

The 2013 Canadian Postdoc Survey:

Painting a Picture of Canadian Postdoctoral Scholars

CAPS-ACSP and Mitacs



Copyright

© 2013 The Canadian Association of Postdoctoral Scholars/L'Association Canadienne de Stagiaires Postdoctoraux (CAPS-ACSP) and Mitacs.

Contributing Authors

Jeremy Mitchell, PhD* Past Chair (2011), CAPS-ACSP

Valerie Walker, PhD* Senior Policy Analyst, Mitacs

Rob Annan, PhD Vice-President, Research & Policy, Mitacs

Chris Corkery, PhD Past Chair (2012), CAPS-ACSP

Nirupa Goel, PhD Executive Committee, CAPS-ACSP

Louise Harvey, PhD Executive Committee, CAPS-ACSP

Dave G. Kent, PhD Vice-Chair International, CAPS-ACSP

Julie Peters, PhD Director of Research, Academica Group

Silvia L. Vilches, PhD Chair (2013), CAPS-ACSP

* Asterisks indicate lead authors and secondary authors are listed alphabetically.

To cite this report

Mitchell, J.S., Walker, V.E., Annan, R.B., Corkery, T.C., Goel, N., Harvey, L., Kent, D.G., Peters, J., Vilches, S.L. 2013. The 2013 Canadian Postdoc Survey: Painting a Picture of Canadian Postdoctoral Scholars. Canadian Association of Postdoctoral Scholars and Mitacs.

Contact

Questions or comments on this survey or related matters may be addressed to CAPS-ACSP or Mitacs at the following addresses:

CAPS-ACSP: survey@caps-acsp.ca

Mitacs: research@mitacs.ca

Acknowledgments

Our first thanks go to the 1,830 individuals who have shared with us their experiences as Canadian postdoctoral scholars. Thank you.

The 2013 Canadian Postdoc Survey has been a success in large part because of the willingness of stakeholders to distribute and promote it. These stakeholders include university postdoctoral associations, the Canadian Institutes of Health Research (CIHR), the Natural Sciences and Engineering Research Council (NSERC), the Social Sciences and Humanities Research Council (SSHRC), and the many institutions that host postdoctoral scholars. We would particularly like to thank Dr. Mihaela Harnos and Dr. Sue Horton, from the Canadian Association of Postdoctoral Administrators (CAPA-ACAP) for helping us to reach out to university administrators across Canada.

Postdocs were able to complete the 2013 survey in either English or French. The French translation was completed by Crabapple Media and proofread by Dr. Sébastien Lévesque, Dr. Suzette Ali, and Dr. Isabelle Duval.

The survey instrument was designed, and the survey itself conducted and analyzed, by Academica Group. Academica's insights and advice were invaluable, and their flexibility throughout the process has been greatly appreciated.

Finally, we would like to recognize the efforts of Dr. Sunny Marche. As Chair of the National Postdoctoral Stakeholder Group, Dr. Marche was a consistent advocate on behalf of Canadian postdoctoral scholars. His strong endorsement at the 2011 Canadian Postdoctoral Policy and Administration Meeting was instrumental in making this survey a reality.

The Canadian Association of Postdoctoral Scholars/L'Association Canadienne de Stagiaires Postdoctoraux

CAPS-ACSP is the national voice of Canadian postdocs. It works towards clarifying the role of postdocs in Canada, advocates for equitable treatment of postdocs, and represents the interests of postdocs at federal and provincial levels. CAPS-ACSP exists as a volunteer committee of postdoctoral scholars with an elected executive representing institutions across the country.

Mitacs

Mitacs is a not-for-profit organization that supports national innovation by coordinating collaborative industry-university research projects involving graduate students and postdoctoral fellows. Since 1999, Mitacs has been promoting academic-industrial research and development (R&D) while supporting the development of future researchers. Mitacs has developed a proactive and successful approach to supporting innovation, both directly through collaborative R&D and indirectly through long-term development of skilled human capital.

