# Reimagining Canada's Postdoctoral Training System

Written Submission for the 2018 Canada Research Coordinating Committee Consultation By:



Canadian Association of Postdoctoral Scholars
Association Canadienne des Stagiaires Post-doctoraux

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## Recommendations to the CRCC

- 1) Establish a common definition of a postdoctoral scholar that states that <u>all</u> postdocs must, by definition, be considered "trainees" and allowed to participate in career development and/or training opportunities of their choosing.
- 2) Require all Canadian institutions to treat postdocs working in their facilities or for their faculty members as employees if any portion of their income comes from Tri-Agency grants or awards.
- 3) Create a uniform policy for all postdocs supported by Tri-Agency grants that:
  - defines all postdocs as both trainees and employees;
  - establishes minimum standards for postdoctoral training conditions that include access
    to statutory (EI and CPP) and workplace (e.g., health/dental) benefits and a gross annual
    income that starts at \$47,500/year and increases by 2% for each additional year of
    postdoctoral training; and
  - establishes additional support / training requirements such as access to ombudspersons in cases of conflict, access to on-campus mental health support, access to a dedicated career counsellor, and free/discount language training for international postdocs.
- 4) Establish uniform guidelines at the national level by encouraging (or requiring) all institutions to adopt the minimum standards described in recommendation #3.
- 5) Adopt the following policies and procedures:
  - Implement a uniform funding transfer mechanism across the three agencies, using CIHR's current approach as a model.
  - Increase the stipend for all Tri-Agency fellowships (except Banting) to \$50,000/year to start (+\$5,000 research allowance) and increase by 2% per year of additional training.
  - Adjust the annual stipend for awards physically held outside of Canada to reflect differences (and/or changes) in currency exchange rates (up to a maximum of \$10,000).
  - Increase the duration of fellowships to 3 years for SSHRC- and NSERC-related disciplines and 4 years for CIHR-related disciplines (as per the Naylor Report).
  - Eliminate limits on the duration of postdoctoral support from Tri-Agency grants, provided a payscale is adopted that includes a 2% raise per year of additional training.
  - Allow postdocs to act as co-investigators on grants that fund their salaries.
  - Create new funding opportunities for senior postdocs to support those who are close to being competitive for (or in the process of transitioning to) faculty positions.
  - Create new funding opportunities specifically geared towards indigenous postdocs.
  - Establish a pool of smaller awards for trainees to support professional development and career transitions for PhDs and postdocs seeking non-tenure track careers.
  - Establish grants to fund research focused on postdoc and PhD career development, experiential learning, career transitions, and employability in non-academic sectors.
- 6) Establish grants and/or internal procedures to:
  - monitor postdoctoral employment conditions and policies at the institutional, provincial, and national levels;
  - track postdoctoral labour market outcomes; and
  - promote the value of postdoctoral and PhD training to non-academic employers.

### Overview

The Canadian Association of Postdoctoral Scholars (CAPS) is a national organization that represents the interests of postdoctoral trainees ('postdocs') working in Canada, as well as Canadian postdocs working abroad. CAPS regularly provides input to the Tri-Agency and other agencies of the Government of Canada with respect to policies related to postdoctoral training, working conditions, recruitment, and retention. Since its inception, CAPS has conducted three National Postdoctoral Surveys (reported in Stanford et al., 2009; Mitchell et al., 2013; and Jadavji et al., 2016), collecting input from approximately 5,000 respondents over the past decade. In addition, CAPS has participated in a number of recent government consultations related to postdoctoral policy, including submissions for Canada's Fundamental Science Review (Sparling & Jadavji, 2016), a 2019 Pre-Budget Brief (Sparling, 2018a), and a recent consultation with Immigration, Refugees, and Citizenship Canada (Sparling, 2018b). Much of the content of the present document was borrowed or adapted from those recent reports and the majority of the recommendations made here are based on the input of thousands of current and former Canadian postdocs.

As the CRCC is likely aware, postdocs across Canada have become rather disillusioned with the status quo of the Canadian postdoctoral training system. This is a major factor impacting the recruitment and retention of young researchers in our country, and thus a concern for all Canadians as these very-early career researchers play an essential role in ensuring the future of Canadian research and innovation.

In our recent 2019 Pre-Budget Brief to the federal government, CAPS/ACSP proposed a reimagining of the current Canadian postdoctoral training system as a purposefully designed system that includes the establishment of overarching policies regarding postdoctoral training and working conditions, as well as appropriate oversight and enforcement of those policies at the national level. Herein we provide recommendations to the CRCC aimed at elaborating the potential role of the Tri-Agency in bringing about positive change for all Canadian postdoctoral trainees as well as providing detailed recommendations regarding Tri-Agency-specific funding and support policies.

