

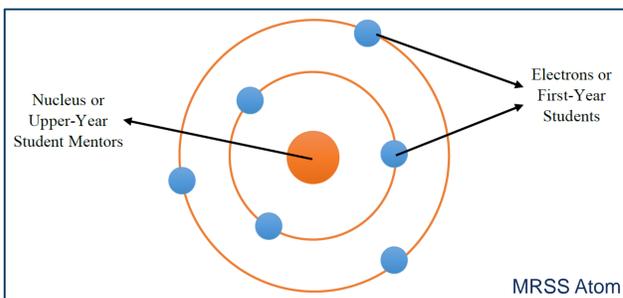
Abstract

Aim: In response to the COVID-19 pandemic and potential lack of engagement within the MRS community, the Medical Radiation Sciences Society (MRSS) Atoms Initiative was proactively developed to provide the incoming first-year students with an equitable opportunity to professionally socialize and network into the MRS program. The MRSS Atoms Initiative is a mentorship cluster program, delegating upper year Medical Radiation Sciences (MRS) students to a group of first-year MRS students (stream specific; Nuclear Medicine, Radiation Therapy, and Radiological Technology) with a maximum 1:4 ratio.

Process: All upper year MRS students (n=188) were invited to take part as mentors; 28 students expressed interest, and all were selected to participate. Mentors and Mentees were divided into 13 groups using random segregation techniques. To ensure all participants understood their roles and responsibilities, each group was required to submit a group charter. A point system was also incorporated to motivate students to engage within the MRS community. The MRSS had approximately 120 students engaged in the MRSS Atoms Initiative.

Benefits/Challenges: There was a noticeable increase in student participation within the MRS community, thereby aiding students in establishing professional relationships. Many mentors have directed their mentees to appropriate tutoring and counselling services at the Michener Institute and the University of Toronto. Conversely, the main observed challenge within this project was the variation in group dynamics.

Impact/Outcomes: This quality improvement project better integrated the three streams within the MRS community, while also introducing unique collaboration opportunities with other student societies. A survey evaluating satisfaction was administered early January.



Why Atoms?
The MRSS Atoms name was selected as a radiation science specific metaphor. Atoms in the MRS program are at the center of all concepts learned. This metaphor uses the nucleus to represent the upper-year mentor students that are the foundations of the group, while the surrounding electrons represent the incoming first-year students that require the support of the nucleus to function. This metaphor also encompasses the integrative nature that the MRSS hopes to promote.

Design

Design: The MRSS Atoms Initiative is a mentorship cluster program, which assigned upper-year MRS students to a group of first-year MRS students. All groups maintained a 1:4 ratio to ensure Mentors were not overwhelmed and were easily accessible to their Mentees. This Initiative was active for the Fall and Winter semesters of the 2020-2021 academic year.

Objective: The MRSS aimed to create an equitable opportunity for the first-year MRS students to professionally socialize and network into the MRS program.

Point System: A point system was implemented to encourage participation in MRSS events and within the MRS community. The points were awarded between September 8, 2020, to March 31, 2021. At the end of this timeline, each student on the first placed group received a gift card valued at \$45. Additionally, the winning MRS stream received a MRSS Atoms Champions banner, which will be hung on the corresponding floor for the next academic year. This banner can be reused for the next stream winner. This Initiative was cost effective, as it only consumed approximately of 5% of budget.

Rank	Team	Points
1st	Straight Outta Compton Effect	27
2nd	Dose Collaborators	26
3rd	X-Perts	23
4th	The Bohring Squad	20
5th	Hot Spots	19
6th	Radiation Miscalculation	18
7th	The Einsteins	17
8th	X-Press Imagers	15
9th	X-Rayngers	15
9th	The External Beam Dream Team	14
10th	kVp MVPs	10
11th	MAMP	8
12th	X-Rated	5

