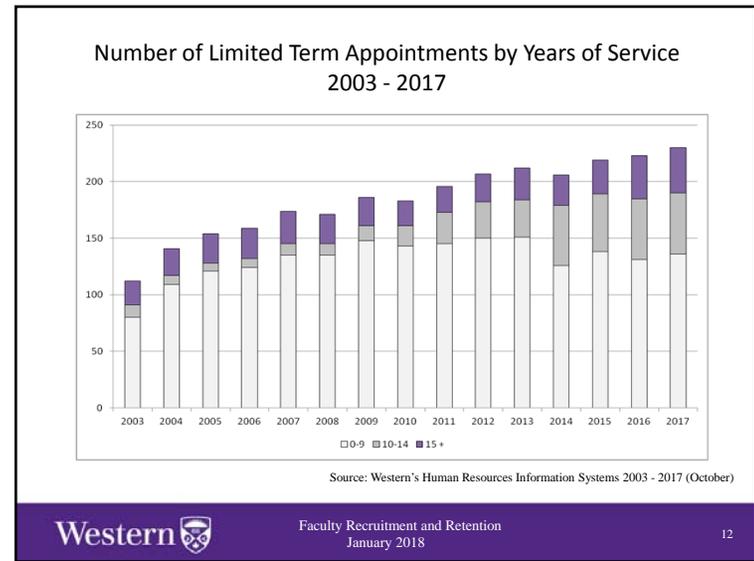
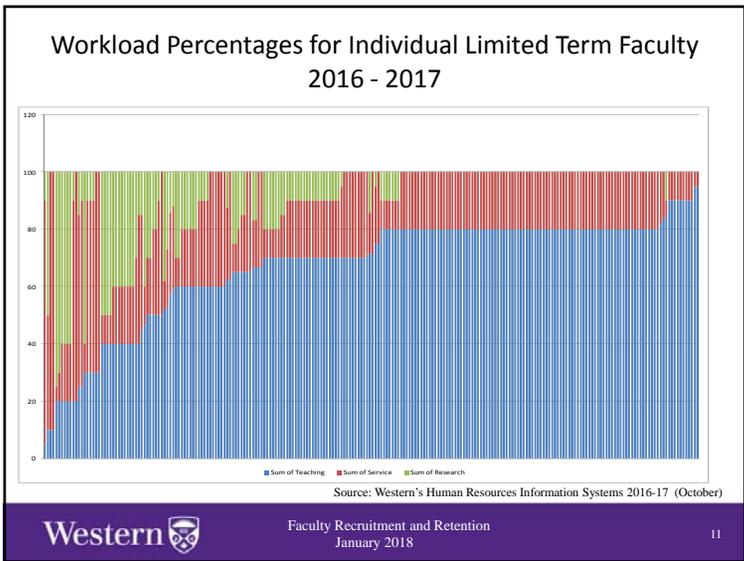
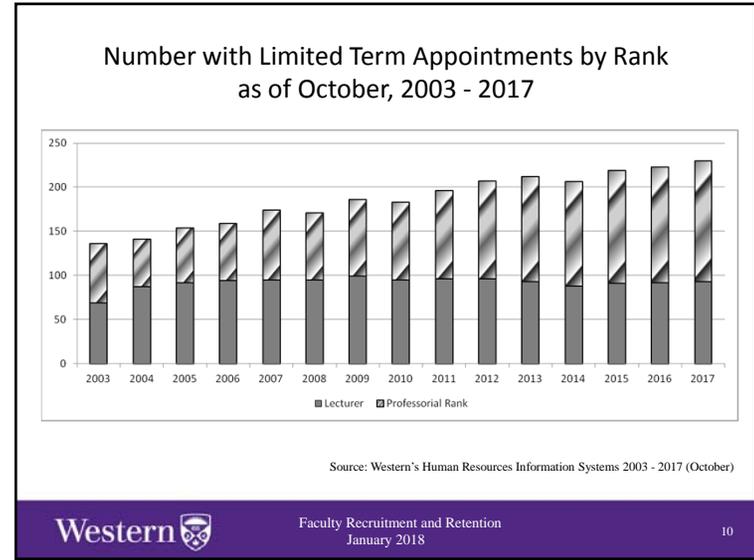


Limited Term Appointments



Faculty Recruitment and Retention
January 2018

9

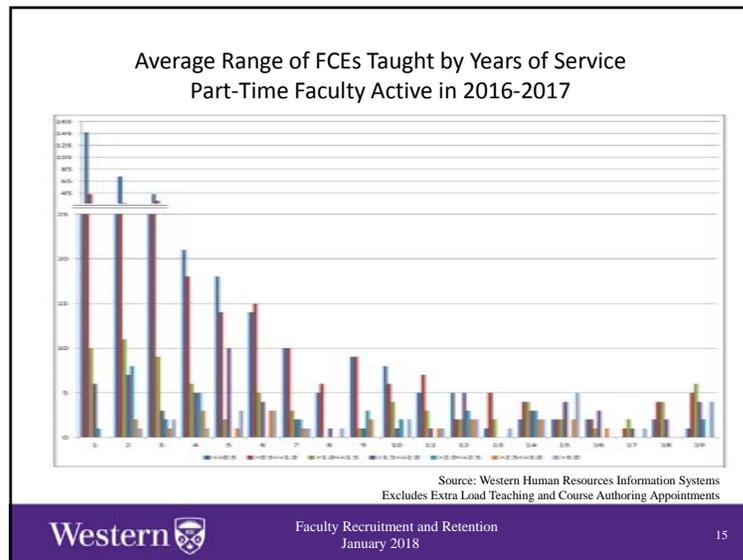
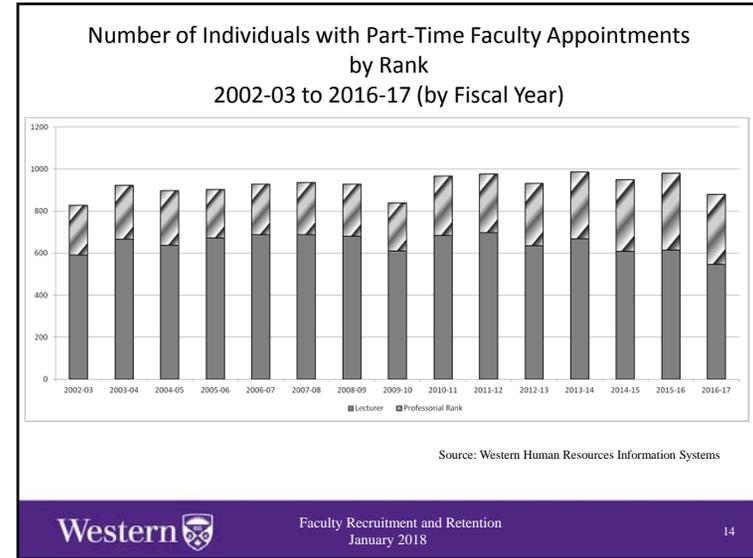


Part-Time Faculty



Faculty Recruitment and Retention
January 2018

13

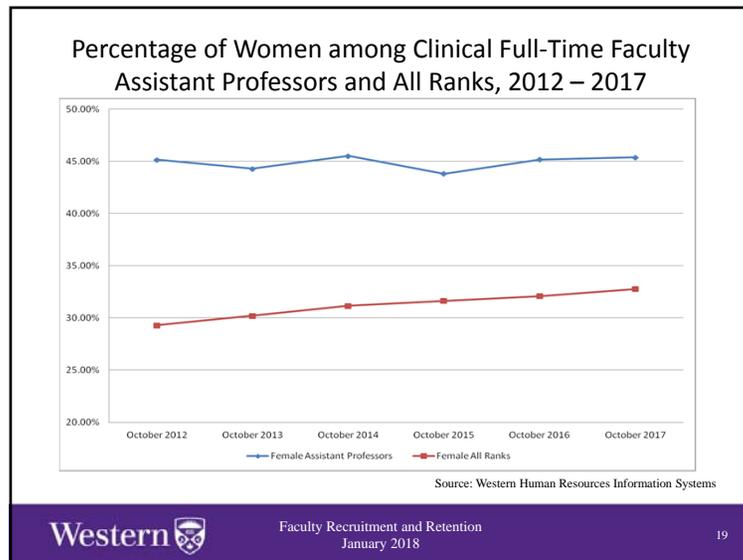
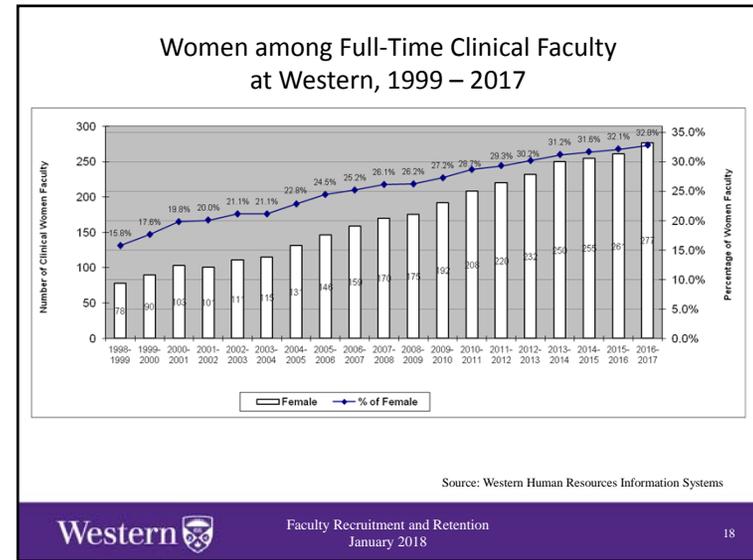
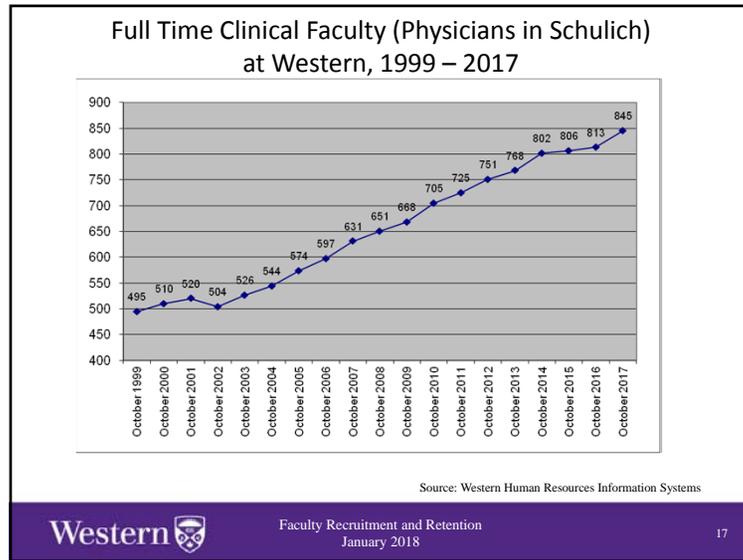


Clinical Full-Time Faculty (Physicians in Schulich)



Faculty Recruitment and Retention
January 2018

16



This report can be found at:

http://uwo.ca/facultyrelations/academic_planning/Recruitment_Retention_Report_2018.pdf

Western Faculty Recruitment and Retention January 2018 20



President & Vice-Chancellor

REPORT OF THE PRESIDENT

To: Senators
From: Amit Chakma
Date: February 8, 2018
Re: President's Report to Senate

For the February 16, 2018 meeting of Senate, I wish to highlight the following news and developments since my last written report for the meeting of Senate on January 19, 2018.

Mental Health Strategic Plan: Initially presented in draft form to key stakeholders in Fall 2017, the latest draft of [Western's Mental Health & Wellness Strategic Plan](#) has been posted online since January 28 to invite further input from all campus members. The plan is founded on a literature review and environmental scan of provincial, national, and international policies and services, as well as processes related to mental health promotion and wellness at other university campuses. For the past 18 months, the plan's development has been further informed through a [community engagement process](#) that included in-person consultations with more than 500 Western faculty, staff, students and senior university leaders, as well as input from another 1,500 individuals who responded to a campus-wide email survey. The plan articulates a vision to cultivate a culture of resilience and caring at Western, where students receive support as needed, where talking and learning about mental health reduces and eliminates stigma, and where all members of the campus community contribute to the creation of an inclusive and supportive environment. A final draft of the plan is expected to be presented to Senate and the Board of Governors for approval later this spring.

Times Higher Education Summit: On February 7, I had the pleasure to represent Western as a panel speaker at the *THE's Asia Universities Summit* held in Shenzhen, China. Our panel discussion was promoted under the banner theme of "Bridging Divides" and explored the increasingly important roles research universities play in the global knowledge economy through collaboration with one another and other institutional partners. I was privileged to participate on the panel with distinguished colleagues including Menahem Ben-Sasson (Chancellor, Hebrew University of Jerusalem), Jeffrey Lehman (Vice-Chancellor, New York University Shanghai), and C. Raj Kumar (Vice-Chancellor, O.P. Jindal Global University).

Western leadership update: Review and selection committees are now active for the following senior academic and administrative positions: President & Vice-Chancellor; Provost & VP (Academic); VP (External); AVP (Student Experience); University Registrar; and the Deans of FIMS, Science and Ivey.

UNANIMOUS CONSENT AGENDA

FOR APPROVAL

Any member who wishes to ask a question, discuss, or oppose an item that is listed below may have it removed from the consent agenda by contacting the Secretary of Senate prior to the meeting or by asking that it be removed before the Chair calls for a mover and seconder for the following motion.

Recommended: That the following items be approved or received for information by the Senate by unanimous consent:

Report of the Senate Operations/Agenda Committee – EXHIBIT III

1. Senate Membership – Faculty of Arts and Humanities	ACTION
2. Senate Membership - Vacancy filled by appointment – Faculty of Education	ACTION

Report of the Senate Committee on Academic Policy and Awards – EXHIBIT V

3. Faculty of Health Sciences, School of Kinesiology: Withdrawal of the Honors Specialization in Kinesiology – Fitness and Exercise Prescription Modules	ACTION
4. School of Graduate and Postdoctoral Studies: Introduction of a Graduate Diploma (GDip) in Applied Health Sciences	ACTION
5. Brescia University College: Introduction of a Major in Power in History and Politics	ACTION
6. Huron University College: Reorganization of the Theology Program	ACTION
7. Huron University College and the Richard Ivey School of Business: Introduction of a Faculty of Arts and Social Science (Bachelor of Arts, Honors Specialization)/HBA Combined Degree Program	ACTION
8. King’s University College: Introduction of an Honors Specialization in Thanatology	ACTION
9. SUPR-U Report: Cyclical Review – Chemistry	INFORMATION
10. SUPR-G Report: Cyclical Review – Geography	INFORMATION
11. New Scholarships and Awards	INFORMATION

Report of the University Research Board – EXHIBIT VII

12. Vice-President (Research Response to the URB Task Force Steering Committee – Support for Research in the Social Science, Arts and Humanities at Western	INFORMATION
---	-------------

Report from the Board of Governors

13. Report from the Board of Governors on the January 2018 meeting	INFORMATION
--	-------------

Announcements – EXHIBIT IX

14. Election Results – Selection Committee for the President & Vice-Chancellor	INFORMATION
--	-------------

The Unanimous Consent Agenda

The Senate's parliamentary authority -- *Sturgis Standard Code of Parliamentary Procedure* -- explains the consent agenda:

Organizations having a large number of routine matters to approve often save time by use of a *consent agenda*, also called a *consent calendar* or *unanimous consent agenda*. This is a portion of the printed agenda listing matters that are expected to be non-controversial and on which there are likely to be no questions.

Before taking the vote, the chair allows time for the members to read the list to determine if it includes any matters on which they may have a question, or which they would like to discuss or oppose. Any member has a right to remove any item from the consent agenda, in which case it is transferred to the regular agenda so that it may be considered and voted on separately. The remaining items are then unanimously approved *en bloc* without discussion, saving the time that would be required for individual votes.

While approval of an omnibus motion saves time at Senate meetings, Senate members will want to review the agenda materials carefully in order that they properly discharge their responsibilities.

How it works:

In consultation with Committee chairs and principal resource persons, the Secretary identifies action and information items that are routine and/or likely non-controversial. In each Committee's report, these items are noted in the list of items at the beginning of the report. Action and information items on the agenda and in committee reports that are not noted on the consent agenda will be presented singly for discussion and voting (when appropriate).

When members receive their Senate agendas, they should review all reports in the usual manner. **If any member wants to ask a question, discuss, or oppose an item that is marked for the consent agenda, he or she can have it be removed from the consent agenda** by contacting the Secretary of the Senate prior to the meeting or by asking that it be removed before the Chair calls for a mover and seconder for the motion to approve or receive, by unanimous consent, the items listed.

At the Senate meeting, before the unanimous consent motion is presented for approval, the Chair of the Senate (1) will advise the Senate of items that are to be removed from the list, based on prior requests from Senate members; and (2) will ask if there are any other items that should be removed from the list. The remaining items are then unanimously approved *en bloc* without discussion, saving the time that would be required for individual presentation and voting. Those matters that have been struck from the consent agenda will be handled in the usual way as each Committee's report is presented.

The minutes of the Senate meeting will report matters approved as part of the consent agenda as "carried by unanimous consent". Information items received as part of the consent agenda will be reported as received.

REPORT OF THE OPERATIONS/AGENDA COMMITTEE

Contents	Consent Agenda
Senate Membership – Faculty of Arts and Humanities Constituency	Yes
Senate Membership – Faculty of Education Constituency	Yes

FOR APPROVAL

1. **Senate Membership – Faculty of Arts and Humanities Constituency**

Recommended: That the seat held by A. Conway, representative of the Faculty of Arts and Humanities constituency, be declared vacant as a result of her resignation and that Allan Pero be elected to fill this vacancy for the remainder of the term (January 1, 2018 to June 30, 2019).

Background:

Professor Pero agreed to fill this vacancy for the remainder of the term which is in accordance with Election Procedures, Filling of Mid-Year Vacancies and Appointment of Alternates.

2. **Senate Membership: Vacancy filled by appointment**

Recommended: That the Senate seat be filled for the July 1, 2018 – June 30, 2020 term by appointment at the recommendation of the units concerned as shown below:

- Faculty of Education: Goli Rezai-Rashti

REPORT OF THE SENATE NOMINATING COMMITTEE

Contents	Consent Agenda
Selection/Review Committee for the Vice-President (External)	No

FOR ACTION

1. Selection Committee/Review Committee for the Vice-President (External)

Composition:

A committee to select a Vice-President (External) shall consist of:

- (a) the President & Vice-Chancellor, who shall be Chair
- (b) a Vice-President, Dean, or member of Faculty appointed by the President & Vice-Chancellor
- (c) 4 persons elected by the Board of Governors, two of whom will be alumni
- (d) 4 persons elected by the Senate, one of whom shall be a student. Of those elected, no two members of faculty may be from the same Faculty.

Current Members elected by Senate:

Haishan Qian (student), Helene Berman (HS), Andy Hrymak (Engg) and Scott MacDougall-Shackleton (SS)

Required: 1 person elected by the Senate, who is not from the Faculties of Engineering or Social Science, to replace Helene Berman (HS) who has resigned.

Nominee: Trista Walker (Administrative Staff)

Future Business of the Senate Nominating Committee

Upcoming Nominating Committee agenda items are posted on the Senate website at:
<http://www.uwo.ca/univsec/pdf/senate/newnoms.pdf>

**REPORT OF THE SENATE COMMITTEE ON ACADEMIC POLICY AND AWARDS
(SCAPA)**

Contents	Consent Agenda
Faculty of Engineering, School of Biomedical Engineering: Introduction of the BESC in Biomedical Engineering (BME) Program	No
Faculty of Health Sciences, School of Kinesiology: Withdrawal of the Honors Specialization in Kinesiology – Fitness and Exercise Prescription Module	Yes
School of Graduate and Postdoctoral Studies: Introduction of a Graduate Diploma (GDip) in Applied Health Sciences	Yes
Brescia University College: Introduction of a Major in Power in History and Politics	Yes
Huron University College: Reorganization of the Theology Program	Yes
Huron University College and the Richard Ivey School of Business: Introduction of a Faculty of Arts and Social Science (Bachelor of Arts, Honors Specialization)/HBA Combined Degree Program	Yes
King’s University College: Introduction of an Honors Specialization in Thanatology	Yes
SUPR-U Report: Cyclical Review – Chemistry	Yes
SUPR-G Report: Cyclical Review – Geography	Yes
New Scholarships and Awards	Yes

FOR APPROVAL

1. **Faculty of Engineering, School of Biomedical Engineering: Introduction of the BESC in Biomedical Engineering (BME) Program**

Recommended: That effective September 1, 2018, the BESC in Biomedical Engineering (BME) be introduced in the School of Biomedical Engineering in the Faculty of Engineering, subject to Quality Council approval, as shown in [Appendix 1](#).

Background

Biomedical engineering (BME) is among the most rapidly growing fields in North America, with projected job growth of 23% for 2014-24 (compared to 7% for all occupations and 4% for all engineering fields) according to the U.S. Department of Labor. BME is consistently among the most highly requested specializations by prospective undergraduate students, especially female students, who visit Faculty of Engineering recruiting events. Western possesses the resources and expertise to offer a unique BME undergraduate program that will effectively balance traditional technical engineering subjects, fundamental biomedical sciences, applications of engineering to biology and medicine, and participation in internationally leading BME research to produce graduates who are well prepared for both employment in the medical device industry and for further graduate or professional studies.

The proposed program will build upon a successful foundation established by the existing Biomedical Engineering Graduate Program. The BME Graduate Program represents a critical mass of faculty

members distributed among the Faculties of Engineering, Health Sciences, and Science and the Schulich School of Medicine and Dentistry who are engaged in BME research that involves both undergraduate and graduate students and who also teach BME-related courses as upper-year undergraduate electives and at the graduate level.

To establish an innovative and rigorous BME undergraduate program, it will be necessary to develop 4.0 new courses that bridge fundamental engineering subjects to existing upper-year electives and research opportunities by providing additional breadth and depth in applications of engineering science to medicine. These courses will be suitable for students with backgrounds in a variety of engineering disciplines, including but not limited to chemical, electrical, and mechanical engineering, and will therefore emphasize the interdisciplinary nature of biomedical engineering.

SUPR-U considered the introduction of the BME program as a new program, and the Final Assessment Report of the external review is attached as [Appendix 2](#).

2. **Faculty of Health Sciences, School of Kinesiology: Withdrawal of the Honors Specialization in Kinesiology – Fitness and Exercise Prescription Module**

Recommended: That effective September 1, 2018, admission to the Honors Specialization in Kinesiology - Fitness and Exercise Prescription module be discontinued, and

That students currently enrolled in the module be allowed to graduate until August 31, 2020 upon fulfillment of the module requirements, and

That effective September 1, 2020, the module be discontinued.

REVISED CALENDAR COPY
<http://westerncalendar.uwo.ca/2017/pg1503.html>

Admission to this module is discontinued effective September 1, 2018. Students enrolled in the module will be allowed to graduate until August 31, 2020 upon fulfillment of the module requirements.

Background

Demand for the Fitness and Exercise Prescription (FEP) module has been much less than what was expected when it was introduced, and the withdrawal of the module has been determined to be the most appropriate decision at this time. There are currently only three students (all in Year 3) registered in the module, and a recent canvassing of the first-year class identified no interest in pursuing the module.

It is important to note, however, that the School of Kinesiology recognized the importance of key elements within the Fitness and Exercise Prescription module, and made certain that those elements were retained within the curriculum of the recently approved Honors Specialization in Professional Kinesiology module. By so doing, the School can offer registrants in the Professional Kinesiology module a breadth of study that was previously unavailable through Fitness and Exercise Prescription.

3. **School of Graduate and Postdoctoral Studies: Introduction of a Graduate Diploma (GDip) in Applied Health Sciences**

Recommended: That, pending Quality Council approval, the new Graduate Diploma (GDip) in Applied Health Sciences be introduced in the School of Graduate and Postdoctoral Studies, effective September 1, 2018 as shown in [Appendix 3](#).

Background

The new online Graduate Diploma in Applied Health Sciences is a stand-alone, direct-entry program, offered to a cohort of learners characterized by their need for lifelong, applied health-sciences education.

The proposed program is fully online to meet the needs of learners who are either employed health professionals, or graduates of a health-sciences post-secondary education (PSE) programs who are seeking additional PSE.

The program includes options for micro-credentialing at the single-course level, taking up to two courses before registering in the Graduate Diploma, customizing one's curriculum by selecting courses from within and across five Areas of Concentration and laddering by applying Graduate Diploma courses/credits toward a course-based Master of Applied Health Sciences degree being developed by the Faculty of Health Sciences with anticipated launch September 2019.

The Graduate Diploma program development was/is supported by eCampusOntario and it will be delivered by the Faculty of Health Sciences at Western University, in collaboration with the Faculty of Health Sciences at the University of Ottawa, and the Faculties of Human Kinetics and Nursing at the University of Windsor. By collaborating with the University of Ottawa and the University of Windsor, a distributed Program infrastructure will be created across Ontario that will optimize the flexibility of the proposed Program by expanding the scope of the course offerings and opportunities for interdisciplinary cross-pollination. This distributed model should also facilitate student recruitment.

The overall objective of the online Graduate Diploma in Applied Health Sciences is to provide students with a depth and breadth of knowledge in the health sciences, and opportunities to apply this knowledge, so as to optimize their capacity to make meaningful contributions to the health and wellbeing of people across Canada and worldwide. This is achieved through successful completion of five half courses (i.e., 0.5 full-course-equivalent [FCE]). One half course is mandatory – Critical Thinking and Critical Analysis in Health Sciences. The remaining four, elective half courses are taken across four Areas of Concentration: two are taken from within one Area of Concentration to provide opportunities for depth of knowledge and the other two are taken from across the remaining Areas of Concentration, thus providing opportunities for breadth of knowledge. A mandatory Orientation Module occurs at the outset of the Graduate Diploma program, providing learners requisite background in the program philosophy and pedagogy, information technology (IT) skills for ensuring optimal participation in the program's online courses and an opportunity to develop a sense of a community of learners.

4. Brescia University College: Introduction of a Major in Power in History and Politics

Recommended: That the Major in Power in History and Politics be introduced at Brescia University College, effective September 1, 2018, as shown in [Appendix 4](#).

Background

The module provides a richly detailed examination of power and its significance for political events both past and present. The module considers the Reformation, Confederation in Canada, and the rule of Queen Elizabeth I, but also studies the modern-day interactions of nations and the dynamics of decision-making in contemporary governments. Some of the courses show how power in its many forms can be used to support less than rational behavior, while others provide students with an opportunity to see power up-close through placement with a community agency. The module is also concerned with such purposes as revealing the varying roles of women in history, gauging the impact of literature and great thinkers, and enriching the communication skills of students. However, all this and more is pursued within the context of understanding power and its employment in public affairs.

The proposed program speaks to Brescia's wish to give a greater emphasis to interdisciplinary studies. Brescia believes that interdisciplinary programming opens up the possibility of a richer understanding of subject matter and the development of a greater receptivity to competing ideas and claims. The program also combines two disciplines that when working together have the potential to produce almost unique insights. This potential arises from the fact that History and Political Science with their different methods and approaches complement each other in the examination of matters important to both. A final reason for the proposal to consider is that it provides an opportunity to study a key concept in the kind of depth unavailable in most programs and modules. The desire to cover the full breadth of a discipline sometimes comes at the cost of not giving sufficient attention to the foundations of a discipline.

5. Huron University College: Reorganization of the Theology Program

5a. Withdrawal of the Major and Minor in Thanatology and Religious Ethics and Major and Minor in Biblical Studies Modules in the Bachelor in Theology (BTh) Program

Recommended: That admissions into the following modules be discontinued effective September 1, 2018:

Major in Theology and Religious Ethics
Minor in Theology and Religious Ethics
Major in Biblical Studies
Minor in Biblical Studies, and

That students enrolled in these modules be permitted to graduate upon fulfilling graduation requirements by August 31, 2021, and

That these modules be withdrawn effective September 1, 2021.

REVISED CALENDAR COPY

<http://www.westerncalendar.uwo.ca/2017/pg1383.html>

<http://www.westerncalendar.uwo.ca/2017/pg1384.html>

<http://www.westerncalendar.uwo.ca/2017/pg1385.html>

<http://www.westerncalendar.uwo.ca/2017/pg1386.html>

Admission to this module is discontinued effective September 1, 2018. Students enrolled in the module will be allowed to graduate until August 31, 2021 upon fulfillment of the module requirements.

5b. Introduction of a Major and Minor in Religion and Theology (BA)

Recommended: That a Major and a Minor in Religion and Theology (BA) be introduced effective September 1, 2018, as shown in **Appendix 5**.

5c. Suspension of Admissions into the Bachelor of Theology (BTh) Program

Recommended: That admissions into the Bachelor of Theology (BTh) program be suspended effective September 1, 2018

REVISED CALENDAR COPY

<http://www.westerncalendar.uwo.ca/2017/pg1382.html>

Admissions into the Bachelor of Theology (BTh) program is suspended effective September 1, 2018.

Background

The Faculty of Theology and Huron is making this proposal in response to the findings from the self-study process and the recommendations made in the cyclical review's Final Assessment Report of the Bachelor of Theology (BTh) program. The proposed changes are also in anticipation of a progress report that is due in May 2018 to SUPR-U.

The cyclical review recommended that:

- the identity of the BTh be resolved and the ambivalence regarding its nomenclature and direction be addressed;
- an identifiable program mentor such as a Chair or Coordinator of the program be established;
- enhanced communications between the program and Undergraduate Academic Advisor.

The withdrawal of the existing modules would simplify the administration and resources, provide greater flexibility for students, and greater conformity to the structure of other modules in the University. This revision would also improve communication for the sake of students and academic advisors. Finally, it would open doors to better cooperation with complementary programs at Kings and Brescia and give flexibility for students on every campus who want to complete courses in Jewish Studies, Islamic Studies, and Christian Studies and/or to expand their studies into a Major or Minor.

Offering the revised modules (Minor and Major in Religion and Theology) as BA degrees is crucial for enrolment and for the viability of these unique modules in the Western system. Promotion of the program has been hampered by the fact that many prospective students either do not know what a "BTh" is or they fear that graduate schools or employers will not recognize a degree by that name. Student feedback indicates that most of them would prefer to earn the "BA" with the option of these Majors and Minors. The proposed revised modules make use of existing courses and existing faculty expertise and resources. The program outcomes and requirements also remain largely the same.

Lastly, it is anticipated that if the revised modules are available to students in the BA degree, the BTh degree can be redeveloped to offer more substantial specialization in Theology. This specialization would support students who seek to pursue Theology in the academy but it would also support students with vocational interests requiring not only greater specialization and depth, but also curricular options for advanced experiential learning and research and thesis writing opportunities. This proposal would be made by the Faculty of Theology separately for a September 2019 start.

6. Huron University College and the Richard Ivey School of Business: Introduction of a Faculty of Arts and Social Science (Bachelor of Arts, Honors Specialization)/HBA Combined Degree Program

Recommended: That a combined degree program between Huron University College's Faculty of Arts and Social Science (Bachelor of Arts, Honors Specialization) and the Ivey HBA program be introduced effective September 1, 2018, as shown in [Appendix 6](#).

Background

Huron University College's Faculty of Arts and Social Science attracts high achieving students, many of whom want to pursue their academic interests in connection with business. Huron University College is responding to student interest in combining a Bachelor of Arts, Honors Specialization degree with an HBA degree. This proposal will offer students in a Bachelor of Arts, Honors Specialization, in a discipline in the Faculty of Arts and Social Science, the opportunity to pursue that interest while registered in the HBA program. With this combined degree program, students will be able to complete both honors' degrees within a five-year period. The high caliber of Huron students, and the demanding nature of the program, make them ideal students for the HBA program. The combined degree will be jointly administered by Richard Ivey School of Business and the Faculty of Arts and Social Science at Huron University College. Only students enrolled in a Bachelor of Arts, Honors Specialization degree will be eligible to take this combined degree.

In Year 1, students must complete the admission requirements for entry into a Bachelor of Arts, Honors Specialization module offered by the Faculty of Arts and Social Science at Huron University College. To be considered for admission to this combined program, students must complete a minimum of 10.0 courses including Business Administration 2257 and the required second year courses for a Bachelor of Arts, Honors Specialization module in the Faculty of Arts and Social Science at Huron University College. A minimum of 5.0 courses must be taken in each of Years 1 and 2. Students apply for the combined degree program during the HBA 1 year, typically their third year of University.

In Year 2, students must enroll in a Bachelor of Arts, Honors Specialization module offered by the Faculty of Arts and Social Science at Huron University College and achieve a minimum 70% modular average. They must also gain admission to the HBA program through the regular application process. In addition, students must normally attain a minimum weighted average of 78% in the first year of the HBA.

7. **King's University College: Introduction of an Honors Specialization in Thanatology**

Recommended: That the Honors Specialization in Thanatology be introduced at King's University College, effective September 1, 2018, as shown in [Appendix 7](#).

Background

King's University College is internationally-known for its program in Thanatology. The introduction of the major module has been well-received by students and by other academic institutions and programs, which recognize the importance education about death, loss, and grief as an interdisciplinary form of study. The Program has also been innovative in the offering of the Thanatology modules via distance education and through a regular classroom-based program. With the increased enrollment in the Thanatology courses over the past seven years, the addition of the Minor and Major Modules in Thanatology, and the level of interest in the Program both locally and internationally, the addition of an Honors Specialization in Thanatology is a natural progression in the Modules that are offered within the Thanatology Program. In addition, many of the students who enroll into the Thanatology Modules also apply for graduate studies upon completion of the Program. An Honors Specialization in Thanatology would provide an appropriate stepping-stone for these students to transition into graduate school. The Honors Specialization would also provide students with the opportunity to immerse into research in Thanatology, which is not readily available in any other program.

FOR INFORMATION

8. **SUPR-U Report: Cyclical Review – Chemistry**

The following cyclical review of an undergraduate program was conducted:

Faculty/Affiliates	Program	Date of Review	SUPR-G recommendation
Science	Chemistry	September 29, 2017	Good Quality

The detailed Final Summary Report for this review is attached as [Appendix 8](#).

9. **SUPR-G Report: Cyclical Review – Geography**

The following cyclical review of a graduate program was conducted:

Faculty/Affiliates	Program	Date of Review	SUPR-G recommendation
Social Science	Geography	October 23 - 24, 2017	Good Quality

The detailed Final Summary Report for this review is attached as [Appendix 9](#).

10. **New Scholarships and Awards**

SCAPA approved on behalf of the Senate, the Terms of Reference for the new scholarships and awards shown in [Appendix 10](#) for recommendation to the Board of Governors through the Vice-Chancellor.

NEW CALENDAR COPY

<http://westerncalendar.uwo.ca/2017/pg1855.html>

<http://westerncalendar.uwo.ca/2017/pg352.html>

BIOMEDICAL ENGINEERING (BME)

The Biomedical Engineering program is offered and administered by the School of Biomedical Engineering. The objective of the program is to educate students in the design and analysis of medical devices and in the application of the principles of engineering science to solve problems in medicine and the biomedical sciences. The program will include an intensive 12-month research experience from the Summer term of Year 3 through the Winter term of Year 4. The summer portion will be in the form of a paid co-op experience during which each student will begin a major project that he or she will continue as a capstone project in Year 4. Students in the Biomedical Engineering program follow the same curriculum for the first year as other engineering students.

Admission Requirements

Students entering the Biomedical Engineering program must have completed the entire first year program in Engineering, with no outstanding credits to be taken, and have a Year Weighted Average (YWA) of at least 75%. First consideration will be given to applicants with a minimum grade of 60% in each course of the first-year engineering program.

Option A: Biomedical Engineering with Chemical Engineering Foundations

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2277A/B, Biology 1202A/B, BME 22201A/B, CBE 2206A/B, CBE 2207A/B, CBE 2214A/B, CBE 2220A/B, CBE 2221A/B, CBE 2224A/B, CBE 2290A/B, CBE 2291A/B, Writing 2130F/G.

Third Year Program

Biochemistry 2280A, CBE 3310A/B, CBE 3315A/B, CBE 3318A/B, CBE 3319A/B, CBE 3322A/B, CBE 3323A/B, CBE 3324A/B, CBE 3325A/B, CBE 3395Y, ECE 2208A/B, Statistical Sciences 2141A/B or Statistical Sciences 2143A/B, 0.5 non-technical elective,*** BME co-operative research project (summer term).

Fourth Year Program

BME 33301A/B, BME 3302A/B, BME 3303A/B, BME 3355A/B, BME 4400, BME 4501A/B, ES 4498F/G, Physiology 2130, 0.5 course medical sciences elective,* 1.0 courses non-technical electives.***

Option B: Biomedical Engineering with Electrical Engineering Foundations

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Biology 1202A/B, BME 2201A/B, CS 1037A/B, ECE 2205A/B, ECE 2231A/B, ECE 2233A/B, ECE 2236A/B, ECE 2240A/B, ECE 2241A/B, ECE 2277A/B, Writing 2130F/G.

Third Year Program

Applied Mathematics 3415A/B, Biochemistry 2280A, ECE 3330A/B, ECE 3331A/B, ECE 3332A/B, ECE 3336A/B, ECE 3337A/B, ECE 3370A/B, ECE 3375A/B, Physiology 2130, Statistical Sciences 2141A/B or Statistical Sciences 2143A/B, 0.5 non-technical elective,*** BME co-operative research project (summer term).

Fourth Year Program

BME 3301A/B, BME 3302A/B, BME 3303A/B, BME 3355A/B, BME 4400, BME 4501A/B, ES 4498F/G, 1.0 courses medical sciences electives,* 0.5 course technical elective,** 1.0 courses non-technical electives.***

Option C: Biomedical Engineering with Mechanical Engineering Foundations

Second Year Program

Applied Mathematics 2270A/B, Applied Mathematics 2276A/B, Biology 1202A/B, BME 2201A/B, ECE 2274A/B, MME 2200Q/R/S/T, MME 2202A/B, MME 2204A/B, MME 2213A/B, MME 2259A/B, MME 2260A/B, MME 2273A/B, Statistical Sciences 2141A/B or Statistical Sciences 2143A/B, Writing 2130F/G.

Third Year Program

Applied Mathematics 3413A/B, Biochemistry 2280A, MME 2285A/B, MME 3303A/B, MME 3307A/B, MME 3350A/B, MME 3360A/B, MME 3379A/B, MME 3380A/B, MME 3381A/B, Physiology 2130, 0.5 non-technical elective,*** BME co-operative research project (summer term).

Fourth Year Program

BME 3301A/B, BME 3302A/B, BME 3303A/B, BME 3355A/B, BME 4400, BME 4501A/B, ES 4498F/G, 1.0 courses medical sciences electives,* 0.5 course technical elective,** 1.0 courses non-technical electives.***

*Medical sciences electives (electives not chosen from this list require special permission): Anatomy & Cell Biology 3309, Anatomy & Cell Biology 3319, Biochemistry 3385A, Biochemistry 3386B, Biology 2382A/B, Biology 2581B, Chemistry 2213A/B, Chemistry 2283G, Communication Sciences & Disorders 4417A, Communication Sciences & Disorders 4497A/B, Epidemiology 2200A/B, Health Sciences 2300A/B, Microbiology & Immunology 2500A/B, Neuroscience 2200, Physiology 3140A.

**Biomedical Engineering technical electives (electives not chosen from this list require special permission): CBE 4421A/B, CBE 4423A/B, ECE 4438A/B, ECE 4445A/B, MME 4469A/B, MME 4470A/B.

***Selection of the non-technical elective must be approved by the Department Counsellor to satisfy the CEAB requirements of subject matter that deals with central issues, methodologies, and thought processes of the humanities and social sciences. In addition, the courses must focus on topics related to health care and the health-care system and its effects on individuals and society. An approved list can be found on the Engineering website.

Approved healthcare non-technical electives: Anthropology 2290F/G, Economics 2169F/G, Geography 2430A/B, History 2195A/B (King's), History of Science 2200, Philosophy 2071E, Philosophy 2072F/G (King's), Philosophy 2715F/G, Political Science 2276F/G (Brescia), Religious Studies 2239F/G (King's), Sociology 2179A/B, Sociology 2180A/B, Sociology 2247A/B, Women's Studies 2244, Writing 3222F/G.



**Proposed Undergraduate Program in Biomedical Engineering
Final Assessment Report**

Faculty / Affiliated University College	Faculty of Engineering
Degrees Offered	Bachelor of Biomedical Engineering
Modules Reviewed	
External Consultants	Dr. Robert Linsenmeier – Professor, Biomedical Engineering Northwestern University Dr. Robert Kearney – Professor, Professor & Chair of Biomedical Engineering, McGill University
Internal Consultants	Dr. Douglas L. Jones – Professor, Departments of Physiology & Pharmacology and Medicine and Vice-Dean, Basic Medical Sciences, Schulich School of Medicine & Dentistry, Western University
Date of Site Visit	October 5 – 6, 2017
Evaluation	Approved to Commence
Approval Dates	SUPR-U: January 24, 2018 SCAPA: February 7, 2018 Senate:

Executive Summary

The onsite visit began at 8:30 am meeting with Dr. Andy Hrymak, Dean of Western Engineering, Dr. Mike Bartlett, Associate Dean, Undergraduate Studies, Western Engineering and Dr. Jim Lacefield, Director, Biomedical Engineering Program. Dr. Lacefield led off with the description of the projected plans for the degree and the longer term plans for a School of Biomedical Engineering and how this program would fit into the longer term plans. Dr. Hrymak also included the information on significant new hires by the Faculty and specifically a “teaching intensive workload” position for this program as well as the development of some new courses and revisions to existing courses to be applicable to the program. Dr. Lacefield further described the intention to offer a dual degree including this new program with the existing 3 Engineering programs in a 5 year stream similar to what is currently being offered with the Honors Business Administration. Due to the processes at Western, the Biomedical Engineering program must be in place before such a “dual degree” program can be offered.

The consultants were particularly interested in specifics of the program, who would be teaching what, and the financial model as well as clarifying that their review would be restricted to this Biomedical Engineering program, and not either the “School” or the dual degree.

The consultants next met with Dr. John Doerksen, Vice-Provost (Academic Programs) and Dr. Karen Campbell, Vice-Provost (Academic Planning, Policy & Faculty). Dr. Doerksen provided an overview of the need for learning outcomes to meet the external focus and the perceived opportunity to enhance the ratio of female engineering students in a biomedical engineering stream. Dr. Campbell clarified that the concept of the School would need to go through the University’s Government structure for approval.