## Recommendations and Justifications

#### **Recommendation 1**

Establish a common definition of a postdoctoral scholar that states that <u>all</u> postdocs must, by definition, be considered "trainees" and allowed to participate in career development and/or training opportunities of their choosing.

The notion that trainee and employee status are mutually exclusive is rampant in academia despite the fact that EI Regulations clearly state otherwise (Paragraph 6b; <a href="Employment Insurance Regulations">Employment Insurance Regulations</a>). With the rise of unionization, the classification of internally-funded postdocs has largely shifted from that of 'trainee' to that of 'employee' and we are now hearing

that some institutions view this reclassification as justification for limiting the access of internally-funded postdocs to training opportunities. This should not be tolerated, as regardless of whether a postdoc is considered an employee, the inclusion of 'training' should be required in any postdoctoral position by definition. Otherwise postdocs are simply reduced to less expensive replacements for research assistants and technicians. Contrary to the typical institutional/academic view of this issue, trainees and apprentices are considered employees according to the EI legislation (see citation above), so there are absolutely no grounds for stripping trainee status from any postdoc simply because they are granted employee status. The Tri-Agency should clarify this matter by establishing a common definition of postdoctoral scholars as described in this recommendation to ensure that all postdocs in Canada are guaranteed access to career development and training opportunities in the future.

#### **Recommendation 2**

Require all Canadian institutions to treat postdocs working in their facilities or for their faculty members as employees if any portion of their income comes from Tri-Agency grants or awards.

According to CAPS' 2016 National Survey, the average postdoc working in Canada today is 34 years old, married, and has a median gross annual income of \$42,500; which is approximately half that of the average age-matched PhD-holder who entered the workforce rather than pursue postdoctoral training. About 1/3 of postdocs in Canada have children, and of those people, about half have more than one child. Broadly speaking, postdocs are adults at a stage in life when settling down, buying houses, starting families and saving for retirement are the norm. While low compensation and a lack of access to pension/benefits have always represented challenges to the recruitment and retention of postdocs in Canada, lengthening training times and the related aging of the PhD and postdoc populations have considerably heightened the need for improved support over the past couple of decades, which is reflected by the fact that access to Employment Insurance (EI), pension plans, and health/dental insurance ranked among the most desired benefits for respondents on our 2016 survey (Jadavji et al., 2016).

The unionization of postdocs has risen steadily across the country over the past decade and unions now represent the majority of postdocs (i.e., those who are internally-funded) at nearly all of Canada's major research institutions. Thus the average postdoc in Canada is now categorized as an employee with access to EI and the Canada Pension Plan (CPP), other workplace benefits (e.g., health/dental), and bargaining rights. However, this is not the case for all postdocs in Canada, as some institutions (particularly those with small postdoc populations) and government laboratories continue to deny their postdocs employee status despite a number of EI/CPP rulings by the Canada Revenue Agency (CRA) and multiple rulings by provincial labour boards to the contrary. In addition, Tri-Agency award-holders and other externally-funded postdocs are almost universally denied employee status and access to EI/CPP and collective bargaining rights even at institutions where the postdocs are unionized. Thus, under the current Canadian postdoctoral training system, the average postdoc (i.e., the internally-funded, unionized postdoc) is now granted access to benefits, protections, and rights

that are withheld from the most promising postdoctoral trainees in the country (i.e., Tri-Agency award-holders). To make matters worse, postdocs on existing internally-funded contracts are now forced to give up employee benefits, protections, and rights in order to accept a Tri-Agency fellowship or other external funding.

As a result of this situation, some postdocs (particularly those with families) are now reluctant to even apply for Tri-Agency funding, as they recognize that accepting an award is likely to hurt them financially in the long-term due to lost benefits and pension earnings. This recommendation aims to rectify that situation by providing employee status and access to El and CPP for all Tri-Agency funded postdocs to ensure that our most promising future researchers are granted the same access to statutory benefits as the average postdoc.

#### **Recommendation 3**

Create a uniform policy for all postdocs supported by Tri-Agency grants that:

- defines all postdocs as both trainees and employees;
- establishes minimum standards for postdoctoral training conditions that include access to statutory (EI and CPP) and workplace (e.g., health/dental) benefits and a gross annual income that starts at \$47,500/year and increases by 2% for each additional year of postdoctoral training; and
- establishes additional support / training requirements such as access to: ombudspersons in cases of conflict, on-campus services (mental health, immigration assistance, and dedicated career counselling), and free/discount language training for international postdocs.

