

# EXPAND CANADA UNDERGRADUATE RESEARCH

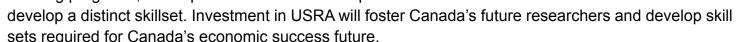
## RECOMMENDATION ONE

Strengthen the Undergraduate Student Research Awards (USRA) program by: extending eligibility to the social sciences, humanities, and health research; increasing available funding to \$67 million annually; and raising the award amount to \$6300.Social Sciences and Humanities Research Council (SSHRC) and Canadian Institutes of Health Research (CIHR).

### **UNDERGRADUATE STUDENT RESEARCH AWARDS PROGRAM:**

The USRA program, currently operated by the Natural Sciences and Engineering Research Council (NSERC), encourages undergraduate students to participate in four month research opportunities under the guidance of senior researchers. The program funds 75% of the cost, with the balance covered by the participating university or private sector partner must contribute the balance.

According to a report conducted by the Conference Board of Canada, human skills like critical thinking and problem-solving are the most important for creating a workforce of the future.<sup>1</sup> Undergraduate research provides a key experience in the formation of both of these skills, as well as time management and decision making abilities, skills that RBC's Future Skills Report predicts will be important for over 90% of job openings over the next three years.<sup>2</sup> While the government is currently supporting entrepreneurship and work-integrated learning programs, it is important that research is prioritized to enable students to



Currently, the USRA program only benefits students conducting research projects under the guidance of a senior researcher who has been awarded an NSERC grant.<sup>3</sup> Thus, students in the social sciences, humanities, or health sciences are ineligible to apply. With a future that requires an increased focus on transferable skills, it is important that all students have access to skill-enriching and cutting-edge research opportunities. The Fundamental Science Review highlighted the importance of creating a long-term talent pipeline for Canadian research.<sup>4</sup> Early research opportunities that grow the potential pool of future doctoral researchers is essential to long term success in every field.

Increased USRA funding would have benefits for research beyond universities as well. With the creation of research superclusters promoting private sector innovation<sup>5</sup>, as well as Industry Canada targeting increased private sector research and development funding to \$30 billion by 2025<sup>6</sup>, URSAs can serve

to develop undergraduate-level research talent for use in the private sector upon graduation through partnerships with industry. For instance, the NSERC program also permits undergraduate research in the private sector as well, through Experience Awards. These awards function in the same manner as the USRA program, apart from the partnership with organizations to conduct industry research.

An NSERC program report in 2012 reflected that the federal \$4,500 amount, combined with the mandatory 25% university support, led to an equivalent compensation of \$9.38 dollars per hour for a 35 hour week, inside a 16-week research experience. This amount falls below the current minimum wage levels of every province and territory, and is over a thousand dollars lower than it was prior to 2010.<sup>7</sup> A survey of students did not accept their URSA approval because there was who received approval for a USRA but did not accept the offer found that a better paying opportunity available one in five students did not accept because there was a better paying opportunity available. By investing additional funds into the USRA program, the USRA funding could be increased to \$6,300. With a proportional increase in university funding, this would reflect an equivalent wage of \$15.00 per hour, or equal to Alberta's minimum wage, and result in more students accepting the awards.8

The increased funding allocated towards undergraduate research opportunities would be housed in each of the funding agencies, and coordinated through the Canada Research Coordinating Committee. \$67 million of funding per year would allow for 2.5% of university students to have a USRA research experience before graduation.

<sup>&</sup>lt;sup>1</sup>Conference Board of Canada, The Cost of Ontario's Skills Gap (2013), 26, https://www.conferenceboard.ca/temp/8cd5e978-fd2a-42c2-9094-8e9b58285e65/14-032\_SkillsGap\_RPT.pdf

<sup>&</sup>lt;sup>2</sup>RBC, Humans Wanted Future Skills Report Technical Annex and Methodology. https://www.rbc.com/dms/enterprise/futurelaunch/\_assets-custom/pdf/RBC13C-Future-Skills-Report-Methodology.pdf

<sup>&</sup>lt;sup>3</sup>NSERC-CRSNG, Evaluation of the USRA Program (2012), 9,http://www.nserc-crsng.gc.ca/\_doc/Reports-Rapports/USRAFR\_e.pdf

<sup>&</sup>lt;sup>4</sup>Advisory Panel for the Review of Federal Support for Fundamental Science, Investing in Canada's Future – Strengthening the Foundations of Canadian Research (2017), 9, http://www.sciencereview.ca/eic/site/059.nsf/vwapj/ScienceReview\_April2017

<sup>&</sup>lt;sup>5</sup>Industry, Science and Economic Development Canada, Canada's New Superclusters (2018), https://www.ic.gc.ca/eic/site/093.nsf/eng/00008.html <sup>6</sup>Industry, Science and Economic Development Canada, Tracking progress and results: The Innovation and Skills Plan (2018), https://www.ic.gc.ca/e-ic/site/062.nsf/eng/h\_00083.html#toc-02

<sup>7</sup>NSERC-CRSNG, Evaluation of the USRA Program (2012), http://www.nserc-crsng.gc.ca/\_doc/Reports-Rapports/USRAFR\_e.pdf

<sup>&</sup>lt;sup>8</sup>Government of Canada, Current And Forthcoming Minimum Hourly Wage Rates For Experienced Adult Workers in Canada (2017), http://srv116.ser-vices.gc.ca/dimt-wid/sm-mw/rpt1.aspx

# RECOMMENDATION TWO

Demographic data should be collected on consenting applicants and recipients to USRAs.

# **RECOMMENDATION THREE**

NSERC should conduct an extensive review of the Undergraduate Student Research Awards Program in 2020 to identify key areas of strength and improvement for the USRA program.

### **COLLECTION OF CLEAR AND VALUABLE DATA:**

Under the guidance of the Canada Research Coordinating Committee, the federal government should mandate research funding agencies to track data pertaining to the number of undergraduate student applications, field of study, number of successful undergraduate student funding applications and dollar value for each successful application. The tracking of this data should mirror the NSERC model of data collection and disclosure<sup>9</sup>, and should be released on an annual basis. As well, the data collection should be expanded to gather and report applicants' self-reported demographic data, including gender, Indigenous status, racialized identity, and if students have a disability.

In the 2018 Budget, the federal government committed to focusing on the next generation of researchers, as well as increasing support for women, youth, Indigenous peoples, persons with disabilities, and racialized individuals in research. An important aspect of this is to ensure traditionally marginalized individuals have access to opportunities early in their academic careers through undergraduate research. UCRU supports the collection and disclosure of information surrounding granting decisions to ensure USRAs are both accessible and equitable.

Many key pieces of data on USRAs are contained in the most recent program review of USRAs, conducted in 2012. UCRU recommends that another USRA program review should be conducted to identify concerns with the program both from data, as well as consultation with universities, students, USRA alumni, and other stakeholders. Collection of this data can help create a set of desired program outcomes for longitudinal study to assess the USRA program in the future.

<sup>&</sup>lt;sup>9</sup>NSERC-CRSNG, 2017 Research Grants Competition - Results by Institution (2017), http://www.nserc-crsng.gc.ca/NSERC-CRSNG/FundingDecisions-DecisionsFinancement/ResearchGrants-SubventionsDeRecherche/ResultsInstitution-ResultatsEtablissement\_eng.asp?Year=2017