Key Observations

The 2013 Canadian Postdoc Survey has two primary objectives: to present demographic data about Canadian postdoctoral fellows (postdocs) and to identify their primary concerns. Many of the concerns expressed by postdocs reflect their current circumstances and future ambitions. Though generally satisfied with the state of their research environment, significant problems are recurrent across the majority of provinces and institutions. These require immediate attention to ensure the healthy continuation of world-class research in Canada.

Who is the Canadian postdoc?

The average Canadian postdoc is 34 years old. They are male (53%) and female (46%). Most are married or in a common-law relationship (69%). One-third (35%) have dependent children. Over 50% of Canadian postdocs are landed immigrants or on work visas.

In short, postdocs are adults: in the middle of their lives, but at the beginning of their careers.

What are the key problems?

Administrative Ambiguity

Postdocs do not have clear employment or administrative status. Postdocs may be classified as employees, students, independent contractors, or trainees. Moreover, their classification within an institution does not necessarily correspond with their federal or provincial employment or labour classification. After years of advanced formal education, most respondents do not perceive themselves as students or “trainees” but as similar to other employees at their institutions, deserving of access to the same employee benefits.

Low Compensation and Benefits

This survey reveals that approximately two-thirds of Canadian postdocs earn less than \$45,000 annually. Many do not have access to their institutions' health or dental insurance plans or are ineligible for employment insurance and pension contributions. Less than half of respondents are satisfied with their salary or stipend, and only 29% of respondents are satisfied with their access to employment benefits. These findings show a dire need for improvement.

Insufficient Training

The survey confirms that most Canadian postdocs view their position as a stepping-stone to employment as university faculty. However, assuming that there is no significant change in either the number of openings for new faculty or the number of postdoc appointments, the majority of postdocs will not obtain faculty positions. Thus, with respect to training, two key issues emerge. First, postdocs receive insufficient training. Second, the training postdocs seek and receive is designed to prepare them for academic careers that few will obtain; postdoctoral training rarely includes the professional skills needed to succeed in non-academic settings.

Canadian postdocs are the future of Canadian research. The data presented here should guide relevant institutions, organizations, and governments to informed, evidence-based development and the evolution of policies and programs that effectively support Canadian postdocs.

Executive Summary

A postdoctoral scholar ('postdoc') is defined as an individual holding a recently completed research doctoral degree (or medical professional equivalent) in a temporary period of mentored research or scholarly training. [A Canadian postdoc is] a postdoc who is associated with a Canadian institution, regardless of nationality, citizenship or residency, or who is receiving funding from within Canada.

—CAPS-ACSP

Postdoctoral scholars ('postdocs') are an essential component of Canada's research community. As highly-trained and experienced early career researchers, they play a key role in driving discovery and expanding knowledge. Postdocs are also the source of future productivity, because postdoctoral appointments are the platform from which the next generation of researchers embarks on independent research careers.

However, most postdoctoral scholarship in Canada has no formal, consistent structure or oversight, either institutionally or nationally. Policies have developed in an ad hoc manner, or have failed to develop at all. The administration and compensation of postdocs have not developed in concert with postdocs' evolving role. Training and professional development have not kept pace with the changing job market.

Efforts to formalize the administration of postdocs and to provide appropriate training opportunities require a clear picture of the individuals for whom policies are being designed. Who are Canadian postdocs? What are their motivations, their goals, and their concerns? How are they currently being administered and how would they like that administration to change? What training are they currently receiving and what training are they seeking?

Respondents by Institution

University of Toronto	211
University of British Columbia	209
McGill University	202
University of Alberta	99
University of Western Ontario	91
Université Laval	81
McMaster University	78
University of Saskatchewan	75
Dalhousie University	70
Université de Montréal	59
University of Calgary	53
University of Waterloo	46
University of Ottawa	44
University of Victoria	42
Université de Sherbrooke	38
Queen's University	32
Samuel Lunenfeld Research Institute	22
Carleton University	20
Memorial University of Newfoundland	20
Other	329
Prefer not to answer	9
Total	1,830

To answer these questions, CAPS-ACSP and Mitacs launched the 2013 Canadian Postdoc Survey. The 1,830 survey respondents include postdocs from diverse research disciplines at 130 universities, hospitals, government laboratories, and private companies across Canada and abroad.

