Full Time Undergrad Enrolment November 1 Counts
(Excludes Students on Co-op)
Student Quality – Entering Averages

<table>
<thead>
<tr>
<th>Year</th>
<th>Eng 1</th>
<th>CompSci 1</th>
<th>Tech 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>83.60%</td>
<td>80.88%</td>
<td>78.03%</td>
</tr>
<tr>
<td>2008</td>
<td>84.36%</td>
<td>82.76%</td>
<td>78.74%</td>
</tr>
<tr>
<td>2009</td>
<td>86.46%</td>
<td>83.98%</td>
<td>78.85%</td>
</tr>
<tr>
<td>2010</td>
<td>86.12%</td>
<td>83.62%</td>
<td>78.97%</td>
</tr>
<tr>
<td>2011</td>
<td>85.63%</td>
<td>83.99%</td>
<td>79.48%</td>
</tr>
<tr>
<td>2012</td>
<td>87.30%</td>
<td>86.19%</td>
<td>78.98%</td>
</tr>
<tr>
<td>2013</td>
<td>87.68%</td>
<td>88.35%</td>
<td>80.56%</td>
</tr>
<tr>
<td>2014</td>
<td>89.57%</td>
<td>90.08%</td>
<td>81.37%</td>
</tr>
<tr>
<td>2015</td>
<td>90.08%</td>
<td>89.57%</td>
<td></td>
</tr>
</tbody>
</table>
Graduate FTE (FT = 1, PT = .3)

2015/16 enrolment data will be included when available
Graduate Students
Foreign vs. Domestic

- % Visa
- % Landed Imm
- % Canadian

<table>
<thead>
<tr>
<th></th>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% Visa</td>
<td>43%</td>
<td>45%</td>
<td>41%</td>
<td>39%</td>
<td>41%</td>
<td>38%</td>
<td>41%</td>
</tr>
<tr>
<td>% Landed Imm</td>
<td>21%</td>
<td>21%</td>
<td>20%</td>
<td>18%</td>
<td>16%</td>
<td>14%</td>
<td>12%</td>
</tr>
<tr>
<td>% Canadian</td>
<td>14%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
<td>12%</td>
</tr>
</tbody>
</table>
2015 Enrollment Numbers by Department and Degree

Full Time

- Eng 1
- Chem Eng
- Civil
- CAS
- ECE
- Eng Phys
- SEP
- MSE
- Mech Eng
- Btech (Includes DCP)

Undergraduate

2015/16 graduate enrolment data will be included when available
2015 Enrollment Numbers by Department and Degree

Part Time

2015/16 graduate enrolment data will be included when available
Departmental Distribution of Students

**2009/10**
- 3613 Grad & U/G FTE
- ChemEng, 394, 11%
- Civil, 408, 11%
- CAS, 646, 18%
- ECE, 607, 17%
- Mech, 451, 12%
- MSE, 261, 7%
- EngPhys, 253, 7%
- SEP, 92, 3%

**2014/15**
- 4,336 Grad & U/G FTE
- ChemEng, 466, 11%
- Civil, 443, 10%
- CAS, 781, 18%
- EngPhys, 207, 5%
- ECE, 779, 18%
- MSE, 248, 6%
- Mech, 503, 11%
- BTech, 834, 19%
- SEP, 75, 2%

<table>
<thead>
<tr>
<th>Growth</th>
<th>ChemEng</th>
<th>Civil</th>
<th>CAS</th>
<th>ECE</th>
<th>EngPhys</th>
<th>MSE</th>
<th>Mech</th>
<th>BTech</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18%</td>
<td>9%</td>
<td>21%</td>
<td>28%</td>
<td>-18%</td>
<td>-5%</td>
<td>12%</td>
<td>66%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

