

Canadian Slice of the 2023 CRA Taulbee Survey

This is the second year that CS-CAN/Info-CAN has made a concerted effort to encourage Canadian institutions to participate in the [Taulbee Survey](#) conducted by the [Computing Research Association](#) (CRA). CRA is an association of more than 250 North American organizations active in computing research, including academic departments of computing; laboratories and centers in industry, government, and academia; and affiliated professional societies (AAAI, ACM, CS-CAN, IEEE Computer Society, SIAM, and USENIX).

Each year, Canadian departments that grant Ph.D.s in computer science (CS), computer engineering (CE), or information (I) are invited to participate in the Taulbee survey. Of the 36 invited departments, 11 participated (31% response rate). For comparison, the response rate of invited U.S. CS departments is 69%.

This year's survey respondents are: Concordia, Dalhousie, Queen's, Simon Fraser, Toronto Metropolitan, Universities of: British Columbia, Manitoba, Saskatchewan, Toronto, Victoria, Waterloo.

This report is a Canadian slice of the 2023 Taulbee Survey (sometimes simply referred to as the Survey), which covers the year from July 1, 2022 to June 30, 2023. This slice incorporates data about Canadian responses that were not included in the 2023 Taulbee Survey report (e.g., information about student and faculty gender and ethnicity, and breakdowns of Canadian PhDs awarded by specialty area).

Table numbers in this report match their counterparts in the Taulbee Survey (for easy cross-reference). Tables in this report will be referred to by their name (e.g., Table B1) whereas the corresponding table in the Taulbee Survey will be prefaced by TS (e.g., TS Table B1). Sometimes the order in which tables are presented in this report has been changed and some tables in the Survey have no corresponding table in this report, usually because the Canadian response rate was too low to provide meaningful data. Finally, all quotes in this report are direct quotes from the 2023 Taulbee Survey report.

Where it makes sense, we have included in this report's tables summaries of US responses to the same questions, for the purpose of comparison with Canadian responses. US responses are shaded in grey to better highlight the Canadian data in the tables.

We thank all the respondents to this year's questionnaire. CS-CAN/Info-CAN hopes that by providing this Canadian slice of the report we can encourage even greater participation by Canadian departments next year. In the near future, CRA will provide an interactive dashboard that will allow a CRA member who completes the Survey to obtain survey results for a small group of a self-selected peer institutions.

Doctoral Program Production, Enrollment, and Employment

“This year’s respondents reported another all-time high doctoral degree production of 2,173 for the 2022-23 academic year”

Table D1 reports on the number of PhDs **awarded** this past year (July 1, 2022 to June 30, 2023), the number of PhDs that are expected to be awarded **next year**, the number of PhD students who passed a PhD **qualifying examination** this past year, and the number of students who passed their **thesis candidacy** exam this past year. “U.S. CS departments at both public and private institutions showed increases; only Canadian departments reported a decline.”

For comparison, data from US institutions is provided but is shaded in grey. Note that the number of PhDs awarded per reporting Canadian department is lower than the number of PhDs awarded per US CS department, despite the reporting Canadian departments having (on average) more research faculty (see Table F1).

Table D1. PhD Production and Pipeline

| Department Type | # Depts | PhDs Awarded | | PhDs Next Year | | Passed PhD Qualifier | | Passed Thesis Proposal | | |
|-----------------|---------|--------------|----------|----------------|----------|----------------------|----------|------------------------|--------|----------|
| | | # | Avg/Dept | # | Avg/Dept | # | Avg/Dept | # | # Dept | Avg/Dept |
| Canadian | 10 | 110 | 11 | 161 | 16.1 | 182 | 18.2 | 132 | 6 | 22 |
| US CS | 115 | 1,883 | 16.4 | 2,207 | 19.2 | 2,379 | 20.7 | 1,566 | 89 | 17.6 |
| US CE | 3 | 76 | 25.3 | 120 | 40 | 121 | 40.3 | 87 | 1 | 87 |
| CS Info | 12 | 104 | 8.7 | 122 | 10.2 | 124 | 10.3 | 168 | 11 | 15.3 |

Table D2 reports the number of PhDs **awarded** this past year by reporting Canadian institutions, disaggregated by **gender**.

The percentage of PhDs awarded to women is on par with the percentage awarded to women at reporting US institutions, suggesting that the representation reported in last year’s report (13.1%) was an anomaly. There remains the concern of a leaky pipeline, as the representation of women **enrolled** in the reporting Canadian PhD programs is persistently higher than the representation of women **graduating** from the reporting Canadian PhD programs (26.1% vs. 22.9%).

Table D2. PhDs Awarded by Gender

| | CS | | CE | | I | | Total | |
|---------------------------|--------------|-------|------------|-------|------------|-------|--------------|-------|
| Canadian | | | | | | | | |
| Men | 84 | 77.1% | 0 | | 0 | | 84 | 77.1% |
| Women | 25 | 22.9% | 0 | | 0 | | 25 | 22.9% |
| Nonbinary/Other | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Total Known Gender | 109 | | 0 | | 0 | | 109 | |
| Gender Unknown | 1 | | 0 | | 0 | | 1 | |
| Canadian Total | 110 | | 0 | | 0 | | 110 | |
| US | | | | | | | | |
| Men | 1,314 | 77.2% | 131 | 78.0% | 101 | 59.4% | 1,546 | 75.8% |
| Women | 387 | 22.7% | 37 | 22.0% | 68 | 40.0% | 492 | 24.1% |
| Nonbinary/Other | 1 | 0.1% | 0 | 0.0% | 1 | 0.6% | 2 | 0.1% |
| Total Known Gender | 1,702 | | 168 | | 170 | | 2,040 | |
| Gender Unknown | 128 | | 2 | | 3 | | 133 | |
| US Total | 1,830 | | 170 | | 173 | | 2,173 | |

Table D3 reports on the number of PhDs **awarded** by reporting Canadian institutions this past year, disaggregated by **ethnicity**. As can be seen, many Canadian institutions are not yet collecting this information. For the the purpose of comparison, we provide the full Taulbee Survey data about the ethnic backgrounds of PhD students.

We hope that, in the near future, the Taulbee survey will be able to rephrase the questions related to ethnicity (in the survey links shared with Canadian institutions) to be more in line with the ethnic categories used in Canadian surveys.

Table D3. PhDs Awarded by Ethnicity

| | CS | | CE | | I | | Total | |
|--|--------------|-------|------------|-------|------------|-------|--------------|-------|
| Canada | | | | | | | | |
| International Student (study visa) | 22 | 59.5% | 0 | | 0 | | 22 | 59.5% |
| Amer Indian or Alaska Native | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Asian | 4 | 10.8% | 0 | | 0 | | 4 | 10.8% |
| Black or African-American | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Native Hawaiian/Pac Islander | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| White | 10 | 27.0% | 0 | | 0 | | 10 | 27.0% |
| Multiracial, not Hispanic | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Hispanic, any race | 1 | 2.7% | 0 | | 0 | | 1 | 2.7% |
| Total Residency & Ethnicity Known | 37 | | 0 | | 0 | | 37 | |
| Resident, ethnicity unknown | 17 | | 0 | | 0 | | 17 | |
| Residency unknown | 56 | | 0 | | 0 | | 56 | |
| Canada Total | 110 | | 0 | | 0 | | 110 | |
| Taulbee | | | | | | | | |
| Nonresident alien | 987 | 66.2% | 61 | 56.5% | 90 | 55.2% | 1,138 | 64.6% |
| Amer Indian or Alaska Native | 2 | 0.1% | 1 | 0.9% | 0 | 0.0% | 2 | 0.1% |
| Asian | 149 | 10.0% | 16 | 14.8% | 15 | 9.2% | 180 | 10.2% |
| Black or African-American | 18 | 1.2% | 2 | 1.9% | 7 | 4.3% | 27 | 1.5% |
| Native Hawaiian/Pac Islander | 1 | 0.1% | 1 | 0.9% | 0 | 0.0% | 2 | 0.1% |
| White | 293 | 19.7% | 26 | 24.1% | 44 | 27.0% | 363 | 20.6% |
| Multiracial, not Hispanic | 9 | 0.6% | 0 | 0.0% | 3 | 1.8% | 12 | 0.7% |
| Hispanic, any race | 32 | 2.1% | 1 | 0.9% | 4 | 2.5% | 37 | 2.1% |
| Total Residency & Ethnicity Known | 1,490 | | 108 | | 163 | | 1,761 | |
| Resident, ethnicity unknown | 62 | | 3 | | 6 | | 71 | |
| Residency unknown | 278 | | 59 | | 4 | | 341 | |
| Taulbee Total | 1,830 | | 170 | | 173 | | 2,173 | |

Table D4a reports on the **employment destination** of those PhDs who graduated in the past year from reporting Canadian institutions and who went to North American **industry**.