Over the two days, the consultants also had full meetings with members of the Academic Administration, (Dr. Jim Lacefield, Director Biomedical Engineering, and Dr. Mike Bartlett, Associate Dean, Academic, Western Engineering), student advising, (Lesley Mounteer, Director of External Services, Kelly Sexsmith, Engineering Career Services Officer, Christine Ellwood, Biomedical Engineering Graduate Program Coordinator, Clare Tattersall, Manager, Undergraduate Services and Nicole Sansone, Upper Year

Academic Coordinator), decanal members of the 4 schools which would be interfacing with the Biomedical Engineering program (Dr. Lauren Briens, Assistant Dean, First Year Studies, Dr. Greg Kopp, Associate Dean, Graduate & Postdoctoral Studies, Western Engineering; Dr. Pauline Barmby, Acting Dean, Dr. Ken Yeung, Acting Associate Dean, Academic, Jisuo Jin, Associate Dean, Graduate Studies, Western Science; Dr. Jayne Garland, Dean, Dr. Karen Danylchuk, Associate Dean, Undergraduate Programs, Western Health Sciences, and Dr. Doug Jones, Vice Dean, Basic Medical Sciences, Dr. Andy Watson, Associate Dean, Graduate & Postdoctoral Studies, Schulich School of Medicine & Dentistry). There were also meetings with additional faculty members who will teach courses and/or be research mentors (Drs. Aaron Fenster, Jim Johnson, Emily Lalone, Tamie Poepping, Andrew Pruszynski, Abbas Samani, and Ana Luisa Trejos), and Chairs of complementary Engineering Departments (Dr. Ajay Ray, Chair of Chemical and Biochemical Engineering; Dr. Jose Herrera, Associate Chair, Undergraduate, Chemical and Biochemical Engineering; Dr. Anestis Dounavis, Associate Chair, Undergraduate, Electrical and Computer Engineering; Dr. Tony Straatman, Chair of Mechanical Engineering, and Dr. Michael Naish, Director of Mechatronic System Engineering), as well as Western Libraries (Jennifer Robinson, Associate Chief Librarian, Academic and Sahn Hendrikx, Research & Instructional Services Librarian). These meetings reinforced the consistent support for the program moving forward. The Consultants also had tours of the Wolf Orthopaedic Biomechanics laboratory, Fowler Kennedy Sport Medicine Clinic, and the Rapid Prototyping Facility, Robarts Research Institute.

As the program is not yet in place, there were no enrolled students with whom to meet, but the consultants did meet with 5 graduate students in the biomedical engineering program.

Additional details will not be included in this summary as they relate to the stated strengths and recommendations. It is relevant to mention that in the programs response to the recommendations, each of the stated recommendations and queries by the consultants has been accepted and some plans have been provide to address the comments and recommendations.

Significant Strengths of the Program

The consultants commented that they *"...were impressed by the collegiality and cooperation that was evident in all of our discussions about this program, and it appeared that this results from a general culture of cooperation at Western."*

The consultants commented that the most unique and innovative aspect of the proposed program is the ability to have a combined dual degree program, with the Biomedical Engineering combined with either Chemical, Electrical or Mechanical Engineering.

They felt that the proposed program fulfilled all of the 7 Western Degree outcomes with appropriate program design, being comparable to programs at other universities. Also, as biomedical engineering is recognized as an interdisciplinary field externally, having an undergraduate program that could also feed the graduate program was consistent with values and academic plans of Western. The mandatory full year research project for all students was thought to be unique provide an excellent opportunity for experiential learning.

The consultants also felt that the relatively small size (30) is appropriate to meet the program objectives and was not expected to have much impact on overall Engineering enrolments or class sizes.

Thus they stated that they believed that the overall the proposed four-year, stand-alone undergraduate program *"... is of very good quality"* and the program should be approved.

Suggestions for Improvement & Enhancement

1. outline what course options would be appropriate for students interested in specific areas of biomedical engineering and students will need specialized counselling to design the program appropriate for their interests.
2. consider supplementing the engineering ethics course with material related to human medical and research ethics.

3. students will not have the experience of working as a team on a major project. Secondly, the reduced design content will make it difficult for the program to become an accredited engineering program as required for its graduates to be immediately eligible for registration as professional engineers. This might be addressed by adding a design project to the final year – perhaps by allowing students to select two of the three final year systems courses and requiring a design course instead of the third one.
4. there might be opportunities to incorporate imaging to some extent in the biomedical systems engineering courses
5. The absence of any biomedical laboratories was a concern. The consultants strongly suggested additional laboratory sessions in which students could explore issues related to the acquisition of bio-electric signals (i.e. ECG, EMG, EOG), images (e.g. ultrasound, optical), and cellular signals. This could be accomplished within the biomedical systems courses.
6. Given the importance to the new program of the research project, the description of its delivery is too vague and needs more detail with more specific goals and timelines. Thought should be given to preparing students for their research experience – perhaps through an intensive “boot camp” session prior to the start of the research experience. Clear milestones, and description of the nature of presentations and reports that will be produced through this 12 month experience are needed. The biomedical engineering group could use as a model the research project courses elsewhere in the University, which have well developed and proven structures.

Recommendations Required for Program Sustainability

Recommendation	Responsibility
supplement the engineering ethics course with material related to human medical and research ethics.	Program Committee
add a design project to the final year	Program Committee
add laboratory sessions in which students could explore issues related to the acquisition of bio-electric signals, images, and cellular signals.	Program Committee, faculty and Dean
the research project the description needs more detail with specific goals, timelines, clear milestones, and description of the nature of presentations and reports.	Program Committee

Graduate Diploma (G.Dip.) in Applied Health Sciences

*(Edited from the Proposal Brief submitted to the School of Graduate and Postdoctoral Studies.
The full Brief is available upon request.)*

A new, online Graduate Diploma in Applied Health Sciences is proposed. The proposed program is a Type 3 diploma (Ontario Universities Council on Quality Assurance, 2017) in that it (i) is a stand-alone, direct-entry program, (ii) will be offered by a unit that currently offers related master's and doctoral degree programs and, further, is developing additional related master's programs, and (iii) is designed to meet the needs of a cohort of learners characterized by their need for lifelong, applied health-sciences education. Through focus-group research conducted by the Faculty of Health Sciences over the past year, we have learned that some learners within this cohort are employed health professionals (i.e., adult learners) while others are graduates of health-sciences post-secondary education (PSE) programs who are seeking additional PSE. Despite the diversity within and between these groups, these students collectively place a high value on flexibility in their health-sciences education activities. With this in mind, and in light of evidence supporting the efficacy of online learning, the proposed Program is *fully online*; it includes options for micro-credentialing at the single-course level, taking up to two courses before registering in the Graduate Diploma, customizing one's curriculum by selecting courses from within and across five Areas of Concentration and laddering by applying Graduate Diploma courses/credits toward a course-based Master of Applied Health Sciences degree being developed by the Faculty of Health Sciences with anticipated launch September 2019. The Graduate Diploma program development was/is supported by eCampusOntario.

The Graduate Diploma is being designed, developed and delivered by The Faculty of Health Sciences at Western University, in collaboration with the Faculty of Health Sciences at the University of Ottawa, and the Faculties of Human Kinetics and Nursing at the University of Windsor. By collaborating with the University of Ottawa and the University of Windsor, we are creating a distributed Program infrastructure across Ontario that will optimize the flexibility of the proposed Program by expanding the scope of the course offerings and opportunities for interdisciplinary cross-pollination. This distributed model should also facilitate student recruitment.

The overall objective of the online Graduate Diploma in Applied Health Sciences is to provide students with a depth and breadth of knowledge in the health sciences, and opportunities to apply this knowledge, so as to optimize their capacity to make meaningful contributions to the health and wellbeing of people across Canada and worldwide. This is achieved through successful completion of five half courses (i.e., 0.5 full-course-equivalent [FCE]). One half course is mandatory – Critical Thinking and Critical Analysis in Health Sciences. The remaining four, elective half courses are taken across four Areas of Concentration: two are taken from within one Area of Concentration to provide opportunities for depth of knowledge and the other two are taken from across the remaining Areas of Concentration, thus providing opportunities for breadth of knowledge. A mandatory Orientation Module occurs at the outset of the Graduate Diploma program, providing learners requisite background in the program philosophy and pedagogy, information technology (IT) skills for ensuring optimal participation in the program's online courses and an opportunity to develop a sense of a community of learners.

Evidence to Support the Introduction of the Program

Converging data from a number of domains provides strong evidence that health is an area of enormous current and future demand, not only in Ontario but across Canada and worldwide. There is compelling evidence supporting the growing demand for flexible health-sciences continuing education opportunities. These learning opportunities are crucial in terms of preparing Ontario learners to: (i) work adaptively within the rapidly evolving health sector, and (ii) contribute to the complex problem-solving required by the health challenges of today and tomorrow.

Special Matters and Innovative Features

1. The development of the Graduate Diploma in Applied Health Sciences is supported by a grant from eCampusOntario. This funding has provided an opportunity to conduct an environmental

scan of online health-sciences graduate education through market research and focus groups. The funding also provides resources to develop 13 online half courses.

2. The Graduate Diploma is fully online, providing learning opportunities for individuals who are engaged in full-time employment.
3. The Program pedagogy of authentic learning, interprofessional learning and interactive engagement guides the approaches to program and course development. An important element of this pedagogy is the value placed on learners' experiences beyond the online Program per se, particularly within their health employment contexts. Online Program-based learning will be interleaved, over days and weeks, with learners' direct experiences with patients, clients, families and health professionals. Authentic learning approaches will leverage this temporal overlap by "pulling" the learners' recent health-employment experiences into the course activities, and "pushing" the course-based materials into the learners' day-to-day experiences in health care. Online Program-based learning will be interleaved, over days and weeks, with learners' direct experiences with patients, clients, families and health professionals. Additionally, the learners will be heterogeneous in terms of their prior experience in relation to health and the health system, engendering inter-individual insight and breadth of understanding.
4. The courses are designed, developed and taught by interprofessional teams. Course development is undertaken by course-development teams, minimally including: (i) two content experts from different disciplines/professions (faculty members, preceptors, practicing health professionals, community partners), (ii) Western's/UOttawa/UWindsor FHS instructional designers, (iii) a contracted instructional designer, (iv) multimedia developer, (v) an editor, and (vi) a Graduate Teaching Assistant.
5. There is micro-credentialing at the single-course level for all courses. Micro-credentialing will be managed by the Graduate Diploma administrative office. We do not anticipate that micro-credentials will appear on a student's transcript. Rather, micro-credentials will be available to all students, regardless of the number of courses taken, to employ in ways that align with and support their continuing-learning goals. We anticipate that students will elect to add their micro-credentials to their CV and/or electronic profile.
6. Learners can take single courses toward the Graduate Diploma and take up to two half courses before being required to register for the Graduate Diploma. These students will be non-degree part-time students for the first 1-2 courses.
7. There will be opportunities to ladder from the Graduate Diploma to a course-based Master of Science degree in Applied Health Sciences that currently is being developed by the Faculty of Health Sciences at Western University, with anticipated launch September, 2019. Students who ladder from the Graduate Diploma to the course-based Master of Science in Applied Health Sciences will receive only the highest level of credential.

Delivery Method of the Program

The Graduate Diploma in Applied Health Sciences is a fully online program.

PROGRAM REGULATIONS AND COURSES

Admission Requirements and Processes

- Applicants must possess an undergraduate degree, or equivalent, with at least a B average (i.e., based on the last 2 years or last 20 half credits), from an accredited university, college or institute. The undergraduate degree, or equivalent, typically will be in the health sciences or a related field. However, learners who hold an undergraduate degree, or equivalent, in an unrelated field and who have at least two years of appropriate, full-time employment experience in the health sciences may be admitted to the Program on a case-by-case basis.
- Application Open: December 1st

- Application Deadline is May 30th.
- Offers of Admission are made by June 15th.

English Language Proficiency

Applicants whose first language is not English must furnish evidence of their proficiency in the use of the English language by a satisfactory* achievement within the last two years in one of the following:

- The Test of English as a Foreign Language (TOEFL). The minimum acceptable score is 86, with no individual score below 20 for the internet based version; 213 for the standard electronic version; or 550 for the paper and pencil version, although some programs require a higher minimum score.
- The International English Language Testing Service (IELTS) of the British Council. The minimum acceptable score is 6 out of 9. The IELTS is offered in 6 test centres in the US and 3 in Canada.
- The Michigan English Language Assessment Battery (MELAB) of the University of Michigan. Students must have at least 80 on each of the sections and an overall score of at least 85. Arrangements to write MELAB may be made online.
- The Canadian Academic English Language Assessment (CAEL Assessment). The minimum acceptable score is 60. The CAEL Assessment is offered in several countries throughout the world as well as Canada.
- Fanshawe College's ESL Program. The requirement is graduation from Level 5, Advanced Academic Preparation, with a minimum 80% in all components.

Students who are required to present evidence of proficiency in English must make their own arrangements to write the TOEFL, IELTS, MELAB or CAEL and to have the official results sent directly to the School of Graduate and Postdoctoral Studies by the testing agency. Those graduates from Level 5 of the Fanshawe College ESL Program must provide official proof of graduation.

Exemptions.

Other formal evidence of graduate level proficiency in English may be considered in lieu of these test scores. Students must contact the graduate program in order to determine if test scores will not be required. A decision will then be made at the discretion of the School of Graduate and Postdoctoral Studies for exemption.

Degree Requirements

The Graduate Diploma, Applied Health Sciences is designed to be completed within 2 years of fully-online, part-time study. This assumes that a student takes one 0.5 course per semester. However, students may elect to take two 0.5 courses during successive semesters, including a summer course, such that they would satisfy the Graduate Diploma requirements within one year of full-time study.

The Graduate Diploma will be earned through successful completion of a total of five 0.5 FCEs. These five half-courses consist of one mandatory course GRDIPAH9001, two additional 0.5 credits taken within one Area of Concentration, and a further two 0.5 credits taken across the remaining three Areas of Concentration. The University of Western Ontario is the degree granting institution. Students will enroll through Western University.

- Course Requirements
 - 0.5 credit mandatory course:
 - GRDIPAH9001 Critical Thinking and Critical Analysis in Health Sciences
 - 4 x 0.5 elective course credits (i.e., two 0.5 course credits from one Area of Concentration and two 0.5 course credits taken across the remaining four Areas of Concentration:

- Area of Concentration: Determinants of Health and Health Equity
 - GRDIPAHS9002 (0.5) Equity and Health Systems
 - GRDIPAHS9003 (0.5) Global Health
 - GRDIPAHS9004 (0.5) Mental Health
 - GRDIPAHS9005 (0.5) Nutrition

- Area of Concentration: Health across the Lifespan
 - GRDIPAHS9006 (0.5) Dementia and Mental Health in Aging
 - GRDIPAHS9007 (0.5) Mobility in Older Adults
 - GRDIPAHS9008 (0.5) Health and Well-being in Childhood and Youth

- Area of Concentration: Health Leadership: Toward Enhancing Health Services, Systems and Policy
 - GRDIPAHS9009 (0.5) Project Management
 - GRDIPAHS9010 (0.5) Health System Quality Improvement
 - GRDIPAHS9011 (0.5) Health Services, Systems and Policy

- Area of Concentration: Methods of Critical Analysis
 - GRDIPAHS9012 (0.5) Program Evaluation
 - GRDIPAHS9013 (0.5) Critical Appraisal and Evidence-based Practice

Progression Requirements

Progression is evaluated on a course-wise basis, with monitoring of a student's customized selection of courses and progression toward the Graduate Diploma.

Student Financial Support

Students in the Online Graduate Diploma will not receive funding through the Program.

Demonstrating and Documenting the Level of Performance of Students

Student performance and outcomes following successful completion of the Graduate Diploma will be determined by (i) tracking the employment of Program graduates, and (ii) conducting surveys of Program graduates and their employers.

Supervision

Students of the Graduate Diploma will not have individual supervisors.

Part-time Studies

Part-time studies are seen as the optimal model of delivery based on the demographics of the target learners. It is anticipated that the vast majority of learners will be employed and, hence, need and value health-sciences learning opportunities that align with, and indeed, seek to leverage their employment circumstances. It is anticipated that learners will take one 0.5 course per semester across the three semesters of an academic year. Thus, students will typically complete the program within two years of part-time study. However, as discussed above, students may elect to take two 0.5 courses during successive semesters, including a summer course, such that they would satisfy the Graduate Diploma requirements within one year of full-time study. There are no tuition implications related to part-time versus full-time enrolment.

Distance Delivery

While technology and approach to teaching in each course will be informed by a number of factors, including the learning outcomes of the course, desired learning activities, student capabilities, and the experience and comfort of the individual instructor, there are some general principles the program will take to use of technology.

1. Wherever possible, open access content will be either incorporated, modified, or developed to reduce

the financial burden on students and ensure the content is aligned.

2. All technology used must be accessible and must directly positively impact the achievement of learning outcomes.
3. Student engagement in online courses is paramount, so development of multimedia case studies, interactive modules, video content, and other ways of representing concepts is important.
4. Facilitating multiple ways to engage with the content, peers, and instructors using technological solutions is desirable.
5. Wherever possible, the Learning Management System [LMS] should provide the hub for learning. Any 3rd party technologies should be accessed through or integrated into the LMS course sites.
6. Making use of the opportunities for students to use the technology they have readily at hand is important. For example, students may access content on their phones, take pictures or video of their learning and load it to the LMS, record their thoughts verbally, and so on. Allowing flexibility and choice in representing learning is a goal.

Courses are designed, developed and taught by interprofessional teams. Enhanced learning outcomes can be achieved through the collaborative participation of people of diverse backgrounds and perspectives and this approach engages the students and their experience into the learning experience.

All Graduate Courses Offered in the Program

Course Catalog Number	Area(s) of Concentration	Course Title
GRDIPAHS 9001	Methods of Critical Analysis	Critical Thinking and Critical Analysis for Health Sciences (Mandatory course)
GRDIPAHS 9002	Determinants of Health and Health Equity	Equity and Health Systems
GRDIPAHS 9003	Determinants of Health and Health Equity	Global Health
GRDIPAHS 9004	Determinants of Health and Health Equity	Determinants of Mental Health and Trauma-informed Mental Health
GRDIPAHS 9005	Determinants of Health and Health Equity	Nutrition
GRDIPAHS 9006	Health Across Lifespan	Dementia and Mental Health in Aging
GRDIPAHS 9007	Health Across the Lifespan	Mobility in Older Adults
GRDIPAHS 9008	Health Across the Lifespan	Health and Wellbeing in Childhood and Youth
GRDIPAHS 9009	Health Leadership	Project Management
GRDIPAHS 9010	Health Leadership	Health System Quality Improvement
GRDIPAHS 9011	Health Leadership	Health Services, Systems and Policy
GRDIPAHS 9012	Methods of Critical Analysis	Program Evaluation
GRDIPAHS 9013	Methods of Critical Analysis	Critical Appraisal and Evidence-Based Practice

NEW CALENDAR COPY

Major in Power in History and Politics

Admission Requirements

Completion of first year requirements, including 1.0 course from History 1201E, 1401E, 1404E, 1601E, 1801E, or 1805E, with a minimum mark of 60%, or Political Science 1020E with a minimum mark of 60%. A course at the 1000 level in both History and Political Science is recommended to satisfy prerequisites for the module's core courses.

Module

6.0 courses*

3.0 courses from: History 2103 or 2403E, 2202 or 2205E, 2201E or 2206,
Political Science 2131 or 2231E

1.0 course from: History 2159A/B or 2459F/G, 2108F/G or 2408F/G, 2170A/B, 2126A/B,
Political Science 2287A/B, 2290E

1.5 courses from: History 3205E, 3440E, 3411E, 4704E, 4423E, Political Science 3338F/G,
Philosophy 3205F/G, English 3351F/G

0.5 course from: History 4808A/B, Political Science 4428A/B

* Students in this module must take at least 1.5 courses in Political Science at the 2200-level and above and 2.5 courses in History at the 2200-level and above

* Students are advised that some of the upper-year level courses in the module may have prerequisites; students may need to plan ahead or request special permission to enroll

* Students in third or fourth year may substitute up to 2.5 courses as part of a student exchange with permission of the Chair of the School of Humanities.

NEW CALENDAR COPY
<http://www.westerncalendar.uwo.ca/2017/pg1075.html>

MAJOR IN RELIGION AND THEOLOGY

Admission Requirements

Completion of first-year requirements. 1.0 course from 1000 level Religious Studies courses (RS1010 and RS1015) is recommended.

Module

6.0 courses:

- 1.0 course Religious Studies 2130 (Living Religions)
- 1.0 course from Theological Studies and/or Religious Studies
 - RS1029 (New Testament Greek), RS2124F/G (Introduction to the New Testament),
 - RS1040A/B (Biblical Hebrew), RS2420F/G (Introduction to the Hebrew Bible),
 - RS3260 A/B (Qur'anic Arabic), RS2310F/G (Introduction to the Qur'an)
- 1.0 additional course in Theological Studies and/or Religious Studies at the 2000 level or above.
- 3.0 additional courses in Theological Studies and/or Religious Studies at the 3000 level or above.

MINOR IN RELIGION AND THEOLOGY

Admission Requirements

Completion of first-year requirements. 1.0 course from 1000 level Religious Studies courses (RS1010 and RS1015) is recommended.

Module

4.0 courses

- 1.0 course from Theological Studies and/or Religious Studies 2130.
- 1.0 course from Theological Studies and/or Religious Studies
 - RS1029 (New Testament Greek), RS2124F/G (Introduction to the New Testament),
 - RS1040A/B (Biblical Hebrew), RS2420F/G (Introduction to the Hebrew Bible),
 - RS3260 A/B (Qur'anic Arabic), RS2310F/G (Introduction to the Qur'an)
- 2.0 courses in Theology and Religious Studies at the 2000 level or above

NEW CALENDAR COPY

Faculty of Arts and Social Science (Bachelor of Arts, Honors Specialization)/HBA Combined Degree Program

Admission Requirements:

To be eligible for consideration for admission to the combined program, in the first two years, students must complete a minimum of 10.0 courses, including Business Administration 2257. In Year 1, they must complete the admission requirements as specified in the current Academic Calendar for entry into a Bachelor of Arts, Honors Specialization module offered in the Faculty of Arts and Social Science at Huron University College.

Admission to the requested Bachelor of Arts, Honors Specialization module occurs at the end of Year 1. The requirements are: Completion of first-year requirements with no failures. Students must have an average of at least 70% in 3.0 principal courses, plus 2.0 additional courses, with no mark in these principal courses below 60%.

For admission to the HBA, students must attain a minimum weighted average of 78%, a minimum mark of 70% in Business Administration 2257, and no mark less than 60%, in the first two years of study. They also must gain admission to the HBA program through the regular application process. In addition, students must normally attain a minimum weighted average of 78% in the first year of the HBA.

Students apply for the combined degree program during the HBA 1 year, typically their third year of University. Applications to the combined program must be made in writing to the appropriate Program Chair at Huron University College and to the HBA Program Office by the deadlines published by the Richard Ivey School of Business. Entrance to the program may be limited.

Progression through the Faculty of Arts and Social Science (Bachelor of Arts, Honors Specialization)/HBA Combined Degree Program:

Year 1:

5.0 courses including:

- all of the required prerequisites for entrance to a Bachelor of Arts, Honors Specialization module offered by the Faculty of Arts and Social Science at Huron University College;
- and Year 1 course from Category C.

Note: If 1.0 Category C course is not taken in Year 1 as part of the 5.0 courses, it may be taken during the subsequent Spring/Summer session and must be completed successfully by the end of August prior to entry to this program.

Year 2:

5.0 courses including:

- 3.0 courses from a 9.0 course Bachelor of Arts, Honors Specialization module offered in the Faculty of Arts and Social Science at Huron University College plus Business Administration 2257 and 1.0 option;
- OR
- 4.0 courses from a 10.0 course Bachelor of Arts, Honors Specialization module offered in the Faculty of Arts and Social Science at Huron University College, plus Business Administration 2257.

Year 3: HBA 1

The third year of the undergraduate program in Business Administration consists of an integrated set of courses designed to give a basic understanding of the functions and the interrelationships of the major areas of management, as well as to develop problem-solving and action-planning skills.

All students will take: Business Administration 3300K, Business Administration 3301K, Business Administration 3302K, Business Administration 3303K, Business Administration 3304K, , Business Administration 3311K, Business Administration 3316K, Business Administration 3321K, Business Administration 3322K and Business Administration 3323K. No substitute is permitted for any of these courses.

Years 4 and 5:

HBA requirements can be taken over Year 4 or 5, except, Business Administration 4569 **must** be taken in Year 4.

2.5 courses:

- International Perspective Requirement: Business Administration 4505A/B;
- Corporations and Society Perspective Requirement: At least 0.5 course from Business Administration 4521A/B, Business Administration 4522A/B, Business Administration 4523A/B or another business elective as determined and approved by the HBA Program Director to satisfy this requirement;
- Applied Project Requirement: Business Administration 4569.
- Managerial Accounting and Control 4624A/B

2.5 additional business elective courses.

Bachelor of Arts, Honors Specialization requirements are to be taken over Years 4 and 5: 6.0 or 7.0 courses as noted below.

- 6.0 courses from any 9.0 or 10.0-course Bachelor of Arts, Honors Specialization module offered by the Faculty of Arts and Social Science at Huron University College. (Along with the required courses in Business Administration, this will require a total of 5.0 courses in one year and 6.0 courses in the other year, or 5.5 courses in each year.)

Program Requirements

Students registered in the combined program are expected to abide by all guidelines associated with each of the individual programs. The combined degree program cannot deviate from the 5-year program structure. That is, it cannot be completed in less time or extended beyond the 5 years.

Progression Standards

Students in the combined program must meet the progression standards of the program. Students enrolled in HBA1 (Year 3) must attain a minimum weighted average of at least 78%. In Years 4 and 5, students must attain a minimum weighted average of 75% in their 4000-level HBA courses. They also must attain a minimum weighted average of 70% in their Bachelor of Arts, Honors Specialization module and meet all other progression requirements of the Bachelor of Arts, Honors Specialization module in which they are enrolled.

Failure to Meet Progression Standards

A student who fails to meet the combined program progression standards in any year must withdraw from the combined program. However, a student who has met the progression standards of either the HBA or the Bachelor of Arts, Honors Specialization, at Huron University College will be allowed to proceed to the next year of that program. If the progression standards of both individual programs have been satisfied, the student may continue in either program and may petition the School or Faculty whose program was not selected for permission to complete that program at a later date. A student who is required to withdraw from the combined program and wishes to pursue either of the individual programs or both programs through a combined degree, must complete all the degree requirements of the individual program or combined programs in order to graduate from that/those program(s).

Dean's Honor List

At the Richard Ivey School of Business, students are considered for the Dean's Honor List during their first year of HBA. Students enrolled in Years 4 and 5 of the combined program are considered for the Dean's Honor List in Year 5 only. Only grades obtained in 4000-level Business courses will be used in calculating averages for the purpose of determining Dean's Honor List standing. Courses taken outside the Richard Ivey School of Business are excluded. Calculations for Ivey Scholar and Gold Medals are completed in the same way.

In the Faculty of Arts and Social Science, students will be considered for the Dean's Honor List in the usual way in Years 1 and 2, and at the end of Year 5, by considering all Faculty of Arts and Social Science courses that have been taken in Years 4 and 5. Students who take at least 2.0 Social Science courses in Year 4 will be considered for the Dean's Honor List in that year on the basis of those courses.

Graduation

Upon completion of this combined program, students will receive a Bachelor of Arts, Honors Specialization BA in a selected Faculty of Arts and Social Science module and a BA in Honors Business Administration.

Graduation with Distinction

Eligibility to graduate "With Distinction" for each degree is determined by the Faculty or School.

International Exchange Programs

Students in the Faculty of Arts and Social Science/HBA combined degree program may be eligible to participate in academic exchange programs. Interested students should discuss exchange options with the HBA Program Office and Huron University College's International Exchange Office.

Fees

Students pay the prevailing fees as determined by the University policy on combined programs. Contact the Office of the Registrar for details.

NEW CALENDAR COPY

Honors Specialization in Thanatology

Enrolment in this module is limited. Meeting the minimum requirements does not guarantee admission.

Admission Requirements

Completion of first-year requirements with no failures. Students must have a minimum 70% average in 3.0 principal first year courses including Thanatology 1025A/B, with no grade below 60% in these principal courses.

Module

9.0 courses

5.0 courses:

Thanatology 2225A/B, 2230A/B, 2231A/B

Interdisciplinary Studies 2252F/G (or the former 3310F/G; Interdisciplinary Qualitative Methods)

Sociology 2205A/B (preferred)*

*Statistical Sciences 1024A/B with a grade of 60% will be accepted as an alternate to Sociology 2205A/B.

Thanatology 3322A/B, 3355A/B, 4401F/G, 4403F/G, 4331F/G

4.0 courses from the following:

(Students who completed the former Thanatology 2200 only require 3.5 courses from this section)

Thanatology 2232A/B, 2233A/B, 3320A/B, 3323A/B, 2234A/B, 2235A/B, 3321A/B (May substitute Psych 3370E), Thanatology 3360A/B, 2293-2295A/B, 2296-2298F/G, 3393-2295A/B, 3396-3398F/G, 4496-4498F/G, 2291F/G-2292F/G

Philosophy 2715F/G

Sociology 2245, 3304F/G

A maximum 1.0 credit from the following courses may be applied toward the 4.0 required above:

Thanatology 2602A/B, 2605A/B, 3601A/B, 3603A/B, 3606A/B, 3607A/B

**Department of Chemistry
Final Assessment Report**

Faculty / Affiliated University College	Faculty of Science
Degrees Offered	BSc
Modules Reviewed	Honors Specialization, Specialization, and Major in Chemistry; Honors; Honors Specialization in Biochemistry and Chemistry
External Consultants	Dr. Alison Flynn, University of Ottawa; Dr. Brian Wagner, UPEI
Internal Reviewers	Dr. Susan Knabe, FIMS
Date of Site Visit	September 29, 2017
Evaluation	Good Quality
Approval Dates	SUPR-U: January 24, 2018 SCAPA: February 7, 2018 Senate:

Executive Summary

The undergraduate programs in the Department of Chemistry took place over the course of one day in late September 2017. While the program was supposed to have been reviewed during the 2016-17 academic year, a cancellation of the originally scheduled review (February 14, 2017) due to bad weather resulted in the review being conducted early in the 2017-18 academic year. Reviewing the program early in the year meant that additional data (the most recent enrolments for the current year for instance) was able to be provided, but it also meant that we were meeting with students very early in the year, so Y4 students were not able to provide as much detail about their experience of their final year because they had only just started it and things like the Chemistry Club, which is organized on a yearly basis, were not yet underway.

The examiners found a program with robust enrollments (compared nationally) which provided students with a rigorous undergraduate chemistry education that prepared them well for both entry into the workforce and further study. They recognized the dedication and commitment that faculty members, laboratory and office staff, graduate TAs, and undergraduate students brought to the undergraduate chemistry modules and credited this dedication with the overall positive experience that most chemistry undergraduates at UWO experience. Specific highlights in terms of curricular innovation or high impact teaching practices included the unique authentic assessment practice of the "drivers test" in their 3rd year and the requirement that all Honors Specialization and Specialization students take Chem 4491E, a research based thesis course. As the reviewers noted, requiring all HSP and Spec students to complete a thesis course is both a wonderful opportunity for students and relatively unique within the landscape of undergraduate chemistry education in Canada. Other curriculum innovations include the development of two blended courses (one in Y1 and one in Y2) for large course sections, though as the reviewers observed, there does seem to be some reluctance to move away from more traditional, lecture based, teaching methods.

The reviewers observed that the department teaches a large number of first and second year students who are taking chemistry courses required to support non-chemistry modules, and that relatively large amounts of laboratory resources, including staff and TA time, as well as faculty and administrative resources and time are spent servicing these courses. This distribution of resources has led to some of the challenges that the reviewers identified and that the faculty and students in the program discussed.

The challenges that the reviewers found included concerns by both students and faculty related to the number and distribution of 4th year electives. Students expressed disappointment that electives in particular sub-disciplines were not offered on a regular basis, or were offered but then cancelled because of low enrollments, something that faculty members also identified as a concern. Both students and faculty identified some areas where they felt students' were unprepared for upper year work -- specifically students identified the transition between first and second year difficult in relation to preparing full lab reports, while faculty, particularly those teaching physical chemistry noted that students often lacked proficiency in the math required for these courses. Much of the impetus for teaching innovation in the department resides with the two limited term appointments, one of whom has recently been on leave. There is a need for greater buy in across the faculty complement for a constructive review of teaching practices. Laboratory resources, both in terms of personnel and space, also posed a challenge for the programs given the number of students enrolled in high enrollment first and second year courses.

The department response to the reviewers report indicates considerable agreement with the overall intent of the recommendations and suggestions for improvement, indicating where steps have already been taken to address some of the concerns raised by the reviewers.

Significant Strengths of the Program

- Faculty members are passionate, dedicated researchers who are committed to the health of the undergraduate program
- Undergraduate students who are highly engaged with the program and excited about chemistry
- A large and healthy graduate program which supports the undergraduate program through TAs
- Well trained and dedicated staff (both administrative and lab) to support the delivery of the various undergraduate modules
- excellent preparation for students going into the workforce or on to further study
- healthy enrolment in chemistry modules with the exception of the module in Chemical Biology
- curriculum provides a strong foundation in the core chemistry disciplines with electives at the 3rd and especially 4th year
- authentic laboratory experience offered to all Hons Spec and Spec students through the thesis research projects under the auspices of Chem 4491E and through the "driver's test" in 3rd year analytical chemistry, in which students demonstrate their ability to use a range of different pieces of analytical equipment
- partnership with WISc program
- support within Department for need for continued pedagogical innovation

Suggestions for Improvement & Enhancement

- continue to work on ensuring high level learning outcomes are linked to both course instruction and assessment, with attention to both ensuring that expected outcomes are taught throughout the curriculum and think through how some of the WDO (especially those like resilience and life-long learning, critical thinking, global and community engagement) might be addressed and assessed in the program; engage students to improve learning experiences across the curriculum
- continued development of opportunities for offering an innovative and dynamic learning experience for students particularly through mentorship for instructors who are interested in innovative pedagogy, by encouraging champions to share experiences with pedagogical and curricular innovation, by making use of the resources offered by the wider university (TSC programs, WALs facilities), and by hiring a faculty member whose specialty is in Chemistry Education Research (CER) or the Scholarship of Teaching and Learning (SoTL) as applied to chemistry).
- identify strategies to ensure a wide range of electives across the different subfields in Y4 – the Faculty response to the reviewers report indicated running courses as grad/undergrad split courses or offering some courses as alternative year courses (with 3rd and 4th year students in these courses) might be a solution, as would increasing enrollments in the modules in order to simply have more students in the modules and thus more bodies in Y4 electives. I note that this

solution is not a guarantee that courses will not be cancelled because of low enrollment, because the distribution across electives in various subfields is also an issue. Further, increased enrollments in the Hons Spec and Spec might put additional pressure on resources in years 2 and 3, but this does not seem to be a concern at this point. Identifying specific subfields that are under enrolled at the Y4 level might permit a more targeted recruitment and retention of students into this subfield at the 2nd and 3rd year levels, particularly if these courses could draw on pedagogical innovations to reanimate interest in the area. However, it is important to recognize that the lack of upper year electives in a subfield may itself have a negative effect on fostering interest in the subfield and hence on recruitment into that subfield. This becomes a kind of a vicious circle. One way out of this impasse, the reviewers suggest, would be for the Faculty to permit the Department of Chemistry to offer a limited number of fourth year electives with low enrollment. Given that Chemistry Department is engaged in a large amount of service teaching at the first and second year levels and further, that it has not set up subfields as separate modules which would require these courses, it would seem reasonable to provide the unit with the opportunity to offer a limited number of courses per year (this could be as low as 1 or 2) that have an enrollment below a specific threshold. As a further incentive to address issues around recruitment and retention into different subfields, this “get out of jail free card” for a limited number of Y4 courses could be linked to pedagogical innovations at the Y2 and Y3 courses in particular subfields.

- Develop a plan to address critical and deferred maintenance in some labs and lab prep areas
- Develop a plan to address the issues related to lab staffing, both in terms of the need for more staff and in terms of planning for succession in lab staff as several members of staff are close to retirement

Recommendations Required for Program Sustainability

Recommendation	Responsibility
Continued attention to curriculum development, learning outcomes, and assessments	Undergraduate Education Committee, Acting Associate Chair, Undergraduate Chair
Enhance pedagogical innovation in the unit through: a) mentorship, sharing of effective teaching practices and b) review and enhance faculty capacity in CER and SoTL	a) Acting Associate Chair, Undergraduate Chair, TSC b) Dean, Faculty of Science, Chair,
Offer Y4 elective courses to ensure subfields are covered	Associate Dean, Faculty of Science, Chair, Acting Associate Chair, Undergraduate Chair
Consider adding an additional full time sessional lab staff member	Dean, Faculty of Science, Chair

Final Assessment Report
Submitted by SUPR-G to SCAPA

Program:	Geography	
Degrees Offered:	MA, MSc, PhD in Geography	
Approved Fields:	Environment, Development and Health; Geographic Information Science; Physical Geography; Urban Studies	
External Consultants:	Jean Andrey, Professor University of Waterloo	Tim Moore, Professor McGill University
Internal Reviewers:	Jisuo Jin, Professor Faculty of Science, Western	Tyler Girard, Doctoral Student Political Science, Western
Date of Site Visit:	October 23–24, 2017	
Evaluation:	<i>Good Quality</i>	
Approved by:	<i>SUPR-G on January 22, 2018</i> <i>SCAPA on February 7, 2018</i>	

Executive Summary

Overall, the external reviewers considered that the department has “**maintained a high quality graduate program**” after the previous cyclical review. Strong research publications, high level of team spirit and morale, excellent level of graduate funding, and first-class graduate student space are noted as the highlights of the program. The recommendation list from the reviewers is short, as summarized in point 2 below.

1. Significant Strengths of Program:

- The program has made substantial improvement based on recommendations of the previous review in terms faculty renewal, program and course offerings, and graduate funding.
- A strong record of research and funding among primary faculty members and students: 23 of the 27 faculty members co-authored 432 papers with their graduate students during reviewed period.
- Graduate students in Geography have been “well-funded” above the minimum level required by Western.
- The reviewers considered “graduate-student space in Geography at Western is first-class.”
- The current graduate students are proud of the department, appreciative of the academic, financial and administrative supports they have. Most students have a strong team spirit and they often help one another in research and social activities, including their field work. Student interactions are facilitated by the well-designed lab/cluster common space in the department. This was described as “a very strong esprit-de-corps” by the reviewers.

2. Suggestions for improvement & Enhancement:

- *Areas for improvement and opportunities for enhancement*
The Graduate curriculum needs further fine-tuning to address the large number of small enrolment (including single-student) courses, and to consider offering broader-interest courses with larger enrolment.
- *Steps the program can or should take for improvement*
Geography has a healthy and vibrant cohort of graduate students, with a high student-faculty ratio (3.5:1). But the reviewers noted that the load of graduate supervision is uneven, with 46% of the primary faculty (11 out of 24) supervising 90% of the students. This is also reflected in the refereed publication unevenness among primary faculty members (from 0 to >10 per year). This situation is expected to improve with the ongoing faculty renewal.

- *Improvements that require support or assistance beyond the program*
Faculty renewal — This is a priority for the Department of Geography, given four retirements in 2017–19, and five other eligible retirements in 2019–24. It seems that the Physical Geography stream will be affected the most by the retirements, and it is hoped that new hires in GIS, with current searches committed/supported by the Faculty of Social Science, will help the situation.

International graduate student funding — Geography currently has a strong group of international students, with fully guaranteed university funding. To maintain the current level of international student enrolment under the new funding model, a more flexible funding mechanism may be necessary, such as greater contributions from supervisors’ research grants.

Recommendations required for Program sustainability:	Responsibility
Faculty renewal to maintain overall graduate supervision capacity and the Physical Geography field or consider realignment of fields	Department and Faculty of Social Science
Develop more evenly distributed graduate supervision	Department and Faculty of Social Science
Sustainable international graduate student enrolment and funding-level	Department and Faculty of Social Science
Reduction of small-enrolment (including single-student) graduate courses	Department Chair

New Scholarships and Awards

Dr. Barry Davidson Global Opportunities Award (Medicine)

Awarded annually to full-time undergraduate Doctor of Medicine (MD) students in the Schulich School of Medicine & Dentistry who are participating in an international medical experience. Students must have completed their prescribed academic program the previous year and currently be registered in a full-time course load. Students may apply for this award in advance of being accepted into an international medical experience with receipt of the award contingent upon acceptance into the program. Students may only receive a Global Opportunities award once during their academic career at Western. Online applications are available on the Global Opportunities website, Western International. Applications are due on November 15th (for decisions in mid-January) or, if there is no recipient selected in January, February 15th (for decisions in late March). Students will be selected based on a combination of academic achievement, as well as a statement outlining how this experience will contribute to their development as a global citizen, what they expect to learn that will contribute to their success in medicine, and how they will be an effective Ambassador for Western. This award was established by a generous gift from Dr. Barry Davidson (MD '74).

Value: 2 at \$2,000*

Effective Date: 2017-2018 to 2020-2021 academic years inclusive

**\$2,000 from the Donor will be matched by \$2,000 through the University's Global Opportunities Award matching Program on an annual basis, for as long as the program exists.*

Dr. Katherine Chorneyko Global Opportunities Award (Medicine)

Awarded annually to a full-time undergraduate Doctor of Medicine student in the Schulich School of Medicine & Dentistry who is participating in an international medical internship program. Students must have completed their prescribed academic program the previous year and currently be registered in a full-time course load. Students may apply for this award in advance of being accepted into an internship program with receipt of the award contingent upon acceptance into the program. Students may only receive a Global Opportunities award once during their academic career at Western. Online applications are available on the Global Opportunities website, Western International. Applications are due on November 15 (for decisions in mid January) or, if there is no recipient selected in January, February 15 (for decisions in late March). Students will be selected based on a combination of academic achievement, as well as a statement outlining how this experience will contribute to their development as a global citizen, what they expect to learn that will contribute to their success in medicine, and how they will be an effective Ambassador for Western. This award was established by a generous gift from Dr. Katherine Chorneyko (MD '89).

Value: 2 at \$2,000*

Effective Date: 2017-2018 to 2020-2021 academic years inclusive

**\$2,000 from the Donor will be matched by \$2,000 through the University's Global Opportunities Award matching Program on an annual basis, for as long as the program exists.*

Edna Angela Liard Continuing Scholarship in Medicine (Medicine)

Awarded to a student entering first year of the Doctor of Medicine (MD) program based on academic achievement and demonstrated financial need. This scholarship will continue for up to four years provided that the recipient progresses satisfactorily and continues to demonstrate financial need each year. Only one student may hold this scholarship at any one time. If the recipient fails to retain the award, another student who meets the criteria will be selected from the same year. Candidates must complete an admission bursary application form, which is available online through Student Center, by August 1. The Office of the Registrar will determine financial need and make the final selection of the recipient. In the event of a late offer, exceptions will be made on a case-by-case basis. This scholarship was established through a generous bequest from the Estate of Joseph Jacques Edouard Liard.

