

Transferrable skills: a *must-have* for the modern PhD graduate

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Graduate education is evolving: the backgrounds of people who enter graduate school, the nature of the research being done, and career prospects after graduation are factors that are likely to be different today than in our supervisors' generation. Our generation has seen a rise in female, international, and older student enrollment, all populations that face additional challenges. The research environment today places heavy emphasis on multidisciplinary collaboration and knowledge translation, two elements with which most graduate students have limited experience. To ensure success in graduate school and beyond, the nature of graduate training must also change.

Whether one intends on pursuing an academic career or not, professional development workshops aid in enhancing skills gained through research and in developing complementary skills. At the University of Alberta, training requirements vary significantly between departments. For example, it was shocking for me to learn from a friend in another department that her supervisor had the option to "buy out" her TA requirement, despite her desire to gain teaching experience. Another example of differential graduate training relates to PhD candidacy exams, with some departments emphasizing the ability to create research proposals, while others have knowledge-based exams. Thus, extracurricular workshops fulfill a vital role in developing well-rounded professionals. For the many graduate students who do not wish to continue in academia or feel discouraged by the dearth of academic positions, developing a wide skill set will enable students to view post-graduation prospects in a positive sense of broadened opportunities.

This summer, I had the privilege of taking part in the **TRANS-DOC** Programme, a two-week course at the University of Buffalo designed to help **doctoral** students develop **transferrable** skills. The TRANS-DOC Programme was funded by the European Commission to promote cooperation between European and North American universities. The University of Alberta was one of two Canadian universities participating in the project. A call for applications was advertised through FGSR and department mailing lists. Successful applicants were chosen on the basis of their CV, a letter of reference, and a letter of motivation. In total, there were 21 students from 8 universities, from backgrounds as varied as film studies to physics.

Material over the two weeks was delivered in numerous formats, including guest speakers, group discussions, and individual and group exercises. Since numerous topics were covered, I have chosen to summarize the key messages that I took away from the course:

- **Global competency** – More than ever, science is an international meeting of minds. Job prospects for PhD graduates abroad are increasing and global experience is advantageous in North America across all sectors. Aside from exchange programs, students can increase their global competency by learning

new languages, being knowledgeable about foreign culture/history/politics, and interacting with international students. However, the global workplace is not always straightforward, given language, religious, and cultural barriers. A continuing theme of the course was **challenging our assumptions** about others, an important part of effective cross-cultural communication.

- **Knowledge translation** – A fundamental aspect of funding agencies’ mandates, knowledge translation is borne from the idea that creation of knowledge (primary research) alone often does not lead to an impact on society. A key requirement to using knowledge in decision-making, improving services, and innovation is the **ability to effectively communicate your message** to different stakeholders (e.g. patients, policymakers, investors). There were two valuable exercises used to develop this skill:
 - **Elevator pitch** – Usually described as a succinct summation of an idea and its value, lasting around 30 seconds. We practiced a variation of this defined by a 50-word limit instead. One highly valuable aspect of this course that differed from similar workshops was the task of repeatedly revising our elevator pitches for improvement.
 - **Interdisciplinary collaboration project** – One of the unique advantages of the TRANS-DOC Programme was that it brought together PhD students from diverse backgrounds. One of the most valuable exercises was a multi-day task where 3 or 4 students from different research backgrounds worked together to create a joint project that utilizes each person’s expertise. To do so, one must convey their research to their team members, and the group must sell the joint idea to the class in a 5-minute presentation. For your reference, my team members were an archaeologist and a Mexican literature analyst. Needless to say, this exercise was incredibly challenging, but rewarding! Among the many lessons I learned from this experience was a newly gained appreciation for thinking from a non-scientific point of view.
- **Teamwork and leadership** – Teamwork ranks among the most highly valued skills outside of academia. I include leadership here as well due to a recent trend towards a model of “leading from the sidelines”, with emphasis on distribution of leadership. Some of the challenges of teamwork include the issues of cross-cultural communication and incorporating interdisciplinary members described above. This is where a leader must facilitate discussion and know how to utilize the potential of every team member. Another challenge of teamwork is simply the clash of different personalities. One approach that can be helpful is to use personality assessment tools for your team, such as the Myers-Brigg Type Indicator and StrengthsQuest. While there is controversy over their validity, when used correctly, these tools can help you appreciate other people’s perspectives and understand your own strengths and weaknesses. Understanding how each person fits into the team will lead to harmony and optimal performance.

In summary, the TRANS-DOC Programme was one of the best and most unique experiences of my graduate training. In addition to the practical aspect of developing transferrable skills, the opportunity to meet so many wonderful people who share similar concerns and goals was invaluable. I cannot describe in words the profound impact that the program had in helping me to adopt a more positive outlook. I highly recommend applying for this and similar exchange programs in the future. If you have any questions, feel free to e-mail me at qhu@ualberta.ca or drop by my office in HMRC 6-25.