Table D4a. Details of Industry Employment

| | Artificial Intelligence / Machine Learning | Computer-Supported Coop Work | Computing Education | Databases / Information Retrieval | Graphics / Visualization | Hardware / Architecture | High Performance Computing | Human-Computer Interaction | Informatics: Biomedical / Other Science | Information Science | Information Systems | Networks | Operating Systems | Programming Languages / Compilers | Robotics / Vision | Scientific / Numerical Computing | Security / Information Assurance | Social Computing / Social Informatics / CSCW | Software Engineering | Theory and Algorithms | Other | Unknown | Total | |
|------------------------------|--|------------------------------|---------------------|-----------------------------------|--------------------------|-------------------------|----------------------------|----------------------------|---|---------------------|---------------------|----------|-------------------|-----------------------------------|-------------------|----------------------------------|----------------------------------|--|----------------------|-----------------------|----------|----------|-----------|--------|
| Inside North America | | | | | | | | | | | | | | | | | | | | | | | | |
| Research | 13 | 0 | 0 | 2 | 2 | 0 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 26 | 78.8% |
| Non-Research | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 6 | 18.2% |
| Postdoctorate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| Type Not Specified | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 3.0% |
| Total Inside NA | 13 | 0 | 0 | 6 | 2 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 1 | 1 | 0 | 2 | 33 | |
| Outside North America | | | | | | | | | | | | | | | | | | | | | | | | |
| Research | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | 100.0% |
| Non-Research | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| Postdoctorate | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| Type Not Specified | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0% |
| Total Outside NA | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 2 | |

Table D5 reports the numbers of newly **admitted** PhD students in the past year, and the proportion of **international students**. For comparison, data from US institutions is provided but is shaded in grey.

“The number of reported new Ph.D. students per department increased by 15 percent this year compared with last year’s reporting departments U.S. CS departments at both public and private institutions showed increases; only Canadian departments reported a decline” (compared to last year’s report of 22.2 new PhD students per Canadian department).

Table D5. New PhD Students

| Department Type | CS | | | | CE | | | | I | | | | Total | |
|-----------------|-----------|-----------|-------|----------------|-----------|-----------|-------|----------------|-----------|-----------|-------|----------------|-------|----------------|
| | New Admit | MS to PhD | Total | Avg. per Dept. | New Admit | MS to PhD | Total | Avg. per Dept. | New Admit | MS to PhD | Total | Avg. per Dept. | Total | Avg. per Dept. |
| Canadian | 160 | 34 | 194 | 17.6 | 4 | 3 | 7 | 7 | | | | | 201 | 18.3 |
| US CS | 3,059 | 195 | 3,254 | 26.7 | 81 | 8 | 89 | 5.9 | 79 | 16 | 95 | 8.6 | 3,438 | 27.7 |
| US CE | 0 | 0 | 0 | | 219 | 13 | 232 | 46.4 | 0 | 0 | 0 | | 232 | 46.4 |
| US Info | 18 | 0 | 18 | 9 | 0 | 0 | 0 | | 185 | 1 | 186 | 15.5 | 204 | 17 |

Table D7 reports the number of PhD students **enrolled** in reporting PhD programs in the past year (July 1, 2022 to June 30, 2023), disaggregated by **gender**. The gender representation among enrolled Canadian PhD students is comparable to that in the States.

Table D7. PhD Enrollment by Gender

| | CS | | CE | | I | | Total | |
|---------------------------|---------------|-------|--------------|-------|--------------|-------|---------------|-------|
| Canadian | | | | | | | | |
| Men | 846 | 73.8% | 0 | | 0 | | 846 | 73.8% |
| Women | 299 | 26.1% | 0 | | 0 | | 299 | 26.1% |
| Nonbinary/Other | 2 | 0.2% | 0 | | 0 | | 2 | 0.2% |
| Total Known Gender | 1,147 | | 0 | | 0 | | 1,147 | |
| Gender Unknown | 31 | | 5 | | 192 | | 228 | |
| Canadian Total | 1,178 | | 5 | | 192 | | 1,375 | |
| US | | | | | | | | |
| Men | 12,230 | 74.6% | 1,449 | 80.8% | 798 | 52.6% | 14,477 | 73.5% |
| Women | 4,125 | 25.2% | 344 | 19.2% | 708 | 46.7% | 5,177 | 26.3% |
| Nonbinary/Other | 30 | 0.2% | | 0.0% | 10 | 0.7% | 40 | 0.2% |
| Total Known Gender | 16,385 | | 1,793 | | 1,516 | | 19,694 | |
| Gender Unknown | 1,319 | | 7 | | 221 | | 1,547 | |
| US Total | 17,704 | | 1,800 | | 1,737 | | 21,241 | |

Table D8 reports the number of PhD students **enrolled** in reporting PhD programs in the past year (July 1, 2022 to June 30, 2023) disaggregated by **ethnicity**, as well as the percentage of enrolled **international students**.

Table D8. PhD Enrollment by Ethnicity

| | CS | | CE | | I | | Total | |
|--|--------------|-------|----------|--|------------|--|--------------|-------|
| International Student (study visa) | 131 | 49.8% | 0 | | 0 | | 131 | 49.8% |
| Amer Indian or Alaska Native | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Asian | 79 | 30.0% | 0 | | 0 | | 79 | 30.0% |
| Black or African-American | 1 | 0.4% | 0 | | 0 | | 1 | 0.4% |
| Native Hawaiian/Pac Islander | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| White | 45 | 17.1% | 0 | | 0 | | 45 | 17.1% |
| Multiracial, not Hispanic | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Hispanic, any race | 7 | 2.7% | 0 | | 0 | | 7 | 2.7% |
| Total Residency & Ethnicity Known | 263 | | 0 | | 0 | | 263 | |
| Resident, ethnicity unknown | 122 | | 0 | | 0 | | 122 | |
| Residency unknown | 793 | | 5 | | 192 | | 990 | |
| Grand Total | 1,178 | | 5 | | 192 | | 1,375 | |

Table D11 reports the numbers of PhD students newly **admitted** to reporting Canadian institutions, disaggregated by **gender**.

Table D11. New PhD Admits by Gender

| | CS | | CE | | I | | Total | |
|---------------------------|--------------|-------|------------|-------|------------|-------|--------------|-------|
| Male | 101 | 72.7% | 0 | | 0 | | 101 | 72.7% |
| Female | 38 | 27.3% | 0 | | 0 | | 38 | 27.3% |
| Nonbinary/Other | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Total Known Gender | 139 | | 0 | | 0 | | 139 | |
| Gender Unknown | 13 | | 4 | | 0 | | 17 | |
| Grand Total | 152 | | 4 | | 0 | | 156 | |
| US | | | | | | | | |
| Men | 2,342 | 74.3% | 240 | 79.7% | 190 | 49.9% | 2,772 | 72.3% |
| Women | 801 | 25.4% | 60 | 19.9% | 187 | 49.1% | 1,048 | 27.3% |
| Nonbinary/Other | 10 | 0.3% | 1 | 0.3% | 4 | 1.0% | 15 | 0.4% |
| Total Known Gender | 3,153 | | 301 | | 381 | | 3,835 | |
| Gender Unknown | 214 | | 8 | | 5 | | 227 | |
| US Total | 3,367 | | 309 | | 386 | | 4,062 | |

Table D12 reports on the **ethnicity** of newly **admitted** Canadian PhD students as well as the percentage of admitted **international students**.

Table D12. New PhD Admits by Ethnicity

| | CS | | CE | | I | | Total | |
|--|------------|-------|----------|--|----------|--|------------|-------|
| Nonresident Alien | 20 | 62.5% | 0 | | 0 | | 20 | 62.5% |
| Amer Indian or Alaska Native | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Asian | 8 | 25.0% | 0 | | 0 | | 8 | 25.0% |
| Black or African-American | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Native Hawaiian/Pac Islander | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| White | 4 | 12.5% | 0 | | 0 | | 4 | 12.5% |
| Multiracial, not Hispanic | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Hispanic, any race | 0 | 0.0% | 0 | | 0 | | 0 | 0.0% |
| Total Residency & Ethnicity Known | 32 | | 0 | | 0 | | 32 | |
| Resident, ethnicity unknown | 20 | | 0 | | 0 | | 20 | |
| Residency unknown | 100 | | 4 | | 0 | | 104 | |
| Grand Total | 152 | | 4 | | 0 | | 156 | |

We omit tables that report data about the intersections of gender and ethnicity of PhD awardees, PhD new admits, and enrolled PhD students, due to the shortage of data from Canadian survey respondents.