Value: 1 at \$20,000 per year

Effective Date: 2018-2019 academic year

Elizabeth Tepe Eudaemon Global Opportunities Award (Arts and Humanities)

Awarded to undergraduate students in the Faculty of Arts and Humanities, who are participating in the Classical Studies Study Tour to Rome and Italy. Students participating in this program who are registered at the constituent University may be considered (with the exception of Ivey students). Students may apply for this award in advance of being accepted into the Study Tour to Rome and Italy with receipt of the award contingent upon acceptance into the program. Preference will be given to full-time students who have not received funding from other sources. Students may only receive a Global Opportunities award once during their academic career at Western. Online applications are available on the Global Opportunities website, Western International. Transcripts are required for undergraduate students who studied elsewhere in their previous academic year. Applications are due on February 15th (for decisions at the end of March). Students will be selected based on a combination of academic achievement, as well as a statement outlining how this experience will contribute to their development as a global citizen, what they expect to learn through their international experience and how they will be an effective Ambassador for Western. This award was established by a generous gift in memory of Elizabeth Tepe.

Value: 10 at \$2,000*

Effective Date: 2017-2018 academic year only

**10,000 from the Donor's gift will be matched by \$10,000 through the University's Global Opportunities Award Matching Program for the 2017-2018 academic year.*

Gudaitis-Bluzas Health Scholarship (Ivey Business School)

Awarded to a full-time student in the Master of Business Administration program at the Ivey Business School, based on academic achievement and demonstrated community leadership. The recipient will have a strong interest in pursuing a career in health care. Final selection of the recipient will be made by the MBA Scholarship Review Committee with at least one member of the selection committee holding membership in the School of Graduate and Postdoctoral Studies. This scholarship is made possible by a generous gift from Edward Gudaitis, MBA '93.

Value: 1 at \$10,000

Effective Date: May 2018

Jack Andrew Kwan International Award in Engineering (Engineering)

Awarded annually to an international full-time undergraduate student in Year 1 in the Faculty of Engineering based on academic achievement and volunteer and leadership ability, as demonstrated by participation in extracurricular activities or community involvement. Students must apply for this award and applications can be obtained from the Office of the Registrar and must be submitted by September 30 along with a one-page statement describing the applicant's extracurricular and community activities, by September 30. The Office of the Registrar will select the recipient. This award was made possible by a generous gift from Tim Kwan (BESc '73), Jane Kwan and Brian Kwan (LLB '04).

Value: 1 at \$2,500

Effective Date: 2018-2019 to 2032-2033 academic years inclusive

This award was established in honour of Jack Kwan, grandson of Tim and Jane Kwan, who came to Canada from Hong Kong, established a successful business and is an active volunteer for a number of organizations in the Greater Toronto Area for more than twenty-five years.

Jack Andrew Kwan International Award in Health Sciences (Health Sciences)

Awarded annually to an international full-time undergraduate student in Year 1 of any program in the Faculty of Health Sciences based on academic achievement and volunteer and leadership ability, as demonstrated by participation in extracurricular activities or community involvement. Students must apply for this award and applications can be obtained from the Office of the Registrar and must be submitted by September 30 along with a one-page statement describing the applicant's extracurricular and community activities, by September 30. The Office of the Registrar will select the recipient. This award was made possible by a generous gift from Tim Kwan (BESc '73), Jane Kwan and Brian Kwan (LLB '04).

Value: 1 at \$2,500

Effective Date: 2018-2019 to 2032-2033 academic years inclusive

This award was established in honour of Jack Kwan, grandson of Tim and Jane Kwan, who came to Canada from Hong Kong, established a successful business and is an active volunteer for a number of organizations in the Greater Toronto Area for more than twenty-five years.

Kriplani MBA Scholarship (Ivey Business School)

Awarded annually to a full-time international student from India who is entering the Master of Business Administration program at the Ivey Business School who has demonstrated financial need and whose permanent residence is outside North America. Preference will be given to a student who has achieved a 700+ GMAT score. Final selection of the recipient will be made by the MBA Scholarship Review Committee with at least one member of the selection committee holding membership in the School of Graduate and Postdoctoral Studies. Recipients will be notified at the time of acceptance into the program. This award was established with a generous gift from Indru Kriplani, MBA '67.

Value: 1 at \$40,000

Effective: May 2018 to April 2023

Law Class of 2007 Tim Edgar Memorial Award (Law)

Awarded annually to a full-time undergraduate student in Year 2 or 3 in the Faculty of Law, who has academic achievement and an interest in, and aptitude for, the advanced study of tax law. A one-page statement describing the candidate's interest in the advanced study of tax law must be submitted to the Dean's Office by March 30th. The Scholarship and Awards Committee in the Faculty of Law will select the recipient. This award was established by a generous gift from the Law Class of 2007 in memory of Dr. Timothy W. Edgar (BA '83 History, LLB '85).

Value: 1 at \$1,500

Effective Date: 2017-2018 to 2021-2022 academic years inclusive

Dr. Timothy Edgar was a brilliant Professor in Tax Law and taught in Western's Faculty of Law from 1989 to 2011. He also taught at Osgoode Hall Law School, York University, and was a member of the Sydney Law School at The University of Sydney. Dr. Edgar died in 2016 at the age of 56.

Lorenzo Di Cecco Memorial Award in Criminal Law (Law)

Awarded annually to a full-time undergraduate student in their final year in the Faculty of Law, based on the highest academic average in advanced criminal law courses. The Scholarship and Awards Committee within the Faculty of Law will select the recipient and the award will be made at the Faculty of Law's award ceremony held during spring convocation. This award is made possible by a generous gift from Mrs. Anna Maria Braithwaite, in loving memory of her brother, Lorenzo Di Cecco (LLB'71).

Value: 1 at \$2,000

Effective Date: 2017-2018 academic year

Lorenzo practiced law for several years, was appointed a Criminal Court Justice of the Ontario Court of Justice, and later served clients as a criminal defense lawyer. He was deeply principled, and always sought to advance the fundamental ideals of the administration of justice. Lorenzo was a voracious reader and avid student, continuing his legal education and obtaining a Masters of Law Degree in his retirement. He was a role model to us all and is deeply missed. Lorenzo died in 2017 at the age of 73.

Mackie Cryderman Award for Excellence in Creative Writing or Theatre Studies (Arts and Humanities)

Awarded annually to a student enrolled in Year 2, 3 or 4 in the Honors Specialization in Creative Writing and English Language and Literature or Major in Theatre Studies program in the Faculty of Arts and Humanities, who demonstrates excellence and potential in either Creative Writing or Theatre Studies. Students must have a minimum 70% average, with plans to work in the creative writing or theatre arts field after graduation. A one-page statement outlining the candidate's creative accomplishments and plans for their future career in creative writing or theatre studies must be submitted to the Departmental Office, English & Writing Studies by September 30th. The Scholarship Committee of the Department of English & Writing Studies will select the recipient. Students are eligible to apply in Year 2, 3 and 4 and may receive the award in each year should they be selected. If there are no students who meet the criteria, the award will not be given out. This award was established by a generous gift from the Hazel Cryderman-Wees Foundation in honour of Hazel's sister-in-law, Mackie.

Value: 1 at \$2,000

Effective Date: 2018-2019 academic year

Mackie Cryderman studied at the Winnipeg School of Art and at the Ontario College of Art, with a number of members from the Group of Seven. She created the vocational art department at the H.B. Beal Technical School in London, Ontario (currently known as H.B. Beal Secondary School). She also taught at Western University and Fanshawe College. Mackie Cryderman was an accomplished artist in a variety of media, working in watercolour, oil, metal and leather as well as pursuits in jewelry making, graphic design and carving. Mackie died in 1969 at the age of 73.

Mackie Cryderman Award for Excellence in Music Performance or Composition (Music)

Awarded annually to a student enrolled in Year 2, 3 or 4 in a Music Performance or Composition program in the Don Wright Faculty of Music, who demonstrates creative excellence and potential. Students must have a minimum 70% average, with plans to work in the music performance or composition field after graduation. A one-page statement outlining the candidate's accomplishments and plans for their future must be submitted to the Dean's Office in the Don Wright Faculty of Music by September 30th. The Scholarship Committee in the Don Wright Faculty of Music will select the recipient. Students are eligible to apply in Year 2, 3 and 4 and may receive the award in each year should they be selected. If there are no students who meet the criteria, the award will not be given out. This award was established by a generous gift from the Hazel Cryderman-Wees Foundation in honour of Hazel's sister-in-law, Mackie.

Value: 1 at \$2,000

Effective Date: 2018-2019 academic year

Mackie Cryderman studied at the Winnipeg School of Art and at the Ontario College of Art, with a number of members from the Group of Seven. She created the vocational art department at the H.B. Beal Technical School in London, Ontario (currently known as H.B. Beal Secondary School). She also taught at Western University and Fanshawe College. Mackie Cryderman was an accomplished artist in a variety of media, working in watercolour, oil, metal and leather as well as pursuits in jewelry making, graphic design and carving. Mackie died in 1969 at the age of 73.

Mackie Cryderman Award for Excellence in Visual Arts (Visual Arts)

Awarded annually to students enrolled in Year 2, 3 or 4 in a Bachelor of Fine Arts program in the Faculty of Arts and Humanities, who demonstrate creative excellence and potential in Visual Arts. Students must have a minimum 70% average, with plans to work in the visual arts field after graduation. A one-page statement outlining the candidate's creative accomplishments and plans for their future career in visual arts must be submitted to the Departmental Office, Visual Arts by September 30th. The Scholarship Committee of the Department of Visual Arts will select the recipients. Students are eligible to apply in Year 2, 3 and 4 and may receive the award in each year should they be selected. If there are no students who meet the criteria, the award will not be given out. This award was established by a generous gift from the Hazel Cryderman-Wees Foundation in honour of Hazel's sister-in-law, Mackie.

Value: 3 at \$2,000

Effective Date: 2018-2019 academic year

Mackie Cryderman studied at the Winnipeg School of Art and at the Ontario College of Art, with a number of members from the Group of Seven. She created the vocational art department at the H.B. Beal Technical School in London, Ontario (currently known as H.B. Beal Secondary School). She also taught at Western University and Fanshawe College. Mackie Cryderman was an accomplished artist in a variety of media, working in watercolour, oil, metal and leather as well as pursuits in jewelry making, graphic design and carving. Mackie died in 1969 at the age of 73.

Meds Class of 1991 (Medicine)

Awarded annually to a full-time undergraduate student completing Year 4 of the Doctor of Medicine (MD) program in the Schulich School of Medicine & Dentistry, based on academic achievement as well as the qualities of honesty, humour and a generosity of spirit and time. Online nomination forms can be submitted by students and faculty to the Undergraduate Medical Education Office by March 31. The recipient will be selected by their peers with the approval of the Progression and Awards Committee. This award was established by a generous gift from the Meds Class of 1991 Alumni, on the occasion of their 25th Homecoming Reunion.

Value: 1 at \$2,000

Effective Date: 2017-2018 to 2020-2021 academic years inclusive

S.B. Family Award (Arts and Humanities)

Awarded annually to a full-time undergraduate student in Year 2, 3 or 4 in the Faculty of Arts and Humanities, based on academic achievement and demonstrated financial need. Preference will be given to students studying in a module offered by the Department of Modern Languages and Literatures. Online financial assistance applications are available through Student Center and must be submitted by September 30. The recipient will be selected by the Office of the Registrar. This award was made possible by a generous gift from the S.B. Family.

Value: 1 at \$1,250

Effective Date: 2018-2019 to 2022-2023 academic years inclusive

FUNDED BY OPERATING

Robert Ninham Entrance Scholarship (Law)

Awarded annually to a full-time undergraduate student entering Year 1 in the Faculty of Law, based on academic promise. Preference will be given to an Indigenous student (First Nations, Metis, Inuit, Status, Non-Status and Self Identifying) who has demonstrated ties to his/her indigenous community. The Scholarship/Awards Committee in the Faculty of Law will select the recipient.

Value: 1 at \$1,500

Effective Date: 2018-2019 to 2022-2023 academic years inclusive

Robert Ninham was wolf clan of the Oneida Nation. He was always expanding his horizons. He obtained his private and commercial licences in 1996. He graduated in 1999 with an Honors Business Commerce degree. Robert worked for the Oneida Nation of the Thames band office and decided that he could make a greater impact for his community by pursuing a law degree. Robert attended Western Law and graduated in 2010. He saw that the only way for First Nations' people to address their issues was to take responsibility and make changes within the community. He enjoyed working with children as an agent of the Office of the Children's Lawyer. He also represented First Nations' people in family court and in child protection proceedings. Robert passed away in 2017 at the age of 47.

REPORT OF THE SENATE COMMITTEE ON UNIVERSITY PLANNING

(SCUP)

Contents	Consent Agenda
Faculty of Engineering – Establishment of New Academic Units – School of Biomedical Engineering and Centre of Engineering Leadership and Innovation (CELI)	No
2018 Entrance Standards for Undergraduate First-Year Admissions	No
Five-Year Enrolment Projections	No
Report on Year One Class and Entering Averages	No
Update on Open Space Strategy	No
National Survey of Student Engagement (NSSE)	No
Provost's Update on Planning Process	No
Question from Senate	No

FOR APPROVAL

1. **Faculty of Engineering – Establishment of New Academic Units - School of Biomedical Engineering and Centre of Engineering Leadership and Innovation (CELI)**

Recommended: That Senate approve and recommend to the Board of Governors the establishment of the new School of Biomedical Engineering and the Centre of Engineering Leadership and Innovation (CELI) in the Faculty of Engineering, effective July 1, 2018, shown in [Appendix 1](#).

Background:

See [Appendix 1](#).

2. **2018 Entrance Standards for Undergraduate First-Year Admissions**

Recommended: That Senate approve the targets and processes for first-year, first-entry undergraduate enrolment for the Constituent University and Affiliated University Colleges as outlined in [Appendix 2](#).

Background:

See [Appendix 2](#).

3. **Five-Year Enrolment Projections**

Recommended: That the five-year enrolment projections/plans presented in [Appendix 3](#) be used for University budget planning purposes.

Background:

See [Appendix 3](#).

FOR INFORMATION

4. **Report on Year One Class and Entering Averages**

See [Appendix 4](#).

5. **Update on Open Space Strategy**

A presentation will be provided by L. Logan, Vice-President (Operations & Finance). A copy of the presentation is provided in [Appendix 5](#).

6. **National Survey of Student Engagement (NSSE)**

A presentation will be provided by J. Doerksen, Vice-Provost (Academic Programs). A copy of the presentation is provided in [Appendix 6](#).

7. **Provost's Update on Planning Process**

J. Deakin, Provost and Vice-President (Academic) will provide an oral report at the meeting.

8. **Question from Senate**

SCUP was advised that a question arose at the Senate meeting on January 19, 2018 regarding the reorganization of Western Libraries and whether Senate should have been consulted about this. The Provost noted that legal advice had been previously provided which confirmed that the matter raised was not within the purview of Senate. Section 18 of the UWO Act provides that all matters not assigned to the Senate are within the ambit of the Board. The Board delegates management and administrative issues, such as reorganization of units, to be areas in which the administration does not, and should not, be seeking Board approval. The Provost also clarified that the reorganization of Western Libraries had been through extensive consultation and resulted in no loss of employment for any member of the Libraries.

As a consequence, SCUP took note that the matter fell outside of both its and Senate's jurisdiction.

Faculty of Engineering – Establishment of New Academic Units

FOR APPROVAL

1. Establishment of the School of Biomedical Engineering

Recommended: That Senate approve the establishment of the new School of Biomedical Engineering in the Faculty of Engineering, effective July 1, 2018.

Background:

The purpose of the new School of Biomedical Engineering is to support a new undergraduate BESC in Biomedical Engineering program and to house the already existing Biomedical Engineering graduate program.

The new undergraduate program (currently under approval) will be small, admitting 25-30 students per year. It will target exceptionally promising students with outstanding high-school and first-year Engineering credentials. The first cohort of the new program will be admitted in September 2018, after approval from the Quality Council is received.

Biomedical Engineering is among the most rapidly growing employment fields in North-America and is consistently among the most highly requested specializations by prospective undergraduate students, especially female students, who visit the Faculty of Engineering's recruiting events. Western possesses the resources and expertise to offer a unique BME undergraduate program that will effectively balance traditional technical engineering subjects, fundamental biomedical sciences, applications of engineering to biology and medicine, and participation in internationally leading BME research. The School will produce graduates who are well prepared for both employment in the medical device industry and for further graduate or professional studies.

This new undergraduate program is intended to broaden the cohort by attracting outstanding students from Ontario and elsewhere but no growth to the current Engineering enrollment of 580 first year students per year is envisaged. The new undergraduate program will offer students opportunities for:

1. Completing dual degrees in selected core engineering programs (Chemical, Electrical, Mechanical, Mechatronics Systems) with Biomedical Engineering;
2. Obtain a solid knowledge base to complement any subsequent training in Medicine;
3. Rewarding employment in the BME sector; and,
4. Continuing to graduate studies in Biomedical Engineering.

The new School will also house the already existing and highly successful Biomedical Engineering graduate program. Since 2000, a successful collaboration involving the Faculties of Engineering, Science, Health Sciences, and the Schulich School of Medicine & Dentistry has supported an interdisciplinary graduate program in Biomedical Engineering (BME). Currently, 84 faculty are members and approximately 70 graduate students per year are supported through the graduate program.

The four main research pillars of biomaterials, biomechanics, imaging and robotics are buttressed by excellent, nationally and internationally leading laboratory facilities within these Faculties and at the Lawson Health Research Institute (LHRI). The biomechanics facilities include laboratories affiliated with the Wolf Orthopaedic Biomechanics Laboratory (WOBL) at the Fowler Kennedy Sports Medicine Clinic, and the Roth McFarlane Hand and Upper Limb Centre (HULC) at St. Joseph's Hospital. Biomedical imaging research in London encompasses all major imaging modalities and biomedical applications using research infrastructure valued at over \$100 million, which ranks it amongst the largest and best-equipped medical imaging research groups in North-America. The majority of the imaging research infrastructure is located at Robarts Research Institute (RRI) and the LHRI Imaging Laboratories at St. Joseph's Hospital. Robotics research is facilitated through Canadian Surgical Technologies & Advanced Robotics (CSTAR) to develop and test the next generation of minimally invasive surgical and interventional technologies and techniques. The proximity of the clinic- and hospital-based laboratories to outpatient clinics, therapy departments and operating rooms facilitates a close interaction between BME researchers, clinicians,

residents and patients.

Completion of new Three C+ Engineering Building in April 2018 will provide a physical home for the School.

The proposed Institutional Structure for the School of Biomedical Engineering includes:

- Director of Biomedical Engineering reporting to Dean of Engineering;
- Associate Director (Undergraduate – new position), who will be a member of the Engineering Undergraduate Committee;
- Associate Director (Graduate), who is a member of the Engineering Graduate Committee and the Schulich Graduate Affairs Committee;
- Steering Committee comprised of the Deans of Medicine & Dentistry, Science, Health Sciences and Engineering (or their designates);
- Faculty either cross-appointed to, or hired by, the School.

2. **Establishment of the Centre of Engineering Leadership and Innovation (CELI)**

Recommended: That Senate approve the establishment of the new Centre of Engineering Leadership and Innovation (CELI) in the Faculty of Engineering, effective July 1, 2018.

Background:

The Centre of Engineering Leadership and Innovation will enable engineering students to identify challenges that are difficult to solve with existing technology solutions alone. By harnessing the expertise and resources available at Western, students, researchers, entrepreneurs and industry partners will work together to build development paths for technological advancements and potential innovative solutions that address the world's big problems and contribute to economic growth.

The Centre will also enable engineering students with a sound understanding of the business processes they are likely to encounter in their careers and prepare graduates to solve problems in their technical fields within the context of a business organization—corporate or entrepreneurial.

The establishment of the John M. Thompson Chair in Engineering Leadership and Innovation has led to the development of a Certificate in Engineering Leadership and Innovation. The Certificate helped to revitalize the core of the Integrated Engineering program, assisted the integration of business into the first year of the Engineering core curriculum, delivered selected business programming for research students and contributed to the student community, through entrepreneurial and other activities.

The proposed Centre of Engineering Leadership and Innovation (CELI) will be the lead partner within Western Engineering for professional skills development in the areas of:

- Leadership and team development
- Communication skills
- Professionalism
- Impact of engineering on society and the environment
- Ethics and equity
- Entrepreneurship, Project Management and Business

These skills align with graduate attributes identified by the Canadian Engineering Accreditation Board as crucial for undergraduate education. Skills development in these areas are increasingly important for graduate students as well.

To further these goals, the Centre will actively work with:

- Academic departments within Western Engineering to support their academic programming
- Western University Faculties and Centres to create experiential and interdisciplinary learning opportunities for Engineering students
- Industrial partners to understand skill requirement and skill development in its area of expertise within the Engineering profession

The Centre will have academic responsibility for the following areas:

- Integrated Engineering undergraduate program
- Advanced Design and Manufacturing Master of Engineering program (collaborative with Queen's University)
- Undergraduate courses offered in the Certificate in Engineering Leadership and Innovation
- Undergraduate courses that are not engineering discipline specific and are foundational measures of the Graduate Attribute criteria of the Canadian Engineering Accreditation Board (currently ES1050 and ES 4498F/G)
- Master of Engineering professional courses that are not discipline specific
- Professional courses for research graduate students (MEng and PhD)

The Centre Director will report to the Dean of Western Engineering, and will be a member of Dean's Council, Undergraduate Curriculum Committee and Graduate Committee.

The Advisory Committee for the Centre will consist of faculty, staff, students, alumni and industrial members. The mandate of the Advisory Committee will be to make recommendations for the improvement of the Centre's offerings and to create opportunities for greater collaboration across the Faculty of Engineering through advice to the Centre's Director and faculty. A subcommittee of the Advisory Committee will also review changes to the professional skills curriculum that are proposed by the Centre.

The Centre will work closely with the Pierre L. Morrissette Institute for Entrepreneurship and the Ian O. Ichnatowycz Institute for Leadership at the Ivey Business School to ensure that curriculum aligns with the curriculum developed and taught through those Institutes.

Western University

SCUP Subcommittee on Enrolment Planning and Policy (SUEPP)

Fall 2018 Entrance Standards for First-Year Undergraduate Admissions

A. Background/Context

History

Over the past twenty years, Western's enrolment planning has placed the highest priority in increasing the quality of our incoming first-year class – which has moved the overall average grade of our first-year class from a position of “below the Ontario average” in 1993 to the top spot in Ontario in 2014. Our approach to first-year admissions – approved by Senate in November 2010 – included the following high-level priorities:

1. Our objective should be to continue to increase the quality of our incoming class – and we should continue to maintain and increase entrance standards.
2. The approach of using the common minimum entrance requirement for the large direct-entry programs should be continued. For limited-enrolment programs – based on annual reviews by the Provost and the Deans – the entrance requirements could be higher. The result of this approach is that student demand/choice drives program-specific enrolments.
3. We should work to increasing our first-year international enrolments.
4. We should continue to monitor the gap in entrance requirements between Western and the Ontario average – with the objective of maintaining/increasing the gap.
5. We should continue to monitor the size of our overall first-year class – in order to ensure that the undergraduate population does not reach a level that cannot be accommodated within our current physical infrastructure.

In 2010, in order to be aligned with the Constituent University's strategy on enrolment planning, the Affiliated University Colleges committed to narrowing the gap in entrance requirements between the Colleges and the Constituent University – by 2014-15.

Current Strategic Plan Priorities

Our current Strategic Plan – *Achieving Excellence on the World Stage* – includes the following enrolment-planning related objectives:

- a. Attract the brightest students as demonstrated through the highest entering grade average.
- b. Achieve the highest student retention and graduation rates among Canada's leading research-intensive universities.
- c. Increase international undergraduate enrolment to at least 15% and domestic out-of-province student enrolment to at least 10% of the undergraduate student body.
- d. Increase graduate student enrolment to at least 20% of the total student body.

B. Update on the Fall 2017 Entering Class and Entrance Standards

Constituent University

1. The Constituent University's full-time first-year enrolment was 5,089. Of this, 638 (or 12.5%) were international students.
2. The common minimum entrance requirement was a mid-year offer grade of 83.5% (for Arts & Humanities and FIMS). For all other programs the mid-year offer grades were higher – ranging from 84.5% to 92.0%. At offer time, the condition for the final grade was as follows -, minimum 83.5% for Arts & Humanities, FIMS and Social Science; 84.0% for Engineering, BHSc program, Kinesiology, Science and MOS; and 85.0% for Nursing.
3. For information, full-time graduate enrolment was 5,935 – which equates to about 19% of total full-time enrolment.

Affiliated University Colleges

4. Full-time first-year enrolment at the Colleges were as follows:
 - Brescia 313
 - Huron 250
 - King's 788
5. The final grade requirement at each of the Colleges was 78% (i.e. compared to the 83.5% at the Constituent University) – and, at this level, the Colleges met the commitment made back in 2010. Western's Provost and the Principals of the Affiliated University Colleges continue to review the gap in entrance standards – in the context of student performance and outcomes measures.

C. Fall 2018 Admissions Plans

Constituent University

1. The admissions strategy of the recent years will continue for the fall 2018 admissions cycle – and it is expected that our mid-year offer grade (for all programs) will be no less than 83.5%, with a final grade requirement of at least 83.5%.
2. Based on the current applications data, we are planning for a first-year class in the range of 5,100. For budget planning purposes, we have used a first-year class of 5,170 – which includes 650 international students.

Affiliated University Colleges

3. The final grade requirement at each of the Colleges will be no less than 78%.
4. As is the case at present, in situations where additional assessment is required (for students with exceptional/unusual circumstances), the Colleges may admit students with grades below the minimum final grade requirement. The proportion with final grades below the minimum requirement (i.e. 78%) shall not exceed 2% of the entering class.
5. Where applicable, the Colleges will be bound to the minimum entrance standards established by the Constituent University for limited-enrolment programs – including B.H.Sc. and Kinesiology.
6. The planned first-year class sizes are as follows:
 - Brescia 328
 - Huron 310
 - King's 815

SUMMARY OF ENROLMENT FORECAST

<Full-time undergraduate defined as 3.5 FCEs or more>

		Actual					Forecast				
		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
1	Constituent University										
2	Full-Time Undergraduates										
3	Arts & Humanities	1,147	1,121	1,027	979	985	977	980	986	992	995
4	Business (HBA)	1,116	1,100	1,093	1,120	1,109	1,130	1,130	1,130	1,130	1,130
5	Dentistry	264	262	265	265	263	264	264	264	264	264
6	Education	597	657	286	653	747	668	668	668	668	668
7	Engineering	1,449	1,546	1,761	1,951	1,981	2,039	2,033	2,107	2,112	2,111
8	Health Sciences										
9	BHSc Program	1,170	1,163	1,179	1,199	1,189	1,167	1,177	1,180	1,175	1,175
10	Kinesiology	1,169	1,240	1,204	1,247	1,231	1,199	1,205	1,196	1,203	1,205
11	Nursing	825	835	868	903	960	979	967	952	952	952
13	Sub-Total	3,164	3,238	3,251	3,349	3,380	3,345	3,349	3,328	3,330	3,331
14	Law	480	486	474	482	478	468	468	468	468	468
15	Media, Information, & Tech	930	924	983	966	898	944	944	931	951	964
16	Medicine										
17	MD Program	680	683	684	682	699	684	684	684	684	684
18	BMedSci Program	862	892	881	928	1,021	970	970	970	970	970
19	Music	512	457	432	417	412	429	566	579	588	588
20	Science	4,482	4,606	4,679	4,826	4,948	4,993	5,031	5,002	5,010	5,030
21	Social Science	6,674	6,601	6,482	6,520	6,501	6,465	6,553	6,630	6,749	6,825
22	Total Full-Time Undergraduates	22,357	22,573	22,298	23,138	23,422	23,376	23,641	23,747	23,917	24,029
23	Concurrent Programs	173	200	255	233	231	235	235	235	235	235
24	Medical Residents	853	913	923	942	934	930	930	930	930	930
25	Full-Time Graduates										
26	Masters	2,977	3,146	3,276	3,431	3,750	3,949	3,988	4,028	4,069	4,109
27	Ph.D.	2,026	2,075	2,088	2,083	2,185	2,237	2,259	2,282	2,305	2,328
28	Total Full-Time Graduates	5,003	5,221	5,364	5,514	5,935	6,186	6,247	6,310	6,374	6,437
29	Total Full-Time Enrolment	28,386	28,907	28,840	29,827	30,522	30,727	31,053	31,222	31,456	31,631
30	Part-Time FTEs										
31	Undergraduate <1>	2,251	2,123	2,226	2,084	2,015	2,000	2,000	2,000	2,000	2,000
32	Education (AQs) <1>	635	607	595	499	390	400	400	400	400	400
33	Masters	149	99	79	89	95	100	100	100	100	100
34	Ph.D.	27	29	32	29	29	30	30	30	30	30
35	Total Part-Time FTEs	3,062	2,858	2,932	2,701	2,529	2,530	2,530	2,530	2,530	2,530
36	Total Constituent FTEs	31,448	31,765	31,772	32,528	33,051	33,257	33,583	33,752	33,986	34,161
37	Affiliated University Colleges <2>										
38	Full-Time Undergraduates										
39	Brescia	1,150	1,269	1,327	1,329	1,306	1,345	1,400	1,413	1,454	1,500
40	Huron	1,250	1,144	1,062	979	882	924	956	1,017	1,122	1,196
41	King's	3,169	3,063	3,004	3,070	3,034	3,049	3,068	3,100	3,137	3,177
42	Total Full-Time Undergraduates	5,569	5,476	5,393	5,378	5,222	5,318	5,424	5,530	5,713	5,873
43	Part-Time Undergraduate FTEs <1>										
44	Brescia	83	86	80	70	70	75	75	75	75	75
45	Huron	65	65	58	50	55	55	55	55	55	55
46	King's	252	277	260	215	205	223	219	218	219	219
47	Total Part-Time FTEs	400	428	398	335	330	353	349	348	349	349
48	Graduate FTEs										
49	Brescia	32	28	33	35	35	35	35	35	35	35
50	Huron	8	11	9	9	7	4	4	4	4	4
51	King's	31	33	29	41	48	47	47	47	47	47
52	Total Graduate FTEs	71	72	71	85	90	86	86	86	86	86
53	Total Affiliate FTEs	6,040	5,976	5,862	5,798	5,642	5,757	5,859	5,964	6,148	6,308
54	Total UWO FTEs	37,488	37,741	37,634	38,326	38,693	39,014	39,442	39,716	40,134	40,469

SUMMARY OF ENROLMENT FORECAST

<Full-time undergraduate defined as 3.5 FCEs or more>

		Actual					Forecast				
		2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
	<i>Rows 55 to 86 Included above</i>										
55	International Students										
56	Constituent Full-Time										
57	Undergraduates	1,611	1,895	1,990	2,217	2,342	2,500	2,700	2,780	2,920	3,075
58	Medical Residents	112	134	136	134	123	125	125	125	125	125
59	Masters (excluding Ivey)	439	495	576	596	715	731	738	746	753	761
60	MBA (Regular), Ivey MSc	43	39	56	68	75	76	75	75	75	75
61	Executive MBA	40	35	24	2	1	0	0	0	0	0
62	Ph.D.	516	547	562	562	581	581	587	593	599	605
63	Affiliates										
64	Undergraduates	497	577	661	718	732	813	890	966	1,037	1,095
65	Masters	3	0	0	2	0	0	0	1	2	2
66	Year 1 Only										
67	Constituent										
68	Arts & Humanities	213	267	217	240	229	240	240	240	240	240
69	Engineering	430	511	637	598	571	580	580	580	580	580
70	Health Sciences										
71	BHSc Program	338	347	336	320	335	325	325	325	325	325
72	Kinesiology	315	386	335	350	318	335	335	335	335	335
73	Nursing	132	131	143	162	144	135	135	135	135	135
74	Media, Information, & Tech	332	336	350	304	245	255	270	275	275	275
75	MOS Program	741	857	794	861	769	820	845	875	895	895
76	Music	121	99	100	102	112	120	120	120	120	120
77	Science	1,347	1,474	1,445	1,599	1,551	1,520	1,530	1,530	1,550	1,550
78	Social Science	878	803	796	817	815	840	840	855	865	865
79	Total Year 1 - Constituent	4,847	5,211	5,153	5,353	5,089	5,170	5,220	5,270	5,320	5,320
80	Affiliated University Colleges										
81	Brescia	309	315	350	321	313	328	352	368	370	370
82	Huron	388	274	290	253	250	310	340	368	401	416
83	King's	848	740	774	777	788	815	823	841	854	867
84	Total Year 1 - Affiliates	1,545	1,329	1,414	1,351	1,351	1,453	1,515	1,577	1,625	1,653
85	Total UWO Year 1	6,392	6,540	6,567	6,704	6,440	6,623	6,735	6,847	6,945	6,973
86	Masters										
87	All Programs (excluding MBAs)	2,583	2,781	2,877	3,004	3,280	3,511	3,543	3,583	3,624	3,664
88	Ivey (excl EMBA)	181	161	208	255	265	267	270	270	270	270
89	Executive MBA	213	204	191	172	205	171	175	175	175	175

For Information

90	Year 1 Constituent International Students	532	527	508	618	638	650	700	750	800	800
----	---	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

<1> 2017-18 part-time undergraduate FTEs are estimated.

Year 1 Class and Entering Averages

SCUP

February 5, 2018

Context

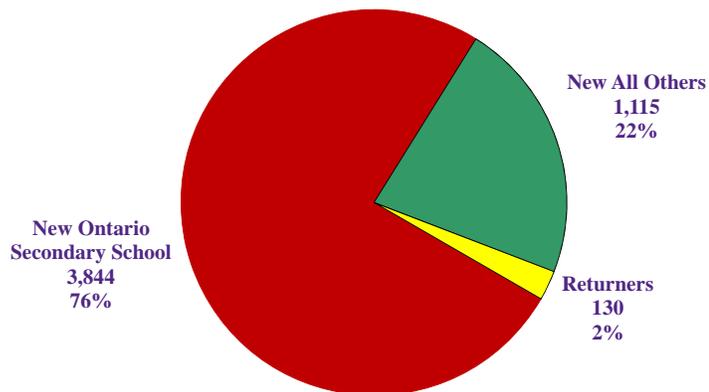
- Western continues Approach using “Standard Minimum Entrance Requirement”
 - **Fall 2017 83.5% (final = 83.5%)**
 - Fall 2016 83.5% (final = 83.5%)
 - Fall 2015 83.5% (final = 83.5%)
 - Fall 2014 84.0% (final = 83.0%)
 - Fall 2013 84.0% (final = 83.0%)
 - Fall 2012 83.0% (final = 82.5%)
 - Fall 2011 83.0% (final = 82.0%)
 - Fall 2010 83.0% (final = 81.0%)
 - Fall 2009 83.0% (final = 80.0%)
 - Fall 2008 82.5% (final = 79.0%)
 - Fall 2007 82.0% (final = 78.0%)
 - Fall 2006 81.0% (final = 78.0%)
 - Fall 2005 80.5% (final = 77.0%)
 - Fall 2004 80.5% (final = 78.0%)
 - Fall 2003 83.0% (final = 78.0%)
 - Fall 2002 79.5% (final = 74.0%)
 - Fall 2001 77.0% (final = 73.0%)

Student Profile: Applicant Type & Geographical Origin

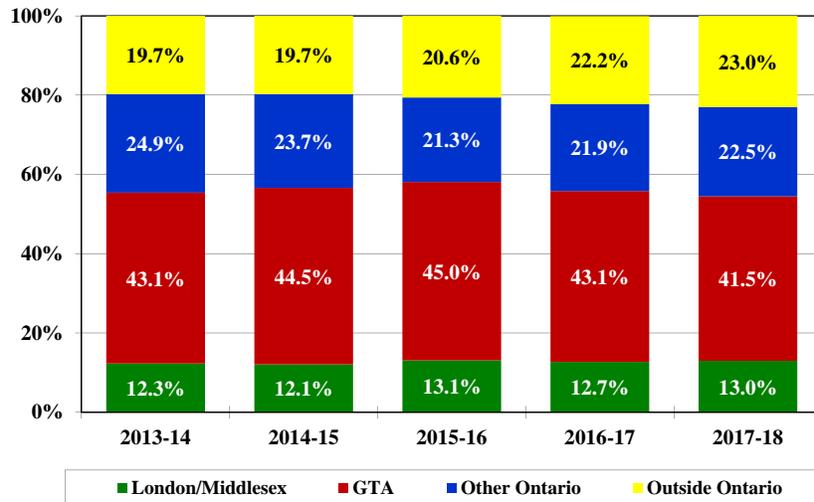
Constituent University

2017-18 Year 1 Students by Applicant Type Constituent University

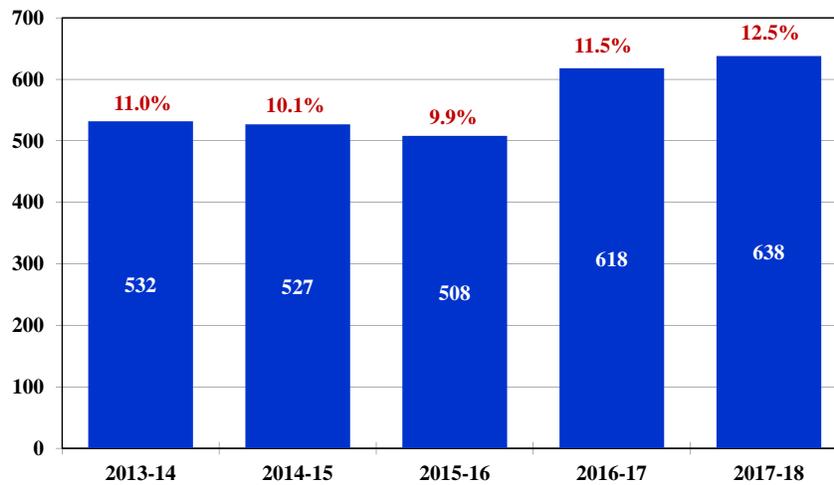
Total Year 1 = 5,089



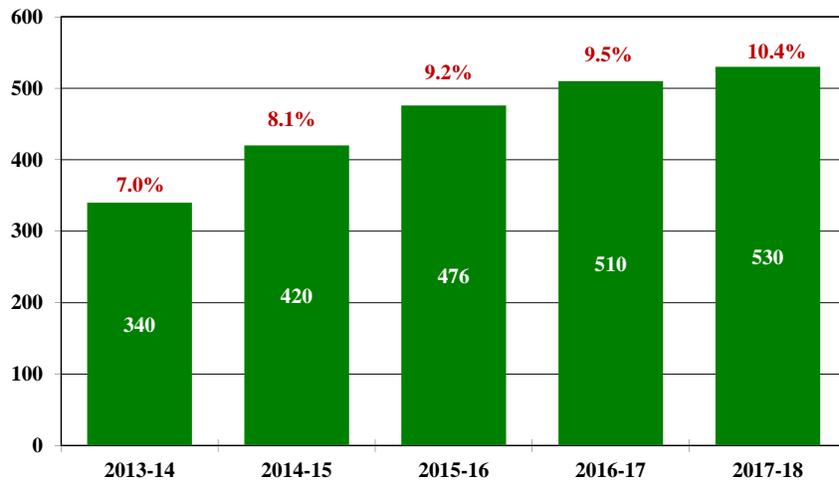
Geographical Origin of New Year 1 Students Constituent University



Year 1 International Students Constituent University

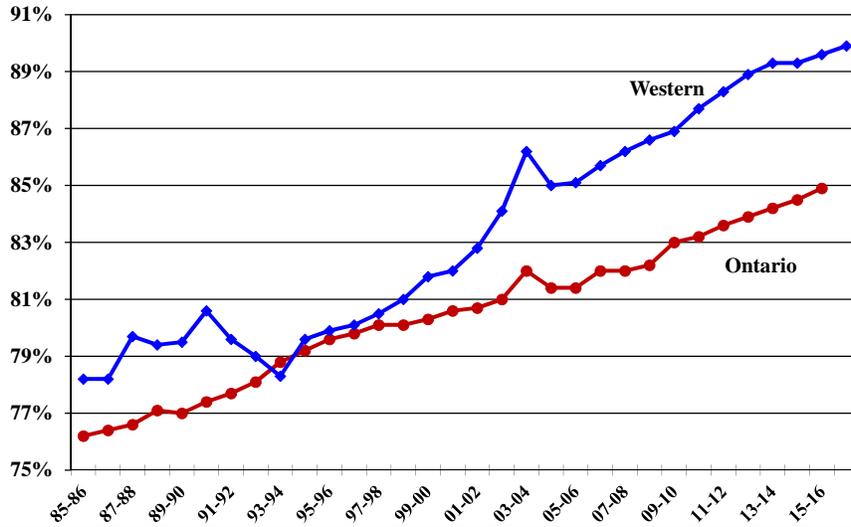


Year 1 Out of Province Students Constituent University

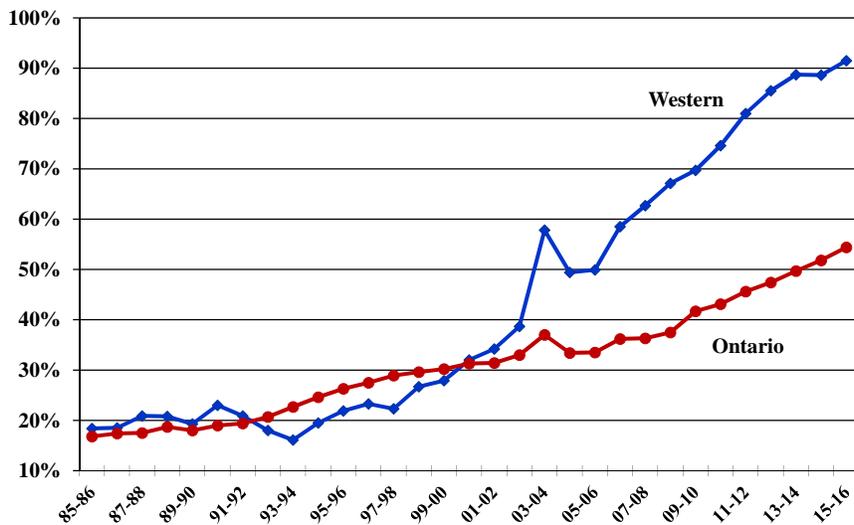


Entering Grades of New Ontario Secondary School Students

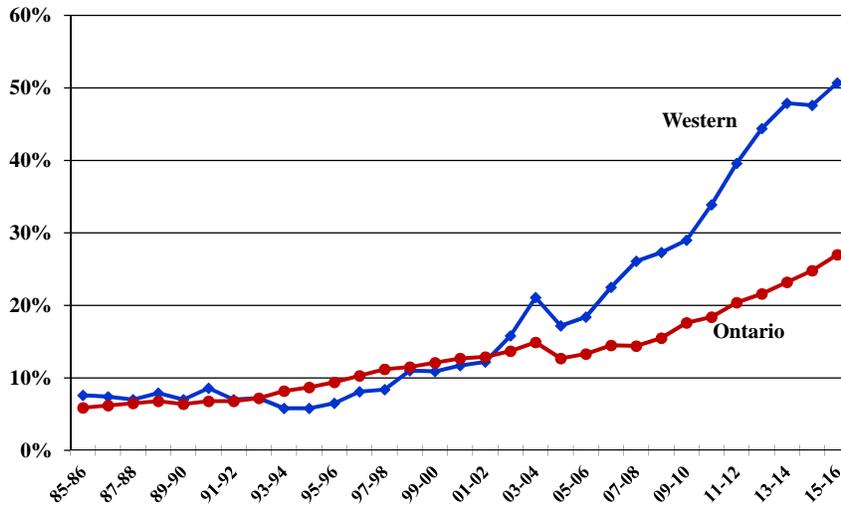
Average Entering Grade



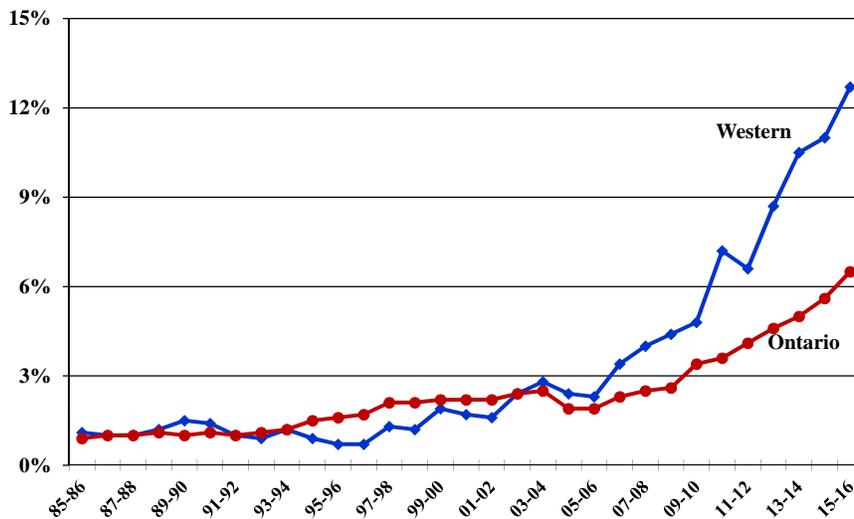
Proportion with Entering Grades of 85% or More