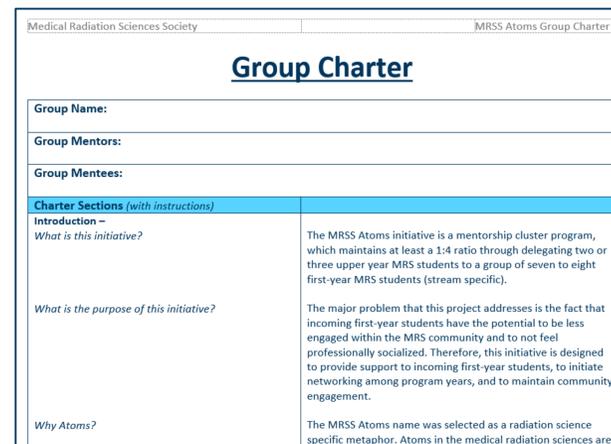
Process

Mentors: Before the beginning of the 2020-2021 academic year, all upper-year MRS students were contacted for recruitment through email. This email outlined brief responsibilities, time commitments, and the potential for this program to succeed. Twenty-eight student Mentors were selected and grouped using random segregation techniques. The MRSS considered personal preference to enhance social aspects of each group. All three MRSS executive members participated in the program as Mentors in addition to the twenty-eight selected Mentors. All mentors attended a one-hour Mentorship Workshop prior to the start of the program to ensure they had the necessary skills and resources to succeed as a student Mentor.

Process

Mentees: The MRSS received a list of all incoming first-year students prior to the beginning of the 2020-2021 academic year. Using this list, the MRSS grouped mentees using random segregation techniques. Considering we had little to no interactions with these students, group creation bias was not a concern. Groups of Mentees were designed to range from 7 to 8 students. After groups were created, the MRSS met with all first-year students to introduce this new Initiative.

Groups: Final groups were announced before the end of orientation week. The frequency of communication was left for groups to decide and was determined by individual group engagement. This was designed to not force this Initiative on any students that did not want to participate. The MRSS provided templated Charters, which were designed to establish group norms and provide more detailed information about the Initiative.



Benefits/Challenges

- Benefits:** The main three benefits observed were:
- Noticeable increase in participation at MRSS Events
 - MRT Week participation increased from an average of 15% last year to 55% this year
 - Points were used to encourage participation
 - Mentors directed mentees to appropriate counselling and tutoring services
 - Have direct feedback from student body

Challenges: The main challenge in this Initiative reflected the design of allowing for individual group engagement. This design created a spectrum of engagement between each group. As a result, some groups had little to no participation in the Initiative.

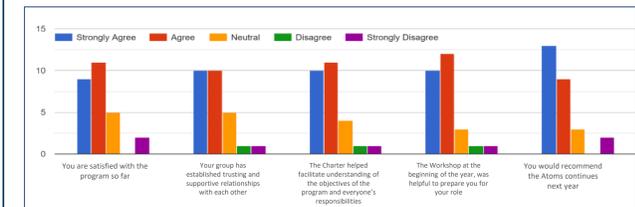
Next Steps:
Guided Communication – Monthly Discussion Topics

Outcomes

Satisfaction Surveys: At the beginning of January, separate surveys were sent to mentors and mentees, which evaluated mentors, group dynamics, and overall satisfaction with the Atoms Initiative. There was also a section to provide personal feedback. Although MRSS executive members were mentors, they did not provide feedback. The MRSS used points to encourage participation and as a result, the overall response rate was higher than expected at 70%.

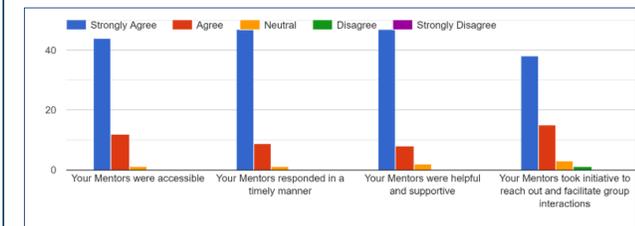
Overall Survey Results: The key overall results from the surveys include:

- Approximate 81% satisfaction rate
- 88% recommended the program continues next year
- 88% stated they felt professionally socialized (main objective)
- 81% found the Workshop helpful



This graph represents the questions asked in the Mentor survey, evaluating the overall Atoms function. Key Results:

- Majority agreed that the charter was constructive
- Majority agreed that the Mentor Workshop was constructive



This graph represents the questions asked in the Mentee survey, evaluating Mentors. Key Results:

- All Mentees were extremely satisfied with their Mentors in all categories
- Reflects the amazing dedication from the Mentors

Personal Feedback from Students:

"Allows the 1st years who are currently struggling due to covid reasons to communicate and ask questions. I would have benefited from a program like this in my first year" – MRSS Mentor

"I love how thorough the mentors are with their advice. I feel as though they genuinely care about our success. They have also provided us with a lot of resources that would not have easily been accessible otherwise" – MRSS Mentee