Master’s Program Production and Enrollment

“This section reports data about enrollment and degree production for master’s programs at doctoral-granting departments.”

Table M1 reports on the number of Master's Degrees **awarded** this past year (July 1, 2022 to June 30, 2023), and **Table M4** reports on the number expected to be awarded **next year**. For comparison, data from US institutions is provided but is shaded in grey.

The numbers of Master’s students in US departments is considerably higher than the numbers in Canadian departments, perhaps because more Master’s programs in the States are professional course-based programs rather than thesis-based programs. It is also the case that the number of students in US Master’s programs “ballooned” in the years after COVID. “Both the total number of master’s degrees produced (40,596) and the average per reporting department (260.1) are more than double those from last year’s report.” “The record production of master’s graduates (in the US) is not expected to continue this year. The CS area forecasts considerably lower degree production for 2023-24 than it experienced in 2022-23.”

The corresponding tables in the Taulbee Survey report the percentages of degree types (CS, CE, Info) awarded by department type (CS, CE, Info); for example, some US Information Systems departments grant Master’s Degrees in Computer Science. Because this happens in too few of the reporting Canadian institutions, we omit these percentages in the tables below.

Table M1. Master’s Degrees Awarded by Department Type

| Department Type | # Depts | CS Degree | CE Degree | Info Degree | Total |
|-----------------|---------|-----------|-----------|-------------|--------|
| Canadian | 11 | 1,014 | 38 | 289 | 1,341 |
| US CS | 127 | 32,834 | 447 | 2,282 | 35,563 |
| US CE | 5 | | 959 | | 959 |
| US Info | 13 | 95 | | 2,625 | 2,720 |

Table M4. Master’s Degrees Expected Next Year by Department Type

| Department Type | # Depts | CS Degree | CE Degree | Info Degree | Total |
|-----------------|---------|-----------|-----------|-------------|--------|
| Canadian | 11 | 985 | 38 | 91 | 1,114 |
| US CS | 113 | 19,931 | 392 | 1,798 | 22,121 |
| US CE | 4 | | 562 | | 562 |
| US Info | 13 | 108 | | 2,738 | 2,846 |

Table M2 reports on the number of Master's Degrees **awarded** by reporting Canadian institutions this past year, disaggregated by **gender**. The representation of women among students awarded Master's degrees in Canada is comparable to that in the States, within each type of degree.

Table M2. Master's Degrees Awarded by Gender

| | CS | | CE | | I | | Total | |
|---------------------------|---------------|-------|--------------|-------|--------------|-------|---------------|-------|
| Canadian | | | | | | | | |
| Men | 344 | 71.7% | 0 | | 60 | 52.6% | 404 | 68.0% |
| Women | 134 | 27.9% | 0 | | 54 | 47.4% | 188 | 31.6% |
| Nonbinary/Other | 2 | 0.4% | 0 | | 0 | 0.0% | 2 | 0.3% |
| Total Known Gender | 480 | | 0 | | 114 | | 594 | |
| Gender Unknown | 534 | | 38 | | 175 | | 747 | |
| Canadian Total | 1,014 | | 38 | | 289 | | 1,341 | |
| US | | | | | | | | |
| Men | 23,622 | 73.1% | 1,007 | 75.3% | 2,490 | 52.4% | 27,119 | 70.6% |
| Women | 8,678 | 26.8% | 331 | 24.7% | 2,257 | 47.5% | 11,266 | 29.3% |
| Nonbinary/Other | 26 | 0.1% | 0 | 0.0% | 2 | 0.0% | 28 | 0.1% |
| Total Known Gender | 32,326 | | 1,338 | | 4,749 | | 38,413 | |
| Gender Unknown | 1,617 | | 106 | | 447 | | 2,170 | |
| US Total | 33,943 | | 1,444 | | 5,196 | | 40,583 | |

Table M3 reports on the number of Master's Degrees **awarded** by reporting Canadian institutions this past year, disaggregated by **ethnicity**. The Table also reports on the percentage of degrees awarded to **international students**. The representation of international students in Canadian Master's programs is considerably lower than that in the US (41.7% vs. 60.4%), perhaps because Canadian Master's degrees are mostly thesis based and are funded primarily by faculty researchers, whereas US Master's degrees are mostly professional and are funded by students.

Table M3. Master's Degrees Awarded by Ethnicity

| | CS | | CE | | I | | Total | |
|--|--------------|-------|-----------|--|------------|--|--------------|-------|
| Nonresident Alien | 30 | 41.7% | 0 | | 0.0% | | 30 | 41.7% |
| Amer Indian or Alaska Native | 0 | 0.0% | 0 | | 0.0% | | 0 | 0.0% |
| Asian | 24 | 33.3% | 0 | | 0.0% | | 24 | 33.3% |
| Black or African-American | 2 | 2.8% | 0 | | 0.0% | | 2 | 2.8% |
| Native Hawaiian/Pac Islander | 0 | 0.0% | 0 | | 0.0% | | 0 | 0.0% |
| White | 15 | 20.8% | 0 | | 0.0% | | 15 | 20.8% |
| Multiracial, not Hispanic | 0 | 0.0% | 0 | | 0.0% | | 0 | 0.0% |
| Hispanic, any race | 1 | 1.4% | 0 | | 0.0% | | 1 | 1.4% |
| Total Residency & Ethnicity Known | 72 | | 0 | | 0 | | 72 | |
| Resident, ethnicity unknown | 32 | | 0 | | 0 | | 32 | |
| Residency unknown | 910 | | 38 | | 289 | | 1,237 | |
| Grand Total | 1,014 | | 38 | | 289 | | 1,341 | |

Table M5 reports the numbers of Master's students newly **admitted** to computing programs in the past year (July 1, 2022 to June 30, 2023), and the proportion of **international students**. Again, the percentage of international students in Canadian Master's programs is significantly lower than in US Master's programs.

Table M5. New Master's Students

| | CS Degree | | | CE Degree | | | Info Degree | | | Total | | | Outside North America | |
|----------|-----------|---------|------------|-----------|---------|------------|-------------|---------|------------|--------|---------|------------|-----------------------|-------|
| | Total | # Depts | Avg / Dept | Total | # Depts | Avg / Dept | Total | # Depts | Avg / Dept | Total | # Depts | Avg / Dept | Total | % |
| Canadian | 967 | 11 | 87.9 | 38 | 1 | 38 | 91 | 1 | 91 | 1,096 | 11 | 99.6 | 426 | 38.9% |
| US CS | 21,878 | 124 | 176 | 365 | 21 | 17 | 1,829 | 20 | 91.5 | 24,072 | 125 | 192.6 | 15,150 | 62.9% |
| US CE | | 0 | | 582 | 5 | 116.4 | | 0 | | 582 | 5 | 116.4 | 413 | 71.0% |
| US Info | 132 | 2 | 66 | 0 | 0 | | 2,651 | 13 | 203.9 | 2,783 | 13 | 214.1 | 1,522 | 54.7% |

Table M8 reports the numbers of Master's students **enrolled** in computing programs in the past year (July 1, 2022 to June 30, 2023), disaggregated by **gender**. As with the PhD programs, the percentage of women **enrolled** in Master's programs is persistently higher than the percentage of women who are **awarded** Master's degrees (30.1% vs. 27.9%), which hints at a leaky pipeline.