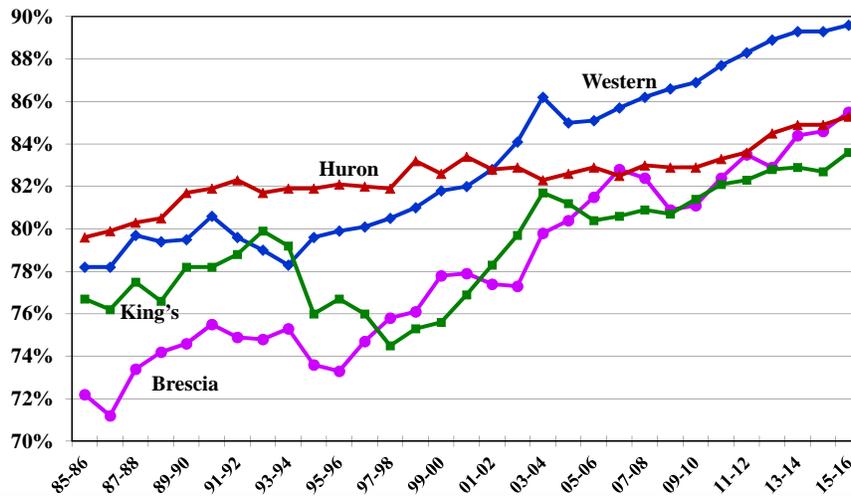
Proportion with Entering Grades of 90% or More



Proportion with Entering Grades of 95% or More

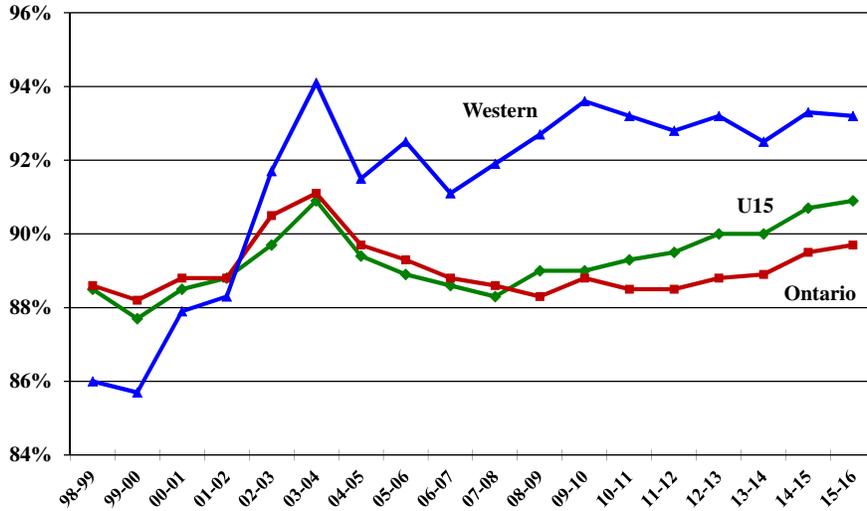


Average Entering Grade Western and Affiliated University Colleges

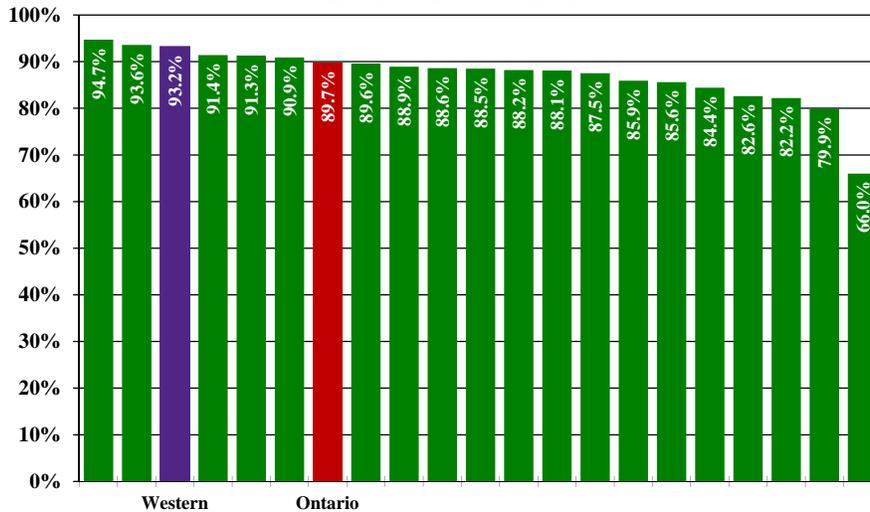


Retention Rates

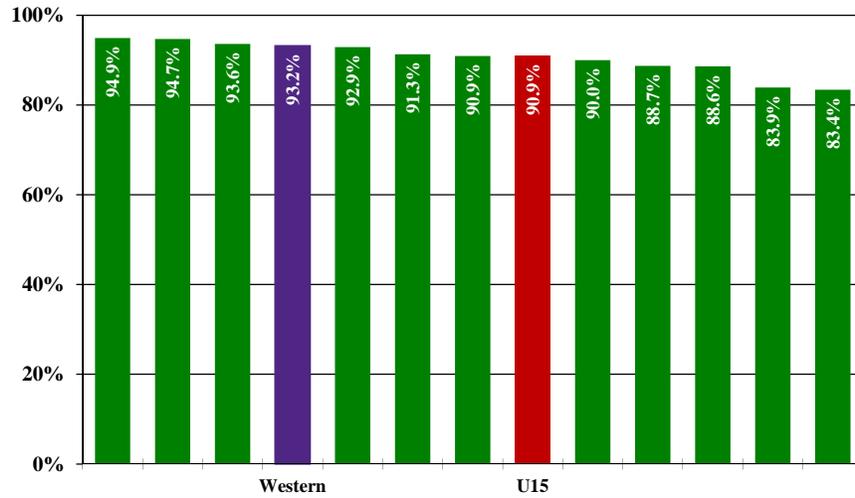
Year 1 to Year 2 Retention Rates



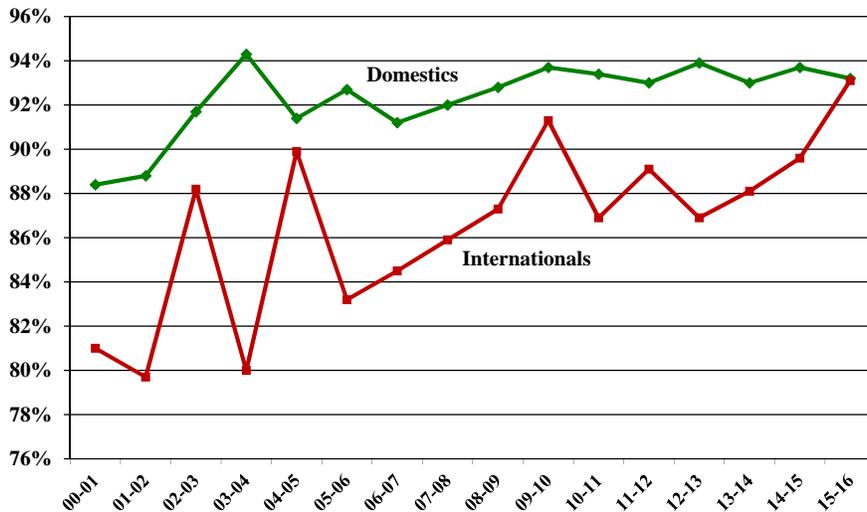
Ontario: Year 1 to Year 2 Retention Rates 2015-16 Cohort



U15: Year 1 to Year 2 Retention Rates 2015-16 Cohort

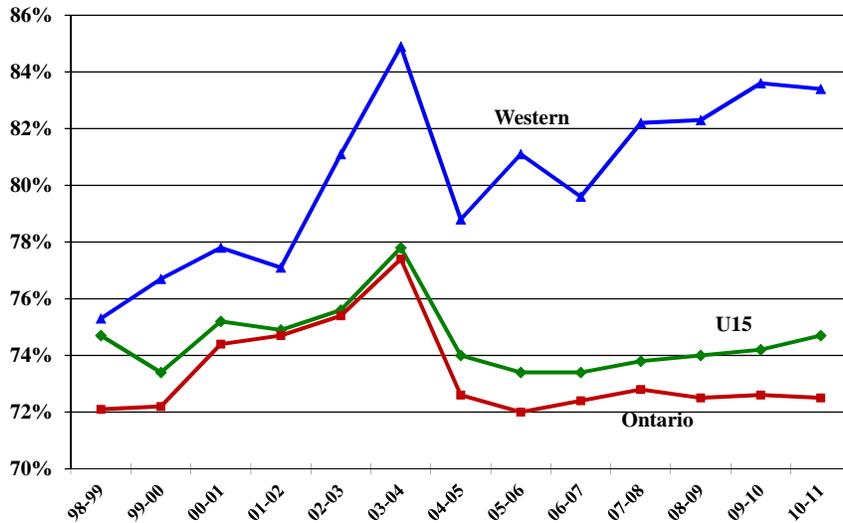


Western: Year 1 to Year 2 Retention Rates

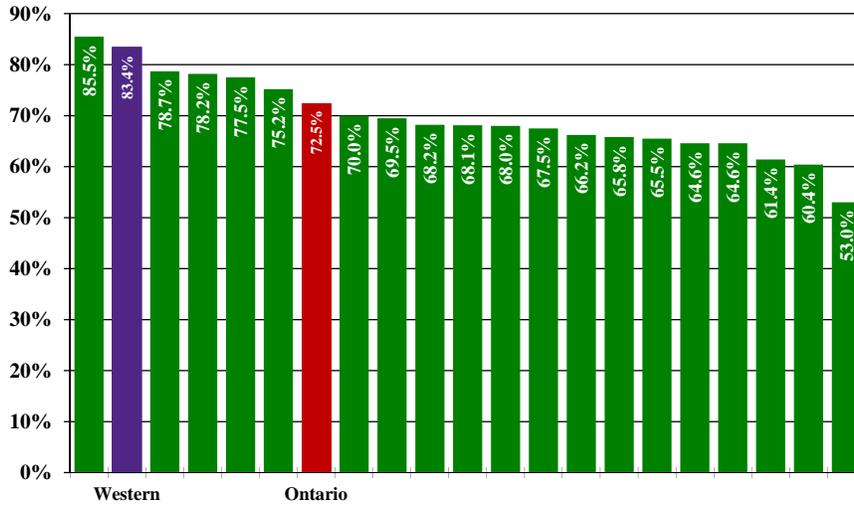


Graduation Rates

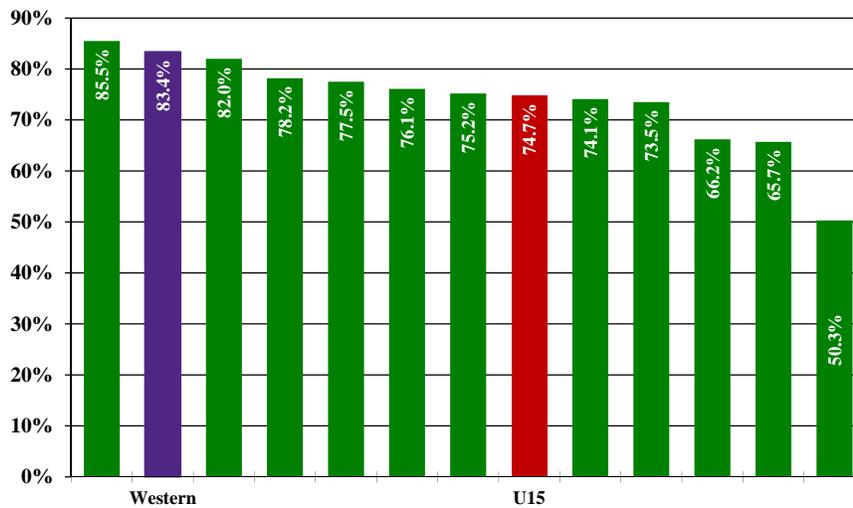
6-Year Graduation Rates



Ontario: 6-Year Graduation Rates 2010-11 Cohort



U15: 6-Year Graduation Rates 2010-11 Cohort

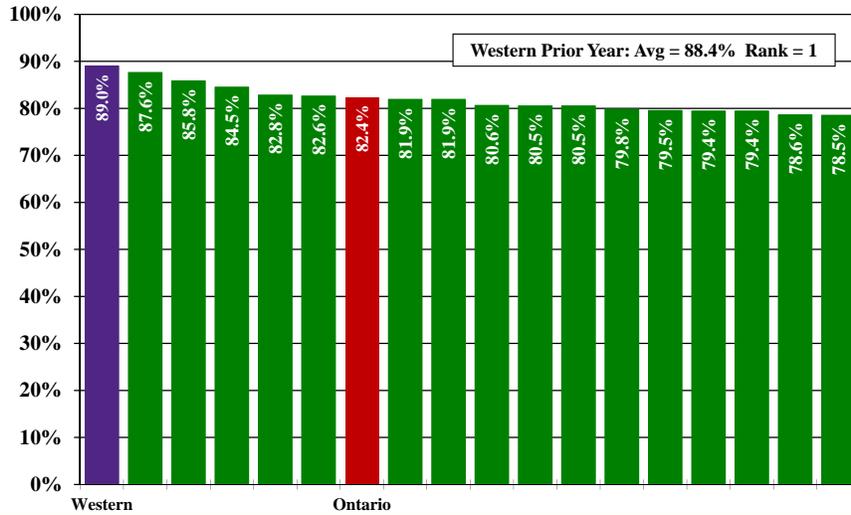


Entering Grades of New Ontario Secondary School Students by University & Program 2015-16

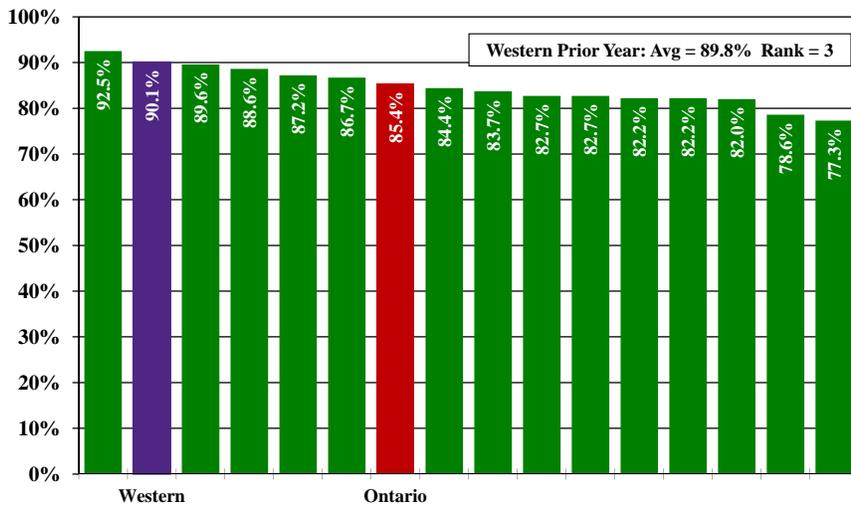
2015-16 Average Entering Grade All Programs



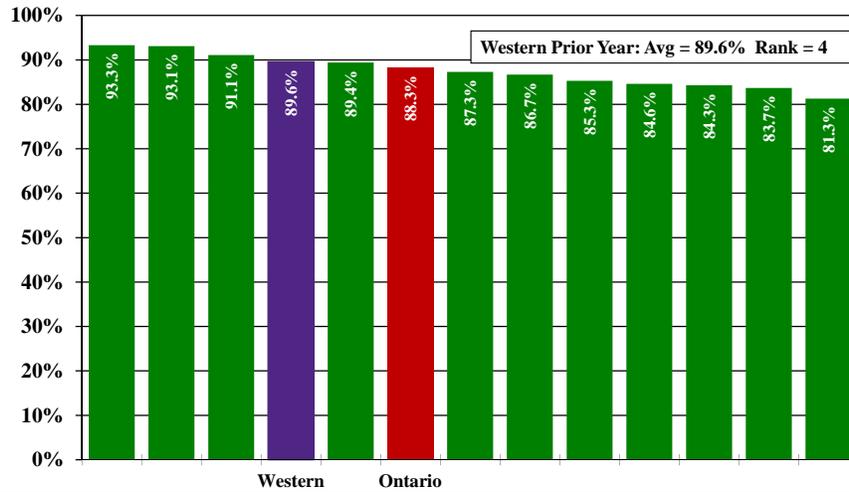
2015-16 Average Entering Grade Arts & Humanities / Social Science



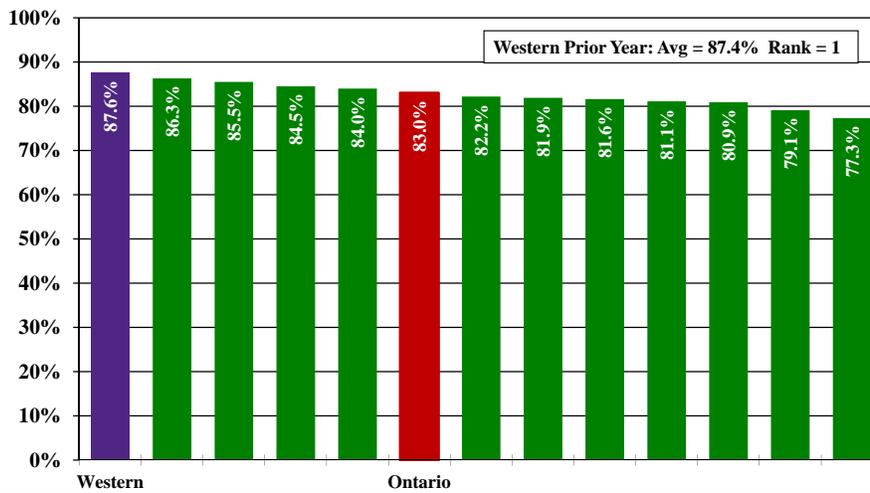
2015-16 Average Entering Grade MOS / Commerce



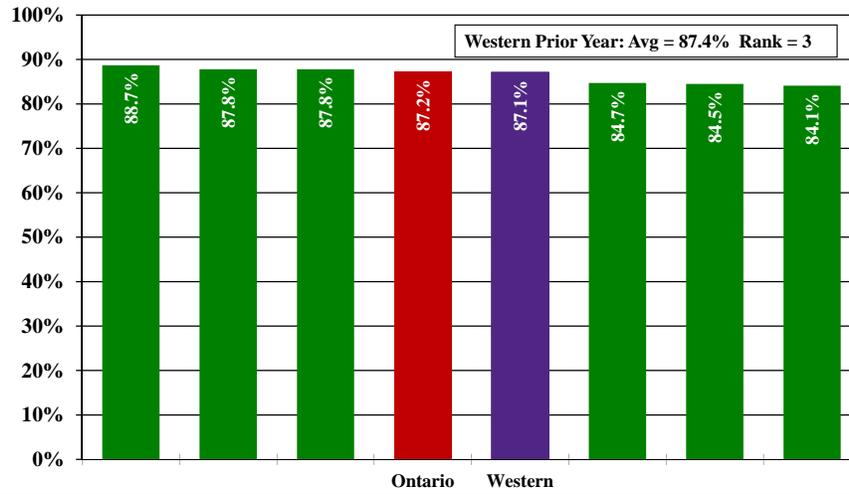
2015-16 Average Entering Grade Engineering



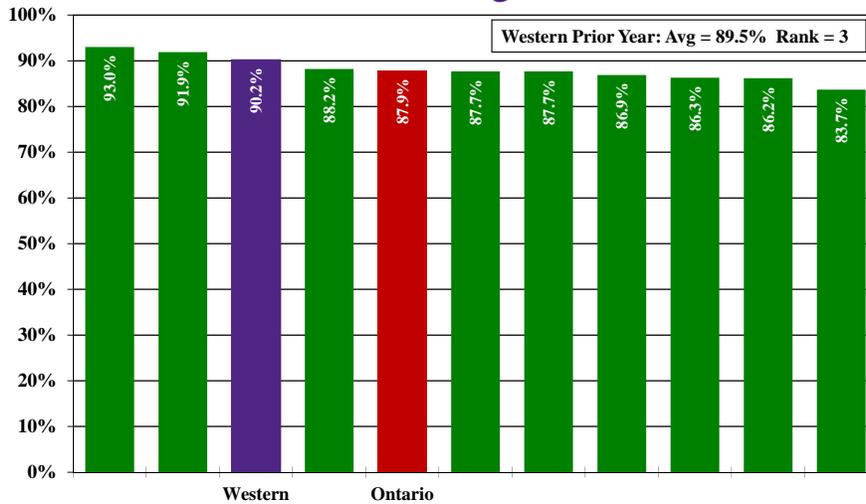
2015-16 Average Entering Grade Kinesiology



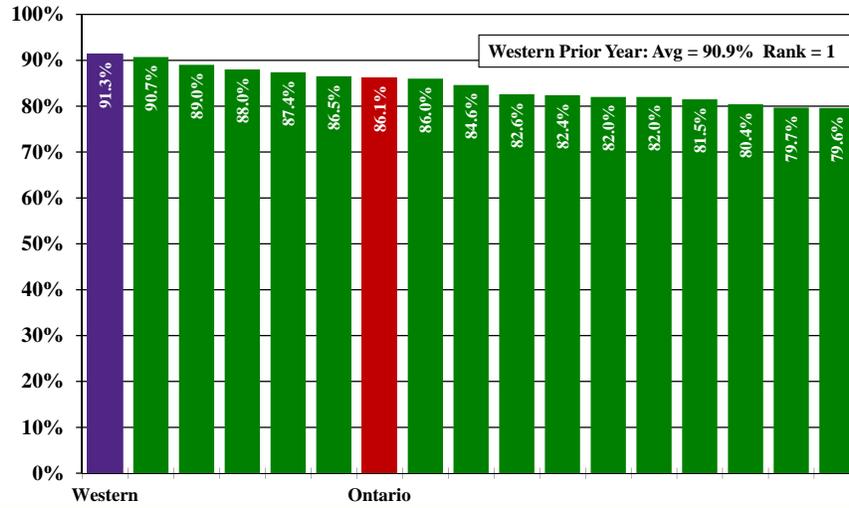
2015-16 Average Entering Grade Music

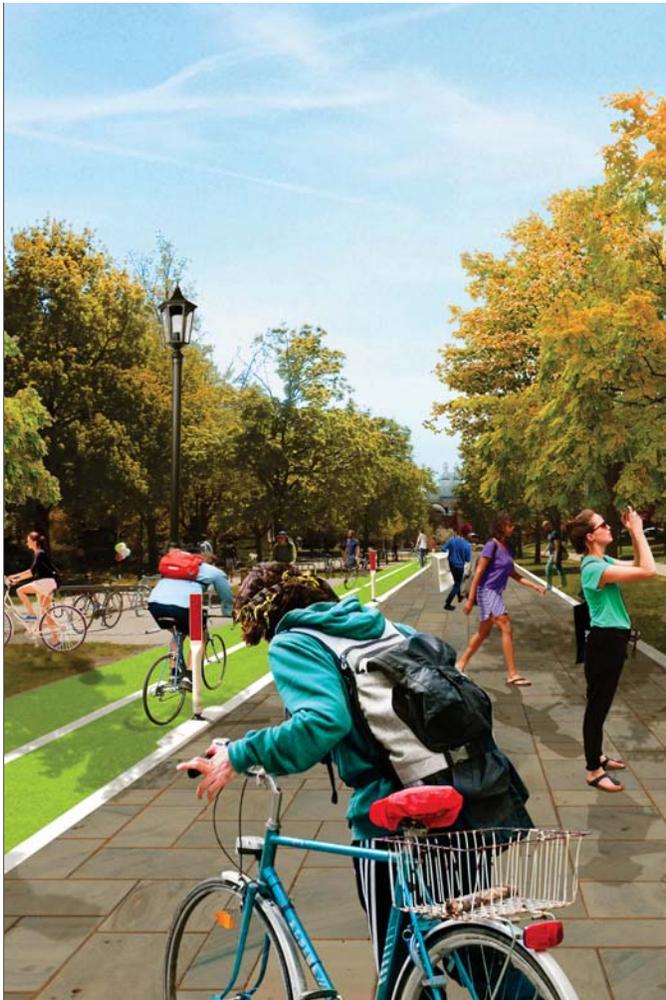


2015-16 Average Entering Grade Nursing



2015-16 Average Entering Grade Science





WESTERN UNIVERSITY

OPEN SPACE STRATEGY

Senate Presentation
February 16, 2018



PERKINS+WILL



ACKNOWLEDGMENTS

Western University Project Team

Wade Boye	Communications Specialist, Human Resources
Chris Bumbacco	Director, Facilities, Housing & Ancillary Services
Karen Campbell	Vice-Provost (Academic Planning, Policy & Faculty)
Ruban Chelladurai	Associate Vice-President (Institutional Planning & Budgeting)
Helen Connell	Associate Vice-President (Communications & Public Affairs)
Dale Laird	SCUP Representative
Martin Lefebvre	Society of Graduate Students Representative
Lynn Logan	Vice-President (Operations & Finance) (Chair)
Mike Lunau	Manager, Landscape Services
Glenn Matthews	Housing & Ancillary Services
Mike McLean	Director, Facilities Planning & Design
Lesley Oliver	Equity Services
Dan Redmond	Director, Campus Community Police Services
Alan Salmoni	School of Kinesiology
Sab Sferrazza	London Health Sciences Centre
Landon Tulk	Vice-President, University Students' Council
Peter White	Executive Director, Government Relations & Strategic Partnerships

Resource

Danielle Lapkowski	Coordinator to the Vice President (Resource & Operations)
Stephen Ledgley	Senior Media Relations Officer

Consultant Team

Paul Kulig	Perkins+Will
Safdar Abidi	Perkins+Will
Janice Cheung	Perkins+Will
Eunice Wong	Perkins+Will
Tom Kwok	Perkins+Will
Karina Ricks	Nelson\Nygaard
Bob Williams	Nelson\Nygaard
Iain Banks	Nelson\Nygaard
Glenn Scheels	GSP
Mark Zuzinjak	GSP
Chris McBride	GSP
Sandrina Dumitrascu	GSP
Justin Whalen	GSP

PROJECT TIMELINE



WESTERN UNIVERSITY
STRATEGIC PLAN
2014

LAUNCH OF SHIFT
2015

WESTERN ROAD
TRANSPORTATION STUDY
DECEMBER 2015

CITY BUSINESS CASE
NOW FULL BRT SYSTEM
2016



2015
CAMPUS MASTER PLAN

2015
WESTERN UNIVERSITY
PARKING STUDY

2016
BOARD SUPPORT FOR
LRT TO CAMPUS BUT
NOT THROUGH CAMPUS

2016
OPEN SPACE AND
LANDSCAPE PLAN



PROJECT TIMELINE

WE ARE HERE

PRINCIPLES
WORKSHOP
NOVEMBER 2016

OPEN HOUSES
AND PRELIMINARY
ACCESS PLAN
JANUARY 2017

PRELIMINARY OPEN
SPACE PLAN
MARCH 2017

PROJECT TEAM
MEETING
SEPTEMBER 2017

CONSULTATION
JANUARY 2018



DECEMBER 2016
TECHNICAL
ASSESSMENT OF
FULL BRT ROUTE
ALTERNATIVES

FEBRUARY 2017
RESPONSE TO CITY

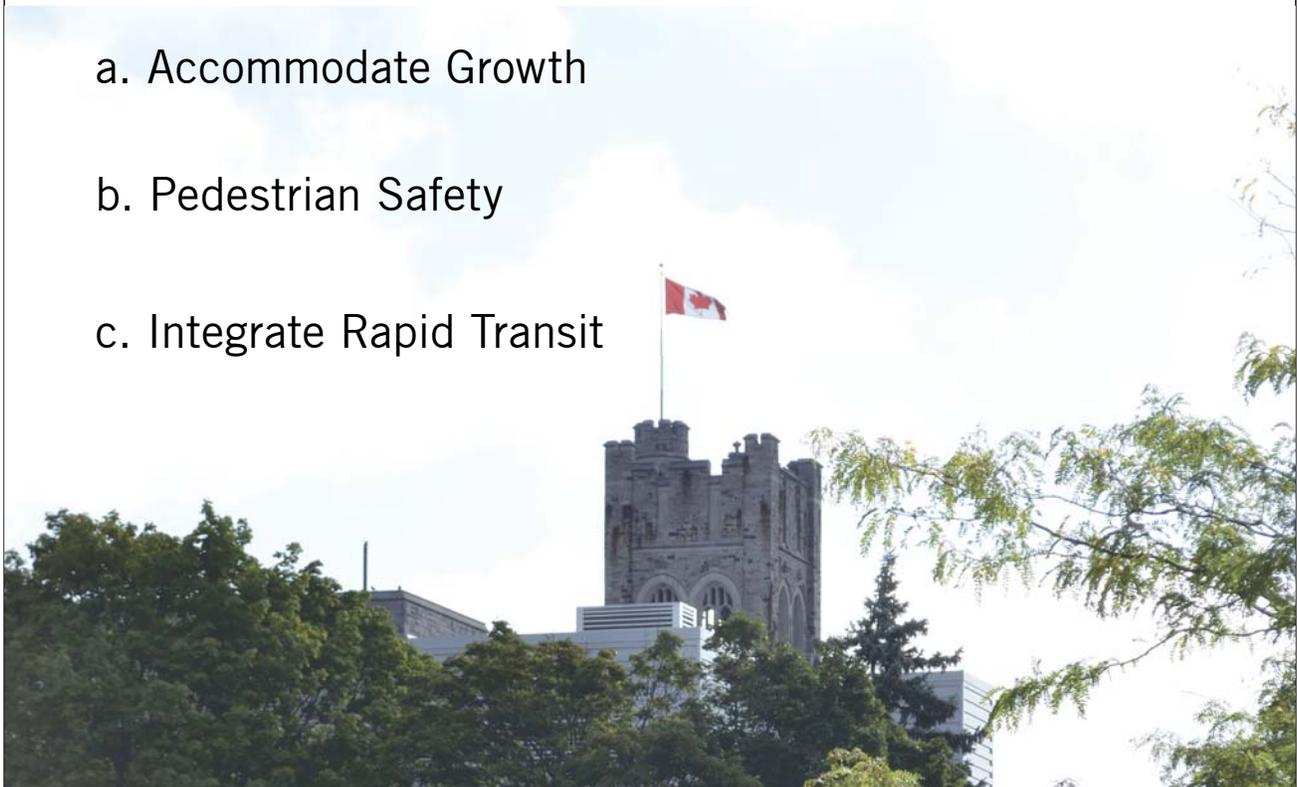
JUNE 2017
DESIGN WORKSHOP

DECEMBER 2017
PROJECT TEAM
MEETING



PURPOSE

- a. Accommodate Growth
- b. Pedestrian Safety
- c. Integrate Rapid Transit





ISSUES & OPPORTUNITIES



a. Legacy of Stewardship



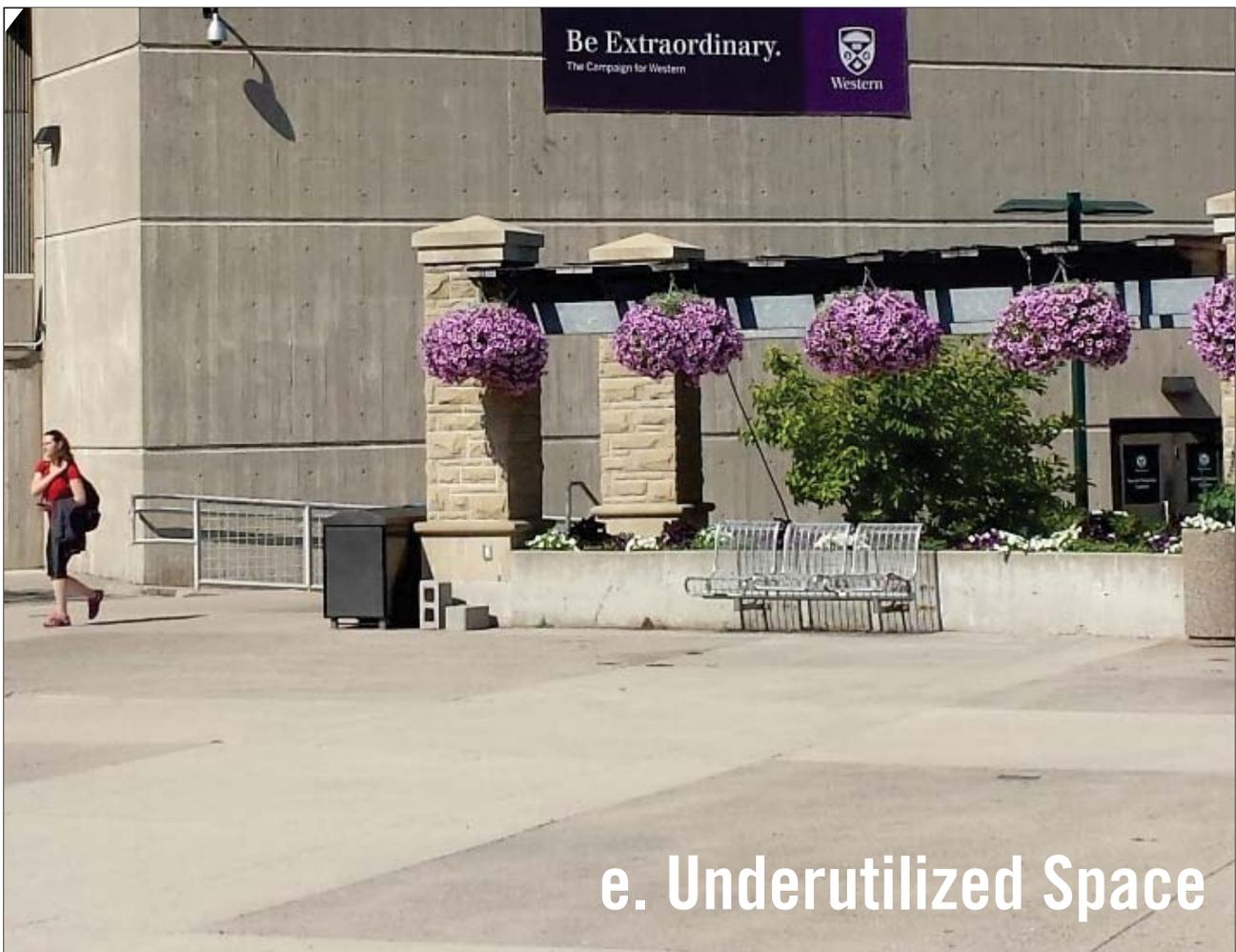
b. Pedestrian Walkway



c. Parking Management



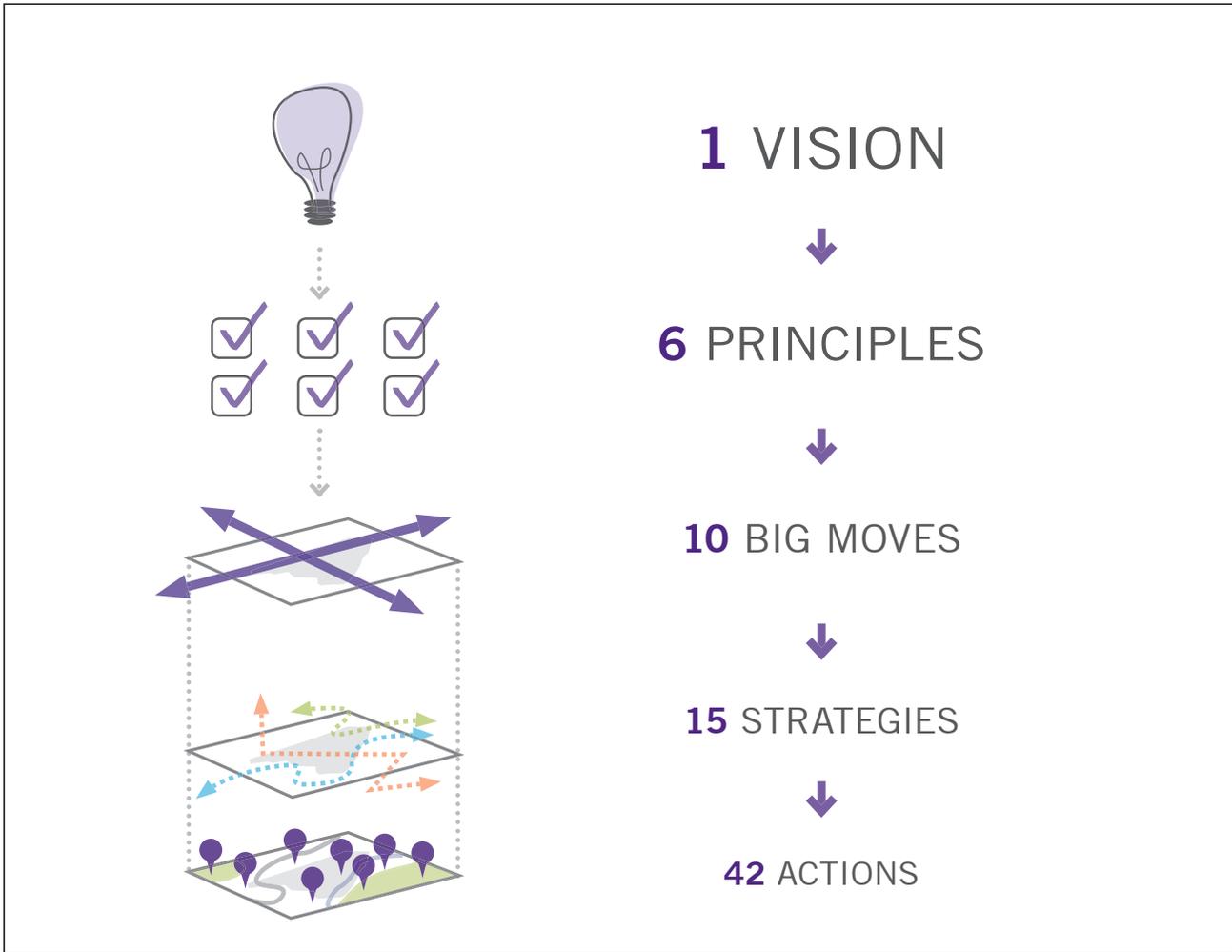
d. Transit



e. Underutilized Space



VISION & PRINCIPLES



VISION

“The Western Open Space, Landscape & Mobility Strategy will build on the natural beauty of Western’s campus and legacy of landscape stewardship to deliver a safe and beautiful campus that will foster learning and promote Western as a destination of choice for world class education and research.”