Despite the rise of postdoctoral unionization, many postdocs in Canada continue to be classified as non-employees and denied access to statutory and workplace benefits. Given that postdocs pay full federal (and usually provincial) tax on their income regardless of the source (stipend or salary), whereas graduate student scholarships are tax exempt, it is quite common for postdocs to have a net annual income that is lower than that of a PhD student holding a Tri-Agency scholarship, and virtually all postdocs except Banting award-holders take home less money after tax than a graduate student with a Vanier award. The irony of the fact that our research training system is governed by policies that clearly undervalue training and experience to such an extent is not lost on today's postdoc, and this contributes to the general disillusionment in our postdoctoral training system.

This recommendation aims to create uniform postdoctoral policy for all Tri-Agency-funded postdocs. The recommended minimum annual income of \$47,500 for all postdocs in Canada is intended to correct for a lack of appropriate inflation-adjustments in postdoctoral compensation over time, to minimize wage loss during training, and to make the Canadian training system more attractive in comparison to other countries that typically offer greater support (Sparling & Jadavji, 2016). It should be noted that this value matches (in CAD\$) the minimum stipend value now adopted and endorsed by the National Institutes of Health (NIH) in the US. In addition, we recommend adopting a payscale whereby stipends/salaries increase with years of training and experience; also in line with NIH policies. In addition we recommend

that the Tri-Agency include access to statutory and workplace (e.g., health/dental) benefits and pension plans in their minimum standards, as well as access to additional on-campus support and training for postdocs akin to that commonly available to graduate students.

#### **Recommendation 4**

Establish uniform guidelines at the national level by encouraging or requiring all institutions to adopt the minimum standards described in recommendation #3 for all postdocs regardless of source of funding for their stipend/salary.

The Tri-Agency plays an immensely important role in setting the tone for postdoctoral support and training across the country. However, in recent years there has been a shift towards the deregulation of Tri-Agency postdoctoral funding in favour of allowing institutions more power to set their own policies. We believe that the widespread disparity in postdoctoral training and working conditions across the country are due in part to the lack of coordinated policy efforts, so we view increased oversight and guidance as a necessary part of the solution to the problems in the Canadian postdoctoral training system. To rectify this, we recommend that the Tri-Agency establish uniform guidelines at the national level based on the minimum standards described in the preceding recommendation and strongly encourage, if not require, institutional adoption of those policies.

This approach would go a long way to reducing disparity in postdoctoral support both between and within institutions and we believe it would enhance the recruitment and retention of domestic and international postdocs, as it would make Canada more attractive to postdocs compared to other countries that have more uniform and standardized national policies for postdoctoral support and training (e.g., the United Kingdom, numerous countries in the European Union, and Australia).

#### **Recommendation 5**

Adopt the following policies and procedures:

• Implement a uniform fund transfer mechanism across the three agencies, using CIHR's current approach as a model.

This recommendation is intended to rectify the fact that some institutions vary the support provided to their postdocs (e.g., access to health/dental insurance) based entirely on the mechanism of fund disbursement used by the agencies. For various reasons, institutions seem inclined to provide better support for postdocs if funds are paid through the university payroll, and so we recommend adopting the approach currently used by CIHR across all three agencies.

• Increase the stipend for all Tri-Agency fellowships (except Banting) to \$50,000/year to start (+\$5,000 research allowance) and increase by 2% per year of additional training.

We recommend that all Tri-Agency fellowships be harmonized, increased in value, and adjusted according to years of training and experience. The latter is essential to establish the value of postdoctoral training, which is oddly not recognized at all by the current funding structure.

 Adjust the annual stipend for awards physically held outside of Canada to reflect differences (and/or changes) in currency exchange rates (up to a maximum of \$10,000).

Canadian postdocs holding Tri-Agency awards abroad often struggle to maintain the lifestyle they are accustomed to in Canada due in part to a relatively low exchange rate for the Canadian dollar compared to the US dollar and Euro. This is particularly true when those exchange rates change dramatically over short periods, as many Canadian postdocs in the US experienced when our dollar went from near parity to \$0.70 in a matter of months a few years ago. The Tri-Agency should increase the value of annual stipends for those holding awards outside of Canada to protect against such situations.

• Increase the duration of fellowships to 3 years for SSHRC- and NSERC-related disciplines and 4 years for CIHR-related disciplines.

This recommendation comes directly from the Naylor Report, and is intended to provide more job stability and longer periods of support for postdocs in an effort to increase the long-term productivity of awardees.

• Eliminate limits on the duration of postdoctoral support from Tri-Agency grants, provided a payscale is adopted that includes a 2% raise per year of additional training.