Growth: 20%
Co-op Work Terms

Bachelor of Engineering Co-op Work Terms

Bachelor of Technology Co-op Work Terms
## Women in Engineering

<table>
<thead>
<tr>
<th></th>
<th>2014/15</th>
<th>Undergraduate Students</th>
<th>Graduate Students</th>
<th>Faculty FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Canada</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>19.1%</strong></td>
<td><strong>24.0%</strong></td>
<td><strong>13.8%</strong></td>
</tr>
<tr>
<td>Change from prior year</td>
<td>- <strong>0.05%</strong></td>
<td>+ <strong>2.56%</strong></td>
<td></td>
<td>+ <strong>2.99%</strong></td>
</tr>
<tr>
<td><strong>Ontario</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>19.6%</strong></td>
<td><strong>23.8%</strong></td>
<td><strong>14.6%</strong></td>
</tr>
<tr>
<td>Change from prior year</td>
<td>- <strong>1.03%</strong></td>
<td>+ <strong>5.31%</strong></td>
<td></td>
<td>+ <strong>4.29%</strong></td>
</tr>
<tr>
<td><strong>McMaster</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>17.6%</strong></td>
<td><strong>26.5%</strong></td>
<td><strong>12.3%</strong></td>
</tr>
<tr>
<td>Change from prior year</td>
<td>- <strong>5.38%</strong></td>
<td>+ <strong>3.92%</strong></td>
<td></td>
<td>+ <strong>6.96%</strong></td>
</tr>
</tbody>
</table>

Source: NCDEAS Resources Survey 2014
Graduate Studies

- We are focused on recruiting excellent domestic students into our programs, with the aim to increase PhD numbers across the faculty.

- Increase in the minimum remuneration for PhD students announced for Sept 2015, at tuition plus $14,000 up from $17,500.

- We are increasing access to professional skills development by providing more workshops, requiring all incoming students to engage in career planning, and a new Career Development and Relations Manager was hired to build up a work placement option across the faculty.

Program Reviews

- School of Engineering Practice (all programs) is to be reviewed this year.

- Computing and Software and the School of Computational Engineering were reviewed last year; positive reviews to both.
Scholarships – NSERC/OGS

- The OGS and NSERC CGS-M scholarships remain at the awarding university and may not be taken to another by the applicant.

- All applications are ranked by an internal scholarships committee and only a fraction will be approved to be forwarded to NSERC. OGS scholarships will be awarded from the same ranking list.

- The OGS scholarship is changing such that next year the top-up limit will be removed and departments will be free to offer funding that attracts the best students into our programs.
Scholarships – NSERC

- Doctoral scholarship still awarded by Tri-Council committees in a Canada wide competition.

- To improve our numbers of award winners in the faculty, the new Faculty Mentorship website offers tips on increasing the impact of reference letters being written for applicants.

  - 2014 – Engineering received 4 and Science 22
  - 2015 – Engineering received 9 and Science 36
International Scholarships

- Strong pool of international graduate students.
- Supplemented by international scholarships from China Scholarship Council (CSC) and other international agencies.
- Ontario Trillium Awards also available for top international scholars.
Dean’s Bridging Scholarships

- One year of a student’s stipend will be covered for faculty who take a PhD candidate rather than a Masters student on a 3-year research grant.
- Up to 8 awards per year.
- Faculty members apply at the time they are writing their research proposals.
Dean’s Excellence Engineering Doctoral Scholarships

- A three year award to new domestic PhD candidates showing academic and research excellence; minimum value of $127,500 throughout the program.
- Up to 12 awards per year; 6 were awarded for 2015.

6 Scholarships @ $127,500 were awarded for 2015:

- Mark Armstrong – Computing & Software
- Isobel Bicket – Materials Science & Engineering
- Eric Mahoney – Biomedical Engineering
- Sara Rahmani – Chemical Engineering
- Mitchell Robson – Engineering Physics
- Eric Salt – Mechanical Engineering
New Gender Equity in Engineering Travel Award

- The aim is to stimulate energetic graduate students who wish to bring new, innovative ideas to the faculty on the issues of gender equity and equality by providing them with financial assistance while attending conferences or workshops on such issues.

- Four awards, each valued up to $3000 for travel expenses.

- First competition was held November 2014 for conference travel during 2015; two awards were granted.
Dean’s Excellence Entrance Scholarships and Undergraduate Summer Student Research Awards

Dean’s Excellence Entrance Scholarships

- 4 @ $10,000 + 24 @ $7,500 = 28 scholarships awarded on the basis of academic excellence, leadership skills and strong extracurricular and/or community involvement
- ‘Scholars Interview Day’: Visit to campus, interview process and special luncheon

Undergraduate Student Summer Research Awards

- 100 full-time, paid research positions offered to incoming McMaster Engineering undergraduate students to be held from May to August 2016

Hatch Scholarships: 2 @ $48,000
Schulich Leader Scholarships: 2 @ $80,000

RESULT: 44% of the 41 students who accepted the offer of a Scholarship and/or a Research Award were women. The average admissions average for all 41 students was 95.6%.
Engage prospective students with the McMaster Engineering community virtually online, at external events, and on campus through pivotal interactions with faculty, staff and engineering student ambassadors.