PRINCIPLES



HUMAN PLACE



EQUITY



**SUPPORTING PEDAGOGY
& RESEARCH**



ACCESS



MOBILITY

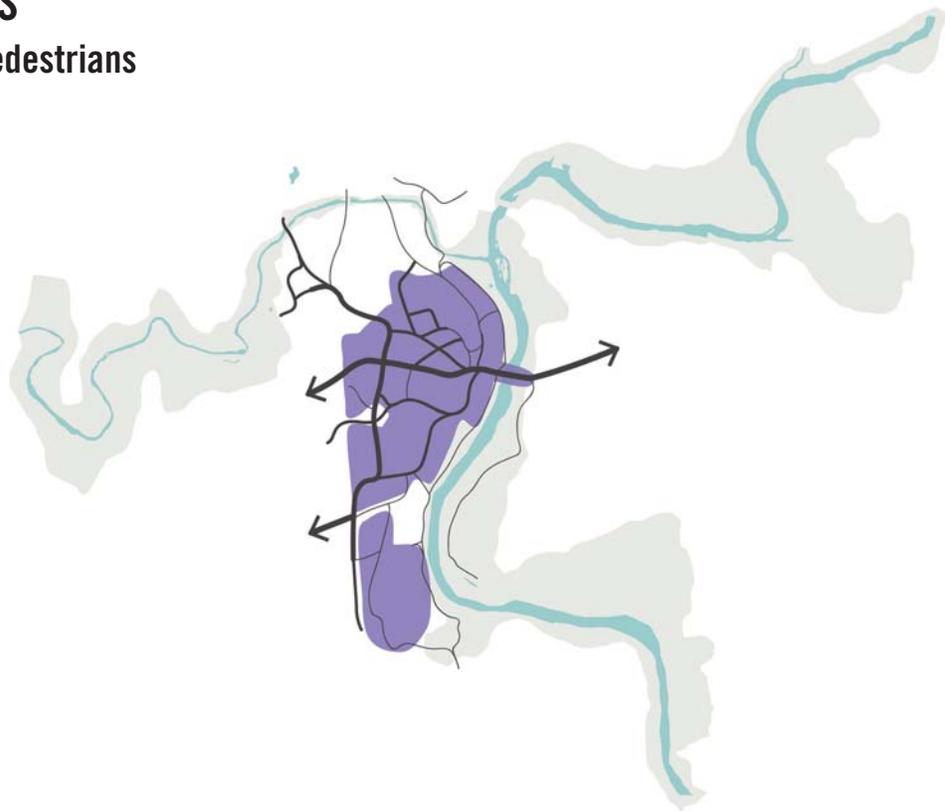


RESILIENCE



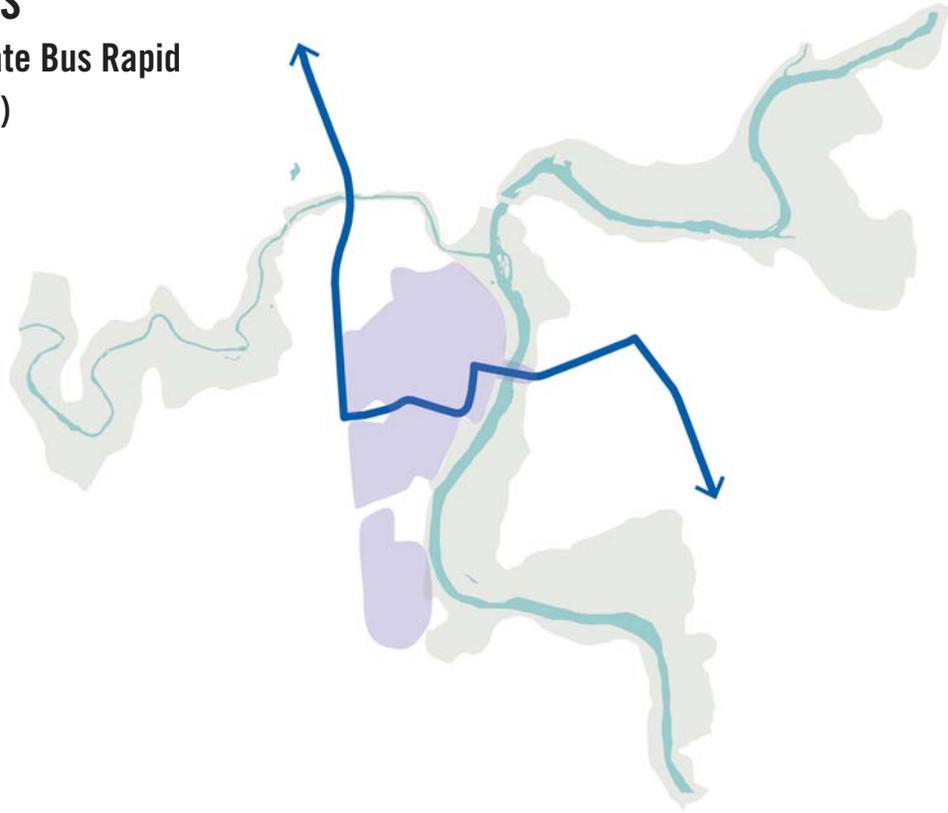
BIG MOVES

Prioritize Pedestrians



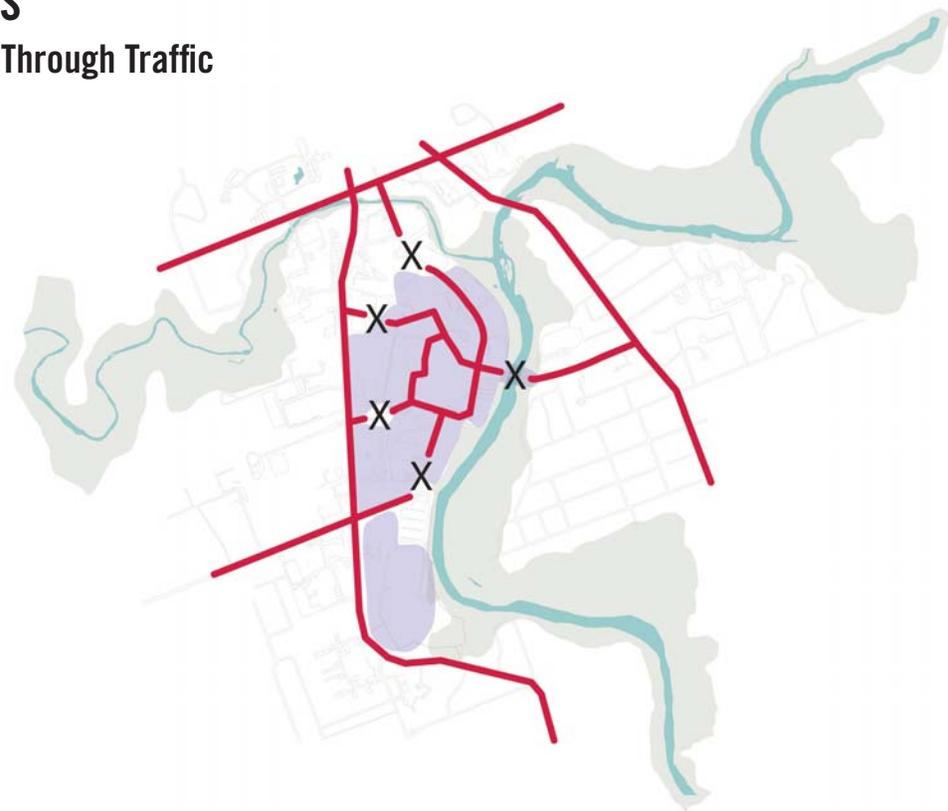
BIG MOVES

Accommodate Bus Rapid Transit (BRT)



BIG MOVES

Reduce Cut Through Traffic



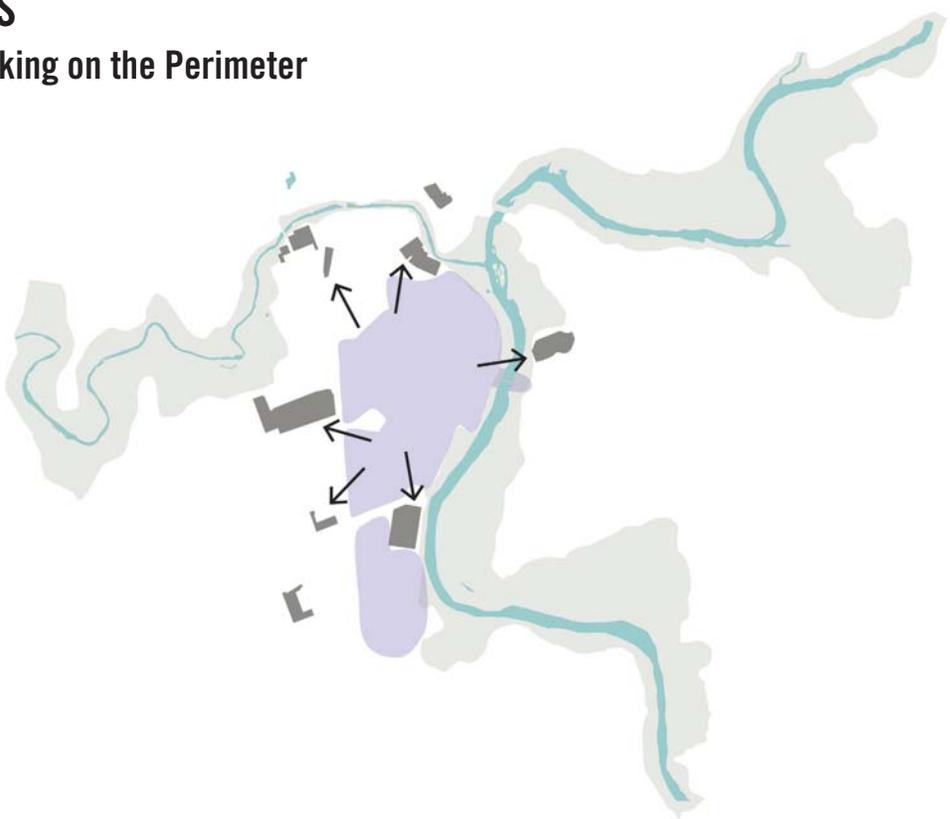
BIG MOVES

Maintain Vehicle Access



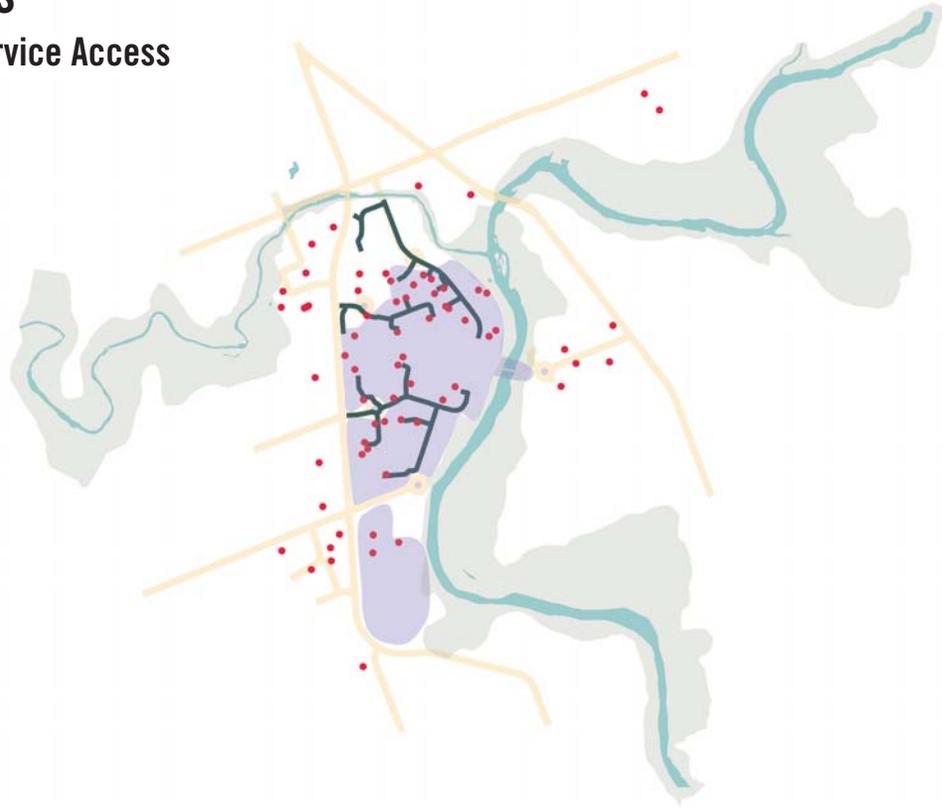
BIG MOVES

Position Parking on the Perimeter



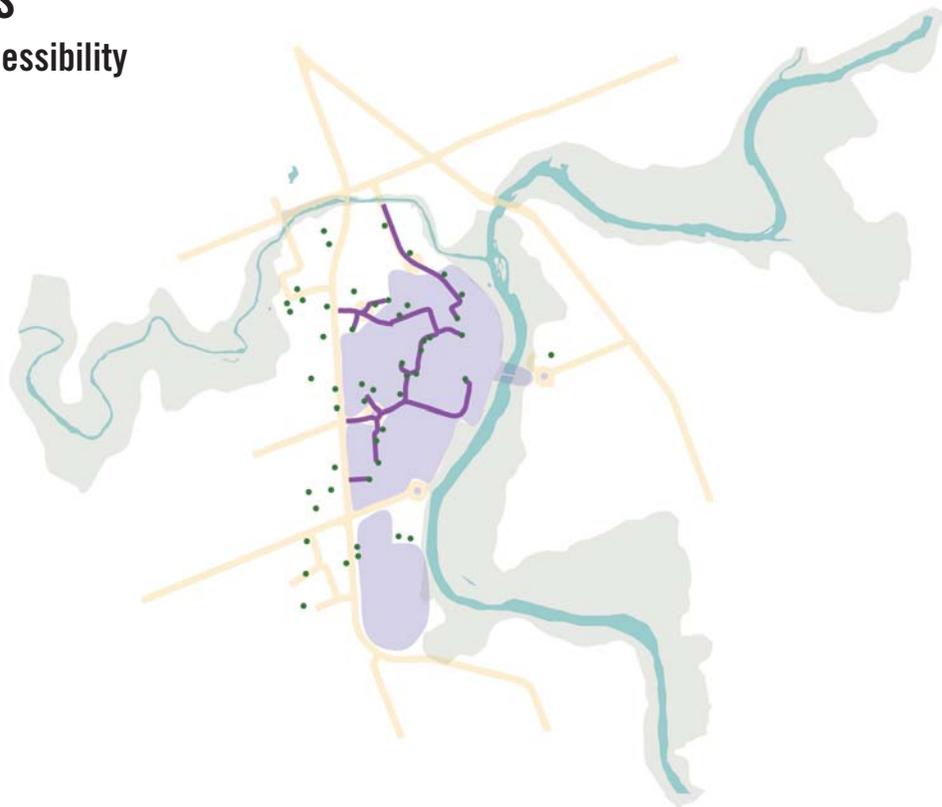
BIG MOVES

Allow for Service Access



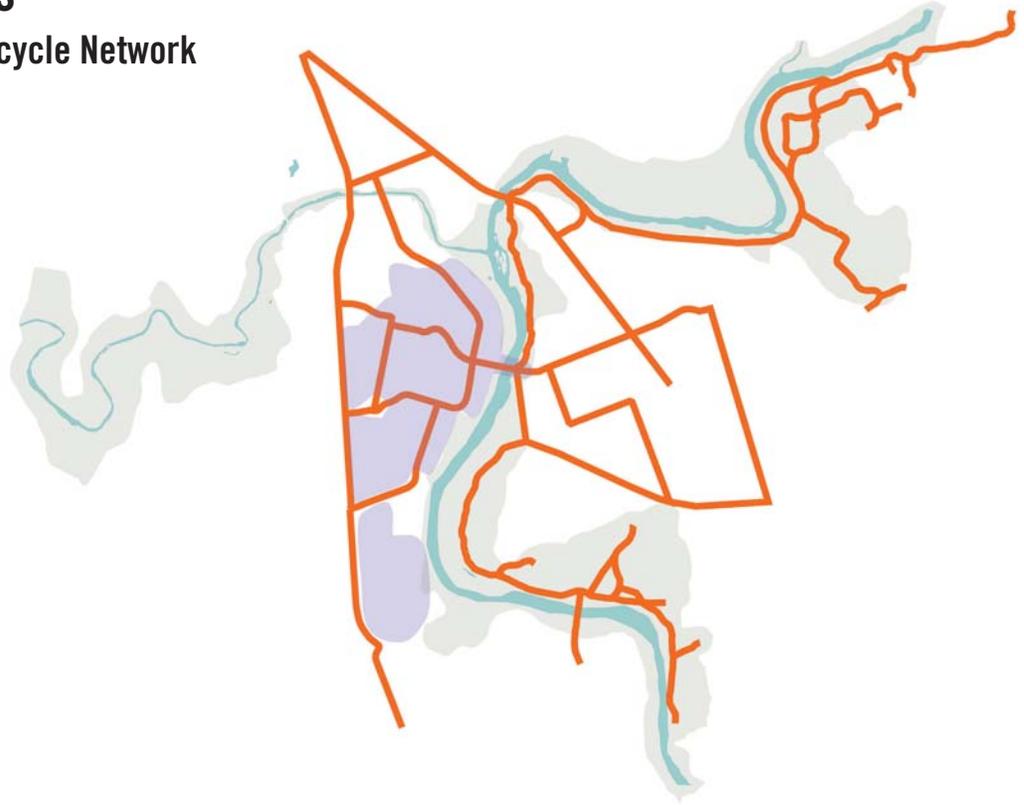
BIG MOVES

Improve Accessibility



BIG MOVES

Complete Bicycle Network



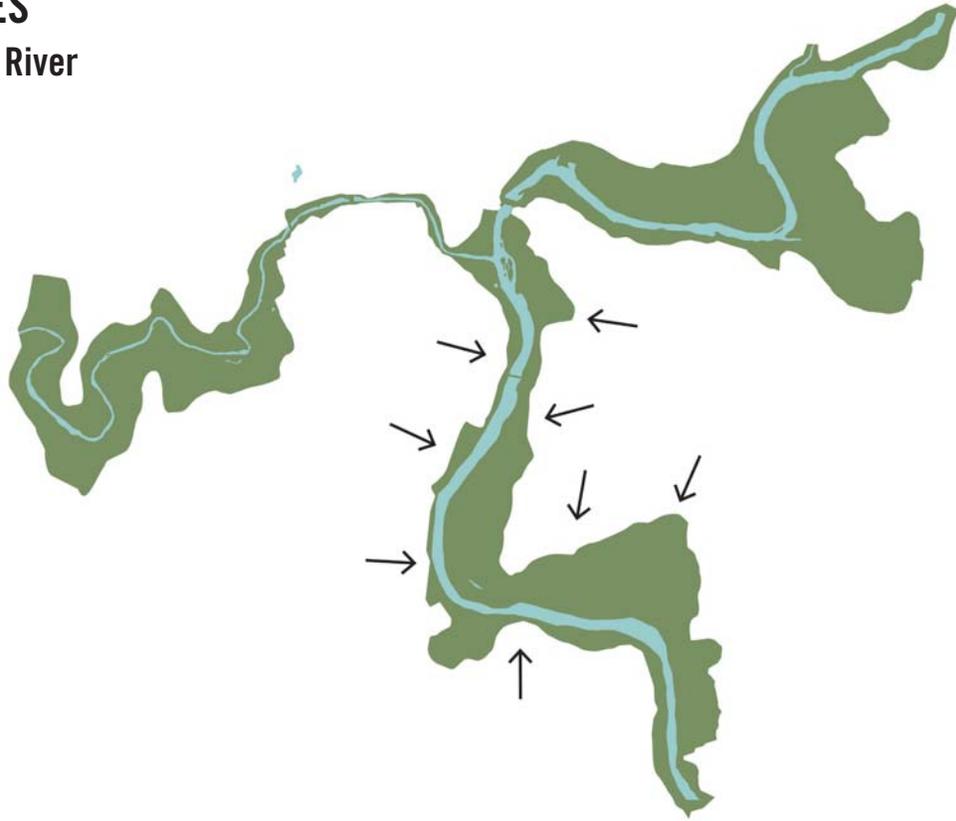
BIG MOVES

Emphasize Landscapes



BIG MOVES

Engage the River



HIGHLIGHTS FROM 42 ACTIONS



ACTIONS

The Open Space, Landscape & Mobility Strategy is organized around the following key actions:

- Accommodate rapid transit in a manner that supports university activities and respects campus integrity
- Improve campus experience for all users, prioritizing pedestrians
- Improve the quality of campus landscaping and open spaces
- Improve Campus Arrival, Circulation and Wayfinding
- Improve campus connection to the Thames River



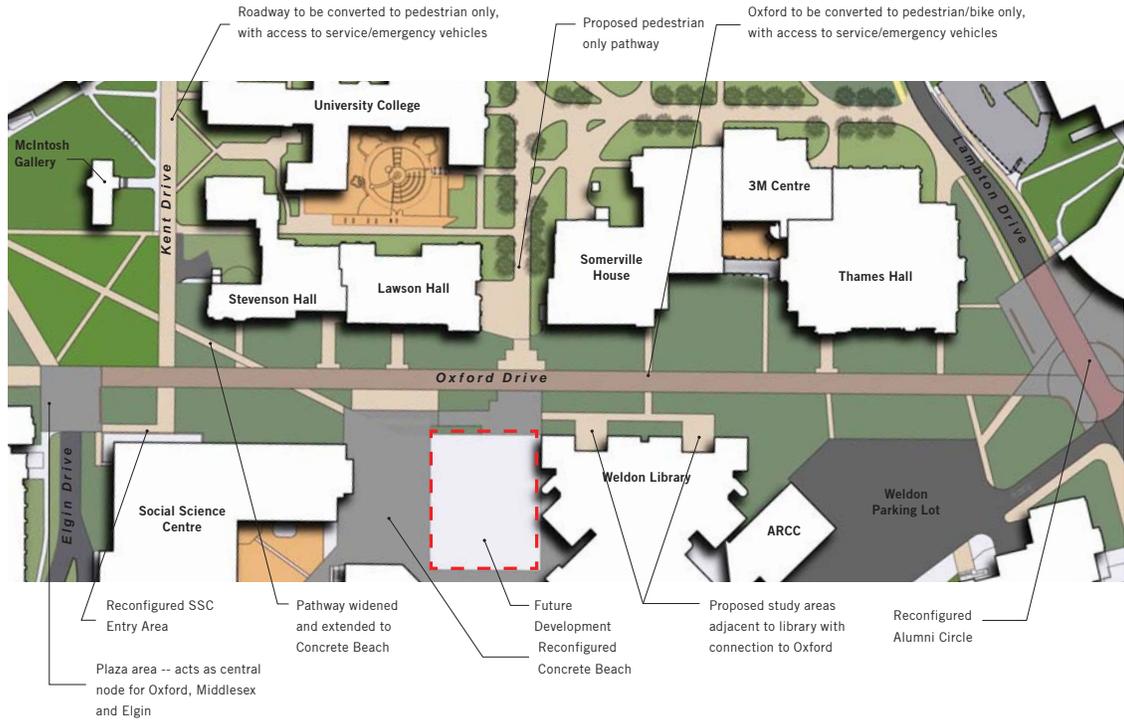
OXFORD DRIVE

Existing



OXFORD DRIVE

Proposed



OXFORD DRIVE EXISTING



OXFORD DRIVE
Proposed Conditions

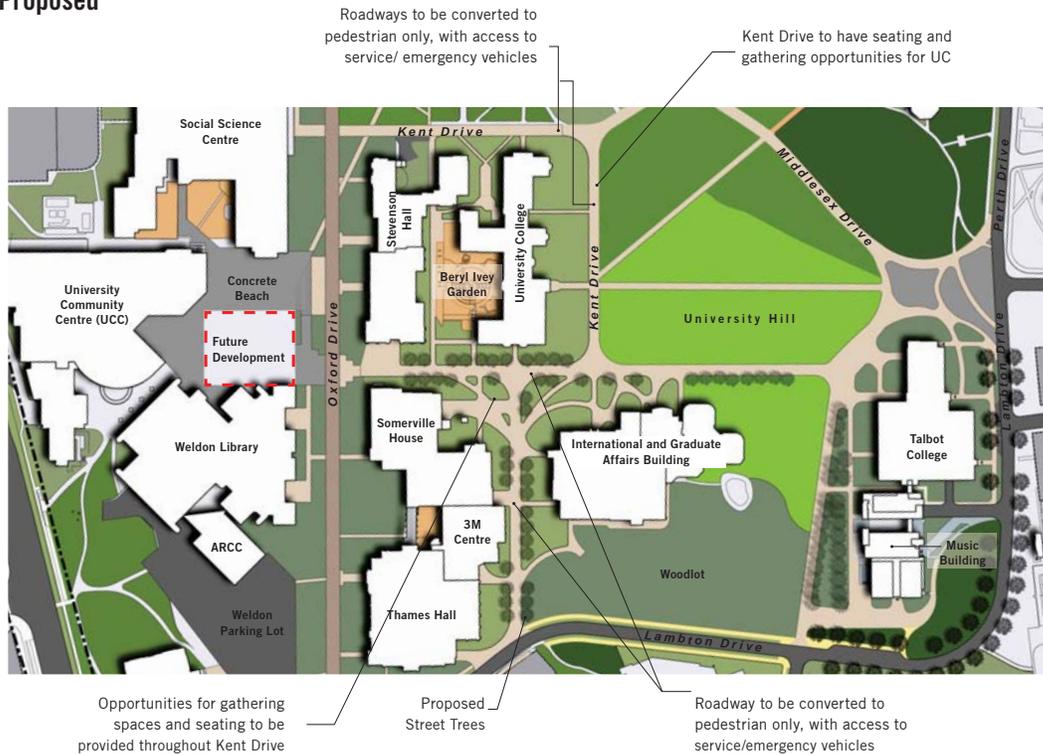
KENT DRIVE

Existing



KENT DRIVE

Proposed





KENT DRIVE EXISTING



KENT DRIVE Proposed Conditions

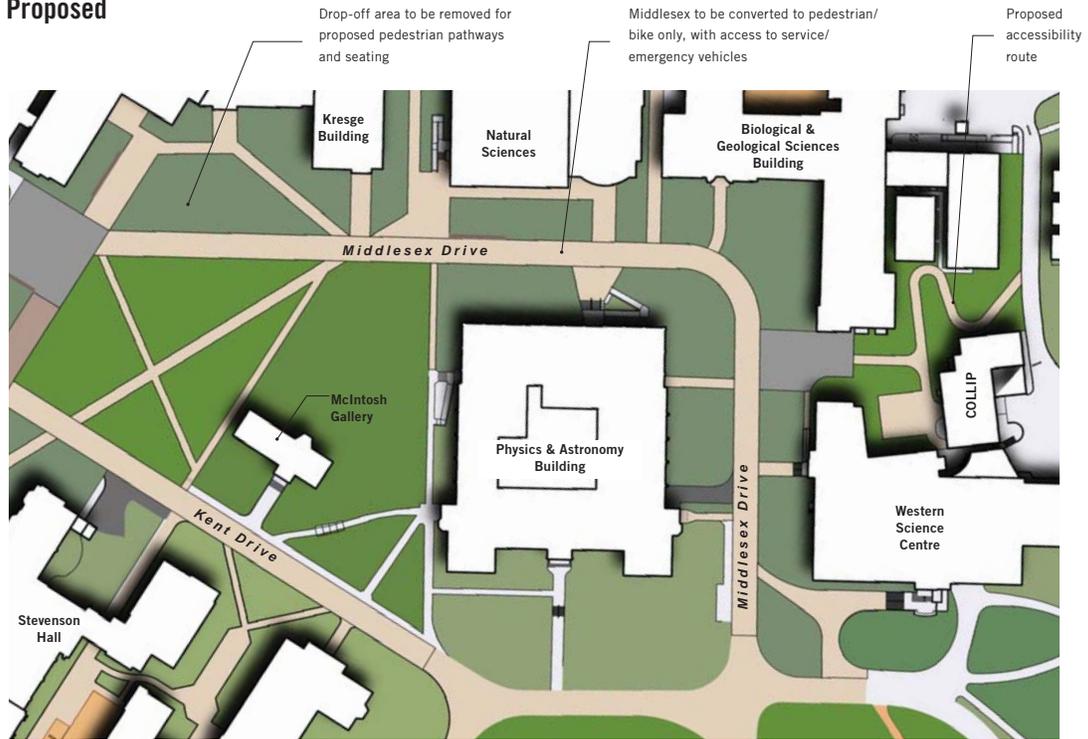
PHYSICS AND ASTRONOMY

Existing



PHYSICS AND ASTRONOMY

Proposed

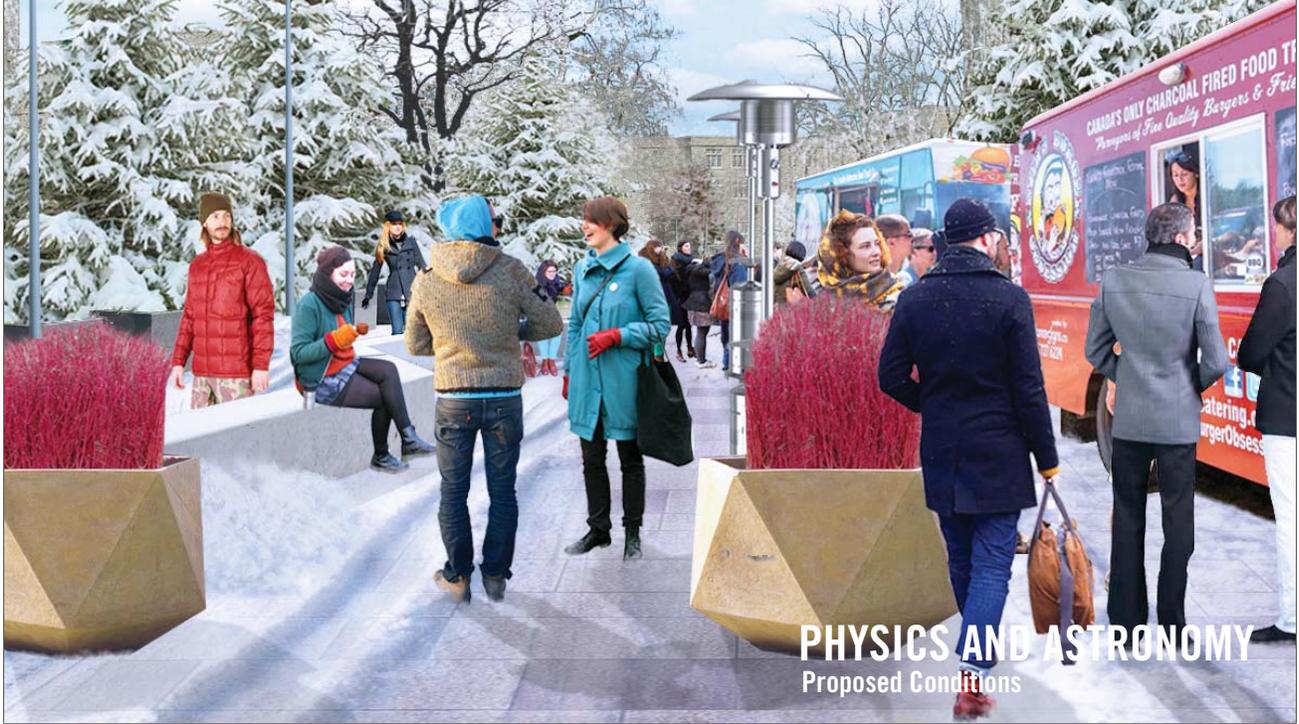


PHYSICS & ASTRONOMY EXISTING





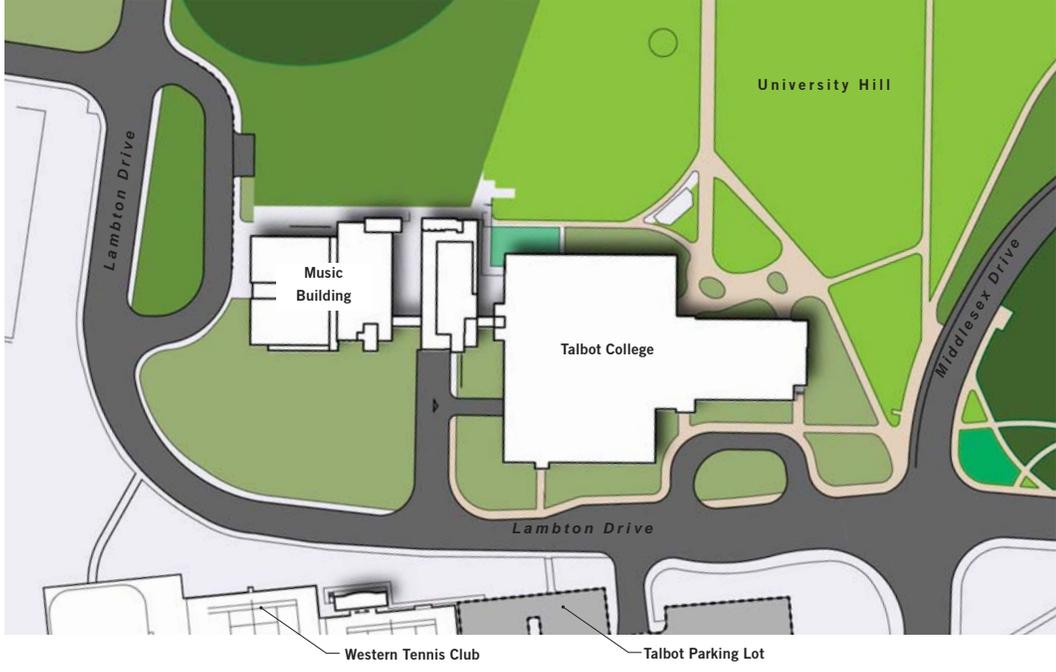
PHYSICS & ASTRONOMY EXISTING



PHYSICS AND ASTRONOMY
Proposed Conditions

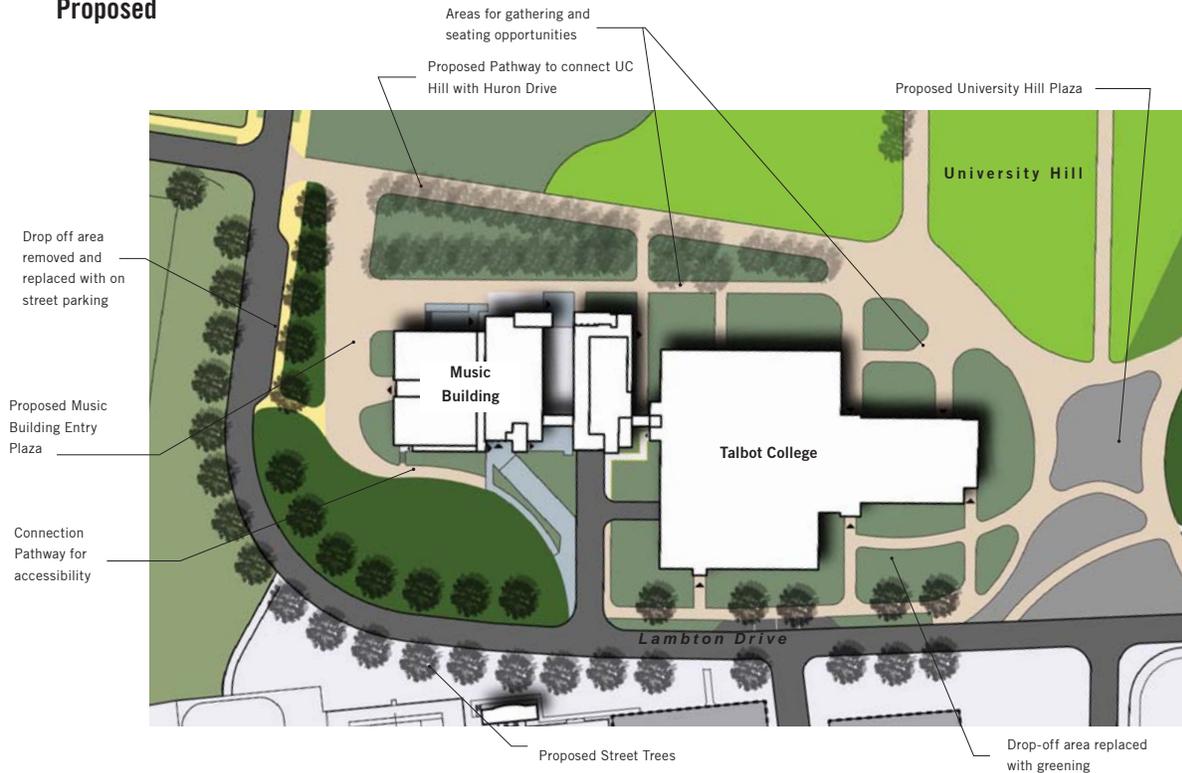
MUSIC BUILDING TO UC HILL WALK

Existing



MUSIC BUILDING TO UC HILL WALK

Proposed



NORTH SIDE OF TALBOT COLLEGE
EXISTING



UNIVERSITY DRIVE & PERTH DRIVE

Existing



UNIVERSITY DRIVE & PERTH DRIVE

Proposed





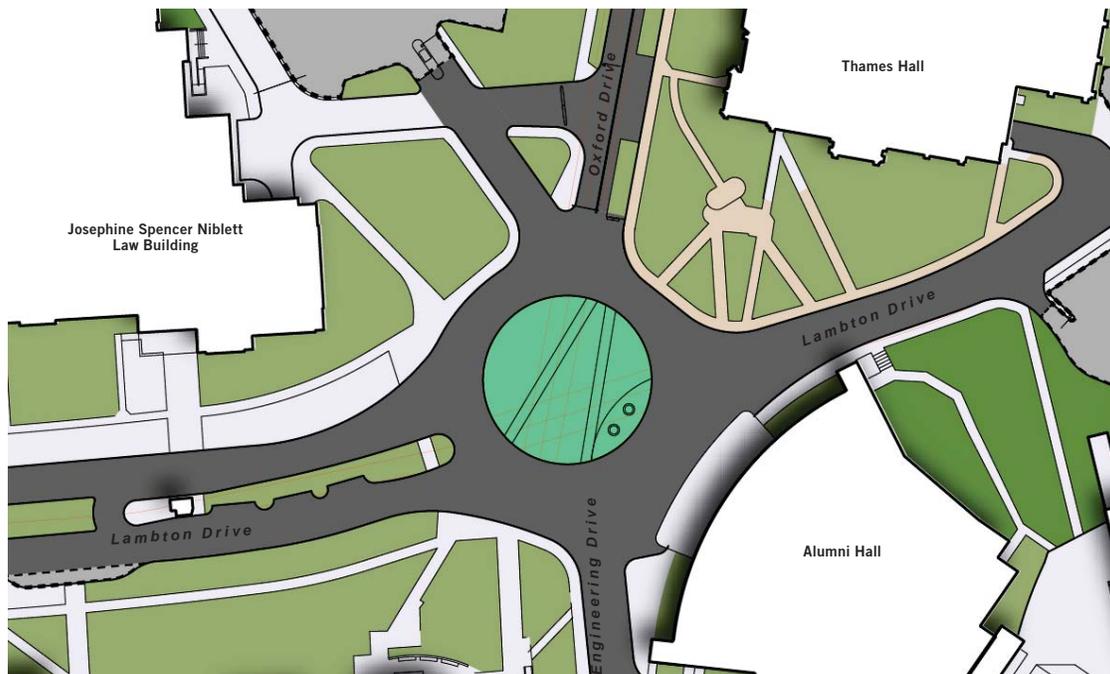
UNIVERSITY DRIVE & PERTH DRIVE EXISTING



UNIVERSITY DRIVE & PERTH DRIVE Proposed Conditions

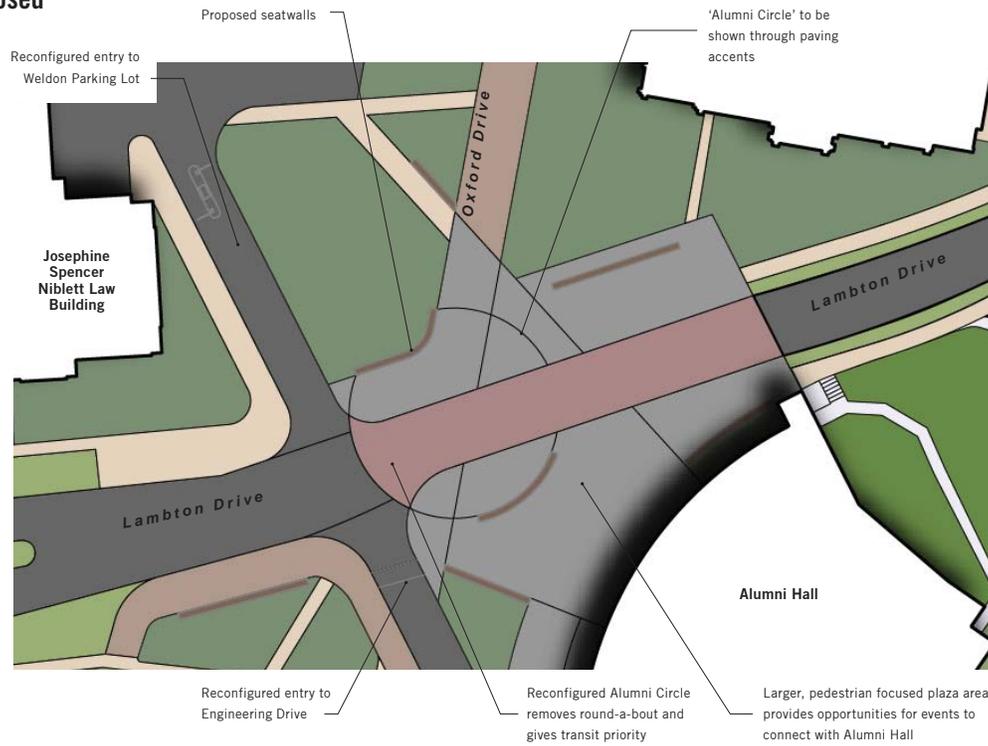
ALUMNI CIRCLE

Existing



ALUMNI CIRCLE

Proposed



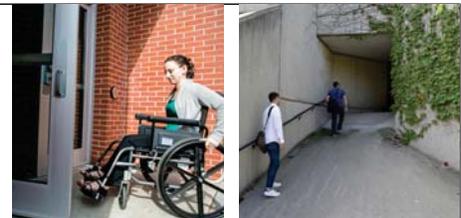
ALUMNI CIRCLE EXISTING





CAMPUS STRATEGIES

- Campus Safety Strategy
- Campus Accessibility Strategy
- Parking Management Strategy
- Service Access Strategy
- Wayfinding Strategy
- Woodlots, Management of Natural Areas & Campus Ecology Strategy
- Stormwater Management Strategy



DESIGN GUIDELINES

- Planting Design Guidelines
- Walls and Structure Guidelines
- Campus Site Furnishing Guidelines
- Campus Lighting Guidelines
- Campus Paving and Paint Guidelines
- Operational Guidelines- Design for Maintenance
- Public Art Guidelines
- Commemorative Considerations



IMPLEMENTATION

Pilot Project (Quick Wins)

- Alumni Circle (2016)
- Alumni/ Thompson Parking Lot (2017)
- Remove parking: Lambton Dr. (2017)
- Talbot/ Music Walkway (Phase I 2017)
- Physics parking lot plaza
- Chemistry parking lot entrance
- Weldon parking lot improvements
- Kent Dr. improvements (Phase I)
- Middlesex Dr. improvements (Phase I)
- Lambton & Huron Dr. traffic calming
- Campus wide lighting (ongoing)
- Removal of invasive species (ongoing)



IMPLEMENTATION

Short Term Priorities (2-3 years)

- Kent Drive Walkway (Phase II)
- Talbot/ Music Walkway (Phase II)
- Middlesex Dr. improvements (Phase II)
- UC Hill walkways
- Law/ Weldon green entry node
- Lambton Drive curve sidewalks
- University Dr. median parking removal
- Thames/ Medway Trail improvements
- Western Rd./ Sarnia Rd./ Philip Aziz Avenue



IMPLEMENTATION

Medium to Long Term Priorities (4-10 years)

- BRT Route with associated public realm improvements
- ILIC/ Concrete Beach
- Oxford Drive
- Elgin Drive streetscape and gateway
- Perth Drive streetscape improvements
- Huron Drive streetscape improvements
- TD Stadium walkway
- Western Rd. pedestrian improvements at TRAC