Table M8. Master's Enrollment by Gender

| | CS | | CE | | I | | Total | |
|---------------------------|---------------|-------|--------------|-------|---------------|-------|---------------|-------|
| Canadian | | | | | | | | |
| Men | 1,416 | 69.8% | 0 | | 60 | 72.3% | 1,476 | 69.9% |
| Women | 611 | 30.1% | 0 | | 23 | 27.7% | 634 | 30.0% |
| Nonbinary/Other | 2 | 0.1% | 0 | | 0 | 0.0% | 2 | 0.1% |
| Total Known Gender | 2,029 | | 0 | | 83 | | 2,112 | |
| Gender Unknown | 665 | | 155 | | 630 | | 1,450 | |
| Canadian Total | 2,694 | | 155 | | 713 | | 3,562 | |
| US | | | | | | | | |
| Men | 33,769 | 69.5% | 2,194 | 77.4% | 6,787 | 52.4% | 42,750 | 66.4% |
| Women | 14,773 | 30.4% | 639 | 22.6% | 6,163 | 47.6% | 21,575 | 33.5% |
| Nonbinary/Other | 67 | 0.1% | 0 | 0.0% | 5 | 0.0% | 72 | 0.1% |
| Total Known Gender | 48,609 | | 2,833 | | 12,955 | | 64,397 | |
| Gender Unknown | 4,391 | | 156 | | 1,142 | | 5,689 | |
| US Total | 53,000 | | 2,989 | | 14,097 | | 70,086 | |

We omit tables that report data about the ethnicity of students enrolled in Master's degree programs, due to a shortage of data from Canadian survey respondents.

Graduate Student Support

“**Table G1** shows the number of doctoral students supported as full-time students as of fall 2023, further categorized as teaching assistants (TAs), research assistants (RAs), and full-support fellows. The table also shows the split between those on institutional vs. external funds.”

Graduate support is reported in terms of the number of full-time-equivalent (FTE) units of support given over the course of an academic year. Thus, if a student is supported by a combination of research and teaching assistantships over the course of a year, their support might be counted as 0.5 TA and 0.5 RA. The Taulbee Survey collects part-time assistantships into units of FTEs, and it reports the numbers of FTE teaching assistantships, FTE research assistantships, and FTE fellowships awarded. It is unclear whether or how various departments have chosen to report summer support.

Because institutional support provided by private US institutions differs greatly from that provided by public US institutions, we disaggregate these responses.

“**Table G1a** shows similar data for supported master’s students.”

Table G1. Doctoral Student Support, expressed as FTE Units of Support

| Department Type | # Depts | On Institutional Funds | | | | | | On External Funds | | | | | | Total |
|-----------------|---------|------------------------|-------|---------------------|-------|---------------------|-------|---------------------|------|---------------------|-------|---------------------|------|----------|
| | | Teaching Assistants | | Research Assistants | | Full-Support Fellow | | Teaching Assistants | | Research Assistants | | Full-Support Fellow | | |
| Canadian | 7 | 252 | 34.1% | 246.3 | 33.3% | 3 | 0.4% | 0 | 0% | 230.7 | 31.2% | 8 | 1.1% | 740 |
| US CS Public | 85 | 4,265.5 | 38.8% | 1,604.3 | 14.7% | 431 | 3.9% | 1.8 | 0.0% | 4,413.9 | 40.1% | 278 | 2.5% | 10,994.4 |
| US CS Private | 25 | 619.6 | 16.6% | 1,051.6 | 28.2% | 299 | 8.0% | 45 | 1.2% | 1,491.2 | 40.0% | 216 | 5.8% | 3,722.5 |
| US CE | 4 | 142.9 | 17.3% | 52 | 6.3% | 120 | 14.5% | 0 | 0.0% | 494.8 | 59.8% | 18 | 2.2% | 827.7 |
| US Info | 13 | 368.7 | 37.9% | 180.8 | 18.6% | 56.8 | 5.8% | 0 | 0.0% | 327 | 33.6% | 40 | 4.1% | 973.3 |

Table G1a. Master’s Student Support, expressed as FTE Units of Support

| Department Type | # Depts | On Institutional Funds | | | | | | On External Funds | | | | | | Total |
|-----------------|---------|------------------------|-------|----------|-------|--------------|-------|-------------------|------|----------|-------|--------------|------|---------|
| | | Teaching | | Research | | Full-Support | | Teaching | | Research | | Full-Support | | |
| Canadian | 6 | 278.5 | 45.7% | 114 | 18.7% | 0 | 0.0% | 0 | 0.0% | 217 | 35.6% | 0 | 0.0% | 609.5 |
| US CS Public | 62 | 1,844.5 | 71.6% | 199.3 | 7.7% | 20 | 0.8% | 5 | 0.2% | 499.5 | 19.4% | 8 | 0.3% | 2,576.2 |
| US CS Private | 15 | 671 | 86.3% | 33 | 4.2% | 15 | 1.9% | 1 | 0.1% | 49.3 | 6.3% | 8 | 1.0% | 777.3 |
| US CE | 2 | 21.5 | 49.4% | 1 | 2.3% | 12 | 27.6% | 0 | 0.0% | 9 | 20.1% | 0 | 0.0% | 43.5 |
| US Info | 12 | 204.2 | 81.3% | 22.8 | 9.1% | 2 | 0.8% | 0 | 0.0% | 22.3 | 8.9% | 0 | 0.0% | 251.2 |

“Table G2 shows the distribution of stipends for TAs, RAs, and full-support fellows.” Because institutional support provided by private US institutions differs greatly from that provided by public US institutions, we disaggregate these responses. Reported Canadian stipends are lower than amounts reported last year, perhaps because different departments reported this year.

In the tables below, the reported amounts are for full-time-equivalent (FTE) assistantships and fellowships. Thus, if a student is supported by a combination of research and teaching assistantships over the course of a year, their support might be counted as 0.5 TA and 0.5 RA.

The difference between support for students at Canadian departments and support for students at US department is striking – worse, given that for Canadian departments stipends are reported in Canadian dollars, whereas for US departments stipends are reported in US dollars.

Table G2. Fall 2023 Academic-Year Graduate Stipends by Support Type

| Teaching Assistantships | | | | | | |
|-------------------------|---------|-----------------------------------|----------|----------|----------|----------|
| Department Type | # Depts | Percentile of Department Averages | | | | |
| | | 10th | 25th | 50th | 75th | 90th |
| Canadian | 7 | \$5,800 | \$7,026 | \$8,010 | \$11,200 | \$14,143 |
| US CS Public | 92 | \$16,160 | \$19,532 | \$23,000 | \$27,107 | \$29,463 |
| US CS Private | 28 | \$23,121 | \$27,529 | \$33,318 | \$39,654 | \$44,157 |
| US CE | 5 | | | \$26,520 | | |
| US Info | 13 | \$18,400 | \$21,750 | \$25,980 | \$28,558 | \$31,329 |
| Research Assistantships | | | | | | |
| Department Type | # Depts | Percentile of Department Averages | | | | |
| | | 10th | 25th | 50th | 75th | 90th |
| Canadian | 7 | \$6,400 | \$11,454 | \$16,226 | \$20,750 | \$24,900 |
| US CS Public | 92 | \$18,000 | \$20,222 | \$23,741 | \$26,760 | \$31,512 |
| US CS Private | 34 | \$22,609 | \$28,041 | \$36,143 | \$39,885 | \$43,120 |
| US CE | 5 | | | \$26,520 | | |
| US Info | 13 | \$18,400 | \$21,750 | \$25,980 | \$28,558 | \$31,329 |
| Full-Support Fellows | | | | | | |
| Department Type | # Depts | Percentile of Department Averages | | | | |
| | | 10th | 25th | 50th | 75th | 90th |
| Canadian | 5 | \$7,200 | \$9,000 | \$15,116 | \$24,500 | \$30,393 |
| US CS Public | 49 | \$20,600 | \$25,500 | \$30,000 | \$34,000 | \$35,067 |
| US CS Private | 30 | \$27,706 | \$31,134 | \$36,968 | \$39,885 | \$43,669 |
| US CE | 3 | | | | | |
| US Info | 9 | | \$25,980 | \$28,647 | \$31,500 | |

Bachelor's Program Production and Enrollment

Table B1 reports on the number of Bachelor's Degrees **awarded** this past year (July 1, 2022 to June 30, 2023), and the number expected to be awarded **next year**. For comparison, data from US institutions is provided but is shaded in grey. Because of the low response rate from Canadian institutions, it does not make sense to report the percentages of Bachelor's degree students from Canadian vs. U.S. departments. Thus, unlike TS Table B1 in the Taulbee Survey (which reports percentages per department type), the percentages of students earning a CS, CE, or Info degree reported below are with respect to all Bachelor's degree students enrolled in Canadian computing departments (or all Bachelor's degree students enrolled in all U.S. computing departments).

It is worth noting that the reporting Canadian departments award more Bachelor's degrees per department than the reporting US departments; this was true in last year's Survey as well as this year's Survey.

