**Winter 2014: Inaugural RySciMatch Program Reflections and Feedback**

**RySciMatch** was offered as a non-credit, certificate course open to Ryerson undergraduate students who are interested in acquiring research experience. The motto was “igniting personal growth and discovery in the sciences through experiential learning and mentorship.” The program recruited senior undergraduate and graduate volunteers to mentor current undergrad students (2nd and 3rd year mentees) on research opportunities in the Faculty of Science. The program focused on building soft skills (leadership, networking, communication, mentorship, etc.), and research readiness (literacy, research culture, funding, etc.) through a variety of modes and topics (as listed below). The program hoped to focus undergraduate enthusiasm by helping mentees identify their interests, and educating them on the research areas & opportunities within the faculty. Student leaders, Ahmad Sidiqi and Jessica Machado, assisted with programming, feedback and advertising. Each session in the 11-week program during the winter 2014 was ~75 minutes in length and was held on Tuesday evenings (only day available due to room scheduling) between (5:15-6:30pm).

**Week 1 – Mentor and Mentee Orientation and Poster Session**

**Week 2 – Extracurricular Opportunities at Ryerson for Science Students**
**Panel:** Dr. Emily Agard (OSOE), Akeisha Lari (Trimentoring), Graham Pearson (Society of Awesome), Ola Kulesza (FA-ST) Karen Quinto (WEAO), Abdulkarim Huhaseen (Ryerson SoS)

**Week 3 – What it means to be a mentee: Self-motivation, Mentorship and Leadership**
**Panel:** Komal Bhasin (Director, Research Strategy and Policy at CAMH), Tash Jefferies (Health and Wellness expert), Liza Arnason (Director of Student Life, U of T, Scarborough)

**Week 4 - Research and Innovation at Ryerson: A wealth of opportunities**
**Panel:** Krysten Connely – Ashoka Ryerson; Jennifer MacInnis – Director, Industrial Liaison and Commercialization; Dana Abou Shackra – Digital Media Zone Outreach & Recruitment Liaison

**Week 5 - Career Planning: The Possibility of Postgraduate Degrees and Certificates**
**Panel:** Dilpreet Kang, Regulatory Affairs (Humber), Paulina Nozka, Career Services; Monika Madik, Teachers college (YorkU), Leslie Bone (Graduate Student, Ryerson); Ahmad Sidiqi (Graduate Student, UoT)

**Week 6 – Effective Written Communication: CV’s and Letters of Interest**
**Guests:** Dr. Kim Gilbride, Dr. Warren Wakarchuk, Paulina Nozka (Career Services)**
Week 7 – Effective Verbal Communication: Networking and Interviews  
**Guests:** Dr. Russ Viirre, Dr. Martina Hausner, Dr. Michael Arts and Paulina Nozka (Career Services)

Week 8 – Biosafety Training and Quiz  
**Guest:** Valerie Phelan (Radiation/Chemical/Biosafety Officer)

Week 9 – Biosafety wrap-up and Research Readiness  
**Guest:** Valerie Phelan (Radiation/Chemical/Biosafety Officer)

Week 10 – Research Literature Literacy  
**Guests:** – Dr. Michael Arts and Dr. Warren Wakarchuk

Week 11 - The Art and Science of Public Speaking  
**Guests:** Ryerson Toastmasters – Abdul Khandwala and Kathleen

**Student Participation: By the Numbers**

![RySciMatch Participation by Program](chart1)

- Biology: 4%
- Chemistry: 42%
- Contemporary Science: 15%
- Medical Physics: 39%

![RySciMatch Participation by Gender](chart2)

- Women: 39%
- Men: 61%

![RySciMatch Students Who Attended a Minimum of Six Sessions](chart3)

- Completed: 72%
- Incomplete: 28%

**Figure 1. Other Metrics.** 95 undergraduate students attended at least one RySciMatch Session. Demographics are detailed above.
A student survey conducted during week 11 suggested that there was something for everyone in these sessions. Of the 57 students who submitted an optional questionnaire (Figure 2 above: only these weeks were given as options, top 3 choices), approval ratings were high for each session. The least favorite sessions were held in Week 4 and Week 11. Week 4 focused on Research at Ryerson, and not specifically in Science, and Week 11 was a biosafety training session and quiz. Week 3, a panel discussion on mentorship and what it means to be a mentee, was the overwhelming favorite in popularity. An energetic, experienced, and highly motivated all-women panel stole the show. It even prompted one student to send in this unsolicited email.

“When I think back on the last month, definitely the two days that I’ve felt most recharged and motivated were the two evenings I left the (RySciMatch) meeting. Some of the speakers you’ve brought in so far have been so inspiring and have been saying some things that really resonate with me, especially all the women today and Karen last week. It really makes me want to figure out a way to get involved with something I’m passionate about, betters me as a person and expands my horizons, which is something I’ve never really put much importance on or considered at all really, which actually sounds crazy, now that I realize that.”

The collated comments are added in Appendix A. The questions posed were designed to be somewhat critical, and therefore, many of the comments are
constructive in nature. There is room for improvement, but generally the students were "pleasantly overwhelmed" with the variety, and distinctively different modes of communication (panel discussions, guest lectures and input, brainstorming and discussions) used. This ‘overwhelmed’ nature is observed in the mostly contradictory suggestions. There is some concern that we have created a monster; the students may become too demanding and may not fully appreciate that this is an entirely voluntary program. The most significant criticism is that the sessions need to be scheduled during a more convenient time (it conflicted with Chang school and day labs).

**Workload**

While most of the content was delivered using panelists and guest lecturers, organizing the programming and moderation during the discussion/panels was extremely important and time consuming. Mentorship matching, answering emails, and other course management issues made this level of programming and organization a similar workload as delivering an undergraduate course. The organizing committee believes that this content needs to be delivered by a faculty member, for promotional and credibility reasons.

**Recommendation**

Implementing student feedback, and building on the current model, continue in the Winter of 2015. Receive more involvement from science faculty members, especially in Medical Physics.