As previously communicated to Tri-Agency representatives reviewing current policies, CAPS supports the elimination of the limits on the duration of postdoctoral support from Tri-Agency grants. However, we are concerned that this will increase the likelihood of postdocs "being taken advantage of" via longer appointments for those who are not actually competitive for faculty positions. As such, we included the caveat that this approach should only be implemented if a payscale is adopted by the Tri-Agency based on years of training and experience. In the absence of an experience-dependent payscale, we would suggest that a maximum limit remain in effect, but that the agencies extend those limits to accommodate the lengthy training times now required to become competitive for faculty positions in the various fields relevant to each agency.

Allow postdocs to act as co-investigators on grants that fund their salaries.

At present postdocs are often tasked with writing or helping to write grants on which they cannot be listed as co-investigators because the grant in question requests funds in part to support their salary. While the regulations are meant to prevent research faculty from abusing the project funding schemes, the Tri-Agency should eliminate this rule with respect to postdoctoral trainees, as it forces postdocs to forego proper recognition for their contributions to grant applications.

• Create new funding opportunities for senior postdocs to support those who are close to being competitive for (or in the process of transitioning to) faculty positions.

This recommendation is meant to provide additional support for senior postdocs who are close to or in the process of transitioning to faculty positions. At present these types of bridging funds are almost entirely lacking for postdocs, which makes these transition periods exceedingly difficult for postdocs to navigate.

• Create new funding opportunities specifically geared towards indigenous postdocs.

The proportion of indigenous people engaged in postdoctoral training is exceedingly low. This recommendation aims to increase the inclusion of this group in Canadian research by providing funding opportunities specific to indigenous applicants.

• Establish a pool of smaller awards for trainees to support professional development and career transitions for PhDs and postdocs seeking non-tenure track careers.

Transitioning to a career off the tenure-track or outside of academia is difficult for most postdocs in part due to a lack of time available to dedicate to acquiring the skills and experience required to land jobs that are not directly related to one's research. We recommend establishing a pool of small awards to support postdocs in this difficult transition, that might be used to "buy" time off from their postdoctoral research to work on projects related to career development.

• Establish grants to fund research focused on postdoc and PhD career development, experiential learning, career transitions, and employability in non-academic sectors.

Post-graduate career development and employment options remain understudied topics. We recommend the dedication of more funds to the study of these subjects and potential approaches to improve the Canadian postdoctoral training system and the success of postdocs in general.

#### **Recommendation 6**

Establish grants and/or internal procedures to:

- monitor postdoctoral employment conditions and policies at the institutional, provincial, and national levels;
- track postdoctoral labour market outcomes; and
- promote the value of postdoctoral and PhD training to non-academic employers.

One of the key difficulties in generating evidence-based recommendations for postdoctoral policy at the provincial and national levels in Canada is a lack of information about the current state of affairs. This recommendation focuses on maintaining a healthy postdoctoral training system in the future by funding the monitoring of postdoctoral employment conditions and policies at the institutional, provincial, and national levels and improving tracking of former postdocs to assess long-term labour market outcomes. These investments are essential to maintaining the health and adaptability of the system, as evidence-based adjustments in policy and funding cannot be made in the absence of accurate data.

# **Concluding Statement**

It is generally recognized that additional education costs a person potential wages during the training period, but pays off long-term as the higher wages offered by jobs available to those with more advanced training allow people to catch up and eventually surpass the cumulative income of their lesser-educated peers. With this in mind, a common approach for examining the value or performance of any training program is to measure the increase in employment opportunities and cumulative income of former trainees over time to determine what 'labour market outcome advantage' is conferred by the training. At present, there is no evidence that the average postdoc trained in Canada ever makes up the wages lost during postdoctoral training (Sparling & Jadavji, 2016). To make matters worse, former postdocs who responded to CAPS' 2016 National Survey had an unemployment rate more than twice that of the average PhD in Canada (Sparling & Jadavji, 2016). Taken together these findings indicate that postdoctoral training under the current Canadian system not only costs the average postdoc money, but also fails to make him/her more employable.

The Canadian postdoctoral training system should provide a labour market advantage for the average postdoc and the full implementation of the recommendations made in this report are designed to accomplish that goal. At a bare minimum we would argue for the adoption of policies to increase compensation and benefits to a level that minimizes the long-term costs associated with the training of the average postdoc, as this situation will not be rectified by implementing policies that fail to address the needs of the average postdoc. Most postdocs have already dedicated many years of their lives to research, and while no one expects to become wealthy in that pursuit, no postdoc should expect it to cost them rather than benefit them in the long term. As a nation, we can do better.

Thank you for the opportunity to share our input with the members of the CRCC in this consultation.

## References

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# Acknowledgements

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