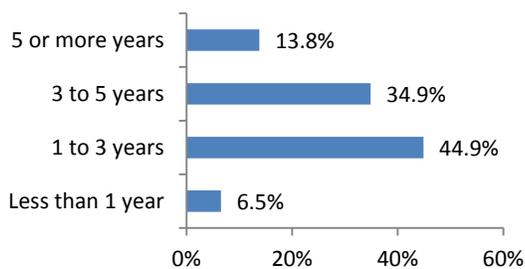
Responses to the 2013 Canadian Postdoc Survey paint a picture of Canadian postdocs as highly-trained, motivated researchers. Respondents are generally satisfied with the research environments that their institutions are providing. However, postdocs repeatedly and resoundingly cite their administrative classification and remuneration as being inconsistent with their expertise and their role within the Canadian research community.

Although postdocs are keenly aware and concerned that their overall numbers outstrip the demand for new university faculty, most view their own position as a stepping-stone to an academic research career. This outlook often results in postdocs who are dissatisfied with their experiences and uncertain about future career options. Highly-skilled researchers are an essential component of our knowledge-based economy. Since only a small capacity exists for growth in university positions, postdocs should be encouraged to explore non-academic career options and to acquire the requisite training and skills.

I don't think that it is fair to expect someone to go through an extended period of education, and then 3-5+ years of temporary, low paid employment as a 'trainee' with no benefits, probably in several different locations before they can even start to apply for permanent employment. The uncertainty is incredibly difficult, especially at a time when people are trying to maintain long term relationships and start families.

—Survey Respondent

Total Expected Number of Years as a Postdoc



Postdoc Profile

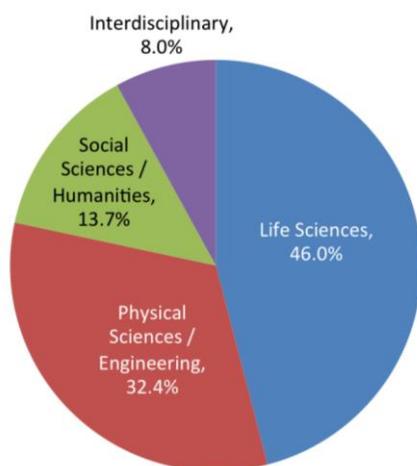
Many of the concerns and priorities highlighted by the 2013 Canadian Postdoc Survey are reflections of the postdoc community's demographic make-up. The average Canadian postdoc is 34 years old. They are male (53%) and female (46%). Most are married or in a common-law relationship (69%). One-third (35%) have dependent children. In short, postdocs are adults.

Most respondents expect to hold a series of postdoctoral positions, and to spend 1-3 years (45%) or 3–5 years (35%) as postdocs before transitioning to stable full-time employment. Thus, qualitatively, over a third of respondents expect the cumulative duration of their postdoctoral appointments to approach that of their doctoral studies. And yet, while considerable attention has been devoted to the needs and concerns of Canada's doctoral students, the needs and concerns of postdocs have been largely ignored.

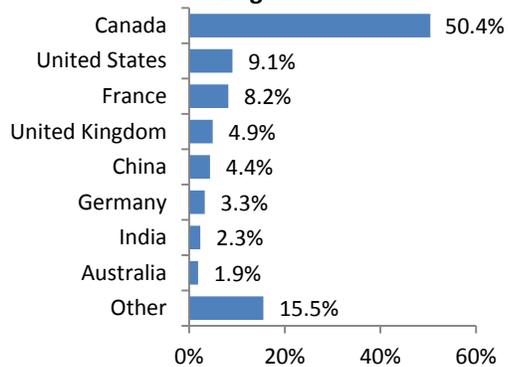
Postdocs represent a wide range of academic disciplines. Approximately half of survey respondents report their main field of research as Life Sciences (46%), one-third as Physical Sciences/Engineering (32%), 14% as Social Sciences/Humanities, and 8% as Interdisciplinary.