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Visits</td>
<td>10,792</td>
<td>19,931</td>
<td>23,393</td>
</tr>
<tr>
<td>Unique Visitors</td>
<td>6,697</td>
<td>13,420</td>
<td>17,291</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total Active Videos</td>
<td>33</td>
<td>38</td>
<td>42</td>
</tr>
<tr>
<td>Total Views</td>
<td>27,819</td>
<td>41,003</td>
<td>65,709</td>
</tr>
</tbody>
</table>
Engage prospective students with the McMaster Engineering community virtually online, at external events, and on campus through pivotal interactions with faculty, staff and engineering student ambassadors.

<table>
<thead>
<tr>
<th>EVENT</th>
<th>2013/2014 – Total No. of Visitors specific to Engineering (campus-wide/overall event)</th>
<th>2014/2015 – Total No. of Visitors specific to Engineering (campus-wide/overall event)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ontario Universities’ Fair</td>
<td>2,160 (121,000)</td>
<td>2,340 (130,000)</td>
</tr>
<tr>
<td>Engineering Olympics</td>
<td>1,495</td>
<td>1,421</td>
</tr>
<tr>
<td>Fall Preview Open Houses</td>
<td>2,010 (8,000)</td>
<td>2,550 (10,480)</td>
</tr>
<tr>
<td>McMaster Engineering Tours</td>
<td>98</td>
<td>187</td>
</tr>
<tr>
<td>May@Mac Open House</td>
<td>508 (7,800)</td>
<td>410 (8,264)</td>
</tr>
<tr>
<td>Grad Studies Fair @ U of T</td>
<td>151 (500)</td>
<td>205 (460)</td>
</tr>
<tr>
<td>Engineering Grad Studies Coffee Houses</td>
<td>128 registered of 150 total</td>
<td>97 registered of 120 total</td>
</tr>
</tbody>
</table>
Engineering Recruitment Office - Outreach & Engagement (cont’d)

Engage prospective students and key influencers (parents and high school teachers) with the McMaster Engineering community virtually online, at external events, and on campus through pivotal interactions with faculty, staff and engineering student ambassadors.

<table>
<thead>
<tr>
<th>CAMPAIGN/ACTIVITY</th>
<th>2013/2014 – Total</th>
<th>2014/2015 – Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mail Campaigns to High Schools (Fall &amp; Winter) – Program Guide &amp; Scholarships Poster</td>
<td>1,900</td>
<td>2,147</td>
</tr>
<tr>
<td>E-blast Campaigns</td>
<td>21,811 (e-mails to applicants)</td>
<td>22,903 (e-mails to applicants)</td>
</tr>
<tr>
<td>Mail Campaign to Students who received offer</td>
<td>1,868</td>
<td>1,426</td>
</tr>
<tr>
<td>Phone Inquiries</td>
<td>1,525</td>
<td>1,166</td>
</tr>
<tr>
<td>Facebook Reach (Page Likes)</td>
<td>451</td>
<td>591</td>
</tr>
</tbody>
</table>
Organized **special initiatives** on-campus for target audiences, with a strategic focus on students who have received an offer of admission (March Break Tours; ‘A Day in the Life of a Mac Engineer’; ‘Women in Engineering Discovery Day’; Academic Achievement Reception; Engineering Experience Weekend (EEW); and Scholars’ Interview Day for Dean’s Excellence Entrance & Hatch Scholarships and Undergraduate Research Awards).

<table>
<thead>
<tr>
<th>Intake Year</th>
<th>Fall 2014</th>
<th>Fall 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prospective Students Hosted On-Campus</td>
<td>235</td>
<td>281</td>
</tr>
<tr>
<td>Accepted Offer of Admission</td>
<td>111</td>
<td>137</td>
</tr>
<tr>
<td>Success Metric - Yield</td>
<td>47.2%</td>
<td>48.8%</td>
</tr>
<tr>
<td>Prospective Female Students Hosted On-Campus</td>
<td>50</td>
<td>87</td>
</tr>
<tr>
<td>Accepted Offer of Admission</td>
<td>30</td>
<td>42</td>
</tr>
<tr>
<td>Success Metric - Yield</td>
<td>60.0%</td>
<td>48.3%</td>
</tr>
</tbody>
</table>
Student Experience / Student Engagement

We are preparing engineering students for the 21st century. We are:

**Building Thinkers (new in 2016)**
- Thought Leaders seminar series
- Education for the “Whole Engineer”

**Building Leaders**
- MacChangers / WorldChangers (new in 2015)
- SELECT Leadership Development Series
- Industry-facilitated professional development series, supported by 50 alumni/industry partners

**Building Community**
- Engineering Living Learning Residence Community (new in 2016)
Marketing & Communications

Raising the profile of McMaster Engineering by highlighting research, attracting top tier students and the accomplishments of students, faculty members, alumni and staff are at the core of the Faculty’s communication and marketing efforts.

