



# The Canadian Consortium for Research / Le Consortium Canadien Pour La Recherche Canadian Psychological Association / Société canadienne de psychologie

## SUMMIT May 6-7, 2019 Hilton Garden Inn (Ottawa, ON)

# What's needed and what's next for Canada's research community: A summit for scientists/researchers working in or outside of academia

## **Overview of Summit**

The Canadian Consortium for Research (CCR), in collaboration with the Canadian Psychological Association (CPA), was pleased to host a 2-day Summit – *What's needed and what's next for Canada's research community: A summit for scientists/researchers working in or outside of academia.* Dr. David Naylor, Chair of the panel convened to review fundamental science in Canada, kicked off the Summit with a Keynote Address and Townhall Discussion on the state of fundamental science in Canada. Delegates then participated in break out sessions focused on the academic work environment, training our next generation for careers outside of academia, and impact/outcome measures in academia and science. The afternoon of the second day was devoted to a meeting of the psychology-specific attendees only.

#### **SESSION 1: IDENTIFYING THE ISSUES**

#### Overview of #PhDs and Academics in Canada Dr. James Compton, CAUT

- Significant increase in full-time university student enrolment since 2001 (60% increase from 600,000 to just over a million)
- Huge amount of growth at the graduate level (99% increase in doctoral programs; 81% in masters and other graduate programs; 50% in undergraduate programs)
- Year-over-year growth rate has declined over the past decade, esp. for PhD students
- Significant decline in post-secondary education funding in most provinces; Federal public funding for PSE has been flat
- With less public funding, tuition fees are high and increasing
- Public funding has declined from 80% to 50%, while tuition fee revenues now represent 40% of university operating revenues
- Faculty salaries represented more than 30% of total university expenditures in the 1970s and 1980s but have declined to 20% currently
- 21% decline in tenure-track positions, but almost a doubling in 12-month or more positions off the tenure –track. Increasing reliance on contract academic staff, who are trained as researchers, is a huge underutilization of Canadian research potential but also raises fairness concerns
- Increasing reliance on contract academic staff (CAS) and the creation of a 2-tiered workforce -53% of those on contract want a tenure-track position; almost half of CAS say they are living month-to-month with current income
- Significant diversity & equity challenges in the PSE sector: wage gaps exist between men and women and worsen for racialized and Aboriginal university and college teachers; racialized, Aboriginal and women teachers are less-likely to have full-time, full-year employment
- Re: funding, peer review committees normally deem about 2/3 of applications fundable, but the research dollars available mean much less is actually funded

## **KEYNOTE PLENARY ADDRESS**

#### Update on Status of Fundamental Research in Canada Dr. David Naylor: Chair, Fundamental Science Review Panel

"Our government must ensure its support for fundamental research is coherent, effective and agile enough to keep pace with the dynamic nature of contemporary science" – Kirsty Duncan

- Panel made 34 recommendations specific to: governance, oversight, coordination and stronger and more equitable adjudication and evaluation; next generation of researchers; and core funding for independent research grants
- Recommendation to undertake a wide ranging and multi-departmental review of innovationrelated programming, including both direct and indirect supports for business research and development still not complete
- In relative terms, Canada must be at or very near the top of the funding pyramid event if can't invest in basic research at the same levels as the world's top economies in absolute terms

- Total expenditure in R&D is falling; Canada isn't competing effectively in R&D sphere
- Canada relies on universities to pay for research more than any other country; universities subsidize research in untoward extent. Gross domestic R&D expenditure from business is also low
- Canada spends more for HERD (higher education R&D) here than any other G7 (as a share of gross domestic product) makes it seem like there is a lot of money in universities when there isn't
- Canada lags in winning international prizes; high on producing educated individuals (incl college diplomas) but very low on innovation
- Canada is more apt to collaborate internationally rather than interprovincially
- Suboptimal coordination across the funding organizations: striking difference in success rates across agencies; different comparables for SSHRC; incongruence between time spent writing grants and success rates
- Strategic science fund has huge potential for many conflicts of interest. When membership announced, research community needs to look at individuals and needs to maintain regular watch
- Very limited FTP interaction on science files and innovation files among senior officials; imbalance of FTP support for research
- Good that we are behind students and doing what we can to support them, but younger researchers are vulnerable
- Operating grant boost got \$235 rather than \$405 recommended by the panel; spread was better but amount still too low
- If add more operating grants, need to add more to facilities and administrative costs investment
  was not even enough to cover the increase in operating grants and current rates massive hole in
  ecosystem (\$300M x %20 = \$60M)