Nationalities are also diverse: 38% of respondents identified themselves as international postdocs on work permits, and a further 15% as permanent residents. Half of all postdoc respondents completed their highest degree outside of

Field of Research



Country Where Completed Highest Academic Degree

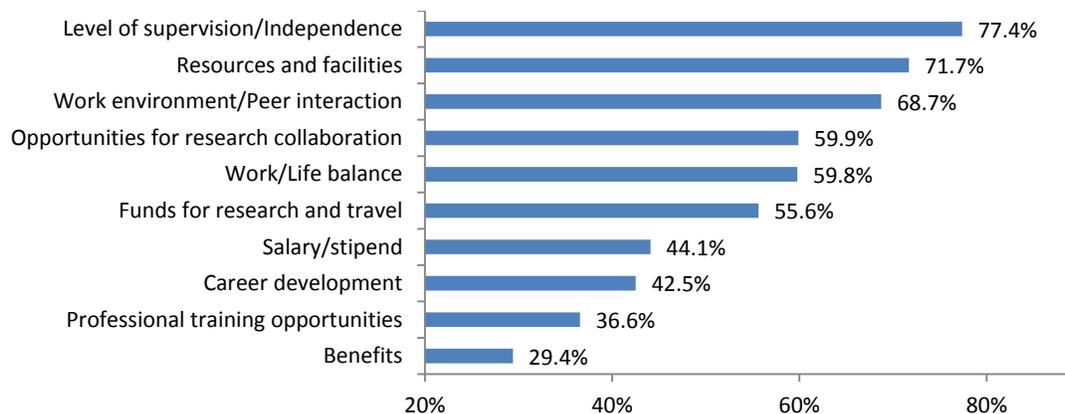


Canada. International mobility facilitates knowledge transfer, encourages the establishment of new research networks, and can help to maintain Canada's reputation for research excellence. Smooth transitions between institutions are essential both for postdocs and for host institutions. This report draws attention to the unique needs of Canada's international postdocs.

Concerns and Satisfaction

Most respondents (77%) are completely or somewhat satisfied with the level of supervision they receive, and 72% are satisfied with the resources and facilities available for their research. However, less than half are satisfied with their salary (44%) and access to benefits (29%), or with the career development (43%) and professional training (37%) opportunities they have at their institutions.

Satisfaction Level (Completely or Somewhat) with Elements of Postdoctoral Administration and Training



Compensation and Administration

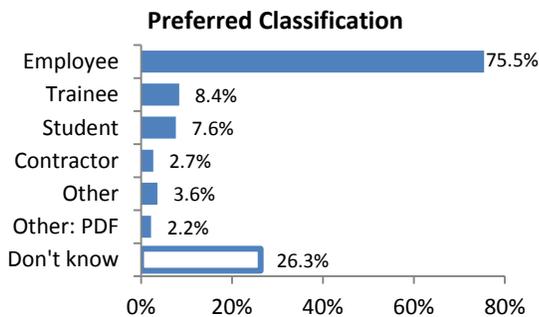
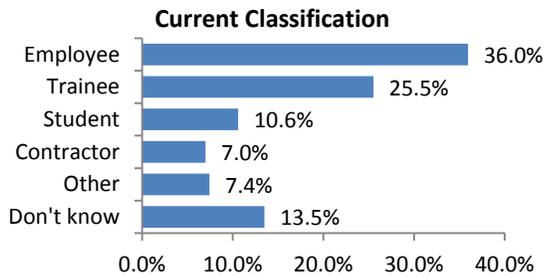
I make less as a postdoctoral fellow than I [made] as a PhD because of income tax. Furthermore, postdoctoral fellow[s] don't have access to medical clinics in universities because they are not students. But we are not employees either. That gray zone between students and employee is really frustrating.

