

Modernizing our Doctoral and Postdoctoral Training Programs: Bold New Initiatives



COMMENTARY

Stephen Bornstein, PhD
Director for the Centre of Applied Health Research
Memorial University
St. John's, NL



ABSTRACT

As Robyn Tamblyn and her colleagues (2016) note in this issue, the Institute of Health Services and Policy Research (IHSPR) of CIHR has identified one of its key strategic goals for the 2015–2019 period as “the creation of learning health systems and the next generation of researchers with the skills to partner in health system learning and transformation.” As part of its effort to realize that goal, the Institute led the creation of a multi-sectoral “alliance” of organizations concerned with health systems and policy research (HSPR) and that Alliance spawned a “Working Group on Training Modernization” whose role was to examine the ways in which our current models of doctoral training in HSPR need to be enhanced and updated to meet the Institute’s strategic goal. As co-chair (alongside Dr. Adalsteinn Brown of the University of Toronto), I am submitting this commentary to inform the readers of this journal about the activities, outputs and plans of that Working Group. I will focus on the report we submitted to the Alliance on December 7, 2015, and on the steps that have followed in moving forward on our recommendations (located at http://ihpme.utoronto.ca/wp-content/uploads/2014/12/CHSPR-Alliance_Final_Dec7.pdf).

FIRST, A BRIEF outline of the process that generated our report and subsequent actions. The Working Group was constituted by Dr. Tamblyn in consultation with the Executive of the Alliance. The membership was a mix of academics, leaders of national and provincial health research funding organizations, graduate students, representatives of health systems organizations and leaders of major national health charities. A list of the members is provided as an appendix to our report. Institute of Health Services and Policy Research (IHSPR) staff kick-started the Working Group's deliberations with a white paper synthesizing the available literature on the challenges facing doctoral education in Canada and across the world, as well as efforts to respond to those challenges. The Working Group then used a combination of telephone consultations with its individual members and key informants, conference call meetings and one face-to-face meeting to draft, revise and finalize our 19-page report.

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Our report started with a consensus on a set of findings about the conditions affecting Canadian doctoral training and trainees in general and in health systems and policy research (HSPR) in particular. Our literature review and consultations found that the environment for training and trainees has been changing rapidly in recent decades. The number of regular, tenure-track academic positions in Canada and in the universities of other industrialized countries has become limited, whereas the number of doctoral graduates being produced has continued to

grow. As a result, an ever smaller percentage of these doctoral graduates, including in HSPR and related fields, will join university faculties as regular staff members. A significant and growing share of the employment opportunities available for the graduates of HSPR doctoral programs is now in the non-academic public sector (federal and provincial ministries and agencies and health system organizations) and in the private sector (industrial firms and associations, consultancy firms, polling organizations, the media, think tanks, non-governmental organizations and health charities). Career patterns for HSPR doctoral students increasingly focus on such non-academic jobs or on combinations of, and movement back and forth among, non-academic and academic jobs. These various non-academic employers would seem to have a growing need for advanced research expertise to address the increasingly complex issues they confront. HSPR doctoral graduates ought, we would think, to be in great demand for employment in these kinds of positions, but this doesn't appear to be the case. Employers often seem to find master's graduates more appropriate.

Despite this clear set of trends, however, we found that most of Canada's HSPR doctoral programs have not yet done very much to modernize their contents or their approaches in an effort to provide the kinds of skills and competencies required by these non-academic positions and these new career patterns. We continue to train our doctoral students as if a conventional academic career were the only possibility. Students in most of these graduate programs continue to see their careers as focused on tenure-track academic positions. Professors and career advisers continue to regard positions outside the university, even secure and well-paid ones, as second-best alternatives and they convey this assessment to their current and prospective students.

To address this worrisome misalignment between the supply conditions of HSPR doctoral graduates and the demand conditions for their services, the Working Group recommended three strategies.