## TOWNHALL WITH DR. DAVID NAYLOR

## Beyond the Science Review: What Issues Still Face Researchers in Canada?

- Research community needs to talk to all parties with one voice again; much ground still to be
  made up. Canada is a young country; science isn't rooted in our history as it is in other countries
  with extensive history of science and innovation need resolve inside and outside of government
  to continue making the case for the importance and contribution of science. No government will
  fill a funding hole that has gotten bigger over many years, rapidly; funding ask could have easily
  been met. When we ramp up slowly harm is being done to next generation of young researchers
  and early scholars; need to storify our facts and figures to make our case and continue on
- Provinces are key allies on facilities and operations. Making case provincially is important; will be very different and granular based on province by province, thereby making a united front difficult
- Open access issue important as concept, but costs are prohibitive. Likes an ecosystem with a blend that involves journals promoted by societies; high subscription rates for bulks of journals that we don't need, and when we're doing bulk of editing as authors.
- Perception that most PhDs don't get jobs in universities so maybe we don't need that many. Need to persuade people that humanities matter; interview those in leadership roles in private sector. We are on low end of PhD output in OECD countries. One comes out of PhD with important competencies and skills; get narratives and showcase how they are using their skills.
- In advocacy, consider targeting Senators instead of or in addition to MPs

## SESSIONS 2 AND 3: IDENTIFYING THE CHALLENGES AND SOLUTIONS

#### Break Out Discussion #1: The Academic Workforce

- Re-interpreting/evaluation of evidence-based decision making to broaden scope and methodologies, without diluting current evidence-based decision-making metrics
- Encouraging diversity through non-traditional evidence
- Hybrid of priority-driven and curiosity-based research funding
- Emphasis of knowledge transmission through supports for teaching
- Value service as a fundamental support to peer review
- Advocating for larger government and social programs that indirectly support academia
- Mid-career encouragement
- Importance of participation and collegial governance and protecting rights within a faculty association collective agreement
- Lobbying for research funding must be multi-dimensional (e.g., telling stories not just numbers)
- Bridging the gap between academic positions and private/governmental work
- No access to research libraries if you're not in academia
- Issue of contract academic staff
- Faculty need to start telling their deans what they do and what they need

#### Break Out Discussion #2: Training the Next Generation

- Mandatory professional training
- Earlier awareness for career purpose
- Work-integrated learning (e.g., practical experience, learning the language, networking, FSWEP)
- Tenure track position is not something all will pursue in fact only 20% of PhDs do
- Wider variety of role models beyond the academic setting
- Culture shift graduate studies are broadening beyond academia (e.g. valuing outside skills, eliminating stigma): students to be more upfront that aren't looking for academic career; faculty to be open to training students for out of academia positions
- Support for faculty development
- Change reward structure for funding agencies; current priority on meriting publications or dependent on supervisor interaction or HQP pursuing academia
- A lot of challenges for contract staff
- CIHR supports faculty development
- Build in workshops at conventions on pursuing careers outside of academia
- Maybe heading towards divergence of different PhD streams teaching only streams, not pursuing academia/some research
- Evidence-based decision-making needs to come through in education how do we best prepare learners? how do we move from one form of learning to another?
- CAGS task force on excellence in graduate programming one looking at research PhDs and the other at professional degrees (e.g. PhD versus PsyD)

## Break Out Discussion #3: Impacts and Outcomes

- We are not entirely measuring and communicating what matters
- Recognition that current metrics used to evaluate academics and academia do not sufficiently capture academic work but, universal agreement that current metrics serve a purpose and need to triangulate with other data metrics
- Discussion of "excellence" varies based on what are trying to obtain from research
- Trying to publish quickly even if means impacting the integrity of the research question/study
- Need for other forms of assessment, evaluation rewarding people who do policy development and analysis; not valued right now because doesn't result in published work despite having had impact in changing a law/policy/government-understanding
- We need evidence-based decision making and academics are in the position to define what the evidence is - needs to be more than impact factors, h-indices, # of publications, # of presentations – particularly hard for early career investigators; metric needs to align with research undertaking
- Greater use of narratives and story-telling
- We need to measure, assess, communicate, and reward networking, both within and beyond
- Outputs, outcomes, and impacts all three need to be considered; with respect to impacts, they need people to sit on standards committees