- More stories were posted to the McMaster Engineering website in 2015 (121 stories) compared to 2014 (45 stories) (January to October). Consumption of news content surged by 63% to 32,670 page views compared to 20,016. We have continued to update the look of homepage, including adding a new carousel, events calendar and social media icons.

- A website redevelopment committee was struck and set the framework for a total redesign for the Faculty website. A website development company has been retained and work will begin early next month.

- The Faculty’s social media presence grew substantially in 2015. The number of Facebook fans has nearly doubled and Twitter followers has increased by 46% in 2015 (January to October).
Marketing & Communications (cont’d)

- Three Faculty Development Academy sessions on media relations and social media were held to train faculty members and staff.
- Faculty and students featured in more than 30 stories in news outlets and more than 230 websites. (Jan to Oct.).
- A monthly Faculty newsletter was launched in July and has grown from 687 subscribers to 1,606 subscribers with an open rate of 32% (industry open average 15%). The newsletter has enabled the Faculty to reach a targeted global audience.

![Bar chart showing open rate and click rate for July, August, September, and October. The open rate ranges from 25% to 40%, with July having the highest open rate at around 35%. The click rate is significantly lower, with values around 10%.
31st Annual

J.W. Hodgins MEMORIAL LECTURE

The Purpose of Higher Education

Dr. Peter Kilpatrick
McCloskey Dean of Engineering, Notre Dame

Tuesday, March 10, 2015
Sanjeev G. Shroff, Distinguished Professor of Bioengineering, University of Pittsburgh - September 2014

Danielle Zyngier, Optimization Specialist, Hatch - October 2014

Tim J. Nohara, President & CEO, Accipiter Radar Technologies Inc. - January 2015

J. Paul Santerre (PhD '90 Chemical Engineering), Professor, Faculty of Dentistry and Institute of Biomaterials & Biomedical Engineering, University of Toronto - March 2015

Ann Cavoukian, Executive Director of the Privacy and Big Data Institute, Ryerson University - April 2015

Raffaella De Vita, Associate Professor, Biomedical Engineering and Mechanics, Virginia Tech. - September 2015


Nicholas Brathwaite (Class of '82) Co-Founder & General Partner at Riverwood Capital - October 2015
Engineering Alumni

Our goals:
- Support McMaster University & the Faculty of Engineering
- Involve Engineering Alumni & Students
- Identify Engineering Alumni Achievements
- Communicate with Engineering Alumni

During 2015:
22 Alumni events
- 457 engineering alumni attended
- 1,572 total attendees, including 85 faculty members

Global Visits
- Hong Kong, San Francisco and Notre Dame University

MacEngineer
- New look
- Sent to over 10,000 alumni

Active Alumni: 16,096
Lost Alumni: 1,294
Active Emails: 11,761
Engineering Alumni (cont’d)

Our graduates
- 18,150 Engineering Alumni, a 5% increase from last year
- 2,613 Alumni have earned more than one Engineering Degree
- 20,753 Engineering Degrees and 799 Bachelor of Technology earned to date

Engineering Alumni Fundraising
- A total of $1,639,011 was given by Engineering Alumni
- 843 Engineering alumni gave
- 131 were first time donors (excludes MacLab)
- The average gift given was $174.77 (excludes 3 large gifts over the $25,000 annual giving threshold)

New initiatives: young alumni professional development events, student-alumni mentoring program
Engineering Alumni (cont’d)

- **Tim Valters**, Mechanical Eng. & Mgmt. ’90 – September 2014
- **Dr. James Cotton**, Professor, Mechanical Engineering – November 2014
- **Dr. Michael Noseworthy**, Director School of Bioengineering – December 2014
- **Dr. Kathryn Grandfield**, Assistant Professor, Materials Science & Engineering – February 2015
- **Dr. Mark Lawford**, Professor, Dept. of Computing & Software – March 2015
- **Dr. Art Heidbrecht**, Director, Walter G. Booth School of Engineering Practice – April 2015
- **Dr. Hubert De Bruin**, Professor, Electrical and Computer Engineering – September 2015
- **Dr. Neslihan Dogan**, Assistant Professor, Materials Science and Engineering – October 2015
Engineering Youth Outreach