CONSULTATION PLAN

* Consultants to attend

(U) Update

(A) Approval

O&F Retreat		November 2, 2017	8:30 a.m. – 12:30 p.m. – SH, the Great Hall
AVP Managers Meeting		November 6, 2017	1:00 p.m. – 2:00 p.m. – Delaware Hall, Formal Lounge
Deans' Meeting		January 2, 2018	8:00 a.m. – 10:00 a.m. – StvH 4155
SCUP*	(U)	January 8, 2018	3:00 p.m. – 4:30 p.m. – StvH 4155
P&F*	(U)	January 16, 2018	10:30 a.m. – 12:30 p.m. – StvH 4155
PVP Meeting		January 19, 2018	8:00 a.m. – 9:30 a.m. – StvH 4155
Open Meeting*		January 22, 2018	9:00 a.m. – 11:00 a.m. – McKellar Theatre
		January 22, 2018	2:30 p.m. – 4:30 p.m. – McKellar Theatre
Open Meeting*		January 23, 2018	12:00 p.m. – 2:00 p.m. – McKellar Theatre
Campus Council		January 24, 2018	9:00 a.m. – 11:00 a.m. – StvH 4155
Board of Governors*	(U)	January 25, 2018	1:00 p.m. – 4:00 p.m. – StvH 4155
Indigenous Services		January 26, 2018	11:00 a.m. – 12:00 p.m. – UCC, Room 147A
Alumni Executive Committee		January 26, 2018	12:30 p.m. – 1:00 p.m. – WH, Room 355
VP Meeting		January 29, 2018	4:00 p.m. – 5:30 p.m. – StvH 2107G
Schulich Executive Committee		February 2, 2018	8:30 a.m. – 9:30 a.m. – Health Sciences Addition Room 101
City of London		February 14, 2018	11:00 a.m. – 12:00 p.m. – City Hall
Neighbourhood Associations		February 15, 2018	6:00 p.m. – 7:30 p.m. – Atlhouse, Room 1162
Senate*		February 16, 2018	1:30 p.m. – 4:30 p.m. – AHB 1R40
USC Executive		February 28, 2018	7:00 p.m. – 8:00 p.m. – UCC, Room 269
SOGS Council		March 1, 2018	6:00 a.m. – 7:00 p.m. – Middlesex College, Room 105B
PMA		March 2, 2018	1:00 p.m. – 2:00 p.m. – StvH 4155
LHSC		March 8, 2018	9:00 a.m. – 10:00 a.m. – StvH 2107M
P&F*	(A)	March 13, 2018	10:30 a.m. – 12:30 p.m. – StvH 4155
Board of Governors*	(A)	April 26, 2018	1:00 p.m. – 4:00 p.m. – StvH 4155

CONSULTATION PLAN

University Employee Groups	Send document for feedback – Meetings on request
LHSC	Send document for feedback – Meetings on request
Huron University College	Send document for feedback – Meetings on request
King's University College	Send document for feedback – Meetings on request
Brescia University College	Send document for feedback – Meetings on request



FEEDBACK TO DATE

Accessibility and Parking

- Addressing the need for accessible parking in the core
- Strategy needs to consider those that have mobility challenges
- Consider access for taxis, Uber, and other emerging ride-sharing companies and technologies
- Ensuring pedestrian routes and building access is made more accessible
- Consider inclusion and utilization of Western's tunnel infrastructure
- Addressing the need for adequate parking

Traffic

- General support for reducing cut-through traffic and creating a pedestrian priority core
- A few queries on access to buildings for performances, clinics and community outreach
- Concerns raised about what will happen with increased traffic on surrounding city streets
- Interest in understanding what will happen to the strategy if BRT does not proceed

FEEDBACK TO DATE

Cycling

- Cyclists want to ensure that their needs are being considered in future plans

Landscape

- Support for maintaining and enhancing outdoor spaces and woodlots with more trees – especially native species
- Support for providing access to the river
- Support for maintaining natural trails

UPDATES TO THE REPORT

- Integrate the Indigenous Strategic Plan
- Integrate the Mental Health & Wellness Strategic Plan
- Identify locations for parking structures on campus and address transportation demand management strategies
- Champion accessibility
- Address winter conditions
- Identify funding strategies for implementation



- THANK YOU -

Paul Kulig, Perkins + Will



Western
UNIVERSITY · CANADA

National Survey of Student Engagement 2017 Update

Presentation to Senate
February 16, 2018

John Doerksen
Vice-Provost (Academic Programs)

What is the NSSE

- ✓ National Survey of Student Engagement (NSSE) assesses:
 - ✓ time & effort students dedicate to educational activities
 - ✓ how institution deploys resources & organizes learning opportunities to engage students in empirically-supported learning activities

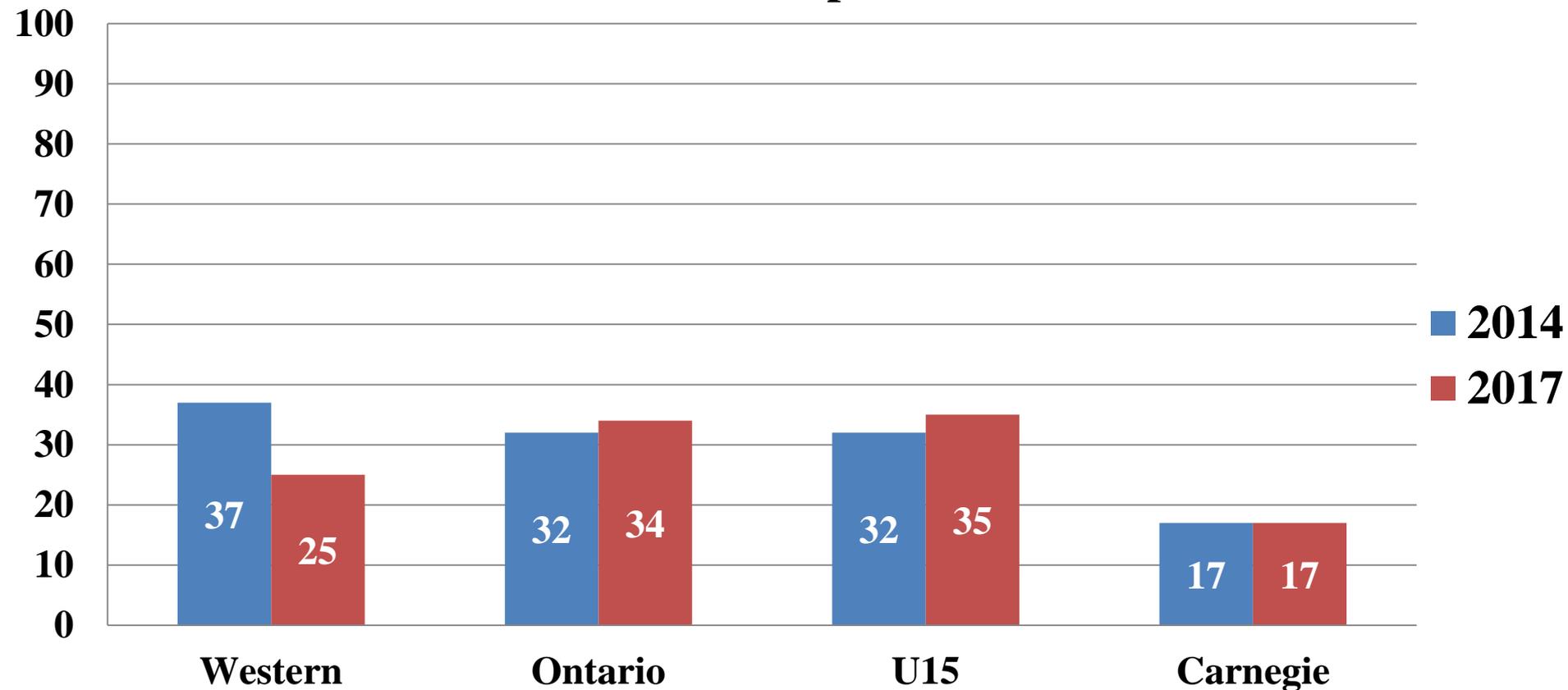
What is the NSSE

- ✓ Focus 1st and Senior year undergraduate students
- ✓ First administered @ Western in 2004
- ✓ Now administered @ Western in Winter/Spring every 3 years (e.g., 2014, 2017)

Select NSSE 2014/2017 Results

Participation Rates: First Year Students

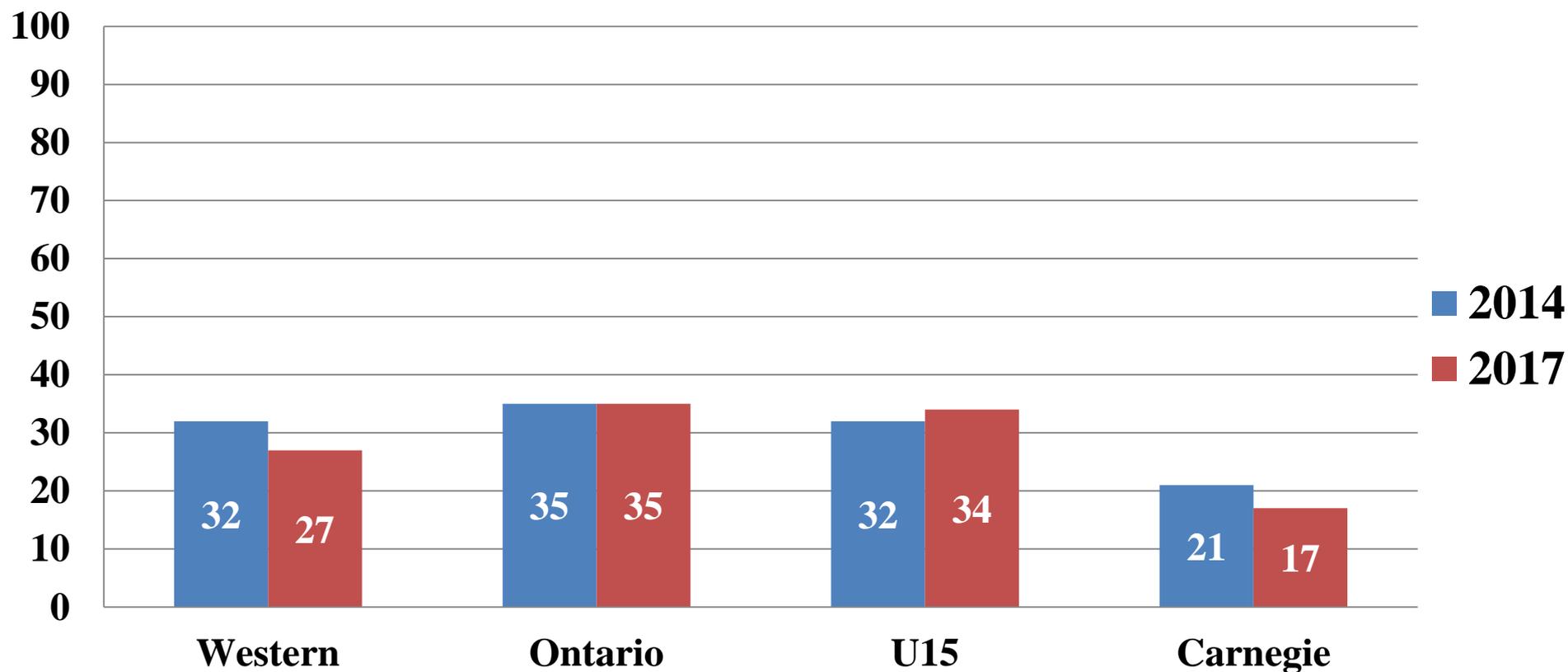
% Participation



Select NSSE 2014/2017 Results

Participation Rates: Senior Year Students

% Participation



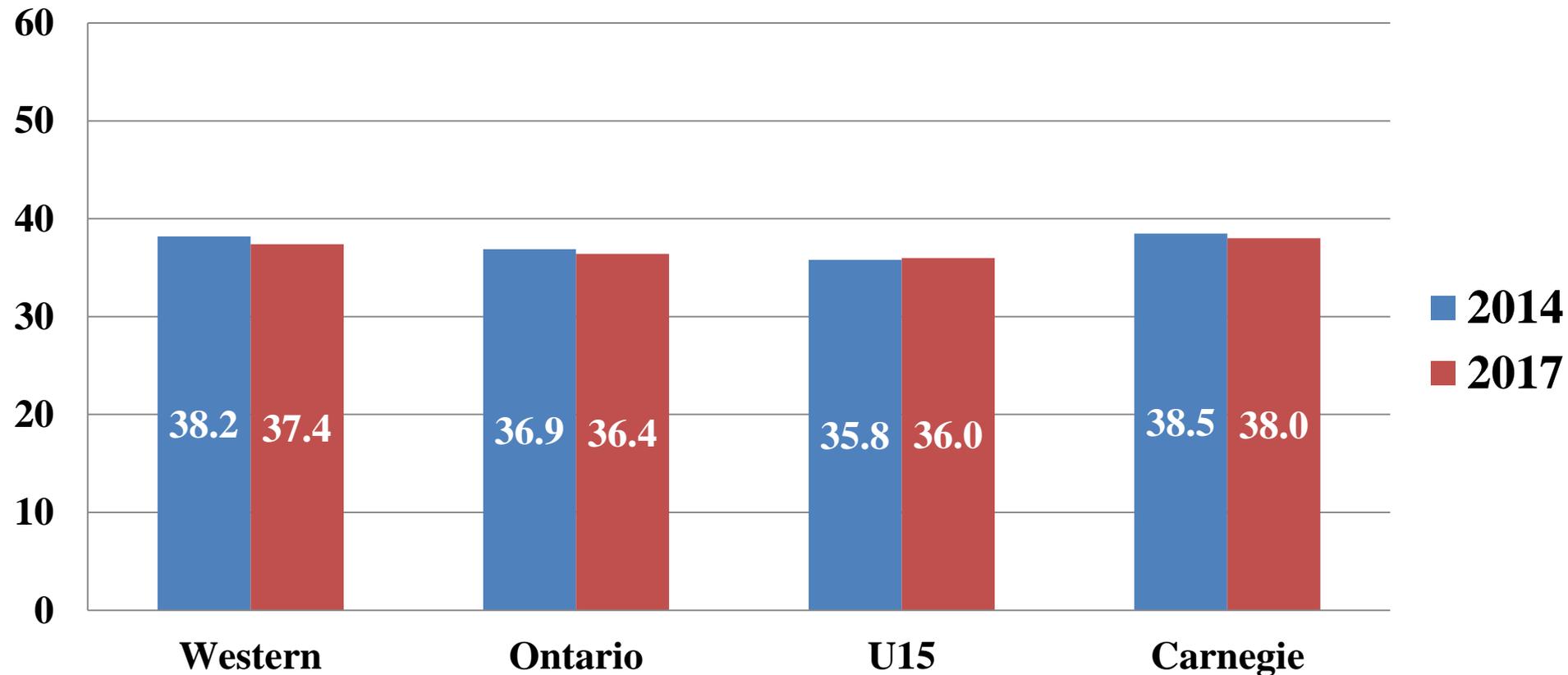
What is the NSSE

- ✓ Reports on:
 - ✓ 10 Engagement Indicators (e.g., Higher Order Learning, Supportive Environment)
 - ✓ 6 High Impact Practices (e.g., Service Learning, Research with Faculty)

Select NSSE 2014/2017 Results

Higher Order Learning – First Year Students

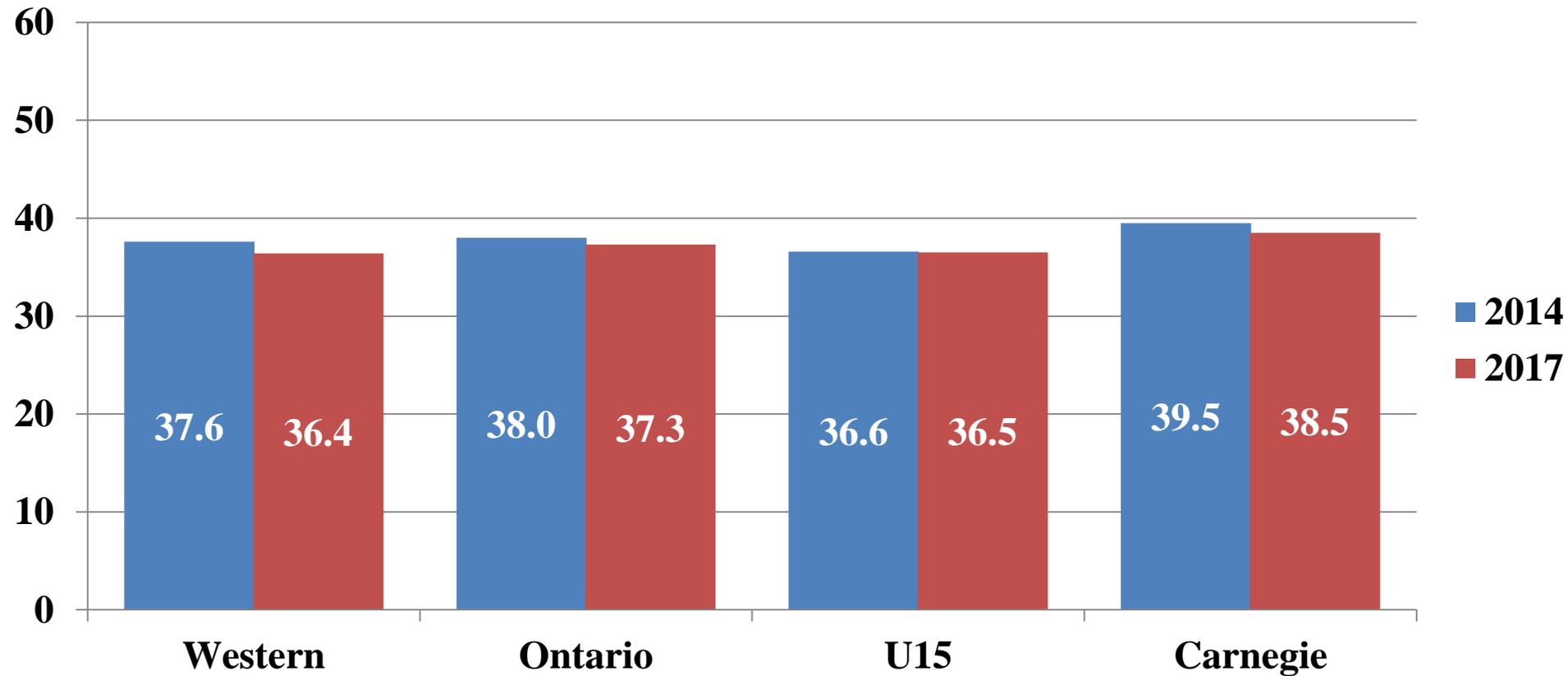
Score (Out of 60)



Select NSSE 2014/2017 Results

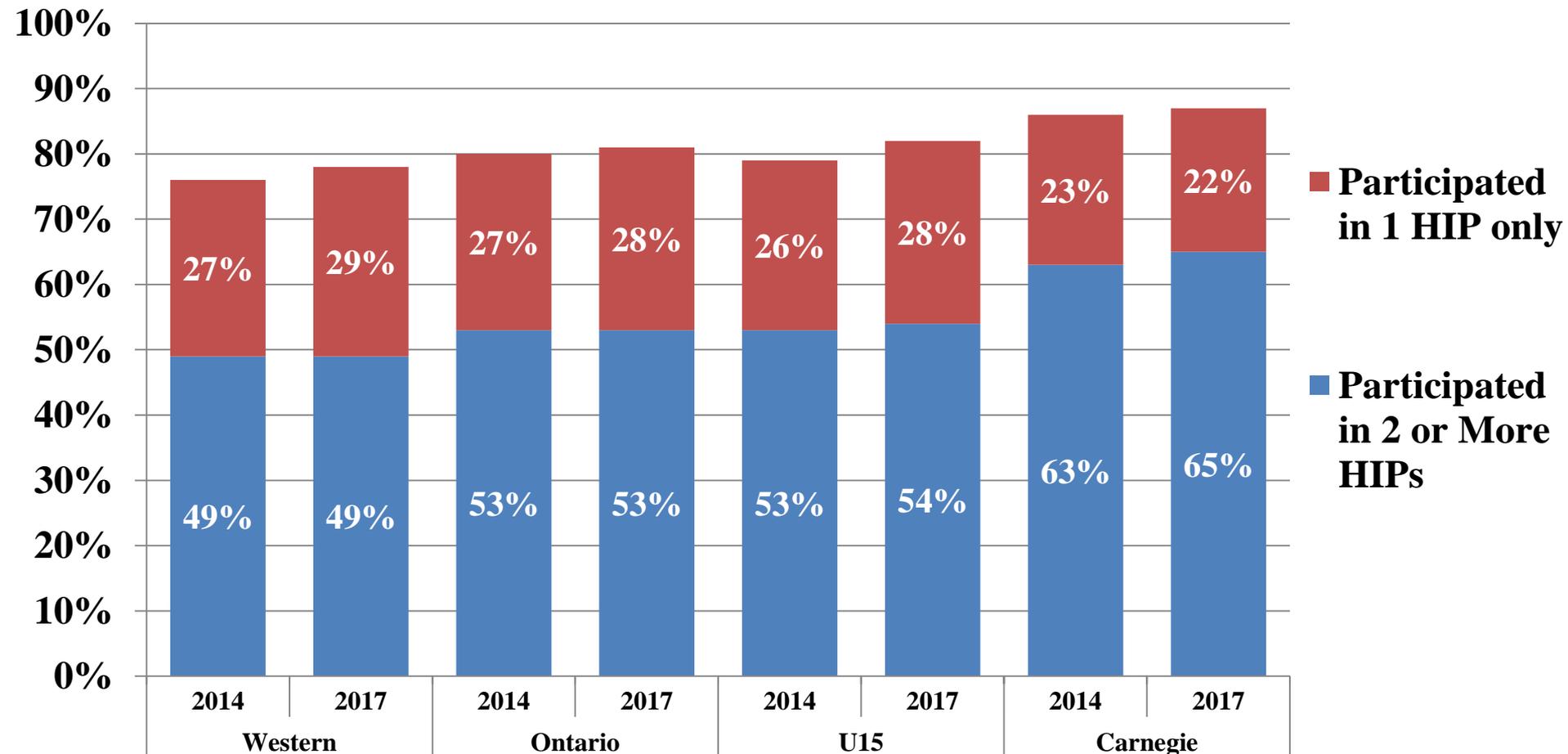
Higher Order Learning – Senior Year Students

Score (Out of 60)



Select NSSE 2014/2017 Results

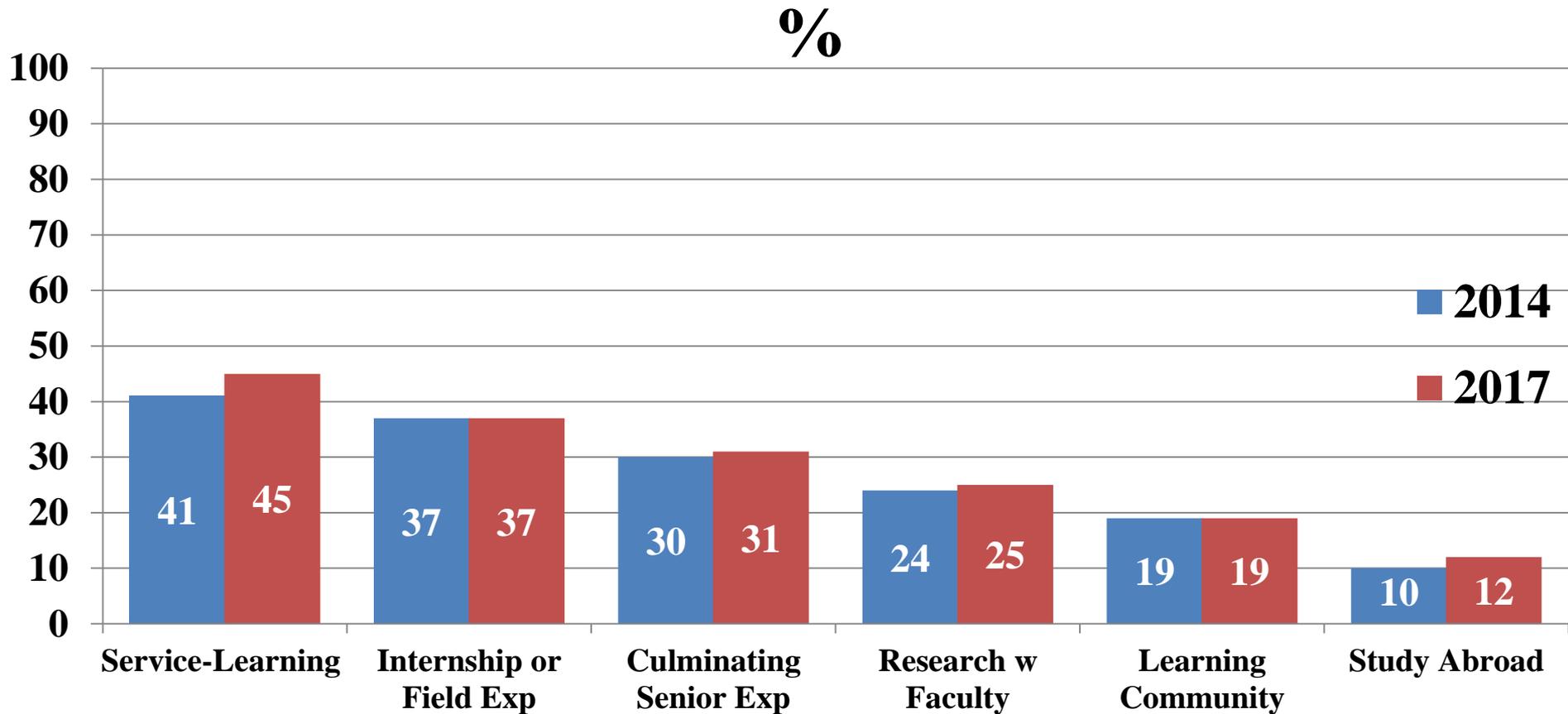
High Impact Practices (HIPs) – Senior Year Students



Select NSSE 2014/2017 Results

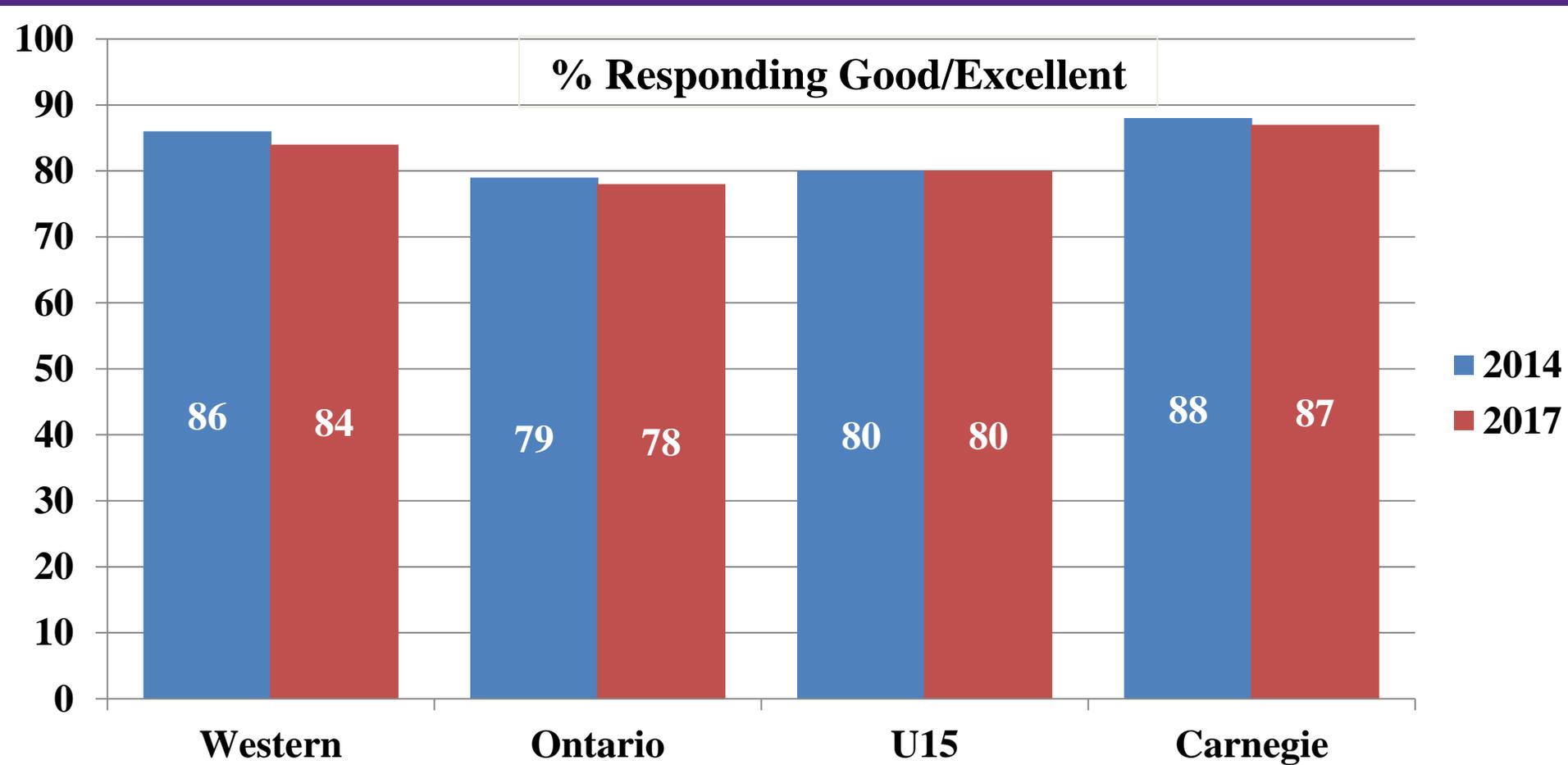
High Impact Practices (HIPs)

Western Senior Year Students



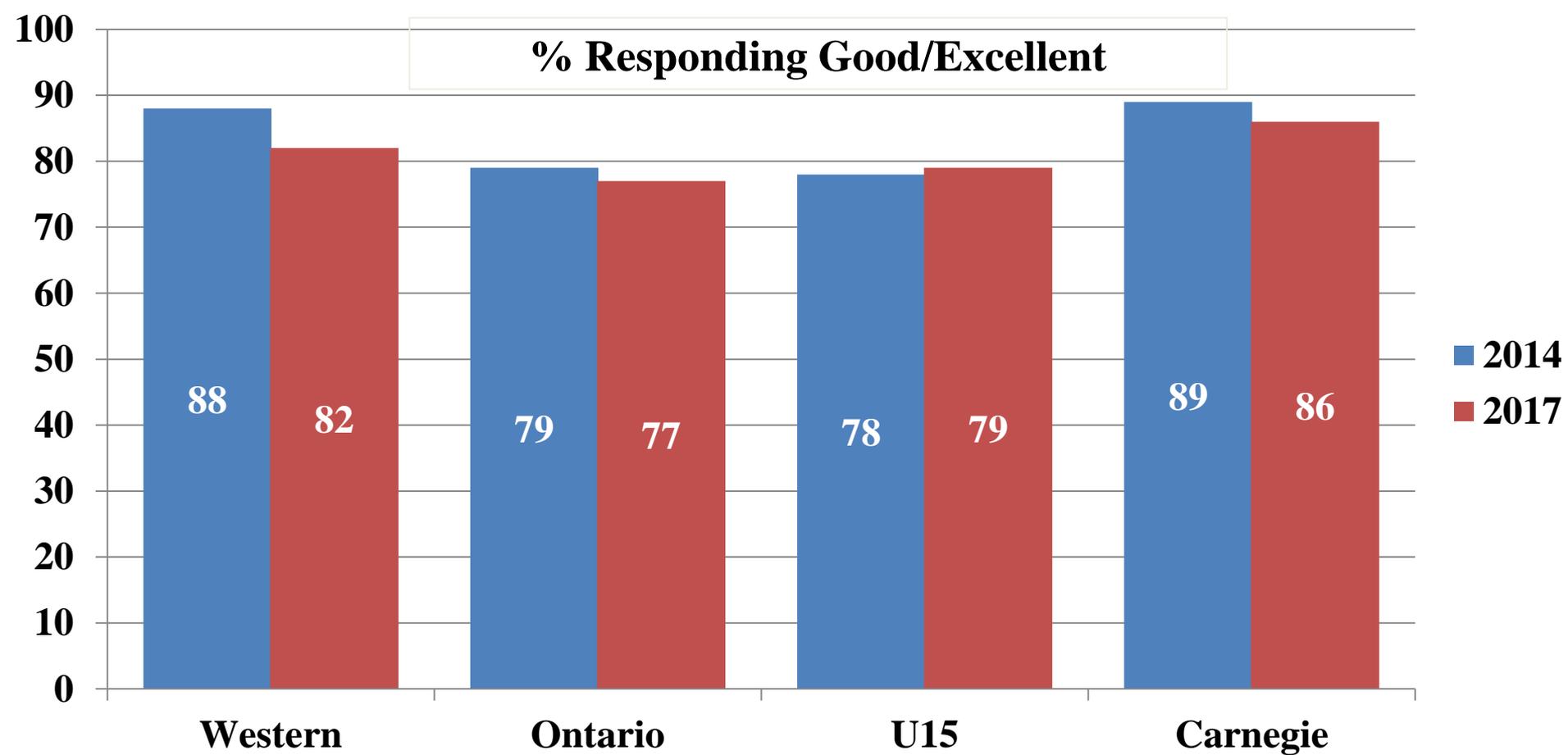
Select NSSE 2014/2017 Results

How Would You Evaluate Your Entire Educational Experience at this Institution?— 1st Year



Select NSSE 2014/2017 Results

How Would You Evaluate Your Entire Educational Experience at this Institution?— Senior Year



Questions



**REPORT OF THE UNIVERSITY RESEARCH BOARD
(URB)**

Contents	Consent Agenda
Vice-President (Research) 2017 Annual Report	No
Vice-President (Research) Response to the URB Task Force Steering Committee – Support for Research in the Social Science, Arts and Humanities at Western	Yes

FOR INFORMATION

1. **Vice-President (Research) 2017 Annual Report**

See [Appendix 1](#).

2. **Vice-President (Research) Response to the URB Task Force Steering Committee – Support for Research in the Social Science, Arts and Humanities at Western**

See [Appendix 2](#).



Western Research

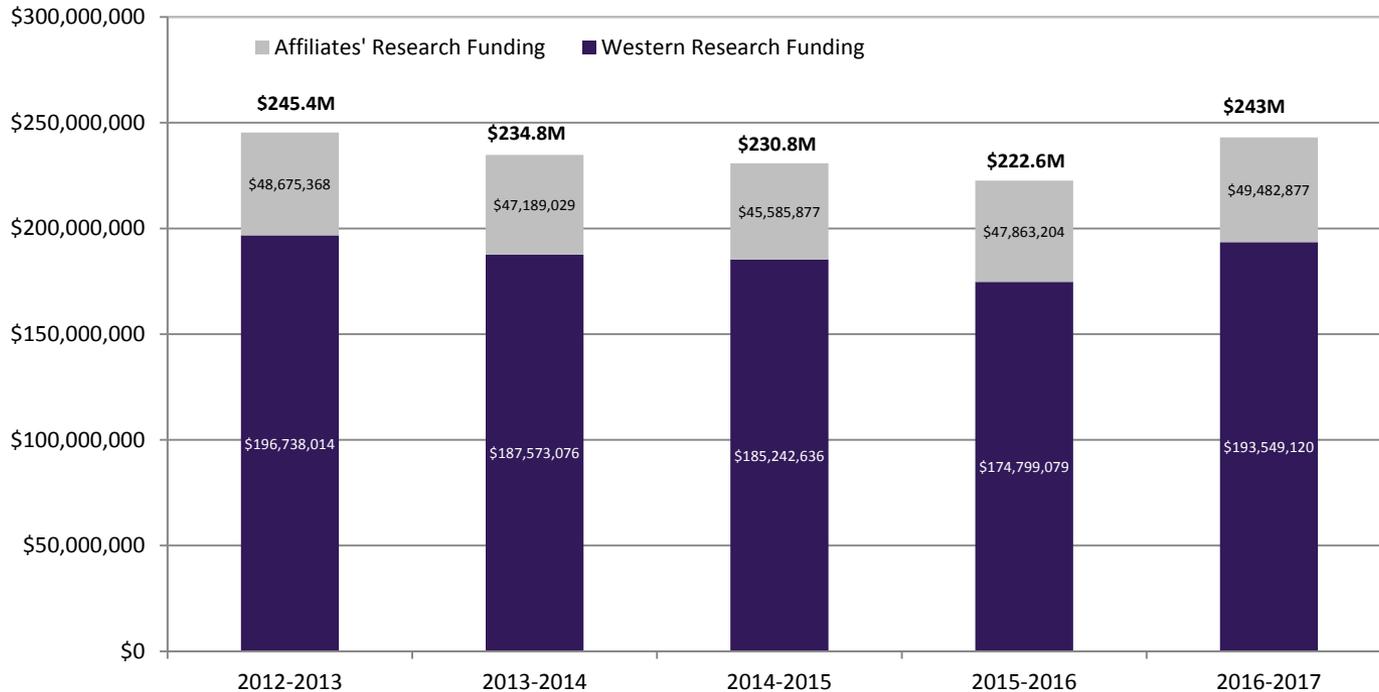
Annual Report | 2017 | Western University

John Capone | Vice-President (Research)

Overview | Research Funding

- **Total Funding:** \$243,031,997, up 9.2% (3rd-highest in history)
- **Contract research/clinical trials:** \$52.4M, up 20.7%
- **Tri-Council funding:** \$55.7M, up 9% (2nd-highest in history)
- **CFI-IF:** \$14.2M awarded (project costs: \$36M)
 - Best success rate, number of projects and value in 5 years
- **CFI MSI/MSII:** lead institution for \$173M initiative for computational infrastructure across Canada
- 2017 **ORF-RI:** 5 projects, \$13.8M
- 2017 **SSHRC Partnership + Insight:** \$4.5M

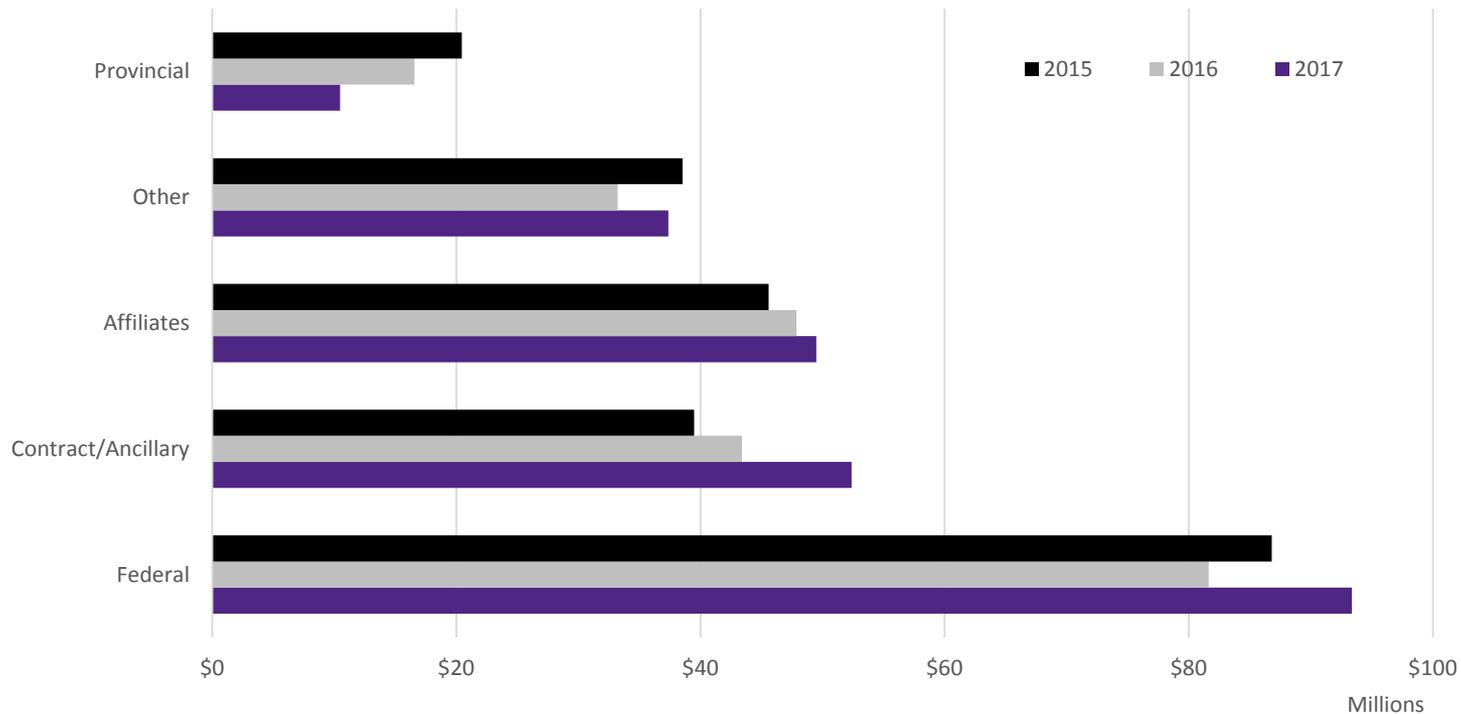
Total Research Funding



2016-17

- **Western:** \$193,549,120 | up 10.7% | 10th in Canada
- **Affiliates:** \$49,482,877 | up 3.4%

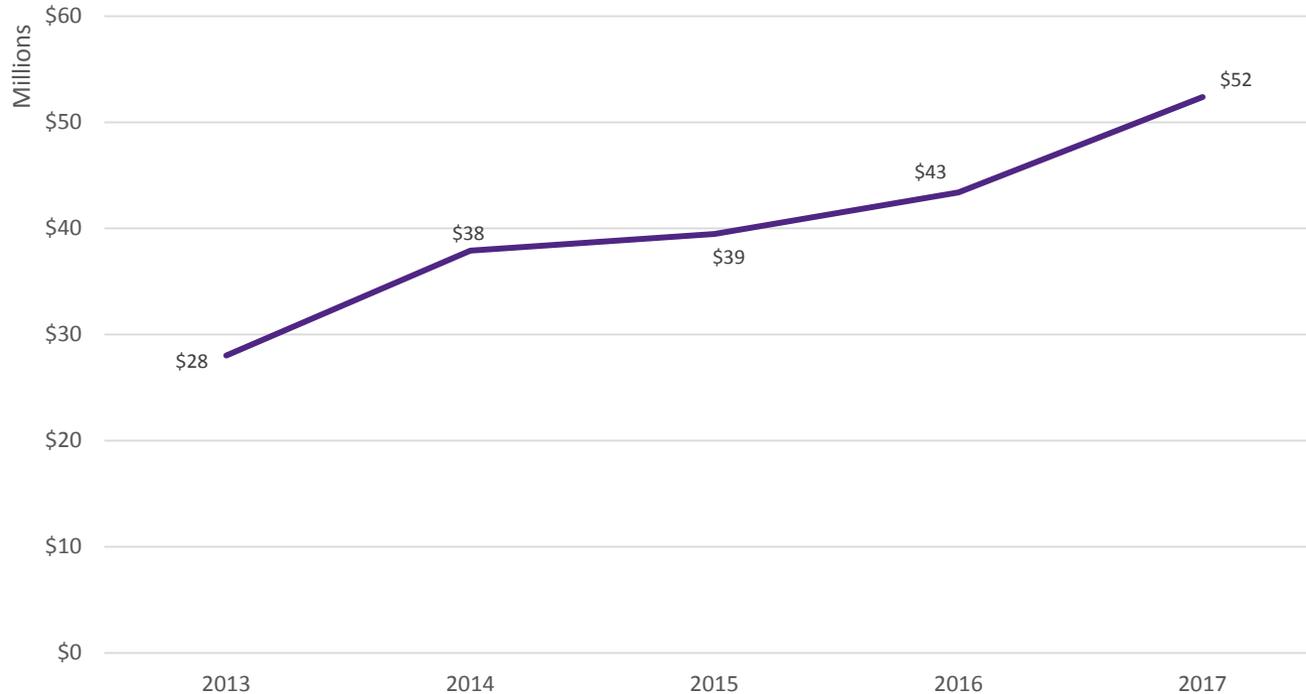
Sources of Funding



2016-17

- **Provincial Funding:** down 48.8% over 3 years
- **Federal Funding:** up 7.5% over 3 years
- **Contract/Ancillary Funding:** up 32.7% over 3 years