Table B1. Bachelor's Degrees Awarded and Pipeline

| Department Type | # Depts | CS Degree | | CE Degree | | Info Degree | | Total | | Expected Next Year | |
|-----------------|---------|-----------|--------|-----------|-------|-------------|-------|--------|--------|--------------------|----------|
| | | # | % | # | % | # | % | # | % | #Depts | #Degrees |
| Canadian | 10 | 3,737 | 100.0% | | 0.0% | | 0.0% | 3,737 | 100.0% | 8 | 4,624 |
| US CS | 124 | 40,036 | 90.6% | 2,366 | 69.6% | 2,576 | 48.5% | 44,978 | 91.5% | 116 | 38,507 |
| US CE | 5 | | 0.0% | 1,031 | 30.4% | | 0.0% | 1,031 | 2.1% | 5 | 1,055 |
| US Info | 13 | 425 | 1.0% | | 0.0% | 2,739 | 51.5% | 3,164 | 6.4% | 13 | 4,624 |

Table B2 reports on the number of Bachelor's Degrees **awarded** by reporting Canadian institutions this past year, disaggregated by **gender**. The representation of women awarded degrees from reporting Canadian institutions is 0.5% higher than last year and is almost 3% higher than the percentage of women awarded degrees from reporting U.S. institutions; however, the percentage of unknown genders in the Canadian data is high (25%).

Table B2. Bachelor's Degrees Awarded by Gender

| | CS | | CE | | I | | Total | |
|---------------------------|---------------|-------|--------------|-------|--------------|-------|---------------|-------|
| Canadian | | | | | | | | |
| Men | 2,093 | 74.8% | | | | | 2,093 | 74.8% |
| Women | 705 | 25.2% | | | | | 705 | 25.2% |
| Nonbinary/Other | 2 | 0.1% | | | | | 2 | 0.1% |
| Total Known Gender | 2,800 | | | | | | 2,800 | |
| Gender Unknown | 937 | | | | | | 937 | |
| Canadian Total | 3,737 | | | | | | 3,737 | |
| US | | | | | | | | |
| Men | 31,668 | 77.3% | 2,427 | 81.2% | 3,347 | 67.4% | 37,442 | 76.6% |
| Women | 9,225 | 22.5% | 553 | 18.5% | 1,613 | 32.5% | 11,391 | 23.3% |
| Nonbinary/Other | 50 | 0.1% | 9 | 0.3% | 3 | 0.1% | 62 | 0.1% |
| Total Known Gender | 40,943 | | 2,989 | | 4,963 | | 48,895 | |
| Gender Unknown | 3,255 | | 408 | | 352 | | 4,015 | |
| US Total | 44,198 | | 3,397 | | 5,315 | | 52,910 | |

The data on the **ethnicity** of Canadian awardees of Bachelor’s degrees is too small to report, hence we omit this information.

Table B5 reports the numbers of Bachelor's students newly **admitted** to computing programs in the past year (July 1, 2022 to June 30, 2023).

Table B5. New Enrolled Bachelor’s Students

| | CS Degree | | | | CE Degree | | | | Info Degree | | | | Total | |
|----------|-----------|-----------|---------|--------------------|-----------|-----------|---------|--------------------|-------------|-----------|---------|--------------------|-------------|--------------------|
| | Major | Pre-Major | # Depts | Avg Major per Dept | Major | Pre-Major | # Depts | Avg Major per Dept | Major | Pre-Major | # Depts | Avg Major per Dept | Total Major | Avg Major per Dept |
| Canadian | 4,495 | 781 | 9 | 499.4 | 223 | | 1 | 223 | | | 0 | | 4,718 | 524.2 |
| US CS | 38,911 | 15,853 | 110 | 353.7 | 2,611 | 1,804 | 36 | 72.5 | 2,471 | 164 | 27 | 91.5 | 43,993 | 396.3 |
| US CE | | | 0 | | 1,055 | 0 | 3 | 351.7 | | | 0 | | 1,055 | 351.7 |
| US Info | 404 | 306 | 2 | 202 | | | 0 | | 1,830 | 570 | 13 | 140.8 | 2,234 | 171.8 |

Table B6 reports the numbers of Bachelor's students **enrolled** in the past year in 10 reporting Canadian institutions. Both this table and the previous table show higher enrolment numbers per reporting Canadian institution than per reporting U.S. institution, but “the average per department was strongly influenced by the inclusion this year of a large Canadian department.”

Table B6. Bachelor’s Enrolment by Department Type

| Department Type | CS | | | | CE | | | | I | | | | Total | |
|-----------------|---------|-----------|---------|--------------------|--------|-----------|---------|--------------------|--------|-----------|---------|--------------------|-------------|--------------------|
| | Major | Pre-Major | # Depts | Avg Major per Dept | Major | Pre-Major | # Depts | Avg Major per Dept | Major | Pre-Major | # Depts | Avg Major per Dept | Total Major | Avg Major per Dept |
| Canadian | 119,312 | 2,073 | 10 | 1,931.2 | 1,013 | 1,013 | 1 | 1,013 | 2,370 | | 1 | 2,370 | 22,695 | 2269.5 |
| US CS | 159,780 | 28,284 | 122 | 1,309.7 | 10,867 | 3,063 | 40 | 271.7 | 12,326 | 1,122 | 29 | 425.1 | 182,973 | 1,487.6 |
| US CE | | 0 | 0 | | 3,875 | 46 | 5 | 775 | | 0 | 0 | | 3,875 | 775.0 |
| US Info | 1,730 | 387 | 2 | 865 | | | 0 | | 9,095 | 1,028 | 13 | 699.6 | 10,825 | 832.7 |

Table B8 reports on the number of Bachelor’s students **enrolled** in the past year in 10 reporting Canadian institutions, disaggregated by **gender**.

Table B8. Bachelor’s Enrolment by Gender

| | CS | | CE | | I | | Total | |
|---------------------------|----------------|-------|----|--|---------------|-------|----------------|-------|
| Canadian | | | | | | | | |
| Men | 9,532 | 72.4% | | | | | 9,532 | 72.4% |
| Women | 3,013 | 22.9% | | | | | 3,013 | 22.9% |
| Nonbinary/Other | 627 | 4.8% | | | | | 627 | 4.8% |
| Total Known Gender | 13,172 | | | | | | 13,172 | |
| Gender Unknown | 6,140 | | | | | | 6,140 | |
| Canadian Total | 19,312 | | | | | | 19,312 | |
| US | | | | | | | | |
| Men | 124,610 | 76.3% | | | 12,086 | 67.4% | 136,696 | 76.6% |
| Women | 37,722 | 23.1% | | | 2,542 | 32.5% | 40,264 | 23.3% |
| Nonbinary/Other | 889 | 0.5% | | | 41 | 0.1% | 930 | 0.1% |
| Total Known Gender | 163,221 | | | | 14,669 | | 177,890 | |
| Gender Unknown | 17,601 | | | | 1,086 | | 18,687 | |
| US Total | 180,822 | | | | 15,755 | | 196,577 | |

Faculty Demographics

“**Table F1** shows the current (2023-24) and anticipated sizes, in FTEs, for tenure-track, teaching, and research faculty, and postdocs. Teaching faculty are separately reported in subcategories called ‘Teaching Professors’ and ‘Other Instructors’. ‘Teaching Professors’ on average have more varied responsibilities in teaching, scholarship, service/governance, etc., and higher expectations for visibility outside the unit or the institution. ‘Other Instructors’ are more focused on teaching introductory or mid-level courses and tend to have shorter contract lengths, though they are still full-time faculty.... The righthand column of Table F1 shows, for each row, the number of departments that provided non-zero values for actual 2023-24 faculty in the particular category.” For comparison, data from reporting US institutions are provided but shaded in grey.