Our goals:
- Excite and inform young people (grades 1-12) about science, technology and engineering to inspire them to choose education and careers in STEM disciplines
- Reach out to under-represented youth populations: young women and girls, Aboriginal students, inner-city neighbourhoods
- Offer diverse programming including summer camps, travelling workshops, overnight camps

Our impact - 2015
- 21,307 students through outreach initiatives including
  - 3,768 aboriginal students through travelling workshops
  - 667 Toronto region students through travelling workshops
Engineering Youth Outreach (cont’d)

Our impact – 2015

- 51 Undergraduate McMaster Students gained skills through summer co-op positions
- 53 High School students attended a Junior Counsellor Leadership Conference
- 43 Scholarships for girls in grades 7 to 10
- 2-day STEM Conference (Science, Technology, Engineering and Math) for 136 Aboriginal Students
- Hosted an overnight conference for 47 girls in grades 9 and 10 and provided ten entrance scholarships to McMaster Engineering

New Initiatives in 2015

- Reached 113 students through the Codemakers program for students entering grades 6 to 8
- Reached 60 female students through the Yes SHE Can! program designed for girls entering grades 6 to 8

Won the Readers’ Choice Diamond Award for Best Summer Camp in Hamilton

Watch for these new initiatives: Yes SHE Can Camp, Aboriginal Camp @ McMaster University, Codemaker Camp, additional scholarships for girls, new LEAP streams e.g., Engineering Physics and Codemaker
Faculty and Staff Transitions

Faculty Retirements

Rafik Lotfy, Walter G. Booth School for Engineering Practice

Staff Retirements

Justyna Derkach, Chemical Engineering
Lynn Falkiner, Chemical Engineering
Jozef Verhaeghe, Mechanical Engineering

New Faculty Positions

Jonathan Bradley, Engineering Physics
Greig Mordue, Walter G. Booth School for Engineering Practice and the Department of Economics
Oleg Rubel, Materials Science and Engineering
New Staff Positions

Delica Aguiar - Accounting & Academic Assistant, ECE - November 2014
David Acciaroli - Information Technology Analyst, ECE - November 2014
Michelle Whalen - Administrative Assistant (Academic) II, Chemical - November 2014
Sarah Sullivan - Administrative Assistant (Academic) II, Civil - December 2014
Brennan Conry - Recruiting & Promotion Co-ordinator, Outreach - January 2015
Monique Beech - Marketing & Communications Strategist, Outreach - January 2015
Linda Ellis - Administrative Assistant (Academic) II, Chemical - January 2015
Yvonne Maidment - Administrator, SEP - March 2015
Tina Thorogood - Administrative Co-ordinator, Biomedical - March 2015
Joy Coomber - Financial Administrative Assistant, Engineering - April 2015
Kyla Whelan - Advancement Co-ordinator, Outreach - April 2015
Dan Wright - Electronic Technologist, Mechanical Engineering - May 2015
Hannah Abram - Administrative Assistant (Academic) II, Materials - June 2015
New Staff Positions (cont’d)

Timothy Stephens - Laboratory Technician, Chemical - June 2015
Christine Larabie - Recruiting & Promotion Co-ordinator, BTech - June 2015
Adam Pepler - Career Development & Relationship Manager (Grad) - July 2015
Joel Roelevled - Research Engineer III, Mechanical - September 2015
Zhilin Peng - Research Engineer III, Engineering Physics - September 2015
Valerie Hillman - Recruiting & Promotion Co-ordinator, BTech - September 2015
Louise Gazzola - Experiential Program Co-ordinator, Outreach - October 2015
Cristina Rizzardo - Recruiting & Promotion Co-ordinator, Engineering Physics - October 2015
Daniel Picone - Recruiting & Promotion Co-ordinator, Outreach - November 2015
Melissa Pyefinch - Administrative Assistant, Alumni - November 2015
Approved Faculty FTE (including CLA)

- Engineering
- Vacancy
- Btech
- Btech vacancy

<table>
<thead>
<tr>
<th>Year</th>
<th>Faculty FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006/7</td>
<td>145.5</td>
</tr>
<tr>
<td>2007/8</td>
<td>147.0</td>
</tr>
<tr>
<td>2008/9</td>
<td>144.0</td>
</tr>
<tr>
<td>2009/10</td>
<td>138.0</td>
</tr>
<tr>
<td>2010/11</td>
<td>136.5</td>
</tr>
<tr>
<td>2011/12</td>
<td>142.5</td>
</tr>
<tr>
<td>2012/13</td>
<td>144.5</td>
</tr>
<tr>
<td>2013/14</td>
<td>153.0</td>
</tr>
<tr>
<td>2014/15</td>
<td>158.0</td>
</tr>
<tr>
<td>2015/16</td>
<td>151.0</td>
</tr>
<tr>
<td>2016/17</td>
<td>156.0</td>
</tr>
</tbody>
</table>
2015 Faculty FTE by Department