1. The first involved a substantial reconfiguration of the contents and delivery modalities of Canada's HSPR doctoral programs. Based on an analysis of the types of additional competencies likely to be required by new, non-academic jobs and new career patterns (outlined in Table 3 of the report), we recommended that Canada's HSPR doctoral programs modernize their approach to student recruitment and orientation to better reflect these new realities and that they upgrade and supplement their programs to include components focusing on each of these additional competencies. To support such efforts, we proposed the development of a set of new, online, pan-Canadian curriculum modules. These modules, involving a combination of in-class, online and mixed teaching approaches, would be developed by a team of experts with representation from across the country. They would be designed to build on the strengths and best practices of existing programs and to serve as supplements, rather than replacements, for current course materials.
2. Our second proposal involved another program innovation. We recommended that HSPR doctoral and postdoctoral programs include significant practicum opportunities. Including a requirement that each student spend a certain amount of time on an internship with a non-academic organization, and especially with organizations that are regular or potential employers of HSPR graduates, will not only enhance students' understanding of

the needs and preferences of such public and private organizations but also provide them with contacts that could prove useful after they graduate. Such internship programs, particularly if developed with the direct and continuous engagement of a range of employers, would also help employers increase their familiarity with the capacities and limitations of HSPR doctoral students and enhance their ability to use the skills of doctoral graduates more effectively. These internships would be supported by a new IHSPR suite of fellowships, possibly borrowing from the approach used by MITACS, and involving a requirement for partial funding from CIHR and from the host employer.

3. Our third recommendation was that our HSPR graduate programs work together with IHSPR and with the Student Working Group of the Canadian Association for Health Services and Policy Research's (CAHSPR) to develop a standardized methodology for tracking the career movements of all graduates who are willing to be tracked. This could be done using software such as LinkedIn. Anonymized results of the tracking could be made available to individual programs and to IHSPR. Being able to understand where the graduates of our programs go for their first and their subsequent jobs will be essential for evaluating the performance of our training programs and for adjusting them to future changes in market conditions. In addition, the existence of such a pool of registered students and graduates could, especially if connected to information about potential employers and positions, serve as a sort of virtual marketplace or community of practice for internships and longer-term employment opportunities that could be used by students, graduates, universities, program advisers and employers.

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To follow up the submission of our report, IHSPR convened a workshop in Toronto on March 31, 2016. The event was very well attended by representatives of all the potential stakeholder communities – research funders, researchers, university administrators, graduate students, and employers from both the public and the private sectors. A broad consensus emerged in the panel presentations and the discussion sessions about the background findings of our report and the three recommendations. While there was strong support for working towards modernizing doctoral curricula and funding programs, the group agreed that the best way to get the ball rolling on a comprehensive set of reforms was to begin at the postdoctoral level by launching a program of one-year fellowships for students with recently completed doctoral degrees in HSPR and related fields.

In early May, a face-to-face meeting of the Working Group on Training was held in conjunction with the annual meeting of the Canadian Association for Health Services and Policy Research in Toronto. The group agreed to focus on the creation of a new fellowship program, involving a significant internship component, to be entitled the “Health System Impact Fellowships” and to begin at the postdoctoral level. A smaller working group was created to develop the program. A set of meetings of that group during the month of June

reached agreement on the basic features of the new program to be crafted by IHSPR and launched by CIHR in early fall 2016. It will be called the Training Modernization Start-Up Grants in HSPR and will be the first component of a multi-year fellowship program at the postdoctoral and doctoral levels. IHSPR will provide funding to successful Start-Up Grant applications to foster partnerships between university training programs and employer organizations and create the conditions necessary for successful training modernization. Specifically, Start-Up Grants will be co-led by Canadian university doctoral programs in HSPR and employer partners from the public or private sector and will enable them to co-develop novel fellowships that involve an internship placement at the employer organization for at least 50% of the time, professional development training, and mentorship and networking opportunities. Co-leads of the Start-Up Grants will also begin collaboration on one of the other key recommendations of our report – a modernized doctoral curriculum with enriched competencies that include the professional skills required to make meaningful and impactful contributions within and outside of academia.

The Start-Up Grants will be followed by a second competition for Health System Impact Fellowships, likely in Winter 2017, for postdoctoral individuals and, eventually, for doctoral trainees.

Reference

Tamblyn, R., M. McMahon, J. Nadigel, B. Dunning and E. Drake. 2016. “Health System Transformation through Research Innovation.” *Healthcare Papers* 16(Special Issue, September): 8–19. doi:10.12927/hcpap.2016.24719.