Table F1. Actual and Anticipated Faculty Size by Position

| | Actual 2023-23 | | Projected 2023-24 | | Projected 2024-25 | | Expected 2-Yr Growth | | # Depts |
|---------------------|-------------------|-------------|----------------------|-----------|----------------------|-------------|----------------------|--------------|------------|
| | Total | Avg | Total | Avg | Total | Avg | # | % | |
| Canadian | | | | | | | | | |
| TenureTrack | 422 | 42.2 | 450 | 45 | 462 | 46.2 | 40 | 9.5% | 10 |
| Teaching Professors | 63 | 6.3 | 67 | 6.7 | 68 | 6.8 | 5 | 7.9% | 6 |
| Other Instructors | 56 | 5.6 | 55 | 5.5 | 56 | 5.6 | 0 | 0.0% | 7 |
| Research | 4 | 0.4 | 5 | 0.5 | 6 | 0.6 | 2 | 50.0% | 1 |
| Postdoc | 61 | 6.1 | 63 | 6.3 | 63 | 6.3 | 2 | 3.3% | 4 |
| Total | 606 | 60.6 | 640 | 64 | 655 | 65.5 | 49 | 8.1% | 10 |
| US CS | | | | | | | | | |
| TenureTrack | 4,868 | 37.4 | 5,188 | 39.9 | 5,379 | 41.4 | 511 | 10.5% | 130 |
| Teaching Professors | 1,083 | 8.3 | 1,177 | 9.1 | 1,252 | 9.6 | 169 | 15.6% | 110 |
| Other Instructors | 893 | 6.9 | 946 | 7.3 | 977 | 7.5 | 84 | 9.4% | 91 |
| Research | 263 | 2 | 283 | 2.2 | 300 | 2.3 | 37 | 14.1% | 43 |
| Postdoc | 439 | 3.4 | 479 | 3.7 | 515 | 4 | 76 | 17.3% | 56 |
| US CE | | | | | | | | | |
| TenureTrack | 249 | 49.8 | 255 | 51 | 260 | 52 | 11 | 4.4% | 5 |
| Teaching Professors | 28 | 5.6 | 31 | 6.2 | 32 | 6.4 | 4 | 14.3% | 5 |
| Other Instructors | 1 | 0.2 | 1 | 0.2 | 1 | 5 | 0 | 0.0% | 1 |
| Research | 22 | 4.4 | 24 | 4.8 | 25 | 5.4 | 3 | 13.6% | 1 |
| Postdoc | 24 | 4.8 | 26 | 5.2 | 27 | 6.9 | 3 | 12.5% | 2 |
| US Info | | | | | | | | | |
| TenureTrack | 419 | 32.2 | 444 | 34.1 | 459 | 35.3 | 40 | 9.5% | 13 |
| Teaching Professors | 197 | 15.1 | 215 | 16.5 | 223 | 17.1 | 26 | 13.2% | 13 |
| Other Instructors | 111 | 8.6 | 109 | 8.4 | 101 | 7.8 | -10 | -9.0% | 9 |
| Research | 8 | 0.6 | 6 | 0.5 | 8 | 0.6 | 0 | 0.0% | 5 |
| Postdoc | 27 | 2.1 | 37 | 2.8 | 39 | 3 | 12 | 44.4% | 9 |
| US Total | | | | | | | | | |
| TenureTrack | 5,536 | 37.405 | 5,887 | 39.777 | 6,098 | 41.2 | 562 | 10.2% | 148 |
| Teaching Professors | 1,308 | 10.219 | 1,423 | 11.117 | 1,507 | 11.77 | 199 | 15.2% | 128 |
| Other Instructors | 1,005 | 9.9505 | 1,056 | 10.455 | 1,079 | 10.68 | 74 | 7.4% | 101 |
| Research | 293 | 5.9796 | 313 | 6.3878 | 333 | 6.796 | 40 | 13.7% | 49 |
| Postdoc | 490 | 7.3134 | 542 | 8.0896 | 581 | 8.672 | 91 | 18.6% | 67 |
| Total | 8,632 | 58 | 9,221 | 62 | 9,598 | 65 | 966 | 11.2% | 148 |

“**Table F2** summarizes faculty hiring this past year.” For comparison, data from reporting US institutions are provided but shaded in grey.

“Departments in the U.S. overall were less successful in hiring tenure-track faculty than they were last year. The success rate at this year’s reporting U.S. CS departments was 76.6 percent compared with last year’s reported 86.9 percent.... Canadian departments again had a lower success rate than U.S. departments, at 55.9 percent, which was lower than the 68.8 percent reported last year.”

Table F2. Vacant Positions 2022-23 by Position and Department Type

| | Tried to fill | Filled |
|---------------------|---------------|------------|
| Canadian | | |
| TenureTrack | 59 | 33 |
| Teaching Professors | 14 | 12 |
| Other Instructors | 4 | 3 |
| Research | 1 | 1 |
| Postdoc | 18 | 52 |
| Total | 96 | 101 |
| US CS | | |
| TenureTrack | 501 | 384 |
| Teaching Professors | 180 | 156 |
| Other Instructors | 74 | 81 |
| Research | 41 | 44 |
| Postdoc | 102 | 112 |
| US CE | | |
| TenureTrack | 13 | 13 |
| Teaching Professors | 3 | 4 |
| Other Instructors | 0 | 1 |
| Research | 0 | 1 |
| Postdoc | 1 | 1 |
| US Info | | |
| TenureTrack | 27 | 22 |
| Teaching Professors | 33 | 26 |
| Other Instructors | 4 | 5 |
| Research | 1 | 1 |
| Postdoc | 13 | 12 |
| US Total | | |
| TenureTrack | 541 | 419 |
| Teaching Professors | 216 | 186 |
| Other Instructors | 78 | 87 |
| Research | 42 | 46 |
| Postdoc | 116 | 125 |
| Total | 993 | 863 |

Table F3 reports the gender diversity among newly hired faculty this year. For comparison, the data from reporting US institutions is provided but is shaded in grey.

The gender diversity in Canada faculty hiring this year is weaker than that reported last year. When all categories of faculty positions (tenure-track, teaching faculty, research faculty) are considered collectively, the fraction of women hires was 20.7 percent vs 33.3 percent for 2021-22 hires. For tenure-track positions, the decline was from 25.9 percent to 20.0 percent. Note that this percentage is lower than the percentage of women among new PhDs produced during the past year (22.9 percent). On the positive side, the percentage of women among post-doc hires is higher than last year (50.0 percent vs. 12.9 percent).

Table F3. Gender of Newly Hired Faculty

| | Tenure-Track | | Teaching Professors | | Other Instructors | | Research | | Postdoc | | Total | |
|-----------------------|--------------|-------|---------------------|-------|-------------------|--------|-----------|--------|------------|-------|------------|-------|
| Men | 16 | 80.0% | 4 | 66.7% | 2 | 100.0% | 1 | 100.0% | 8 | 50.0% | 31 | 68.9% |
| Women | 4 | 20.0% | 2 | 33.3% | 0 | 0.0% | 0 | 0.0% | 8 | 50.0% | 14 | 31.1% |
| Nonbinary/Other | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Unknown | 0 | | 0 | | 0 | | 0 | | 0 | | 0 | |
| Canadian Total | 20 | | 6 | | 2 | | 1 | | 16 | | 45 | |
| US Men | 327 | 74.1% | 105 | 61.8% | 77 | 72.6% | 32 | 82.1% | 117 | 72.7% | 658 | 71.8% |
| US Women | 114 | 25.9% | 65 | 38.2% | 29 | 27.4% | 7 | 17.9% | 44 | 27.3% | 259 | 28.2% |
| US Nonbinary/Other | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| US Unknown | 7 | | 6 | | 2 | | 0 | | 3 | | 18 | |
| US Total | 448 | | 176 | | 108 | | 39 | | 164 | | 935 | |

We omit tables that report data about the ethnicity of new faculty hires, due to a shortage of data from Canadian survey respondents (the ethnicity of only 6 of 45 new faculty hires is reported).

Table F5 reports on the number of faculty loses at reporting Canadian institutions.

Table F5. Faculty Losses

| | |
|------------------------------------|-----------|
| Died | 2 |
| Retired | 12 |
| Took Academic Position Elsewhere | 10 |
| Took Nonacademic Position | 2 |
| Remained, but Changed to Part Time | 12 |
| Other | 4 |
| Unknown | 0 |
| Total | 42 |

Table F6 reports the **gender** diversity among **current** faculty this year. For comparison, the data from reporting US institutions is provided but is shaded in grey. The percentage of women increased in all categories of faculty positions (full, associate, assistant, teaching, and other instructors), compared with last year.