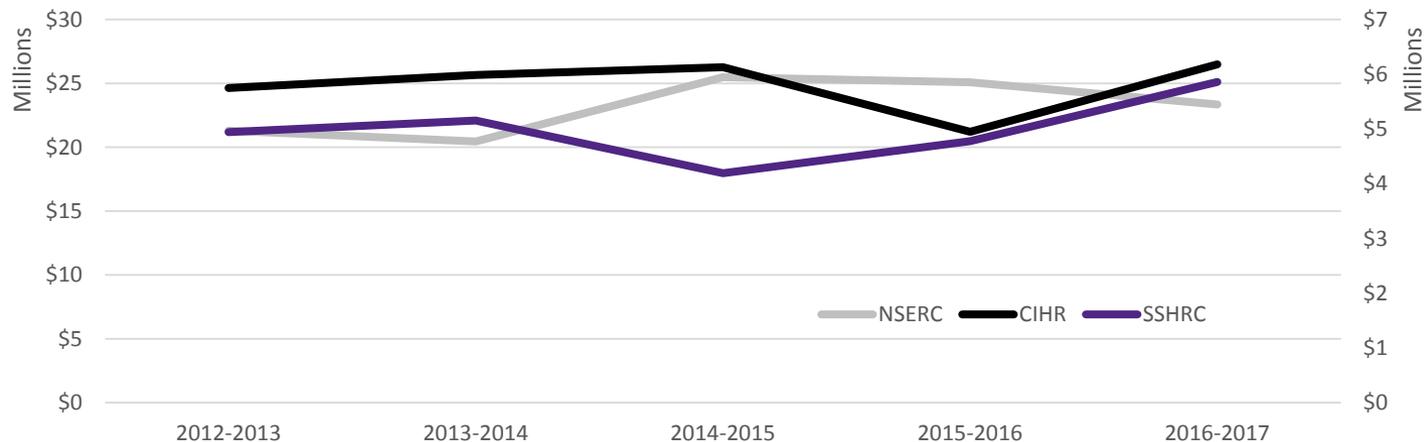
Sources of Funding | Contract Revenue



2016-17

- Contract Revenue: up 87% since 2013 | \$52M vs. \$28M
- Bulk related to Robarts Clinical Trials | up 141% since 2013 | \$35M vs. \$15M
- Government and non-government contracts: up 15%
- Robarts core facilities: up 16%
- Ancillary research operations: up 54%

Sources of Funding | Tri-Council



	2012-13	2013-14	2014-15	2015-16	2016-17	5-yr. % Increase
NSERC	\$21,292,736	\$20,451,306	\$25,481,722	\$25,080,460	\$23,344,050	9.6%
CIHR	\$24,637,713	\$25,658,861	\$26,259,592	\$21,212,042	\$26,484,748	7.5%
SSHRC	\$4,942,208	\$5,154,949	\$4,190,927	\$4,778,272	\$5,859,500	18.6%
Total	\$50,872,657	\$51,265,116	\$55,932,241	\$51,070,774	\$55,688,298	9.5%

2016-17

- 2nd-highest total of Tri-Council funding in history | 9% increase from last year

Sources of Funding | CIHR

Indicator	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Number of applications	341	284	285	299	220
Number of awards	105	76	79	58	57
Success rate	31%	27%	28%	19%	26%
National share	3.7%	3.7%	3.6%	3.8%	\$3.7
Total funding	\$24,637,713	\$25,658,861	\$26,259,592	\$21,212,042	\$26,484,748

2016-17

- **\$26,484,748** | up 25% from 2015-16 | highest level in 5 years
- **Council share: 3.7%**

Sources of Funding | NSERC

Indicator	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Number of applications	297	276	297	250	274
Number of awards	168	182	205	151	147
Success rate	57%	66%	69%	60%	54%
National share	2.6%	2.7%	3%	3.2%	3.3%
Total funding	\$21,292,736	\$20,451,306	\$25,481,722	\$25,080,460	\$23,344,050

2016-17

- **\$23,344,050** | down 6.9% from to 2015-16 | 8th in U15, equal to 2015-16 | 3rd in Ontario
- **Council share:** 3.3% | U15 share: 5.2%
- **Discovery Grants:** 86/130 funded | \$30.8M
- **Strategic Project Grants:** 5/9 funded | \$3.5M
- **Research Tools & Instruments:** 13/29 funded | \$1.8M

Sources of Funding | SSHRC

Indicator	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017
Number of applications	122	107	126	98	95
Number of awards	46	30	47	30	46
Success rate	38%	28%	37%	31%	48%
National share	3.1%	2.4%	2.7%	3.1%	2.5%
Total funding	\$4,942,208	\$5,154,949	\$4,190,927	\$4,778,272	\$5,859,500

2016-17

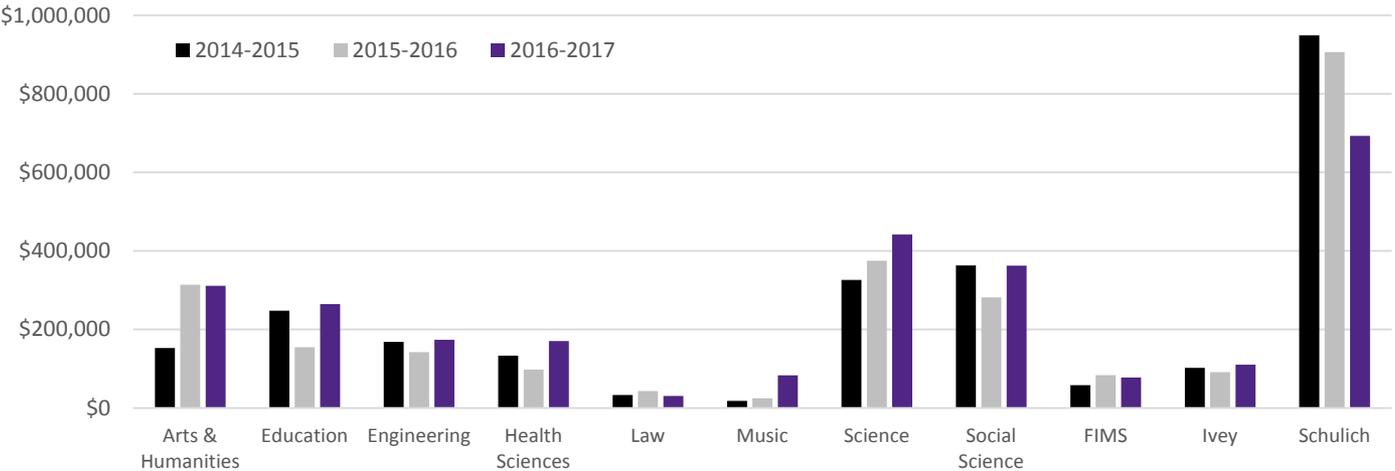
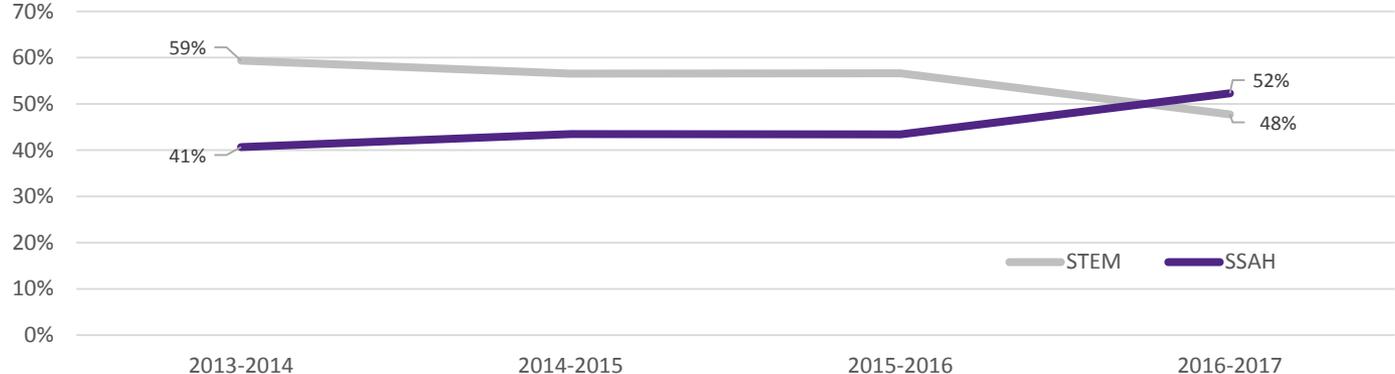
- **\$5,859,500** | up 23% from 2015-16 | highest in Western's history | 8th in U15
- **Council share:** 2.5% | U15 share: 4.5%
- **Partnership Grant:** \$2.5M | Tima Bansal
- **Partnership Development Grants:** 3/3 funded | 100% success vs. 37.1% average
- **Insight Grants:** 22/49 funded | \$3.3M | 44.9% success vs. 40% average
- **Insight Development Grants:** 10/15 funded | 66.7% success vs. 32.1% average

Notable Achievements

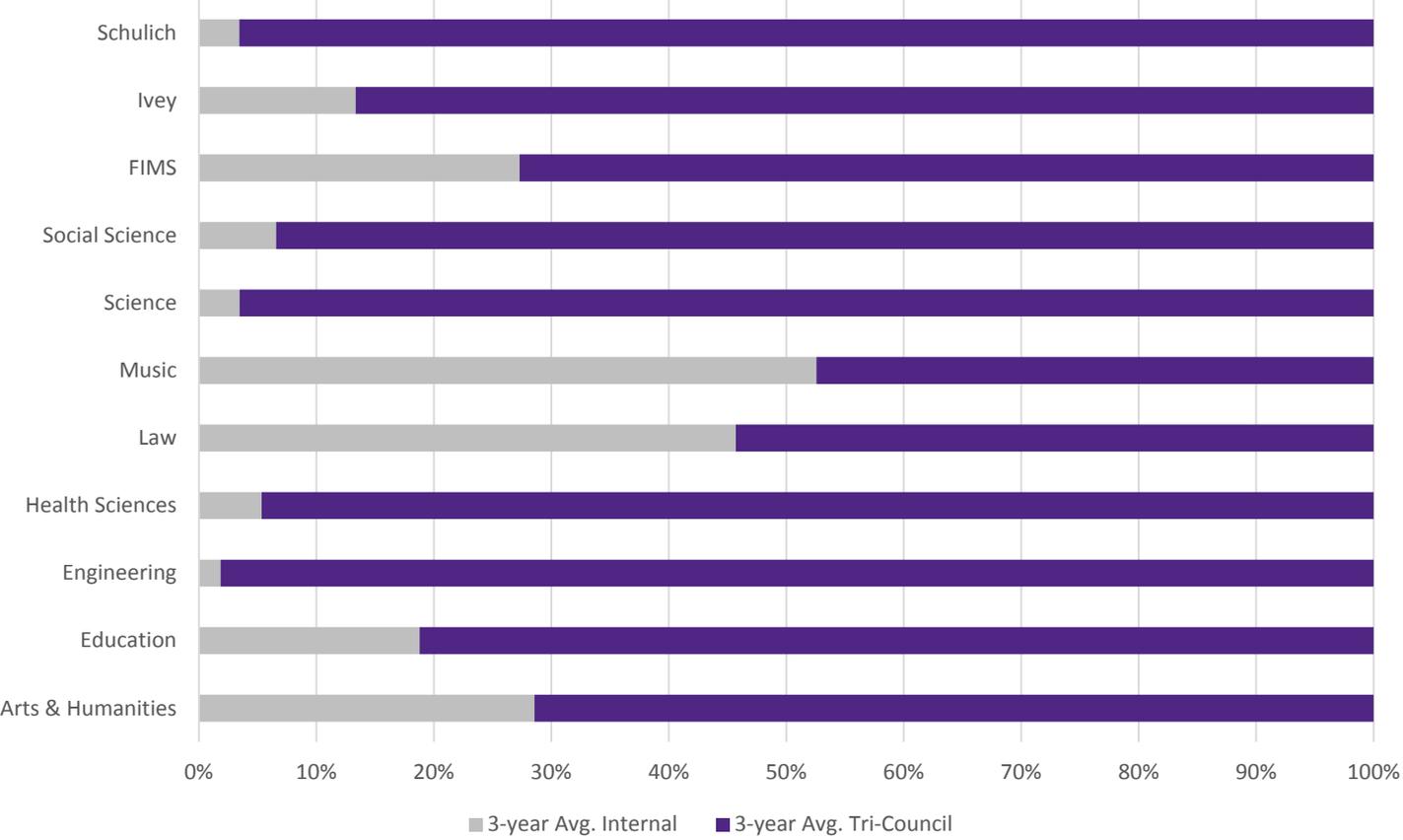
Initiatives to Support SSHRC-Related Research

- Introduction of new Associate Vice-President (Research)
- Established \$7.5M endowment fund
- Creation of Knowledge Exchange Manager role
- Realignment of internal funding mechanisms and programs
- Consultation process related to service provision
- Response to URB Task Force Report
- Telling our research story:
 - Storytelling Bootcamp (92% SSAH registrants)
 - Creation of Research Storyteller role, focusing on SSAH
 - Inaugural Heritage Plaques project (one SSAH, one STEM)

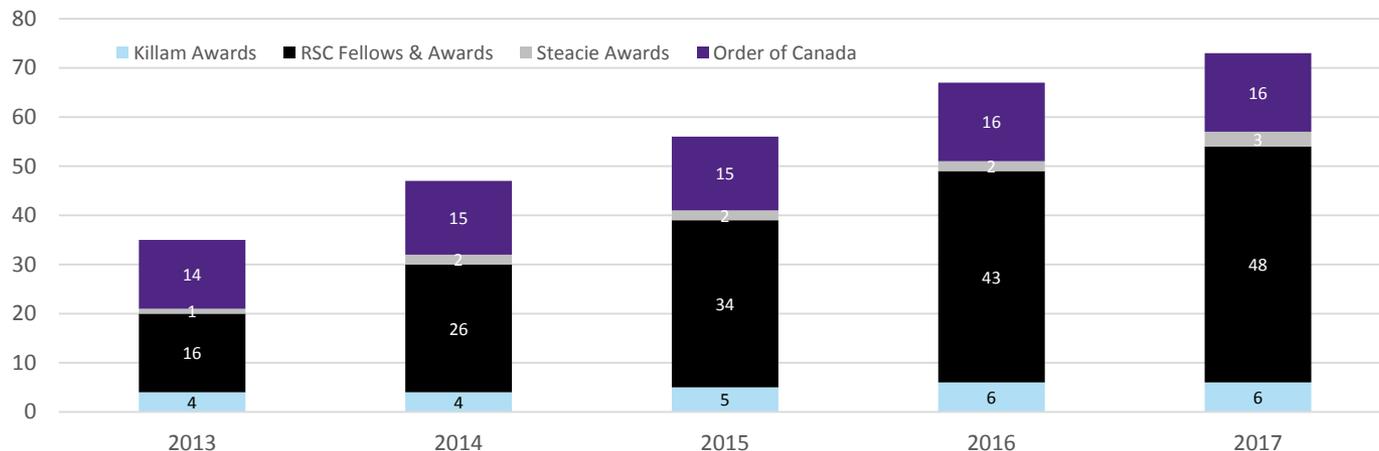
Internal Funding Support & Allocations



Internal Funding Support & Allocations



Research Awards & Distinctions



Additional Notable Awards

- Fellows & New College Members of RSC: **Patrick Mahon, Terry Peters; Laura Huey, Sharon Sliwinski**
- Prince Mahidol Award in Public Health: **Vladimir Hachinski**
- Governor General Meritorious Service Cross: **Ting-Yim Lee**
- E.W.R. Steacie Memorial Fellowship: **Elizabeth Gillies**
- NSERC Award for Science Promotion: **Jeremy McNeil**
- NSERC Synergy Award for Innovation: **Jason Gerhard**
- Canadian Academy of Health Sciences Fellow: **Terry Peters**
- IEEE Fellowships: **Jin Jiang, Xianbin Wang**

Achievements | Human Ethics

- Hired two new ethics officers
- Launched WesternREM: streamlines business processes, improves information management and reporting capabilities
- Developed and implemented standard operating procedures, updated all existing guidance documents and templates
- Established successful coordinated review process with University of Waterloo

Achievements | WORLDiscoveries

- \$3.6M licensing income, 54 invention disclosures, 14 patents
- **Innovation Ambassadors:** Launched with 15+ ambassadors
- **Medical Innovation Fellows:** BrainsCAN fellow funded; 4 patent applications, 5 start-up companies
- **Vanguard Awards:** Innovator of the Year, Matthew Hebb
- **WORLDiscoveries Asia**
 - \$300K from MRIS to transform initiative to provincial platform
 - \$200K from JITRI to help link to companies, institutions in Jiangsu
 - Represents 25+ Ontario organizations, 60+ technologies
 - Closed 2 licensing deals with Chinese companies (\$1M+)

SMA | Research Performance Metrics

Five Key Measures

- Tri-Council research income per full-time faculty
- Prestigious doctoral scholarships per full-time faculty
- Number of broad subject areas in which the university is ranked in the top 50 in the QS rankings
- Average citations per full-time faculty
- Times Higher Education Rankings (top 100)

- Universities can use up to 10% of funding eligible to PhD allocation for international students
- Universities in the top quartile of 4/5 criteria are eligible to claim 5% more spaces (total 15%)

Research Intensity

	FY 2016
McMaster	\$405.3
Toronto	\$381.2
McGill	\$317.6
Montreal	\$277.1
Ottawa	\$264.4
Calgary	\$242.7
Laval	\$239.8
UBC	\$227.3
Alberta	\$210.2
Saskatchewan	\$204.5
Queen's	\$197.2
Western	\$167.4
Manitoba	\$158.1
Waterloo	\$146.3
Dalhousie	\$121.0

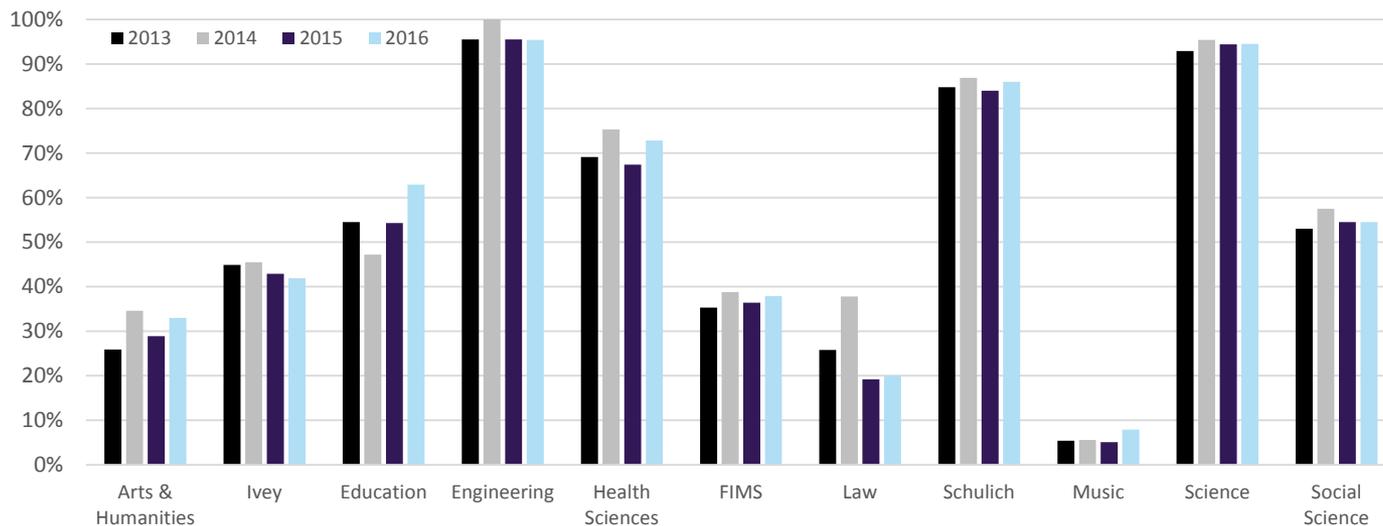
*Western's faculty counts include affiliated colleges; if excluded: \$210K

Aggregate 3-Year Average Tri-Council Funding, 2013-16

- Total Tri-Council: \$54.3M (4th in ON)
- CIHR: \$25.6M (3rd in ON)
- NSERC: \$23.7M (5th in ON)
- SSHRC: \$4.6M (5th in ON)

- Tri-Council Research Intensity: \$38,647 (6th in ON)

Faculty Members Holding Grants



	2013	2014	2015	2016
Full-Time Faculty	1,079	1,074	1,066	1,071
% Holding Grants	62.5	64	62.9	63.3
% Holding Tri-Council Grants	–	–	60	55.2

Publication Data

	Publications	Citation Rank	Norm. Citation Impact	Citations among top 10%	Books
Toronto	2	2	121	3	18
UBC	23	24	111	24	39
McGill	42	37	182	41	48
Alberta	59	79	360	83	118
Montreal	79	79	302	103	146
McMaster	127	115	191	129	153
Calgary	132	130	318	143	126
Ottawa	149	146	329	154	95
Western	157 (9)	174 (9)	480 (11)	187 (9)	126 (8)
Waterloo	193	216	480	215	125
Laval	235	241	441	245	454
Manitoba	301	289	570	297	295
Dalhousie	301	291	369	293	210
Queen's	310	341	578	332	146
Saskatchewan	330	365	670	388	252

Publications and Citations, 2011-2015

- Total publications: 16,250 (4th in ON)
- Publications per faculty member: 2.19 (5th in ON)
- Total citations: 151,070 (4th in ON)
- Citations per paper: 9.3 (4th in ON)
- Citations per faculty member: 101 (4th in ON)

Times Higher Education World Rankings

	2014	2015	2016	2017	Weighting
Teaching	38.3 (6 th)*	38.6 (7 th)*	40.1 (7 th)	41.8 (7 th)	30%
Research*	35.7 (8 th)	32.4 (11 th)	34 (9 th)	36.1 (9 th)	30%
Citations	47.0 (14 th)	59.0 (12 th)	69.3 (10 th)	68.8(10 th)	30%
Industry Income	50.7 (7 th)	59.7 (4 th)	55.1 (4 th)	55.7 (4 th)	2.5%
International outlook	63.7 (8 th)	73.6 (9 th)	73.6 (9 th)	75.2 (9 th)	7.5%
Aggregate Score	42.35	46.5	50.12	48.3-51.6	
International Ranking	226-250	201-250	201-250	201-250	
U15 Ranking	9 th (tied)	8 th (tied)	9 th	8 th (tied)	

McMaster	63.4	78
Calgary	51.14	201-250
Western	51.1	201-250
Waterloo	51.1	201-250
Ottawa	49.8	201-250
Queen's	45.2-48.2	251-300

2016-17

- * 30% research ranking is composed of:
 - Manuscripts/academic staff: 6%
 - Research income/academic staff: 6%
 - Research reputation: 18%

QS World Rankings

Globally Ranked Areas (Top 50)

- Sports-related Subjects (30)
- Psychology (38)
- Philosophy (47)

Ontario Competitors in Top 50

- Toronto (47)
- McMaster (4)
- Western (3)
- Guelph (2)
- Waterloo (1)
- Queen's (1)
- Ottawa (1)



210

2017-18 Ranking

- Down from 198 in 2016-17
- Canada rank: 8 (up one spot)

Ongoing Initiatives

- BrainsCAN: up and running
- Ontario Research Fund-RE (all-time high 15 proposals)
- AMC Proposal with Waterloo and McMaster
- \$50M renovation of animal facilities
- Newly opened Western Interdisciplinary Research Building
- Congress 2020 Federation in planning stages (expecting 10K+)
- Superclusters in advanced manufacturing, mining
- New postdoctoral scholarship program



Western
UNIVERSITY · CANADA

Western Research

*RESPONSE TO THE REPORT OF THE URB TASK FORCE STEERING COMMITTEE
SUPPORT FOR RESEARCH IN SOCIAL SCIENCES, ARTS, AND HUMANITIES AT WESTERN*

January 2018

Response to the Report of the URB Task Force Steering Committee Support for Research in Social Sciences, Arts, and Humanities at Western

In the fall of 2015, I directed the University Research Board to establish a Task Force to assess strengths and weaknesses in how research and scholarship in the Social Sciences, Arts, and Humanities are supported and valued at Western, and to ultimately recommend strategies for how to better promote and enhance research excellence, leadership, recognition, and success in these disciplines. The Task Force's final report was completed in May 2016, and is available at the [following link](#). I subsequently established a representative working group, chaired by Associate Vice-President (Research), Juan Luis Suárez, to begin to address and implement some of the Task Force Report's recommendations.

The following highlights some of our progress to date and contains 1) A Summary of measures taken in response to the Report; 2) A full consideration of main points and recommendations included in the Report; and 3) Appendices.

Recommendations put forth in the Task Force Report constitute one component of an overall strategy to better serve the various missions and needs of the broader SSAH research community. In this context, my office has also implemented several important initiatives in the past two years beyond Task Force recommendations, some of which are also included here for completeness.

1) Summary of Measures

- Creation of a new Associate Vice-President (Research) position to support SSAH disciplines. Dr. Juan Luis Suárez was appointed to this role on July 1, 2017.
- Western established a \$10M* Endowment Fund for research in the SSAH. This fund will make available \$400,000 annually for the support of research activity in these areas by 2019.
- Appointment of a newly created Knowledge Exchange Manager role (Erin Huner).
- Internal funding mechanisms have been re-tooled through direct input and consultation with Associate Deans (Research) (ADRs), resulting in a set of opportunities that address, to the extent our resources allow, concerns expressed in the Report, and better embrace the culture and practice of these disciplines:
 - Western Strategic Support for SSHRC Success has been organized into two competitions to maximize flexibility to researchers' programs and types of research:
 - SSHRB Seed Research Grant; and
 - SSHRB Open Research Grant.
 - A new competition to seed New International Research Networks was launched in fall 2017.
- The allocation formula for the Faculty Research Development Fund (FRDF) to individual faculties remains unchanged after broad consultation and review by ADRs. We continue to ensure maximum flexibility to better serve all types of research and scholarship by maintaining faculty-level decision-making responsibility for the FRDF.
- Implementation of an enhanced communication strategy that includes increased coordination between Research Western and Communications & Public Affairs; hiring a Research Storyteller focused on stories about SSAH research; and organization of a Storyteller Bootcamp to provide researchers with tools and confidence to communicate their work externally.
- More consultation, more often with SSAH researchers. As part of this, Research Western undertook broad face-to-face consultations with more than 50 faculty members over a dozen sessions to gain a better understanding of issues and to improve services.
- Increased attention by the Associate Vice-Presidents (Research) to fostering collaboration among researchers in interdisciplinary settings.

- Engaged the ADR group to play a more strategic role in decisions. This group is now chaired by an ADR.
- Streamlined the ethics approval process and efficiency by deploying a new software platform (WREM) and hiring two new ethics officers.

* The SSAH endowment fund will be augmented by an additional \$2.5M in the upcoming budget year, bringing the total value of the endowment to \$10M.

2) Full consideration of main points and recommendations included in the Report

The URB Report is organized into six sections (1. Background; 2. Social Sciences, Arts, and Humanities Research – The Western Context; 3. Value and Recognition of Social Sciences, Arts, and Humanities Research at Western; 4. Infrastructure to Support Research at Western; 5. Funding and Other Resources for Research at Western; and 6. Conclusions) and three appendices, containing reports by each of the three Task Force working groups. The following addresses each section of the original Report.

Note: Paragraphs in *italics* are specific recommendations issued by the URB Task Force and paragraphs in **blue** detail specific measures taken to solve these issues. Paragraphs beginning with **R** indicate initiatives that are currently underway, but not yet completed.

Background:

The Report covers some of the most important principles of the research mission outlined in Western's strategic plan – *Achieving Excellence on the World Stage* – especially those for fostering a culture that places high value on scholarship and innovation, impact and productivity across disciplines. Moreover, it quotes the call on page seven of *Achieving Excellence* to focus more attention and resources on excellence in scholarship and innovation, knowledge creation, and translation of knowledge.

The Report places most of its emphasis on the availability of resources (or lack thereof) and differences in culture and practice around disciplines that make up eight of Western's 12 faculties and schools. The Report exposit the existence of deep currents of discord within social sciences, arts, and humanities communities at Western.

The committee was organized into three working groups that answered, respectively, the following questions: 1) How do external entities, including funding agencies and professional organizations, define leading-edge, scholarly activity in social sciences, arts, and humanities disciplines? 2) What are the strengths, weaknesses, opportunities for and threats to social sciences, arts, and humanities research at Western? 3) How is research in the social sciences, arts, and humanities supported at Western and how can this be improved? Results of the three working groups were compiled into the following sections:

Social Science, Arts, and Humanities Research at Western – The Western Context:

Externally, crisis of the SSAH;

Internally,

- Concerns about how research is valued within Western;
- Lack of suitable internal funding mechanisms; and
- Limited research infrastructure support¹.

According to the Report, Western's prevalent model of research values and celebrates:

- High-budget research, tied to technological innovation and industry interests; and
- Particular kinds of outputs (volume of publications and multi-authored publications).

Our proposals to mid-career researchers, who “are often disenfranchised as they find their programs of research difficult to sustain given current internal funding conditions,” can be found under “Funding and Other Resources for Research.”

Value and Recognition of Social Science, Arts, and Humanities Research

This section of the Report focuses on how Western values research by linking it to:

- Deployment of tangible internal resources (funding and infrastructure);
- Practices related to communication of research;
- How research is assessed in P&T and APE²;
- Impact; and
- Knowledge mobilization.

The committee offers three recommendations and one comment about the importance of knowledge mobilization as an integral part of these disciplines:

Initiate broad discussion within the University about how research is valued, and impact assessed at the level of the institution. The VPR's office initiated a discussion on this issue, and the SSHRC social science, arts, and humanities ADRs responded with a statement on indicators, but more discussion is needed, particularly in terms of how the University can be an advocate for, and provide appropriate supporting tools to, its researchers.

¹ These issues are not exclusive to Western, but a concern by many top researchers, like Jeffrey C. Hall in [http://www.cell.com/current-biology/fulltext/S0960-9822\(07\)02369-X](http://www.cell.com/current-biology/fulltext/S0960-9822(07)02369-X).

² Research Western is not involved in the assessment of P&T or APE files, although in P&T cases, the VPR's expertise can be asked upon in matters of research output.

Our response:

- ADR meetings have become the permanent forum for this issue.
- The Vice-President (Research)'s leadership team regularly attends faculty events, such as Faculty Council, faculty planning meetings, and meetings with ADRs to engage researchers about these issues.
- In June 2017, Research Western initiated a consultation process to more directly engage researchers in institutional strategic planning exercises, and to identify opportunities to align the university's activities with the community's needs. "*Stewarding Knowledge: Reviewing the Alignment of Research Western's Services through Consultation*" (see Appendix 1) represents feedback from more than 50 faculty members from each faculty over a dozen 90-minute consultations.
 - There are now clear expectations of excellence, productivity and innovation among most of our researchers, who are demanding equivalent levels of institutional support. Put bluntly, the community understands we are a research-intensive university, and the question now is what type of research-intensive university we are.

Engage in a new and critical discussion of contributions and impacts that are considered in promotion and tenure, Annual Performance Evaluation and graduate student assessment files. It is clear that the external context is shifting in terms of contributions that the Tri-Councils value, so Western should respond to support its researchers.

Our response:

- We are happy to participate in a consultative role as required, but departments and faculty councils are the appropriate forum for this discussion in light of our collective agreement and details of our shared governance model.
- The new Associate Vice-President (Research) has engaged with faculties through ADRs to stress the importance put by external funding agencies and new provincial and federal government agencies on collaboration, interdisciplinarity, societal impact, knowledge mobilization and communication.
- As approved by the ADRs, we have embarked on a strategic exercise that, throughout 2017-2018, will solicit input from all members of the academic community to provide a comprehensive overview of research undertaken across campus. The resulting document will inform development of the next Strategic Research Plan. (Appendix 2).

Establish better mechanisms to connect the Communications & Public Affairs office with the Faculties and social science, arts, and humanities researchers.

Our response:

- We have initiated additional monthly meetings with Helen Connell (Associate Vice-President, Communications & Public Affairs) about possible stories, successes and priorities related to research in SSAH. These are in addition to established quarterly strategic meetings between Research Western and Communications & Public Affairs.
- In collaboration with Communications & Public Affairs, we conceived of, and introduced, a 'Storytelling Bootcamp' to provide hands-on training related to speaking with reporters, using social media, developing knowledge exchange plans, and shooting and editing video. Registration for the first session – held in October 2017 and designed to increase competencies and confidence among researchers – consisted of more than 90 per cent SSAH researchers.
- As a pilot initiative, Research Western hired a six-month contract 'Research Storyteller' dedicated to sourcing and crafting research stories for dissemination through various channels. This new hire began in November 2017 and has exclusively produced SSAH stories.
- Collaborative efforts between Research Western and Communications & Public Affairs to promote SSAH research also continue through promotion of events like the Indigenous

Mentorship Network Program, the Innovation Ambassadors launch, and announcements of various centres and initiatives.

- We will host an annual Awards Ceremony to recognize and celebrate achievements of researchers who have won prestigious awards and/or who have been recognized over the past year (by the Royal Society, CRC, etc.). The inaugural awards ceremony is provisionally scheduled for February 2018.

For this process to be effective, researchers themselves need to recognize the value of advocacy/knowledge mobilization/public engagement/dissemination to their own work and become partners with communications professionals across campus in publicizing their research achievements.

Our response:

- Appointment of a newly created Knowledge Exchange Manager role (Erin Huner).
- Regular engagement by the Knowledge Exchange Manager with researchers through a variety of events, including a special session in Arts & Humanities in August 2017.
- Collaboration with Western Libraries to create and implement a campus-wide Strategic Plan for Knowledge Exchange.
- As noted above, the Research Storyteller role has been introduced to better engage with SSAH researchers and to identify stories for internal and external audiences. It is a six-month pilot we hope may evolve into a permanent position in the future.
- In early 2017, Research Western introduced a new Heritage Plaques program to celebrate historical research achievements in research at the university. Of the two plaques announced annually, one will be dedicated to research in SSAH disciplines

Infrastructure to Support Research

The Report emphasizes the link between increasing productivity and impact, and the existence of a solid infrastructure support for our researchers. It spells out the following areas of concern:

Support for the preparation of research proposals

Our response:

- The capacity of Research Development and Services teams is limited given high volumes; even so, over the past 18 months, we have supported the preparation of a record number of applications to ORF and other funding agencies.
- We lack a consistent practice of funding for preparation and support of large, multi-institutional, multi-disciplinary proposals, which often occurs in collaboration with faculties. We are developing a plan to produce a document each year, in the month of June, which will outline what type of financial support researchers can expect over the next fiscal year when putting together large, collaborative application grants.

Assistance in formulating and advancing research

Our response:

- We provide this service on an individual basis as a permanent activity in one-to-one meetings with researchers, and through coordination with ADRs, including, as examples: Centre for Francophone Literature in A&H, meetings with researchers in Health Science and Education, the Child & Youth Initiative in Education.

Administrative barriers: ROLA

Our response:

- Research Development & Services and Research Ethics (RDSE) identified four working group areas in May 2017, following consultation with WISG and detailed interviews completed by Karen Chelladurai. Upon further discussion, a fifth area has also been identified.
 - Certifications and Risk;

- ROLA Changes;
- Reporting;
- Procedural/Documentation; and
- PI Research Eligibility – Grants integration with HR.
- As of October 4, 2017, there is no firm timeline for implementation as WTS is at full capacity and tending to other projects. They have assured us work to be done with RDSE remains a priority.

Administrative barriers: HR regulations around hiring research assistants

Our response:

- During the first term of 2018, we will engage in conversations with HR to study possible ways of increasing efficiency and limiting frictions, while complying with our institutional obligations in this area.

Research ethics and approval

- See below.

Access to research tools

- See below.

Fostering interdisciplinary and collaborative research

- We have established more than 50 new collaborations over the past two years through legwork by the AVPRs and ADRs to make one-by-one connections. This is a very high priority for both AVPRs.
- We expect programming associated with the Innovation Ambassadors (Western Entrepreneurship) will contribute to the discovery of new synergies and collaborations.
- The strategic planning exercise to compile areas of research expertise will uncover new areas of possible collaboration.

Specific recommendations made in the Report include:

Centralize some elements of grant support activities, such as the identification of granting opportunities, grant preparation support, peer review, determination of the nature and strategies for in-kind support, knowledge mobilization strategies and community engaged research facilitation and support.

Our response:

Most of these elements are already centralized, as:

- *The identification of granting opportunities.*
 - These are identified on Research Western's website and in monthly emails to ADRs containing research opportunities for distribution among researchers.
 - We can analyse the website's design and user experience and formulate a strategy for the (broad and targeted) dissemination of granting opportunities around communicating timelines to researchers.
- *Grant preparation support, peer review, determination of the nature and strategies for in-kind support, knowledge mobilization strategies and community engaged research facilitation and support.*
 - These are available through the Research Development team for both standard and large external funding opportunities.
 - These are available through the Research Services team for standard external funding

- opportunities, and for additional support for U.S. federally funded programs.
- In many cases, the peer-review process is taken on by individual members of the Research Development team and the AVPRs.
- Every year in August, publish and distribute among ADRs a sheet describing strategies for in-kind and cash support for the upcoming year's competitions.
- *Streamline basic administrative requirements and undertake a broad-based review to increase efficiencies and decrease the load on the researcher.*
 - Once the position is filled, this will be a key accountability for the new Executive Director of RDSE.
 - It is clear, however, that increasing requirements for accountability and transparency from funders will augment existing administrative burden on PIs.
- *Continue to support the search for improvements and efficiencies in the ethics approval process, noting the improvements that have taken place in the last year.*
 - In September 2017, the Office of Human Research Ethics implemented a new mission-critical software platform (Western REM/WREM) to streamline business processes and improve information management and reporting capabilities.
 - We have identified and documented new sets of roles and responsibilities, hired two new staff members and trained staff to properly fill identified positions.
 - We have developed and implemented Standard Operating Procedures, updated all existing guidance documents and templates and published new ones – all to modern standards.
 - We estimate service delivery wait times have been reduced by 25 per cent and commit to providing annual reports on service quality (as this is now possible with the new support infrastructure).
- *Expand the negotiated agreements with other institutions to allow ethics review to be delegated to a single institution.*
 - We established a successful coordinated review process with the University of Waterloo two years ago.
 - We continue to engage in conversations with Universities of Toronto and Ottawa to institute a similar process.
 - We are part of the South Western Academic Hospital Network.
 - Western functions as the Board of Record for Child & Parent Resources Institute, Thames Valley Children Centre, and Vanier Children Services.
- *Encourage faculty members to become involved in REB committees.*
 - The REB, together with the Dean's office for the Schulich School of Medicine & Dentistry, has introduced a project that assigns debits/credits to researchers based on their contributions to, and use of, the human research ethics boards. In this system, the REB reports to individual department Chairs/Deans on the number of submissions received by the REB per department and whom from each department is attending REB meetings and contributing to the review of submitted protocols. In turn, departmental Chairs will establish a fair solution that provides the Health Sciences Research Ethics Board (HSREB) sufficient REB membership to handle workload, help maintain the HSREB as a scientifically valid Board and remain compliant with regulations set forth by federal and provincial governing bodies. It is up to individual Chairs, working with the Dean's office,

to orchestrate this activity within their own departments (including recognition of academic contribution and time availability). We will evaluate this program once it has been running for six months and will assess the viability of extending it to other faculties, where there is interest from the dean.

- A noted delay in the review process is seen during initial review. REB members can take upwards of three weeks to initially review a submission, or the REB may have insufficient REB representation. A delay is, therefore, seen when finding a reviewer. We will have more precise data to assess this issue once the WREM system has been in place for six months. We acknowledge departments should properly credit their members for this work.
- *Centralize support for key research tools, such as Qualtrics and NVivo.*
 - Through communication with WTS, and a survey to faculty research administrators, we have created an inventory of available software research tools on campus (Appendix 3).
 - The report recommends offering centralized access to Qualtrics and NVivo.
 - According to WTS, a large number of faculties and units already use it; the price is \$3,000/unit.
 - The price for an educational license of NVivo is US\$540.
 - We recommend forwarding a special request to the VPR, via the corresponding ADR, in cases where faculties are unable to provide funds for licenses as it is impossible to provide limited-use licenses.
 - We also recommend the adoption of open-source alternatives whenever possible.
- *Provide more support for inter-disciplinary research.*
 - *Encourage the continued support for the IDI program.*
 - This is already central of Research Western's leadership team's continued advocacy efforts, although the program is administered by the Provost's Office.
 - *Work for improvements in cross-unit appointments.*
 - Not applicable to Research Western.
 - *Create spaces that promote collaboration and cross-unit communication.*
 - **R:** With the Libraries, Knowledge Translation.
 - **R:** Design an innovative, multi-disciplinary strategy for SSAH as part of the Knowledge Exchange portfolio.
 - In collaboration with the Western Entrepreneurship initiative:
 - Provide innovation courses for graduate students in a multi-disciplinary setting.
 - Propose faculties incorporate spaces for collaboration and innovation into their building designs, as per discussions and recommendations proposed during the Innovation Ambassadors launch event.

Funding and Other Resources for Research

The Report praises the financial support to internal funding programs (around \$2M) and stresses the need for a funding strategy that addresses the variety of types of research at Western – that is, a funding strategy for internal programs that remains flexible to tackle different needs at different moments of a researcher's career. Some problems with the internal programs included:

- Lack of transparency of formulae used for distribution of FRDF funds.
- The structure of the WSSS is questioned on the following aspects:
 - Size of grants;
 - Focus on development of Tri-Council proposals; and
 - Restrictive eligibility criteria for applicants (SSHRC grant within two years of recent 4A rating on SSHRC).
- The Report also suggests new forms of Internal grants, specifically competitive teaching release, mid-career research awards, a small grants program (\$10,000 or less), grants to support preparation of large proposals, and research grants in lieu of salary.