#### **MEETING OF PSYCHOLOGY ATTENDEES ONLY**

What's needed and what's next for Canada's psychology scientists/researchers: A Summit for psychological scientists/researchers working in or outside of academia

#### **KEYNOTE ADDRESS**

#### Dr. Stewart Donaldson Claremont Graduate University

- Psychology training set us up for many jobs: Leadership positions; Applied research and evaluation; Consulting; Human resources; Training and development; Faculty positions
- At undergrad level, students don't know the career opportunities that are possible; faculty, departments and professional association can play role in fostering this knowledge
- Advice from alumni to current students: Follow passions; Build skills (scientific methods, research tools, content knowledge and breadth, communication skills, gain field experience, be flexible); need methods and content/substantive knowledge as well; careers aren't linear
- Scientifically trained MAs and PhDs are in demand today to address the most pressing problems in society few do it better
- Sometimes calling yourself psychologist when in a different job role can work against you because of the perception that we are all clinicians

#### Panel Presentation Psychology-prepped Careers Outside of Academia

Dr. Jennifer Veitch, National Research Council of Canada Dr. Heather Orpana, Public Health Agency of Canada Chris Nicholson, Shopify *(unable to attend due to illness)* 

- Psychology has key role in public health; data and surveillance, poverty reduction; positive mental health; applied research; need to understand human behavior to address public health threats; mental health and well-being, healthy living, healthy built and social environment, healthy child and youth development, healthy aging, health inequalities
- Valuable to able to talk across disciplines and engage in interdisciplinary collaboration
- Supervisor needs to support students in extra experiences
- New grads seem to lack institutional awareness and how to navigate institutional structures
- Service to the profession is important because you can take it back to the place in which you work
- Advice to grad students and their supervisors
  - Do an applied project/internship/student-placement
  - Communication and soft skills are very important need to be able to be collegial and flexible, and evidence-based
  - Blend of good publication record and some exposure to some places outside of academia
  - Send students to knowledge translation workshops
  - Don't underestimate need for critical thinking skills; training to look at context; get the right thing done in spite of the politics
  - Train in job interviewing; behavioural competencies

## Facilitated Discussion to Identify Key Issues impacting Psychology Departments/Training, Recommended Solutions, and Next Steps

## Next Steps / CPA Role

- Summit value conduct annually; make info accessible via different means (e.g. webinars, social media)
- Career Resources/Support
  - Host job fairs/conferences for non-clinical students
  - Faculty need to use their networks to help students
  - Mobilize online training specific to jobs
  - Post info on the CPA's website
- Better communication with graduate chairs; find ways to communicate with those outside of academia
- Continued need to reach out to government and media on psychology's contribution in different domains
  - Psychology doesn't market itself well
  - Structure of CPA (e.g. sections, two summits) promotes silos
  - Getting content for promotional purposes from CPA members is a challenge
- Continued need to advocate for research funding
  - Huge problem in funding of psychology at tri-agencies
  - Lack of standardization among reviewers at tri-agencies; more psychology needed on peer review panels
  - Who funds mental health research / psychological research in Canada?
- Some departments are resorting to not offering funding for students but still accepting them
- Proposed psychology month campaign
  - Feature individuals with PhDs in psychology not in clinical or academic settings
  - Contribution of psychology in all different areas that it matters
- Community impact; impact evaluation that's next wave where we can contribute
  - Training in program evaluation is needed
  - Foster more opportunities for interdisciplinary work
  - Teach leadership, project management, teamwork in some cases, these are hard
  - Provide media training
- CPA should get involved in more public policy issues
- Continue the partnership with CCR
- Many experimental programs feeling some apathy re: career trajectory, funding, diluting of brand - concern about all the different names psychology is using, particularly in absence of being able to use psychologist title
  - Experimental Chairs unclear on what else they need to be offering/teaching as part of the curriculum to help students