Table F6. Gender of Current Faculty

| | Full | | Associate | | Assistant | | Teaching Professors | | Other Instructors | | Research | | Postdoc | | Total | |
|-----------------------|--------------|-------|--------------|-------|--------------|-------|---------------------|-------|-------------------|-------|------------|-------|------------|-------|--------------|-------|
| Men | 119 | 79.3% | 60 | 80.0% | 52 | 62.7% | 43 | 69.4% | 18 | 69.2% | 4 | 66.7% | 66 | 67.3% | 362 | 72.4% |
| Women | 31 | 20.7% | 15 | 20.0% | 31 | 37.3% | 19 | 30.6% | 8 | 30.8% | 2 | 33.3% | 32 | 32.7% | 138 | 27.6% |
| Nonbinary/Other | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| Unknown | 30 | | 14 | | 17 | | 0 | | 0 | | 0 | | 0 | | 61 | |
| Canadian Total | 180 | | 89 | | 100 | | 62 | | 26 | | 6 | | 98 | | 561 | |
| Men | 2,049 | 81.5% | 1,108 | 77.9% | 1,257 | 71.4% | 866 | 69.0% | 600 | 72.4% | 252 | 77.8% | 489 | 73.0% | 6,621 | 75.5% |
| Women | 455 | 18.1% | 315 | 22.1% | 501 | 28.4% | 386 | 30.8% | 227 | 27.4% | 72 | 22.2% | 180 | 26.9% | 2,136 | 24.3% |
| Nonbinary/Other | 9 | 0.4% | 0 | 0.0% | 3 | 0.2% | 3 | 0.2% | 2 | 0.2% | 0 | 0.0% | 1 | 0.1% | 18 | 0.2% |
| Unknown | 215 | | 84 | | 119 | | 57 | | 25 | | 60 | | 43 | | 603 | |
| US Total | 2,728 | | 1,507 | | 1,880 | | 1,312 | | 854 | | 384 | | 713 | | 9,378 | |

Table F7 reports on the number of **current** faculty at reporting Canadian institutions this past year, disaggregated by **ethnicity**. Most Canadian institutions are not yet collecting this information: the ethnicity is known for 11 percent of Canadian faculty and post-docs, whereas the ethnicity is known for 85 percent of US faculty and post-docs.

Table F7. Ethnicity of Current Faculty

| | Full | | Associate | | Assistant | | Teaching Professors | | Other Instructors | | Research | | Postdoc | | Total | |
|---------------------------------------|--------------|-------|--------------|-------|--------------|-------|---------------------|--------|-------------------|--------|------------|-------|------------|-------|--------------|-------|
| NonCanadian, Non-PR | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 | 0 | 0.0% | 0 | 0.0% |
| American Indian / Alaska Native | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 | 0 | 0.0% | 0 | 0.0% |
| Asian | 3 | 10.3% | 2 | 28.6% | 5 | 41.7% | 0 | 0.0% | 0 | 0.0% | 0 | 1 | 14.3% | 11 | 17.7% | |
| Black or African-American | 1 | 3.4% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 | 0.0% | 1 | 1.6% | |
| Native Hawaiian/ Pacific Islander | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0.0% | |
| White | 24 | 82.8% | 5 | 71.4% | 5 | 41.7% | 2 | 100.0% | 0 | 0.0% | 0 | 3 | 42.9% | 39 | 62.9% | |
| Multiracial, not Hispanic | 1 | 3.4% | 0 | 0.0% | 2 | 16.7% | 0 | 0.0% | 0 | 0.0% | 0 | 0 | 0.0% | 3 | 4.8% | |
| Hispanic, any race | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0 | 0.0% | 0 | 0.0% | |
| Resident, race/ethnic unknown | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 5 | 100.0% | 0 | 3 | 42.9% | 8 | 12.9% | |
| Canadian Total known residency | 29 | | 7 | | 12 | | 2 | | 5 | | 0 | | 7 | | 62 | |
| Residency Unknown | 151 | | 82 | | 88 | | 60 | | 21 | | 6 | | 91 | | 499 | |
| Canadian Total | 180 | | 89 | | 100 | | 62 | | 26 | | 6 | | 98 | | 561 | |
| Nonresident Alien | 56 | 2.4% | 39 | 3.0% | 269 | 16.6% | 82 | 7.0% | 37 | 4.9% | 38 | 13.0% | 133 | 24.1% | 654 | 8.2% |
| American Indian / Alaska Native | 34 | 1.5% | 5 | 0.4% | 31 | 1.9% | 8 | 0.7% | 1 | 0.1% | 0 | 0.0% | 3 | 0.5% | 82 | 1.0% |
| Asian | 735 | 31.8% | 437 | 33.6% | 616 | 38.0% | 194 | 16.5% | 117 | 15.5% | 54 | 18.4% | 200 | 36.2% | 2,353 | 29.4% |
| Black or African-American | 28 | 1.2% | 29 | 2.2% | 32 | 2.0% | 31 | 2.6% | 35 | 4.6% | 4 | 1.4% | 9 | 1.6% | 168 | 2.1% |
| Native Hawaiian/ Pacific Islander | 0 | 0.0% | 1 | 0.1% | 2 | 0.1% | 2 | 0.2% | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% | 5 | 0.1% |
| White | 1,335 | 57.7% | 689 | 53.0% | 538 | 33.2% | 744 | 63.4% | 501 | 66.5% | 170 | 58.0% | 167 | 30.2% | 4,144 | 51.8% |
| Multiracial, not Hispanic | 15 | 0.6% | 11 | 0.8% | 18 | 1.1% | 5 | 0.4% | 4 | 0.5% | 2 | 0.7% | 1 | 0.2% | 56 | 0.7% |
| Hispanic, any race | 52 | 2.2% | 37 | 2.8% | 50 | 3.1% | 48 | 4.1% | 31 | 4.1% | 6 | 2.0% | 7 | 1.3% | 231 | 2.9% |
| Resident, race/ethnic unknown | 57 | 2.5% | 53 | 4.1% | 64 | 4.0% | 59 | 5.0% | 27 | 3.6% | 19 | 6.5% | 33 | 6.0% | 312 | 3.9% |
| Taulbee Total known residency | 2,312 | | 1,301 | | 1,620 | | 1,173 | | 753 | | 293 | | 553 | | 8,005 | |
| Residency Unknown | 416 | | 206 | | 260 | | 139 | | 101 | | 91 | | 160 | | 1,373 | |
| Taulbee Total | 2,728 | | 1,507 | | 1,880 | | 1,312 | | 854 | | 384 | | 713 | | 9,378 | |

We omit two tables that report data about the intersections of gender and ethnicity of current tenure-track faculty, due to a shortage of data from Canadian survey respondents.

Tables S1 report salaries for **current** Canadian faculty that were in effect on January 1, 2024. Canadian departments reported twelve-month salaries in Canadian dollars. For comparison, **Tables S1a** report faculty salaries at U.S. CS departments; these are nine-month salaries and are reported in U.S. dollars. “Respondents were asked to include salary supplements such as salary monies from endowed positions.” “The tables contain distributional data (first decile, quartiles, and ninth decile) computed from the department averages. Thus, a table row labeled ‘50’ is the median of the averages for the departments that reported within the stratum (the number of such departments reporting is shown in the ‘Depts’ row).”

Table S1. Twelve-month Salaries, Percentiles from 10 Department Averages

| | Full Professor | | | | Associate | | | Assistant | Non-Tenure Track | | |
|-------|--------------------|---------------------|--------------------|----------------------|-------------------|--------------------|----------------------|-----------|------------------|----------|----------|
| | In rank 16+ yrs | In rank 8-15 yrs | In rank 0-7 yrs | All years in rank | In rank 8+ yrs | In rank 0-7 yrs | All years in rank | | Teach | Research | Postdoc |
| Depts | 9 | 9 | 10 | 10 | 9 | 9 | 10 | 10 | 10 | 1 | 5 |
| Indiv | 74 | 62 | 53 | 189 | 37 | 71 | 108 | 118 | 100 | | 68 |
| 10 | | | \$173,460 | \$181,580 | | \$134,959 | \$142,862 | \$117,131 | \$88,625 | | |
| 25 | \$197,189 | \$180,064 | \$188,559 | \$190,243 | \$151,833 | \$142,012 | \$148,740 | \$123,448 | \$103,202 | | |
| 50 | \$215,298 | \$214,043 | \$202,991 | \$206,345 | \$187,237 | \$153,994 | \$167,291 | \$142,260 | \$110,030 | | \$61,030 |
| 75 | \$244,566 | \$222,219 | \$214,370 | \$221,960 | \$191,745 | \$175,585 | \$176,708 | \$158,695 | \$133,619 | | |
| 90 | | | \$220,873 | \$237,433 | | \$184,372 | \$195,479 | \$180,012 | \$145,233 | | |