Coming to Canada for a postdoctoral 'training' is a financial disaster in every way.

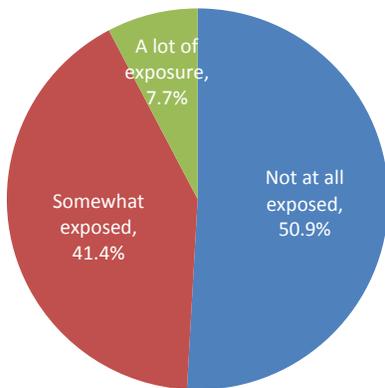
—Survey Respondents

Many postdocs are dissatisfied with their salary and benefits. Approximately two-thirds of respondents (63%) have a gross annual income less than \$45,000. Access to benefits varies widely. The majority of postdocs are paid through a supervisor's research grant (49%) or through fellowships (20%) from the Tri-Council national research funding agencies (CIHR, NSERC, SSHRC). Given that the Tri-Council also funds a significant proportion of faculty research grants, they are in a strong position to provide leadership in revising postdoc administration, including compensation and benefits.

Concerns surrounding access to benefits are related to inconsistencies in postdoc classification by provincial and



Exposure to Non-Academic Career Opportunities



I am constantly stressed that I won't be able to get a job as a university professor, but I really don't have a satisfactory 'plan B' if this doesn't work out.

—Survey Respondent

federal governments and by host institutions. Currently, postdocs report a confusing array of classifications, as employees, students, independent contractors, and trainees. Many postdocs are uncertain of their administrative classification. Among survey respondents who express a preference, the significant majority (75%) indicate that they would prefer to be classified as employees. This preference reflects the desire for statutory benefits (Employment Insurance, Canada Pension Plan) and for commonly negotiated employee benefits (extended health and dental insurance).

Postdocs who have neither employee nor student status express a particular dissatisfaction with their inability to access the rights and benefits of either classification. Some respondents also feel that student and 'trainee' designations are insulting given their experience and expertise.

Career Development and Professional Training

Most postdocs view their postdoctoral appointment as a stepping-stone to a faculty position. "University research faculty" is among the original career goals of 81% of survey respondents prior to their postdoc appointment. When asked about current career goals, that frequency drops to 69%, but university faculty remains the dominant career goal. Given the challenges in securing faculty appointments, many postdocs will find that their aspirations do not match reality.

"Academic tunnel vision" is reflected in the career development and professional training opportunities that postdocs seek out and that universities provide. The most common skills sought by postdocs are those that will prepare them for a faculty position, e.g., grant or proposal writing, project management, and teaching skills.

Barring significant changes in the supply of postdocs or the demand for new faculty, only a minority of postdocs will obtain a faculty position. And yet, half of the survey's respondents report having no exposure to non-academic careers, and 87% either have no access to career counselling or are uncertain of their access. Canadian postdocs would benefit from broader training and greater exposure to non-academic training opportunities.

In summary, the 2013 Canadian Postdoc Survey provides a comprehensive, up-to-date picture of Canadian postdocs. CAPS-ACSP and Mitacs believe that the Survey will provide a valuable tool as Canadian research institutions and organizations seek to develop progressive approaches to postdoctoral administration and training. The Survey confirms that most Canadian postdocs believe the Canadian research environment is conducive to productive research. However, two concerns are in urgent need of attention:

First, many postdocs are unhappy with their administrative or employment status and with the corresponding salary and benefits. ***Postdocs would like to be treated as employees, and to receive benefits and compensation commensurate with their work and experience.***

Second, respondents are very concerned that, after investing years as postdocs, their career opportunities remain uncertain. Successful transitions from postdoctoral scholarship to independent careers are in Canada's interests as well as those of Canadian postdocs. ***Canadian postdoctoral appointments should be supported with appropriate and relevant career development opportunities.***

CAPS-ACSP and Mitacs look forward to working with universities, research institutions, funding agencies, and governments to identify and implement solutions to these challenges.