- Chemical: 17
- Civil: 18.5
- CAS: 22
- ECE: 28
- EP: 16
- MSE: 14.5
- Mechanical: 25
- Btech: 12
- SEP: 2

Color codes:
- Red: CLA
- Light green: Teaching Track/Permanence
- Blue: Tenure/Tenure Track
## Major Research Initiatives – CFI JELF/MRI ORF RI

<table>
<thead>
<tr>
<th>Year</th>
<th>Researchers</th>
<th>Project Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>Tracy Becker and Lydell Wiebe</td>
<td>Next-generation Structure Systems for Seismic Protection of Infrastructure</td>
</tr>
<tr>
<td>2015</td>
<td>Fei Chiang</td>
<td>Infrastructure for Continuous Privacy Preserving, Data Cleaning at the McMaster Data Science Lab</td>
</tr>
<tr>
<td>2015</td>
<td>Qiyin Fang</td>
<td>Intelligent Home Sensors Network for the Elderly</td>
</tr>
<tr>
<td>2015</td>
<td>Kathryn Grandfield</td>
<td>Advanced Characterization of Biomaterials</td>
</tr>
<tr>
<td>2015</td>
<td>David Latulippe</td>
<td>Micro-scale Separations and Analysis Suite (MSAS) for Bio-processing and Environmental Applications</td>
</tr>
<tr>
<td>2015</td>
<td>Stephen Velduis</td>
<td>Hybrid PVD Coating System</td>
</tr>
</tbody>
</table>
NSERC Competition Success Rate

NEW DISCOVERY GRANTS

<table>
<thead>
<tr>
<th>YEAR</th>
<th>McMaster Engineering</th>
<th>McMaster</th>
<th>National</th>
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</thead>
<tbody>
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<td>TOTAL # Requested</td>
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<td>2014</td>
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<tr>
<td>2015</td>
<td>25</td>
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<td>80</td>
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RTI GRANTS

<table>
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<th>2014-2015</th>
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<tr>
<td>Engineering</td>
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<tr>
<td>McMaster</td>
<td>23*</td>
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<td>National average</td>
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<td>Success Rate</td>
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<tr>
<td>Engineering</td>
<td>44%</td>
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<tr>
<td>McMaster</td>
<td>38%</td>
<td>36%</td>
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<tr>
<td>National average</td>
<td>34%</td>
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</table>

*The funding envelope for NSERC’s RTI program was reduced in 2014. Consequently, NSERC gave each university an application quota. McMaster’s quota for the 2015 competition was 23.
Faculty of Engineering - Research Funding

*Other - Crown Corps/APC/Foreign Gov’t/nonprofits/Hospital/other
Faculty Honours Received in 2014

Faculty of Engineering Research Achievement Award
Shiping Zhu, Professor, Department of Chemical Engineering

Faculty of Engineering Teaching Excellence Award
Dan Centea, Program Chair, Department of Automotive & Vehicle Technology, School of Technology

Canada Research Chairs
- Jamal Deen, Information Technology, NSERC
- Younggy Kim, Water and Health, NSERC
- Heather Sheardown, Ophthalmic Biomaterials and Drug Delivery Systems, NSERC
Honorific McMaster Engineering Awards

Distinguished Engineering Professors
Thia Kirubarajan, Professor, Electrical and Computer Engineering - July 1, 2014 to June 30, 2019
Xiaolin Wu, Professor, Electrical and Computer Engineering - July 1, 2014 to June 30, 2019
Igor Zhitomirsky, Professor, Materials Science and Engineering - July 1, 2014 to June 30, 2019

Joseph Ip Distinguished Engineering Fellows
July 1, 2015 to June 30, 2018:
   Tom Adams, Chemical Engineering
   Emily Cranston, Chemical Engineering
   Rong Zheng, Associate Professor, Computing and Software
   Jun Chen, Associate Professor, Electrical and Computer Engineering

July 1, 2014 to June 30, 2017:
   Todd Hoare, Professor, Chemical Engineering
   Andy Knights, Professor, Engineering Physics
   Ray LaPierre, Professor, Engineering Physics