Table S1. Twelve-month Salaries, Percentiles from 10 Department Averages

| Tenure Track | Teaching Professor | | | | | Other Instructor | | | | |
|--------------|--------------------|---------------------|---------------------|--------------------|-----------|--------------------|---------------------|---------------------|--------------------|-----------|
| | Teaching 9+ yrs | Teaching 6-8 yrs | Teaching 3-5 yrs | Teaching <3 yrs | All years | Teaching 9+ yrs | Teaching 6-8 yrs | Teaching 3-5 yrs | Teaching <3 yrs | All years |
| Depts | 5 | 3 | 4 | 4 | 8 | 0 | 0 | 2 | 3 | 5 |
| Indiv | 26 | | 8 | 10 | 74 | | | | | 26 |
| 10 | | | | | | | | | | |
| 25 | | | | | \$103,379 | | | | | |
| 50 | \$150,720 | | \$111,358 | \$133,168 | \$130,288 | | | | | \$95,199 |
| 75 | | | | | \$144,704 | | | | | |
| 90 | | | | | | | | | | |

Table S1a. Nine-month Salaries, Percentiles from 135 US Department Averages

| | Full Professor | | | | Associate | | | Assistant | Non-Tenure Track | | |
|-------|--------------------|---------------------|--------------------|----------------------|-------------------|--------------------|----------------------|-----------|------------------|-----------|----------|
| | In rank 16+ yrs | In rank 8-15 yrs | In rank 0-7 yrs | All years in rank | In rank 8+ yrs | In rank 0-7 yrs | All years in rank | | Teach | Research | Postdoc |
| Depts | 111 | 111 | 111 | 133 | 96 | 119 | 130 | 131 | 128 | 43 | 46 |
| Indiv | 772 | 632 | 647 | 2,145 | 361 | 778 | 1,190 | 1,490 | 1,614 | 233 | 396 |
| 10 | \$152,425 | \$148,896 | \$143,348 | \$150,803 | \$114,949 | \$114,879 | \$117,588 | \$102,411 | \$73,470 | \$46,082 | \$49,042 |
| 25 | \$176,745 | \$163,080 | \$159,347 | \$164,873 | \$120,757 | \$126,034 | \$127,896 | \$111,196 | \$85,797 | \$74,125 | \$52,351 |
| 50 | \$204,477 | \$194,009 | \$185,622 | \$189,012 | \$137,292 | \$143,654 | \$141,723 | \$125,692 | \$97,690 | \$91,436 | \$67,194 |
| 75 | \$240,196 | \$217,365 | \$205,353 | \$217,744 | \$151,425 | \$160,665 | \$160,102 | \$137,076 | \$115,041 | \$146,381 | \$72,623 |
| 90 | \$274,886 | \$236,114 | \$237,745 | \$240,180 | \$161,919 | \$171,554 | \$170,577 | \$145,567 | \$133,432 | \$174,082 | \$77,452 |

Table S1a. Nine-month Salaries, Percentiles from 135 US Department Averages

| Non-Tenure Track | Teaching Professor | | | | | Other Instructor | | | | |
|------------------|--------------------|---------------------|---------------------|--------------------|-----------|--------------------|---------------------|---------------------|--------------------|-----------|
| | Teaching 9+ yrs | Teaching 6-8 yrs | Teaching 3-5 yrs | Teaching <3 yrs | All years | Teaching 9+ yrs | Teaching 6-8 yrs | Teaching 3-5 yrs | Teaching <3 yrs | All years |
| Depts | 53 | 54 | 62 | 72 | 109 | 33 | 31 | 34 | 50 | 75 |
| Indiv | 203 | 122 | 190 | 261 | 1,055 | 75 | 60 | 106 | 152 | 559 |
| 10 | \$78,109 | \$81,226 | \$78,007 | \$77,353 | \$80,270 | \$60,046 | \$61,800 | \$59,590 | \$64,350 | \$65,377 |
| 25 | \$96,708 | \$93,019 | \$91,369 | \$84,750 | \$92,992 | \$70,202 | \$76,214 | \$71,017 | \$73,734 | \$75,181 |
| 50 | \$115,317 | \$109,608 | \$101,637 | \$95,758 | \$103,062 | \$87,586 | \$94,232 | \$90,768 | \$83,298 | \$88,195 |
| 75 | \$143,609 | \$127,040 | \$122,506 | \$112,127 | \$131,430 | \$107,689 | \$103,586 | \$107,241 | \$94,867 | \$99,662 |
| 90 | \$156,999 | \$149,523 | \$140,325 | \$129,912 | \$144,737 | \$125,325 | \$125,250 | \$120,432 | \$105,286 | \$120,739 |

Table S20 reports faculty salaries for **newly hired** faculty. Again, the Canadian departments reported twelve-month salaries in Canadian dollars and U.S. departments reported nine-month salaries in U.S. dollars. When too few responses are received (such that the information about individual institutions could be identified), only the mean average (or less information) is reported.

Table S20. Twelve-month Salaries for New PhDs (Nine-month for US)

| | Canadian | | | | | | US (CS, CE, Info combined) | | | | | |
|-------|--------------|----------------|-------------------|------------------|------------------|---------|----------------------------|----------------|-------------------|------------------|------------------|----------|
| | Tenure-Track | Teaching Profs | Other Instructors | Non-ten Teaching | Non-ten Research | Postdoc | Tenure-Track | Teaching Profs | Other Instructors | Non-ten Teaching | Non-ten Research | Postdoc |
| Depts | 4 | 2 | 1 | 3 | 0 | 1 | 50 | 25 | 9 | 32 | 6 | 14 |
| Indiv | 6 | 2 | 2 | 4 | 0 | 9 | 137 | 53 | 25 | 78 | 7 | 53 |
| 10 | | | | | | | \$105,600 | \$81,400 | \$80,644 | \$80,700 | \$31,440 | \$44,370 |
| 25 | | | | | | | \$118,000 | \$85,000 | \$82,840 | \$85,000 | \$37,200 | \$58,500 |
| 50 | \$144,000 | | | | | | \$128,000 | \$92,867 | \$90,000 | \$90,500 | \$82,500 | \$69,342 |
| 75 | | | | | | | \$140,000 | \$105,000 | \$102,500 | \$104,375 | \$105,000 | \$78,000 |
| 90 | | | | | | | \$157,640 | \$122,800 | \$116,273 | \$122,300 | \$152,000 | \$83,918 |

“**Table S21** shows, by type of faculty and type of department, the change in the median of the average salaries from departments that reported [both in this year’s and last year’s Surveys]. The number of departments that reported data in both years is indicated in parenthesis at the top of each column.” Using the cell associated with full professors at Canadian departments as an example, the table indicates that, at the 10 departments that reported both years, the median of the average salaries for full professors was 3.5 percent higher in 2023 than in 2022.

Table S21. Salary Changes for Departments that Reported in Both 2022 and 2023

| | Canadian (10) | US CS (133) | US CE (4) | US I (14) |
|------------------|---------------|-------------|-----------|-----------|
| Full Profs | 3.5% | 4.0% | 11.0% | 3.6% |
| Assoc. Profs. | 2.2% | 3.2% | 8.0% | 3.7% |
| Asst. Profs. | 4.5% | 4.3% | 6.0% | 1.6% |
| Teaching Prof | 7.3% | 6.4% | 23.3% | 3.6% |
| Other Instructor | 43.8% | -9.3% | 20.5% | -6.8% |
| Research faculty | -7.8% | -1.1% | 6.8% | 12.9% |
| Post doctorates | 3.5% | 4.0% | 11.0% | 3.6% |

“**Table R1** shows the distribution of departments’ total research expenditure (including indirect costs or ‘overhead’ as stated on project budgets) from external sources of support.” “Reported expenditures decreased by 11.4 percent” compared to last year. For comparison, we show the responses of US institutions as well.

Table R1. Total Expenditure from External Sources for Computing Research

| Department Type | # Depts | Percentile of Department Averages | | | | |
|-----------------|---------|-----------------------------------|-------------|--------------|--------------|--------------|
| | | 10th | 25th | 50th | 75th | 90th |
| Canadian | 6 | \$2,997,000 | \$5,004,401 | \$5,712,091 | \$8,153,204 | \$9,641,291 |
| US CS Public | 74 | \$1,731,638 | \$3,036,891 | \$7,045,607 | \$15,041,468 | \$21,257,853 |
| US CS Private | 23 | \$2,195,923 | \$4,057,771 | \$10,054,780 | \$19,183,796 | \$68,523,361 |
| US CE | 2 | | | | | |
| US Info | 12 | \$1,795,937 | \$5,211,573 | \$7,180,055 | \$8,417,238 | \$12,700,089 |