Our response:

- Western has established a \$10M Endowment Fund for Research in the SSAH, which will eventually make available \$400,000 annually for research in these areas. For the current year, \$200,000 was allocated directly to faculties through the FRDF, with the remainder retained centrally for strategic SSAH-related initiatives, support for larger external proposals, and for other strategic SSAH-related purposes, including promoting interdisciplinarity, equity and diversity, etc. We will revisit strategies on how best to use the endowment funds next year.
- Internal funding mechanisms have been revised through direct input and consultation with ADRs, resulting in a set of opportunities that collectively address, to the extent of that our resources allow, many concerns expressed in the Report:
 - Western Strategic Support for SSHRC Success has been organized into two competitions to maximize flexibility to researchers' programs and types of research:
 - SSHRB Seed Research Grant; and
 - SSHRB Open Research Grant
- We launched a new competition to seed New International Research Networks in fall, 2017.

The recommendations are to:

- *Re-examine its internal funding program to better understand whether current programs are achieving their goals, being cognizant of the variability in the kinds of support that researchers need. This could include:*
 - *Revisiting the current FRDF and Strategic Support for Success (WSS) Grants, doing an analysis of the effectiveness of these programs and the equity of the distribution of funds.*

Our Response:

- The formula for distributing the FRDF was reviewed and examined by a task force set up by the ADRs. Their recommendation was to keep the current allocation formula as is and to maintain control of the FRDF at the faculty level. As in the past, the FRDF allocation is expected to be used strategically by faculties to directly address issues of distinctive disciplinary "practice and culture" that have been articulated in the Task Force Report (see below).
- As described above, the FRDF has been supplemented by \$200K from the Endowment Fund for the SSAH for the current year. This decision was taken on the strong advice of the ADRs.
- We developed a better reporting system within RDSE to help track researchers' external successes and connect this record to internal funding programs. There was agreement among ADRs for the WSS to serve as a collective method of allocating resources to those researchers trying to extend their research programs through external funding.
- *Broaden the existing internal funding program, considering new possibilities such as:*
 - *Competitive teaching release grants;*

- *Mid-career kick starter grants;*
- *Small research grants; and*
- *Grants to support the preparation of large and complex proposals.*

Our Response:

- The FRDF, supplemented by additional resources from the SSAH Endowment Fund this year, provides a possible source of support for these ideas and to enable faculties themselves can make decisions that best suit them.
- The first round of the newly created New International Research Networks has been adjudicated (Appendix 4).
- We will be relaunching the Distinguished International Visiting Researchers initiative.
- We are developing a strategy to recruit outstanding postdoctoral scholars across all disciplines.

- *Reviewing the URG and how it is being utilized as a means of making it more “user friendly” for faculty members who must, or choose, to self-fund. This may involve seeking a ruling from the CRA on the issue of whether non-sabbaticants can apply.*

Our Response:

- Not applicable to Research Western.

Conclusions

Research and scholarship in social sciences, arts and humanities-aligned disciplines is foundational to Western’s vision and mission as a comprehensive, globally recognized and research-intensive university. The foregoing is a brief summary of just some of the steps we have taken to help ensure that these disciplines remain vibrant and strong. We are committed to continuous improvements in how to best to support and promote the breadth and diversity of the critically important research we undertake in SSAH. We will continue the collaboration with our stakeholders, and welcome ongoing input from our community.

Western Research

STEWARDED KNOWLEDGE: REVIEWING THE ALIGNMENT OF RESEARCH WESTERN'S SERVICES THROUGH CONSULTATION

Julaine Hall | Erin Huner | Douglas Keddy

November 2017

STEWARDED KNOWLEDGE: REVIEWING THE ALIGNMENT OF RESEARCH WESTERN'S SERVICES THROUGH CONSULTATION | NOVEMBER 2017

Julaine Hall | Erin Huner | Douglas Keddy

OVERVIEW

As an effort to begin the process of engaging scholars in institutional strategic planning exercises, and to identify opportunities to more closely align the university's activities (e.g., services, processes and supports) with the research community's needs, Research Western held a dozen 90-minute consultation sessions with more than 50 faculty members between June 21-28, 2017. This is the first time Research Western has undertaken extensive face-to-face consultations to better understand stakeholders' views of their experiences with our services. Ultimately, these discussions garnered significant feedback from each of Western's faculties and schools.

Recommendations from these consultations will be provided to Research Western's leadership team to guide development of unit-specific strategies for adapting and refining day-to-day services in the short-to medium-term. They will also be offered to senior administrators to identify operational priorities and to inform development of the university's next strategic research plan. This report, therefore, has been produced to open dialogue and to acknowledge feedback we received for improving research administration efforts, rather than to commit to the implementation of any specific actions at this time.

We also sent this report to participants to engage in member-checking and to ensure we had, in fact, correctly heard our constituents. We received 14 responses during this two-week process, the vast majority of which confirmed the accurate representation of their views. While some suggestions appear relatively simple to enact, others will necessitate – *or create* – a shift in research culture and practice at Western. In many ways, this is an overarching goal of this process of ongoing engagement.

PARTICIPANTS

We identified potential participants by randomizing faculty listings using random.org to establish 10 primary and 10 backup invitees from each faculty and school (to accommodate its size, and number of affiliated clinicians, we held two sessions for the Schulich School of Medicine & Dentistry). As randomization was intended to ensure participants had varying degrees of experience with Research Western's services, we continued to use this method to expand our list as invitations were declined. Those identified were then individually contacted by email. In all, there were:

- 263 personal email invitations distributed, and 64 accepted (24.3 per cent);

- 54 participants (15.6 per cent attrition from acceptances);
- 26 female (48.1 per cent) and 28 male (51.9 per cent) participants;
- 48 written surveys completed;
- 2 additional written responses received; and
- 3 facilitators from Research Western:
 - **Julaine Hall**, Research Development Consultant (Awards & Distinctions)
 - **Erin Huner**, Knowledge Exchange Manager
 - **Douglas Keddy**, Research Communications Manager

FORMAT

Two or three of the authors facilitated each 90-minute session using a semi-structured interview guide developed to ensure we asked consistent questions with each group. After first encouraging participants to speak about services Research Western currently offers, we asked open-ended questions to provide scholars with opportunities to discuss topics of interest to them about research practice and research support at Western. We began each session by providing participants with a one-page infographic outlining Research Western's services and key contacts, and concluded with a brief paper survey to obtain some preliminary, anonymous data related to participants' interaction points with our services, and their experiences.

The authors reviewed their raw notes from each consultation session and identified recurring themes, which comprise the numbered headings below. Bulleted lists summarize additional recommendations participants offered within each theme.

1. FINDINGS | SERVICE DELIVERY FROM RESEARCH WESTERN

During our consultations, Research Western staff were encouraged to make a more visible, proactive effort to meet face-to-face with faculty members, and to build stronger personal relationships with them. In fact, some of the reluctance to contact the department was attributed to "typing to an anonymous email." This point was further highlighted by a consistent lack of awareness of most names or supports on the infographic provided at the start of each session.

Similarly, many participants expressed a desire to have Research Western play a more significant role in identifying, establishing and fostering relationships with community groups, government and business entities external to the university: "We need Research Western to get out into the community more to actually make connections." There appears to be an impression from consulted faculty that, as an institution, we consistently revisit the same potential partners and that we rely on academics to do

their own legwork, which takes time away from their research. Scholars also called for the department to serve as a connector hub for strengthening interdisciplinary efforts internally: “Connecting people is a gap.” Participants were largely in consensus that developing pathways for interdisciplinary research would be a good investment that could significantly help increase research output across disciplines.

From a systems point of view, we were told ROLA is difficult to use, particularly for those who do not use it regularly. Given that users must re-orient themselves each time, participants encouraged Research Western to build a more intuitive skin for ROLA, or to incorporate a step-by-step guide directly into the software. The ROLA Help service by telephone and email, however, was found to be helpful.

Service related to human research ethics was a recurring theme across faculties. Some concerns about the administrative office included: inserting feedback addressed during board meetings into recommendation letters, which slows down the initial approval process; the need for a better job triaging high-risk proposals from straightforward ones; and insufficient training provided to board members. Concerns about the ethics boards included: a lack of recognition of low-risk studies and of understanding qualitative research methods; too much focus on methodological, rather than ethical implications; and group-think leading to nit-picking at too narrow a level, which researchers agreed created a lengthy and unclear research ethics process.

Several researchers asked about the potential of breaking REBs into smaller groups and conducting interviews as part of the review process (e.g., telephone or in-person) to address board concerns in a more efficient and immediate manner. A few participants also offered to review submissions as a pre-review mechanism, if possible without sitting on the board itself. Further, representatives of several departments indicated they have been taking turns serving on the relevant ethics board to ensure members have a better understanding of work in their disciplines. As these individuals have seen success with this approach, they encouraged others to consider doing the same.

We were told human and animal ethics units need to do a better job setting expectations for faculty engaging in these processes. Similarly, we were told on many occasions – and consistently across STEM and social sciences, arts and humanities-based disciplines – that current processes are having a direct impact on scholarly practice, as professors are advising their students to not engage in research involving humans or animals due to the length of time it takes to obtain approvals. For instance, one participant noted that “we need some form of fast-tracking system as we get halfway through a semester before we can get approvals for students.” In some cases, scholars reported current processes are also having consequences for their own research programs.

Our member-checking exercise, however, provided feedback to the effect that many of the problems inherent in these processes do not reflect the quality of service provided by staff members within Research Western: I “think (this report) could be more positive about research western staff (and ethics staff in particular),” replied one participant. “My dealings with staff have been VERY positive. (I) would not want staff to be criticized for what are systemic issues and under-resourcing.”

Additional Community Recommendations:

- Create new ways to facilitate interdisciplinary discussions (e.g., a virtual or physical space) that help identify partnerships in other faculties and better frame Interdisciplinary Initiatives.
- Provide additional help establishing contacts with industry, foundations and community groups.
- Increase outreach for grant writing and proposal development on a one-on-one basis, rather than through workshops.
- Provide centralized consulting services for statistical design to support grant development for qualitative research (e.g., <http://cscar.research.umich.edu/about/>).
- Provide services related to writing scripts and scraping data.
- Develop better human ethics templates to ensure clearer wording, while having the Tri-Councils review our processes to ensure boards are not over-stepping their mandates.
- Offer examples of successful ethics submissions online.
- Create, and share, as broad a range as possible of knowledge exchange tools, including tactics known to be successful.

2. FINDINGS | COMMUNICATION

Research Western’s communication efforts produced a range of responses, from practical (how, what and how often we should communicate with the community), to marketing (that we need to do a better job telling our research story) to feelings elicited by messages we often communicate, intentionally or not.

Researchers noted they receive repeated messages through deans, chairs, research officers and Research Western, and have, by and large, indicated they are more interested in hearing about timelines than funding opportunities: “I can’t remember a single grant I applied for from an email.” As a means of decreasing the volume of email communication, it was suggested we limit grant opportunity notifications to those falling outside the normal stream of consciousness (i.e., one-offs). Overall, however, the vast majority of participants indicated email remains the preferred method of contact, while a significant population indicated they also value in-person or telephone interaction.

Researchers challenged us to consciously transition our internal and institutional messaging to ensure we celebrate more than grants and funding amounts: “Messaging seems to be around money, not how to build a project.” Many scholars, particularly those who do not rely on large sums of funding to undertake their research, reported they do not identify with, or feel included in, the university’s research story: “It feels like we don’t help unless (we’re) bringing in the big money.”

Additional Community Recommendations:

- Some faculties requested we videotape workshops; others would prefer to see PowerPoint slides or bulleted information.
- Develop an internal strategy for scholarly communications.
- Meet with new scholars one-on-one during their first month to outline what we do at a high level, and how we can support them in establishing their research programs.
- As everything is run on a shoestring, help disseminate concerts (e.g., can we live-stream them through an easy-to-find portal?)
- Find better ways to disseminate information (e.g., can it be customized or created as a once-weekly digest?)
- Create a series of five-minute YouTube videos about knowledge exchange (e.g., here is how to microblog).
- As new faculty members do not know whom to ask about services, create a mentorship system.
- Better articulate what grant support we can provide the Faculty of Arts & Humanities, which lacks a research officer.
- As the relationship between research officers and Research Western is unclear, develop a communication plan for how and when researchers are to approach each spoke in the process.
- Update the website as it contains too much stale information and unnecessary pages, including presentations that are just regurgitations of materials available elsewhere on the internet.

3. FINDINGS | EXTERNAL GRANTS & FUNDING

The academic community requested additional outreach and grant-writing support, including more “boots on the ground” to help obtain quotes, prepare budgets and show what might be possible with opportunities for funding, knowledge exchange, technology transfer, etc. Many researchers reported they believe these supports are only available for large-scale grants with high monetary value.

Participants across disciplines also reported a need for more formal processes to help develop research programs at the beginning of a scholar’s career, and for reviewing unsuccessful proposals. Further, several participants recommended Research Western coordinate sessions with faculty who have served

on committees and review panels for all major funding sources. Participants felt these various forms of feedback could help improve their chances of success in the future.

Most strongly articulated in STEM engagement sessions was the impression Western lacks vision for long-term support of research infrastructure: “There appears to be pressure to go for larger (CFI) JELFs than is necessary, with more bells and whistles than required for impactful research.” We were told numerous times the university is seen as “just trying to meet an opportunity,” where “researchers are thrown together for things like CFI,” without a longer-term plan for how programs will be built from the ground up or supported once project funding has ended. Participants reported these factors have left them committing their energies not to the ground-breaking research their labs enable, but to business development efforts that sustain them.

We also heard “there’s no incentive to get big grants in a lot of cases as it creates a lot more work – it’s problematic that we feel the need to apologize to administration (e.g., support staff) for all the extra work that will be caused.” SSHRC-discipline researchers, in particular, pointed to the lack of opportunities for teaching buyout as working against their willingness to “go through the hassle” of applying for funding. They also reported they felt grant opportunities set up to support large cohorts of HQP were not well-suited to their research practice as many work independently from projects their graduate students are pursuing. Given this practice, it has become increasingly difficult to apply for grants where they need to show intersection between their own scholarship and scholarship of their HQP.

Additional Community Recommendations:

- Provide additional grant-writing support – professional writers who can produce better results, faster – and offer detailed feedback on proposals, including reviews with a multidisciplinary eye.
- Develop better onboarding and mentorship processes for new faculty, graduate students and postdoctoral scholars that include sitting down face-to-face to set them on the path to success.
- Offer better support for building toward larger grants, particularly for early career investigators (e.g., two-day writing workshops, which could potentially be recorded).
- Coordinate formal sessions with review committee members for all major funding sources to provide valuable inside information to which scholars don’t currently have access.
- Provide centralized expertise with all three councils to help researchers avoid the “kiss of death” on multidisciplinary grant applications as many have challenges attracting Tri-Council funding.
- Use machine learning or a dedicated information-retrieval staff member to mine successful and unsuccessful grants to identify patterns and potential opportunities for developing collaborations.

- Create a pool of reviewers, particularly for interdisciplinary studies.
- Develop mechanisms for communicating funding opportunities a year or two ahead of time.
- Look at how to better fold graduate and postdoctoral scholar funding into research grants.
- Provide a role that helps develop interdisciplinary partnerships and relationships with industry, particularly for matching funds (e.g., MITACS, which also adds value for HQP development).
- Provide more systematic, targeted means of finding funding, as current emails and ROLA are unhelpful (e.g., “When the list leads with Alzheimer’s and you see a long list, you quit looking”).

4. FINDINGS | INTERNAL FUNDING MECHANISMS

Across disciplines, participants indicated Western’s internal funding models are insufficiently flexible to facilitate success (particularly for early and mid-career academics), too focused on CVs, rather than a given project’s merit, and too-closely follow the Tri-Council model: “We still need more bridge and seed-type grants, but with 900 tenured faculty on campus, conditions for internal grants are too restrictive.” The overwhelming sentiment is internal programs should be scaled to discipline-specific research practice, not external grants. Feedback received during our member-checking exercise, however, indicated these views are not unanimous, and that some faculties already tailor these funds according to their specific needs.

Participants also reported that the biomedical model of continuous funding has been unrealistically applied to SSAH disciplines. Instead, researchers in these faculties suggested current programs be tailored according to research practice and transitioned to broader, smaller internal grant programs (e.g., \$5-10K). As well, many scholars recommended these programs be decoupled from Tri-Council requirements to accommodate travel (e.g., for archives, dissemination), equipment, speakers, etc.: “I see these small grants as integral; you pay me 40 per cent to teach and don’t expect me to buy the classroom, or the lectern,” offered one participant. Many indicated they have been self-funding many of these activities, which is becoming untenable: “If you don’t need a lot of money, sometimes you fall between the cracks.”

As part of this process, some participants recommended reframing questions about internal funding to ask: “What do you need money for, and when?” and “What don’t you need money for?” Responses would help identify general patterns that could be applied to small funds that may not be in SSHRC-friendly areas, but would facilitate research production and dissemination efforts.

Similar concerns exist in STEM disciplines, where there was an overwhelming call for small, reliable grants – rather than deep investments in narrow areas – to provide credible support for bottom-up research: “We don’t need to be told to innovate – it’s what we do as scientists.”

Many of these facilitated discussions related to macro-level concerns, which highlighted a very real anxiety about the future of research programs where academics are unsuccessful at obtaining funding – which is occurring with greater frequency given increased competition for limited funds. “We shouldn’t let good scholars fall by the wayside at a research-intensive university,” we were told. “Labs are closing because nobody wants to maintain them financially – we focus on getting, rather than sustaining.” We were also challenged to think about what it would mean as an institution to help support an “unfunded research program” – specifically, how we could provide services that support both funded and non-funded academics in their pursuit of research.

Additional Community Recommendations:

- Scale support to include smaller grants that consider how to “get people back into the game,” or “get them into it in the first place.”
- In SSAH disciplines, replace current small-grant programs with guaranteed research funding that operates like PER (e.g., \$4K, forfeited if you receive a big grant) to improve productivity.
- Subsidize animal costs, which many universities do.
- Provide better clarity and instruction around internal program eligibility.
- Availability of internal funding for non-traditional research activities that fall between the cracks of the Tri-Council purview (e.g., activities related to music production, including recording, editing and delivery).

5. FINDINGS | PROMOTING A STRONGER RESEARCH CULTURE

To reach objectives set out in [Achieving Excellence on the World Stage](#), participants told us the university must help foster a better research culture from the ground up, including by providing better support for undergraduate, graduate and postdoctoral research: “We need to better engage undergrads in research and reduce the marginal costs of engaging with (them) to create a community.” One suggestion for structurally supporting undergraduate students was to mimic a program at the University of Auckland, which provides a thousand summer internships annually. The university has found most students, in turn, return for graduate school. A significant related concern voiced across engagement sessions, however, was the increased administrative burden of mentoring student research projects.

Several poignant discussions attempted to determine what research practice should in fact look like in the modern university, and how to find ways to develop policies that do not constrain scholarship. While participants reported administrative burden associated with grants, ethics, compliance, etc. has led to changes in scholarly practice, this reality also reflects, in many ways, ongoing shifts in Canada’s

research landscape. For many, the big question has become about not having enough hours in the day: “We need time to think and write, not necessarily money.”

Many participants also communicated that, while there is an appreciation for the importance of interdisciplinary research, there is also a general feeling funding models and journals tend to get in the way of conducting interdisciplinary research effectively. While representatives of one faculty indicated interdisciplinary research must develop organically, most felt Research Western could add value by providing better support. It was noted, however, these efforts must be backed by a strong strategy.

One specific suggestion involved having a coordinator within Research Western who is knowledgeable about the breadth of work underway within – and external to – the university who could provide support by doing much of the legwork to establish connections and help introduce cross-disciplinary teams. Another suggestion involved implementing software that not only stores what researchers are working on, but uses machine learning to identify complementary work campus-wide (e.g., searching by method, population, research, etc.), making it easier for scholars to connect.

Overall, as previously discussed, there continues to be a feeling of disconnect between STEM and SSAH disciplines: “Structures are set-up to steer people in certain areas.” As one participant noted: “Performance doesn’t always fit that box and it sidetracks us from the purpose – I don’t need that much money, so it distracts us from what we want to do – make music.” We were told including formal recognition of creativity as a research output in the next strategic research plan, and creating a fund to support creative activities, would be appreciated steps for scholars in creativity-based disciplines.

Additional Community Recommendations:

- Create a “Test your Theory” event like the Three-Minute Thesis for researchers that includes a five-minute pitch to a multidisciplinary review panel. (Research Western would then work to identify opportunities for funding, partnerships, dissemination, etc.)
- Provide better access to information about residencies, fellowships and sabbatical opportunities, ensuring relevance to career stage.
- Compile best practices for Research Gate, and maximize participation in tools like Google Scholar.
- Use an information systems-driven approach to develop a searchable database (e.g., using Watson) to help scholars learn what colleagues do and increase opportunities for collaboration.
- Create a Research Incubator/Accelerator where people feel excited about engaging in interdisciplinary research, or hold semi-regular networking receptions to foster collaboration and awareness of research across campus.
- Provide assistance for partnership-development activities (e.g., with communities, academics), to benefit interdisciplinary grant applications, community-engaged scholarship and knowledge exchange opportunities.
- Provide undergraduate research fellowships, which could see students partnered with a local community organization (there is no equivalent to the NSERC program for SSAH).
- Review policies related to research-eligibility of limited duties academics.

CONCLUSION

While many concerns voiced during these consultations reflected larger trends and challenges that extend beyond the institution’s control – particularly insofar as they relate to funding, staff complements and increased compliance requirements – participants offered practical solutions and novel ideas that may be applicable to Research Western’s service offerings. In fact, despite researchers’ identified challenges with specific units and frustrations with what was described as an “ever-increasing administrative burden,” feedback was constructive and positive, and expressed an appreciation for the opportunity to engage in consultation and provide input. For instance, one participant remarked that “having come from [an international context], I think the level of research support here is outstanding.”

From this process, we found faculty interaction with Research Western is currently limited by an overall lack of awareness of services provided, and tends to be based predominantly on an as-needed basis. This is particularly the case for the contracts research team and WORLDiscoveries, which were often identified as being part of a research process, but not elements of a researcher’s strategic project

planning. Additional in-person attempts to build relationships, paired with a concerted effort to better communicate services – including their benefits to researchers – could help narrow this gap.

As previously outlined in the [URB Social Sciences, Arts, and Humanities Task Force Report](#) (2015-16), there exists a growing disconnect between research practice in SSAH and STEM disciplines, and opportunities afforded each (funding, promotion, etc.). Scholars expressed frustration with the application of biomedical funding models (e.g., continuous, escalating funding, as opposed to smaller, project-based one-off funding) to SSAH research. This sentiment extended to the current portfolio of internal funding programs, which – while developed by SSAH Associate Deans (Research) – many researchers felt do not align with the needs, or research practice, of most researchers in social sciences, arts and humanities-based disciplines: “The research office should embrace our culture, not vice-versa.”

It is the authors' belief that, through more and ongoing consultation, the institution can develop a better understanding of the roots of many of these overarching reported issues, and the unique needs and cultures of each faculty. If we are to stay ahead of the curve and adapt to external pressures – not to mention reach objectives set out in *Achieving Excellence on the World Stage* – we must continue to work together to develop proactive solutions that take current, and future, realities into consideration.

We are extremely grateful for the time, active discussion and candour afforded us by the research community throughout these sessions. It is our intention to engage Research Western colleagues and senior administrators to not only identify opportunities to operationalize some of these recommendations, but to implement mechanisms that ensure we continue to solicit input from the academic community. This effort reflects a significant shift in the department's approach to service provision, and offers an important first step toward developing a methodology for evidence-based decision-making that sees our constituents contribute to, *and shape*, our mandate.

A Strategic Research Inventory

Purpose

To create an inventory of existing research endeavours and collaborations, and future research aspirations, at Western University through a bottom-up, faculty-led, process.

This inventory will provide a broad, self-reported, 'snapshot' of the state of the research endeavour at Western in anticipation of the need to inform a new cohort of senior leaders.

Process

Via an institution-wide communications process, all faculty members, including academic librarians, at Western will be invited to submit a one-page *Personal Research Inventory* articulating:

- The areas of research in which they are currently active
- Significant research collaborations (and, where appropriate by discipline, public and private-sector partnerships) at Western, in Canada, and internationally.
- Their research aspirations for the future. What fields do they see themselves engaged in over the next 10 years?

An example personal research inventory will be provided for consideration as a template.

Inventories will be submitted to the faculty member's department chair by [end of December 2017].

Each department chair will be asked to read the submissions from their faculty members and, with the help of their leadership team, synthesize a *Departmental Research Inventory* addressing the three areas of: **existing strength, collaborations, and future aspirations**. This document should be no longer than 5 pages.

Department chairs will submit their *Departmental Research Inventory*, along with all submitted *Personal Research Inventories* as an appendix, to their Dean by [End of March 2017].

Deans, along with their leadership teams, will create a *Faculty Research Inventory* addressing faculty-level strengths, collaborations and aspirations. Departmental and Personal inventories will be included as an appendix and submitted to the Vice-President, Research by [end of August 2017].

A committee composed of:

- The Vice-President, Research
- Associate Vice-Presidents, Research
- Vice/Associate/Assistant Deans, Research
- Associate Vice-Provost, Graduate Affairs
- Associate Chief Librarian.

will prepare an institutional *Strategic Research Inventory* articulating the greatest areas of existing strength, our most significant partnerships, and our collective research aspirations.

Additional notes

Data Use

The data gathered during this process will be entered into a searchable unstructured text database for future use by research stakeholders at Western. Text analytics will be employed to identify major themes, and extract important relationships, in the submitted inventories.

Comms Plan

- Dedicated web page outlining objectives
- UWOFA newsletter
- President's update
- Ask deans/ADRs to present at faculty councils
- Banner on webpage, with link to dedicated information page
- Article in Western News (sharable by researchers)
- Bi-weekly ad in the Western News, as necessary.

Consult with

- ADRs
- Deans
- Dept chairs (via deans)
- Provost and Vice-Provost(Faculty)
- UWOFA
- President

Western Research

RESPONSE TO THE REPORT OF THE URB TASK FORCE STEERING COMMITTEE
SUPPORT FOR RESEARCH IN SOCIAL SCIENCES, ARTS, AND HUMANITIES AT WESTERN

Appendix 3 | Inventory of Available Software Research Tools

January 2018

SENDER DEPARTMENT/ FACULTY	SOFTWARE REQUESTED	Existing Site License?	COMMENTS/NOTES
EDUCATION	Nvivo		we centrally fund through a large volume license agreement
EDUCATION	SPSS	\$130 per license, \$25 for initial software download	we centrally fund up to 20 licenses per year
EDUCATION	R		funded through research grants
EDUCATION	Comprehensive Meta Analysis		funded through research grants
EDUCATION	Atlas.Ti		funded through research grants
LAW	SPSS	\$130 per license, \$25 for initial software download	
LAW	Qualtrics	\$3000 per unit	\$3000/year cost to the Faculty was prohibitive. If Western was fully absorbing the cost we might have ended up using it instead of Survey Monkey
LINGUISTICS	Endnote		
LINGUISTICS	Atlas.Ti		
ANATOMY/ CELL BIO	Graphpad Prism		statistics and graphing program. It's not as good at stats as SPSS but it is very popular with grad students and researchers because it is easy to use, allows you to do most stats that you will ever need and create graphs showing the results.
ANATOMY/ CELL BIO	Adobe Acrobat Pro		need to fill or create pdf forms. Easily done with acrobat pro, nearly impossible to do with the free version
ANATOMY/ CELL BIO	Corel Draw		Photo edit
ANATOMY/ CELL BIO	Adobe Illustrator		Photo edit
ANATOMY/ CELL BIO	Photoshop		Photo edit
OTOLARYNGOLOGY	REDCap		
OTOLARYNGOLOGY	SAS	YES	

OTOLARYNGOLOGY	SPSS	\$130 per license, \$25 for initial software download	
OTOLARYNGOLOGY	Adobe Acrobat DC		
OTOLARYNGOLOGY	TreeAge		simulation modeling (i.e. Markov modeling for long-term cost trajectories for cost-effectiveness/cost-utility analyses)
OTOLARYNGOLOGY	R		
OTOLARYNGOLOGY	Gpower		
OTOLARYNGOLOGY	Praat		
OTOLARYNGOLOGY	TreeAge		
PSYCHOLOGY	SPSS	\$130 per license, \$25 for initial software download	Provided through Fac. Soc. Sci
PSYCHOLOGY	EQS		Provided through Fac. Soc. Sci
PSYCHOLOGY	Mplus		Provided through Fac. Soc. Sci
PSYCHOLOGY	Qualtrics	\$3000 per unit	Provided through Fac. Soc. Sci
PSYCHOLOGY	Amos		Provided through Fac. Soc. Sci
PSYCHOLOGY	Matlab	YES	Provided through Fac. Soc. Sci
PSYCHOLOGY	Adobe Acrobat Pro		Provided through Fac. Soc. Sci
PSYCHOLOGY	HLM		Provided through Fac. Soc. Sci
PSYCHOLOGY	EndNote		Psychology Researchers using Grant Funding
PSYCHOLOGY	Latent Gold		Psychology Researchers using Grant Funding
PSYCHOLOGY	Mplus		Psychology Researchers using Grant Funding
PSYCHOLOGY	Nvivo		Psychology Researchers using Grant Funding
PSYCHOLOGY	Adobe Acrobat Pro		Psychology Researchers using Grant Funding
PSYCHOLOGY	STATA		Psychology Researchers using Grant Funding
PSYCHOLOGY	AMI Action 4		Psychology Researchers using Grant Funding
PSYCHOLOGY	AMI Actioin W		Psychology Researchers using Grant Funding
PSYCHOLOGY	Cyberlink Powerdirector		Psychology Researchers using Grant Funding

PSYCHOLOGY	SNAP		Psychology Researchers using Grant Funding
PSYCHOLOGY	MS Visio		Psychology Researchers using Grant Funding
PSYCHOLOGY	SPSS	\$130 per license, \$25 for initial software download	Psychology Researchers using Grant Funding
PSYCHOLOGY	Eprime		Psychology Researchers using Grant Funding
PSYCHOLOGY	Brain Voyager		Psychology Researchers using Grant Funding
PSYCHOLOGY	Superlab		Psychology Researchers using Grant Funding
PSYCHOLOGY	Vpixx		Psychology Researchers using Grant Funding
PSYCHOLOGY	Graphic Converter		Psychology Researchers using Grant Funding
PSYCHOLOGY	Graphpad Prism for Mac		Psychology Researchers using Grant Funding
PSYCHOLOGY	Raven Pro		Psychology Researchers using Grant Funding
PSYCHOLOGY	Papers 3		Psychology Researchers using Grant Funding
PSYCHOLOGY	Maplesim		Psychology Researchers using Grant Funding
PSYCHOLOGY	Comprehensive Meta-analysis (CMA)		Psychology Researchers using Grant Funding
PSYCHOLOGY	Noldus Face Reader		Psychology Researchers using Grant Funding
PSYCHOLOGY	Adobe Creative Suite		Psychology Researchers using Grant Funding
PSYCHOLOGY	Adobe Photoshop		Psychology Researchers using Grant Funding
PSYCHOLOGY	Netstation		Psychology Researchers using Grant Funding
PSYCHOLOGY	Adobe Illustrator		Psychology Researchers using Grant Funding
PSYCHOLOGY	Adobe Audition		Psychology Researchers using Grant Funding
PSYCHOLOGY	Paperpile		Psychology Researchers using Grant Funding
PSYCHOLOGY	Slack		Psychology Researchers using Grant Funding
PSYCHOLOGY	Dropbox Business		Psychology Researchers using Grant Funding
PSYCHOLOGY	SONA		Psychology Researchers using Grant Funding
EPIDEMIOLOGY & BIOSTATS	STATA		
EPIDEMIOLOGY & BIOSTATS	STAT-Transfer		
EPIDEMIOLOGY & BIOSTATS	SPSS		
EPIDEMIOLOGY & BIOSTATS	TreeAge		

EPIDEMIOLOGY & BIOSTATS	SAS	YES	
	OTHER SOFTWARE COMMENTS AND FEEDBACK		
EDUCATION	<p>most frequent requests is in the form of a platform for sharing data amongst constituent partners of a research project, both Western-affiliated and external. This item has been the most difficult to fulfill and we do not have a platform that we have collectively settled on. Microsoft Office 365 only partially addresses concerns (external access and US-based provision being the larger remaining concerns).</p>		

BIOTRON	<p>In terms of software, we have various scientific research instrumentation at the Biotron which are manipulated by software; from environmental growth chambers and microscopes to analytical equipment. Although we have purchased the original software for these instruments they are, or will soon be, 10 years in age. And in terms of software, upgrades are required. Not only for the performance of this instruments, but to be compliant with Western's ITS policies</p>		
---------	--	--	--

Western Research

RESPONSE TO THE REPORT OF THE URB TASK FORCE STEERING COMMITTEE
SUPPORT FOR RESEARCH IN SOCIAL SCIENCES, ARTS, AND HUMANITIES AT WESTERN

Appendix 4 | New International Research Networks Award 2017 Report

January 2018

New International Research Networks Award 2017 Report*

AWARD OVERVIEW

The New International Research Networks award was initiated in 2017 as a new award program supported by the Office of the Vice-President (Research). The award aims to promote new collaborations between researchers from Western and their international colleagues. As the rate of growth of human knowledge continues to increase, we have reached an era of necessary hyper-specialization in which international collaboration is an increasingly fundamental enabler of world-class research. Creating opportunities for researchers at Western to interact with colleagues from around the world is of critical importance to our research mission.

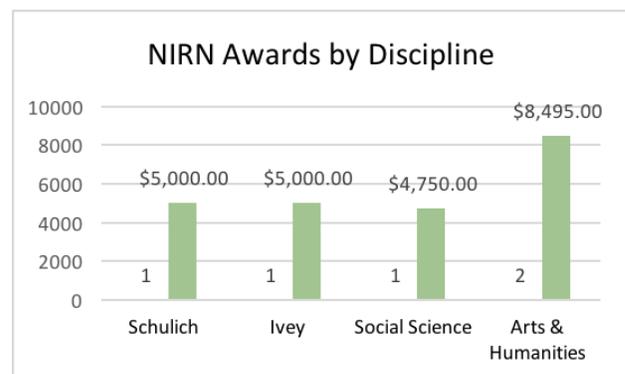
The New International Research Networks award program provides up to \$5,000 to eligible Western Researchers for establishing new international collaborations. These funds are intended to address the logistical costs incurred during the initial process of setting up a collaborative research project such as travel, communications costs, and/or small scale exploratory research.

AWARDED RESEARCH FUNDING

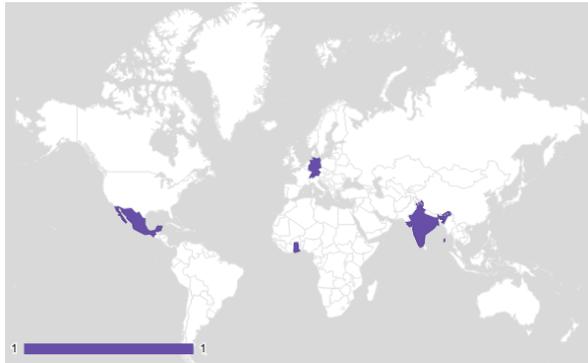
In 2017 (from February to September), Western faculty submitted **5** applications for funding from this program. The total program budget for FY2017 was set at \$15,000 (since this was a new program and we had no history of average application rates, the budget was tentatively set at this amount). **Five** research grants were successful and the total awarded for these grants was **\$23,245**. The average grant amount awarded was **\$4,649**.

5 grants = \$23,245

Five New International Research Network awards were awarded to faculty in the following disciplines: psychiatry (1), business (1), psychology (1), philosophy-linguistics (1), and modern languages and literature-film studies (1).



INTERNATIONAL RESEARCH COLLABORATIONS



NIRN program research collaborations include the following international organizations (and area of research):

- Mexico: *The National Autonomous University of Mexico (Neuroscience)*
- Ghana: *University of Ghana (Linguistics)*
- Germany: *Carl von Ossietzky University Oldenburg (Psychology)*
- Switzerland: *University of Zurich (Film studies)*
- India: *National Institute of Mental Health & Neurosciences (Psychiatry)*

SUMMARY OF WESTERN FACULTY PROJECTS

Research Projects Awarded

1. **Aksuya Vasudev**, *Yoga and consciousness in current times: Trumping spirituality over materialism across India and Canada* (\$5,000). **International collaboration:** India
Research area: Integrative medicine including yoga and consciousness studies
2. **Lucas Monzani**, *The physiological correlates of leader character and its influence on power and economic behavior* (\$5,000). **International collaboration:** Mexico
Research area: Psychobiology and neurophysiology

3. **Jessica Grahn**, *The causal role of neuronal oscillations in beat perception as revealed by noninvasive brain stimulation* (\$4,750). **International collaboration:** Germany

Research area: 1) Brain-physiological correlates of cognitive processes such as attention, memory and perception using electroencephalography (EEG), magnetoencephalography (MEG), functional magnetic resonance tomography (fMRI), EEG neurofeedback, eye tracking, neural network simulations and psychophysics. 2) The influence of transcranial alternating current stimulation (TACS) on oscillatory brain activity and whether certain cognitive processes can be modulated by influencing certain frequency bands of brain activity.

4. **Robert Stainton**, *Collaborations in linguistics with University of Ghana School of Languages* (\$3,495). **International collaboration:** Ghana

Research area: Linguistics and philosophy

5. **Constanza Burucúa**, *Latin America in the film festival circuit: Images and ideas in flow* (\$5,000). **International collaboration:** Switzerland

Research area: Film studies - transnational cinemas, world cinema

SUMMARY OF OUTCOMES

*Note this is a preliminary report of the program. Final reports for New International Research Network awards are to be submitted three months after the end date of the award. Award outcome data will be available after final reports are submitted.

Report to Senate from the Board of Governors

Contents	Consent Agenda
Report from the Board of Governors on the January 25, 2018 Meeting	Yes

FOR INFORMATION

Report from the Board of Governors on the January 25, 2018 Meeting

The Board of Governors met on January 25, 2018. Attached is a full list of items received for approval or information from the Board's standing committees and from Senate. Documentation for these items can be found at: http://www.uwo.ca/univsec/pdf/board/minutes/2018/a18jan25bg_full.pdf

The reports and proposals received were standard items of business.

SUMMARY OF AGENDA ITEMS – January 25, 2018 - OPEN SESSION

Adoption of Agenda	ACTION
Report of the President	INFO
Unanimous Consent Agenda – Appendix I	ACTION
Minutes of the Meeting of November 23, 2017	ACTION

Report of the Property & Finance Committee – Appendix II

1. Open Space, Landscape, Mobility Strategy Update	INFORMATION
2. Jaggaer Contract Renewal	INFORMATION
3. J.C. Kennedy Chair in Orthopaedic Surgery – Revised Terms of Reference	INFORMATION
4. Salamander Chair in Environmental Engineering – Revised Terms of Reference	INFORMATION
5. Ancillary Financial Report	INFORMATION
6. Quarterly Ratio Report on Non-Endowed Funds	INFORMATION
7. Investment Committee Membership	INFORMATION
8. Investment Committee Report	INFORMATION
9. Revenues, Expenditures, and Tuition: by Faculty	INFORMATION
10. Annual Report on trademark Licensees doing Business with the Western Book Store	INFORMATION
11. Key Financial Indicators Report as at April 30, 2017	INFORMATION
12. New Scholarships, Awards and Prizes	INFORMATION

Senior Policy & Operations Committee – Appendix III

13. Annual Report of the Code of Student Conduct Cases	INFORMATION
--	-------------

Report of the Audit Committee – Appendix IV

14. Office of the Ombudsperson Annual Review 2016-17	INFORMATION
--	-------------

Fundraising & Donor Relations Committee – Appendix V

15. Fund Raising Activity Quarterly Report to October 31, 2017	INFORMATION
--	-------------

Items Referred by Senate – Appendix VI

16. Report on Faculty Recruitment and Retention	INFORMATION
17. Report of the Academic Colleague	INFORMATION
18. Announcements	INFORMATION

ANNOUNCEMENTS

Contents	Consent Agenda
Election Results – Selection Committee for the President & Vice-Chancellor	Yes

FOR INFORMATION

1. **Election Results – Selection Committee for the President & Vice-Chancellor**

The election results for the members elected to the Selection Committee for the President & Vice-Chancellor are attached as **Appendix 1**.

January 25, 2018

Western University Secretariat
Western University
Room 4101, Stevenson Hall
London, ON
N6A 5B8 Canada

To Whom It May Concern:

The following election results are certified by Simply Voting to have been securely processed and accurately tabulated by our independently managed service.

Respectfully yours,



Brian Lack
President
Simply Voting Inc.

President Selection Committee

Start: 2018-01-23 12:00:00 Canada/Eastern

End: 2018-01-25 12:00:00 Canada/Eastern

Turnout: 83 (83.8%) of 99 electors voted in this ballot.

President Selection Committee - Students

Option	Votes
Erik Mandawe	28 (37.3%)
Yazan Hassan	24 (32.0%)
Robyn Masters	11 (14.7%)
Ariana Magliocco	8 (10.7%)
Ayesha Khanna	4 (5.3%)

VOTER SUMMARY

Total	83
Abstain	8 (9.6%)

President Selection Committee - Administrative Staff

Option	Votes
Louise Koza	57 (72.2%)
Arzie Chant	22 (27.8%)

VOTER SUMMARY

Total	83
Abstain	4 (4.8%)

President Selection Committee - Faculty of Arts and Humanities

Option	Votes
Michael Milde	41 (52.6%)
Bipasha Baruah	24 (30.8%)
Manina Jones	13 (16.7%)

VOTER SUMMARY

Total	83
Abstain	5 (6.0%)

President Selection Committee - Faculty of Health Sciences

Option	Votes
Jayne Garland	44 (55.7%)
Kevin Shoemaker	35 (44.3%)

VOTER SUMMARY

Total	83
Abstain	4 (4.8%)



January 31, 2018

Western University Secretariat
Western University
Room 4101, Stevenson Hall
London, ON
N6A 5B8 Canada

To Whom It May Concern:

The following election results are certified by Simply Voting to have been securely processed and accurately tabulated by our independently managed service.

Respectfully yours,



Brian Lack
President
Simply Voting Inc.

President Selection Committee - Stage 2

Start: 2018-01-29 09:00:00 Canada/Eastern

End: 2018-01-30 20:00:00 Canada/Eastern

Turnout: 78 (78.8%) of 99 electors voted in this ballot.

President Selection Committee

Option	Votes
Michael Milde (Arts and Humanities)	49 (24.4%)
Jayne Garland (Health Sciences)	37 (18.4%)
Audra Bowlus (Soc Sci)	34 (16.9%)
Alison Hearn (FIMS)	32 (15.9%)
Liana Zanette (Sci)	32 (15.9%)
Brent (Ahnungoonhs) Debassige (Education)	17 (8.5%)

VOTER SUMMARY

Total	78
Abstain	0 (0.0%)