Distinguished Engineering Educator
Nicola Nicolici, Professor, Electrical & Computer Engineering - July 1, 2014 to June 30, 2019
Teaching Awards

- Robert Fleisig, President's Award for Outstanding Contributions to Teaching & Learning
- Michael Justason, MSU Teaching Award
- David Latulippe, MSU Teaching Award
- Lydell Wiebe, MSU Teaching Award
Noteworthy Research Awards

- **Tracy Becker** and **Lydell Wiebe**, $338,561 Canadian Foundation for Innovation Award
- **Ian Bruce**, **Sue Becker** and **Larry Roberts**, $300,000 Canadian Foundation for Innovation Award
- **Fei Chiang**, $49,400 Canadian Foundation for Innovation Award
- **Ken Coley**, **Neslihan Dogan** and **Gordon Irons**, $565,903 NSERC Strategic Project Grant
- **Emily Cranston**, Ontario Early Researcher Award
- **Neslihan Dogan**, $160,000 Canadian Foundation for Innovation Award
- **Qiyin Fang**, $50,000 Ontario Centres of Excellence Grant
- **Carlos Filipe**, **Ali Ashkar** and **Sana Jahanshahi-Anbuhi**, $100,000 Grand Challenges Canada Stars in Global Health
- **Raja Ghosh** and **David Latulippe**, $60,000,000 Network of Centres of Excellence team devoted to cancer research
Noteworthy Research Awards (cont’d)

- **Todd Hoare**, $270,500 NSERC Strategic Project Grant; McMaster University Scholar
- **Adrian Kitai**, $25,000 NSERC Engage Grant
- **Rafael Kleiman**, $120,000 NSERC Discovery Grant and Discovery Accelerator Supplements; $999,850 Canadian Foundation for Innovation-ORF Award
- **Ray LaPierre**, $125,000 NSERC Idea to Innovation Grant
- **David Latulippe**, $80,000 Canadian Foundation for Innovation Award
- **Shinya Nagasaki**, $63,756 NSERC Collaborative Research and Development Grant
- **David Novog**, $150,000 NSERC Collaborative Research and Development Grant
- **Ishwar Puri**, $196,770 Canadian Foundation for Innovation Award
- **Nigel Schofield**, $99,468 Canadian Foundation for Innovation Award
- **Ravi Selvaganapathy**, $200,000 Canadian Foundation for Innovation Award
- **Shahin Sirouspour**, $120,000 NSERC Discovery Grant and Discovery Accelerator Supplements
Professional Associations, Societies & Awards

- Nafia Al-Mutawaly, Mohawk President’s Award
- Gianluigi Botton, Fellow of the American Microscopy Society
- John Brash, Indian Society for Biomaterials and Artificial Organs - Chandra P. Sharma Award
- Ken Coley, Fellow of the Canadian Institute of Mining, Metallurgy and Petroleum (CIM); 2014 Best Paper Award, Canadian Metallurgical Quarterly
- Ken Coley, Gord Irons, Matthew King & Tai Xi Zhu, TMS, Extraction and Processing Division Science Award
- Jamal Deen, President of The Academy of Science, Royal Society of Canada; European Academy of Sciences and Arts
- Antoine Deza, Fields Institute Fellow, University of Toronto
- David Embury, Acta Materialia Gold Medal Award
Professional Associations, Societies & Awards - cont’d

- Ali Emadi, Founding Editor-in-Chief, IEEE Transactions on Transportation Electrification
- Hoda Kamel, Membership Chair for the International True Colors Association Board
- Hassan Kojori, Fellow of the IEEE
- Allan MacKenzie, Professional Manager Designation, Canadian Institute of Management; Certified Human Resources Leader Designation, Human Resources Professional Association
- Resources Leader Designation, Human Resources Professional Association
- Heather Sheardown, Fellow of the Canadian Academy of Engineering
- John Vlachopoulos, Fellow of the Canadian Academy of Engineering; Bruce Maddock Award, Extrusion Division of the Society of Plastics Engineers; SABIC Lectureship Award
- Shiping Zhu, Fellow of the Royal Society of Canada
Staff Awards

- Louise Gazzola, Lynn Stewart and Saiedeh Razavi - Heavy Construction Internship Program, Dean’s Team Excellence Award
- Paul Gatt, Veronika Czerneda Staff Award
- Paula Gremmen, McMaster Health and Safety Award of Excellence
- Doris Stevanovic, McMaster Health and Safety Award of Excellence
- Dan Wright, President’s Award for Outstanding Service
Student Successes

- **Michael Chatzidakis**, University of Notre Dame Undergraduate Nanotech Research Competition, second place
- **Ephrem Chemali** and **Lucas McCurlie**, MATLAB and Simulink Student Design Challenge, second place
- **Michael Diggins**, MAPS Gold Medal
- **Rotimi Fadiya**, Scotiabank Scholar
- **Zuriel Garcia**, William H. Becker Honorary Scholarship, American Railway Engineering & Maintenance-of-Way Association
- **Frances Lasowski**, Claudette MacKay-Lassonde Graduate Scholarship, Canadian Engineering Memorial Foundation
- **Neil MacPhee, Mike Sucharda, Dan Lee Kim, Trevor Reade** and **Matt East**, Troitsky Bridge Competition, second place
- **Andrew Norgate**, MAPS Gold Medal
- **Matthew Pinder**, Iroquois Trophy
- **Brady Semple**, CSME Gold Medal Award
- **Dickson Wong**, Chancellor’s Gold Medal
Applause and Accolades 2015

Dan Centea, Ishwar Puri, Trueman Goba, Sean Donnelly (Shiping Zhu absent)
There were 280 recorded gifts to the Faculty of engineering totalling $3,243,000

- Bot Engineering $650,000 nuclear
- Bob Kulperger $600,000 Student support
- MES $520,000 MacLAB & Hatch Centre
- Engineering Class ’85 Atrium project $300,000
- Hatch $218,000 scholarships
- ArcelorMittal Dofasco $200,000 Chair
- Richard and Kathy Jones $150,000 Scholarships
- Doug Barber $150,000 Building Leaders
- Schulich Foundation $140,000 Scholarships
- Tom Jenkins $100,000 Scholarships
- Don Woods Lectureship $100,000
- Toyota $100,000 Software
- Cam Crowe $75,000 Lab improvements
- PEO Foundation $70,000 Scholarships
- Paul DiNovo $65,000 Scholarship
- Petro Canada $30,000
- Air Liquide $25,000 student support
The Gerald Hatch Centre for Engineering Experiential Learning

- Toronto-based Diamond Schmitt Architects (DSAI) is the Prime Consultant responsible for overseeing the new building.
- Aquicon Construction Co. Ltd. is the general contractor.
- Ground breaking ceremony was held on October 7, 2015. Construction began soon afterward; the building is expected to open by April 2017.
- CFI Research Infrastructure Grant awarded for research on community integrated energy systems and energy harvesting, creating research opportunities for faculty members as well as opportunities for student research and in-class experiential learning.
- Hatch Centre will act as a hub for student clubs, teams, and student-led experiential learning.
Dean’s Advisory Board

- **Douglas Barber**  
  OC (Chair), Gennum Corporation (retired)

- **Erica Barnes**  
  Halsall Associates Ltd.

- **Christine Ermarkaryan**  
  Vice-President/Senior SR&ED Consultant, Global R&D Consulting Group Inc

- **Mike Fielding**  
  Consultant

- **Art Heidebrecht**  
  Director, Walter G. Booth School for Engineering Practice, McMaster University

- **Stephen Howe**  
  Executive Vice President and Chief Technology Officer, Bell Canada

- **Waguih Ishak**  
  Division VP, Research Director, Corning West Technology Center, Corning

- **Linda Javorski**  
  President, Hatch Investments Ltd.

- **Chandra Kudsia**  
  President, Mantrix Inc.

- **Joe Liburdi**  
  President, Liburdi Engineering

- **Robert Magee**  
  Chairman of the Board, The Woodbridge Group
Dean’s Advisory Board – cont’d

- Mike Palmer
  Senior Director, Energy & Raw Materials, Agrium

- Angela Pappin
  Vice President Technology, ArcelorMittal Dofasco

- Michael Pley
  Chief Executive Officer, COM DEV International

- James Politeski
  President, Sales & Marketing
  Samsung Electronics Canada Inc.

- Eugene Roman
  Chief Technology Officer, Canadian Tire Corporation

- Colleen Shannon
  Partner, Borden Ladner Gervais LLP

- Howard Shearer
  Chairman, Hitachi Canada Ltd.

- Dr. Kurt A. Stroble
  Chairman of Board, Hatch

- Tony Thoma
  Dean of Engineering Technology, Mohawk College

- Tim Valters
  Consultant
Engineering Operating Spending Distribution
2014-2015 Fiscal Year Total: $53,925,560
(Excludes Specifically Funded)