



# LABTREK Presentation

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**Presented By: Rabia Shuaib**

September 16th, 2023





# Introduction



I am a 4th year student pursuing biochemistry honours CO-OP with a minor in statistics.

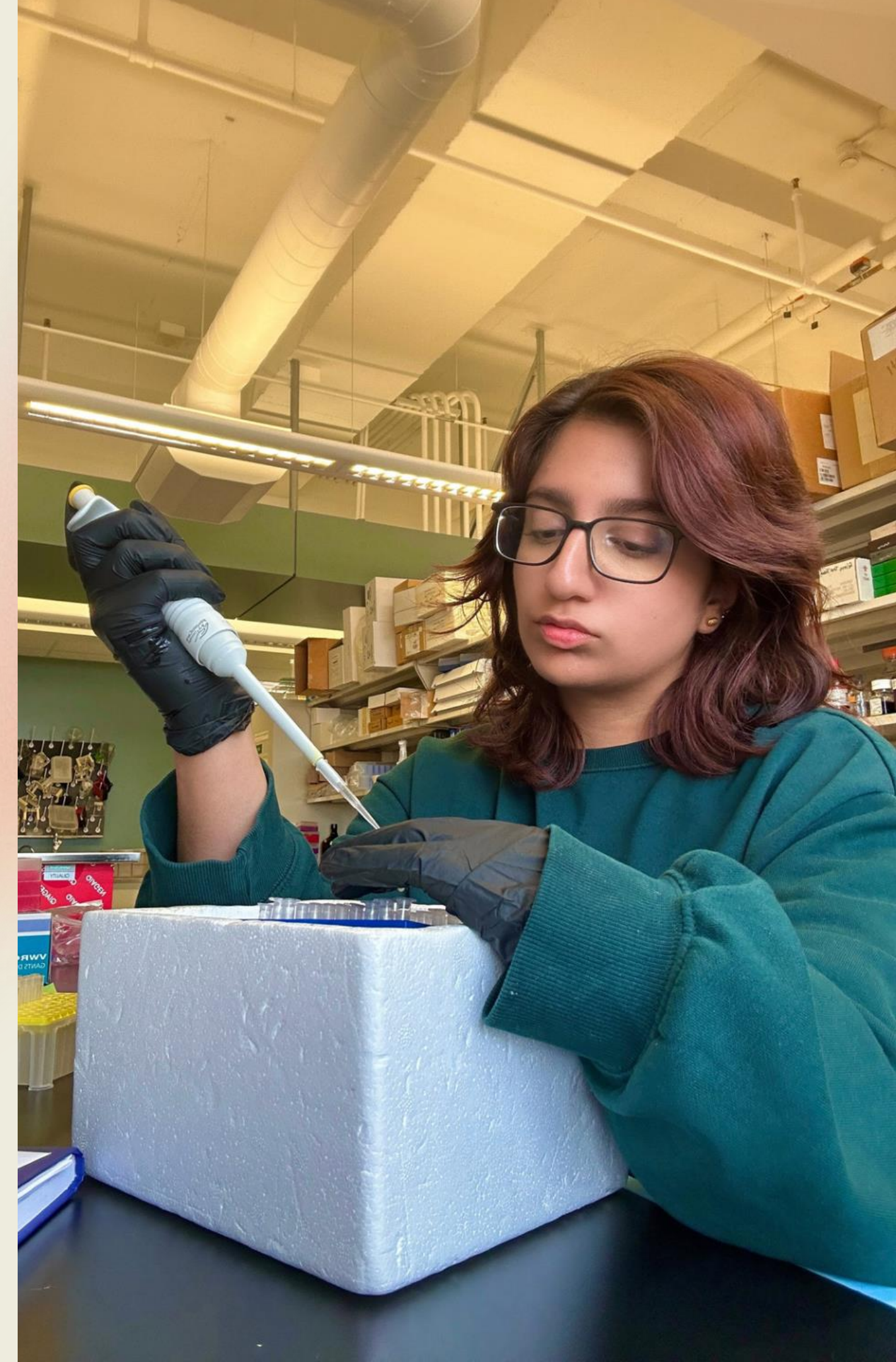
I have previously worked in the Kothe lab for 1 year (Fort Garry - Parker building) and the Dakshinamurti lab for 4 months (Bannatyne Campus - John Buhler Research Building).



# How did I end up working in the labs?

- Kothe Lab - Undergraduate Research Award and continued working there as a volunteer then as a part-time research assistant.
- Dakshinamurti lab - CO-OP work term.

Other methods to work on research:  
USRA, Enrrich Studentship, cold-emailing professors, references





# Undergraduate Research Award

## Share the excitement of discovery

UM is the first Canadian university to offer an Undergraduate Research Award open to undergraduate students in all fields and ranges of research, scholarly works or creative activities.

The awards are competitive. Students apply to be mentored for 16 weeks (full-time from May through August) by a professor of their choice. There are:

- 205 awards available across all disciplines
- 10 per cent of awards are available for self-declared Indigenous students
- 2 awards for community-based projects
- \$7,000 monetary award
- Is a recognized UM Co-Curricular Record activity

## Important Dates

**Feb. 13, 2023** Submit your application by February 13, 2023 by 4:30 p.m. (CST)

**May. 1, 2023** Start of the URA Research Work Period (tentative)



Applicants for UM Undergraduate Research Award will be given conditional notification of award in early March, with final confirmation being sent the last week of March.

## Apply for the Undergraduate Research Award

Please note that the application period for the 2023 URAs has closed.



## Competitions and trainee opportunities

Undergraduate Research Showcase

**Undergraduate Research Awards**

Banting Postdoctoral Fellowships

Falling Walls Lab



Back

# Science CO-OP program

## Why Science Co-op

Interested in applying to Science Co-op? We look forward to having you join us!  
Science Co-op is more than just a job. By joining Science Co-op, you will:



### Gain degree related work experience - Your competitive advantage!

Build your resume by learning new skills and developing professional work experience. Enhance your employability after graduation.



### Apply your classroom learning to real-life work

By complementing your academic studies with co-op work terms, you apply what you learn in class to real-world work environments and then apply what you learn on your co-op work terms to your classroom studies.



### Build your professional and career network

Develop key employer and industry contacts from your co-op work terms; as well as mentoring opportunities with professionals.



### Career exploration

Learn more about your career options. Test-drive different types of work experiences prior to graduating.



### Earn money while you learn

Co-op is paid work. Help pay for your education or future travel plans.



### Build life-long friendships

Make lasting connections with like-minded, talented people through co-op work placements.

Science Co-op

[Co-op for prospective students](#)

[Co-op for current students](#)

[Co-op employers](#)







# My Research Projects

## KOTHE LAB

- Analyzing the interactions of a snoRNA snR30 and ribosomal RNA during ribosome assembly in *Saccharomyces cerevisiae*

### Skills I learned:

- Yeast cell culture and transformations
- *E. coli* cell culture
- Polymerase chain reaction (PCR)
- Agarose gel electrophoresis
- Genome sequencing

## DAKSHINAMURTI LAB

- Mapping the Distribution of Adenylyl Cyclase Isoforms in Hypoxic Neonatal Pulmonary Arteries

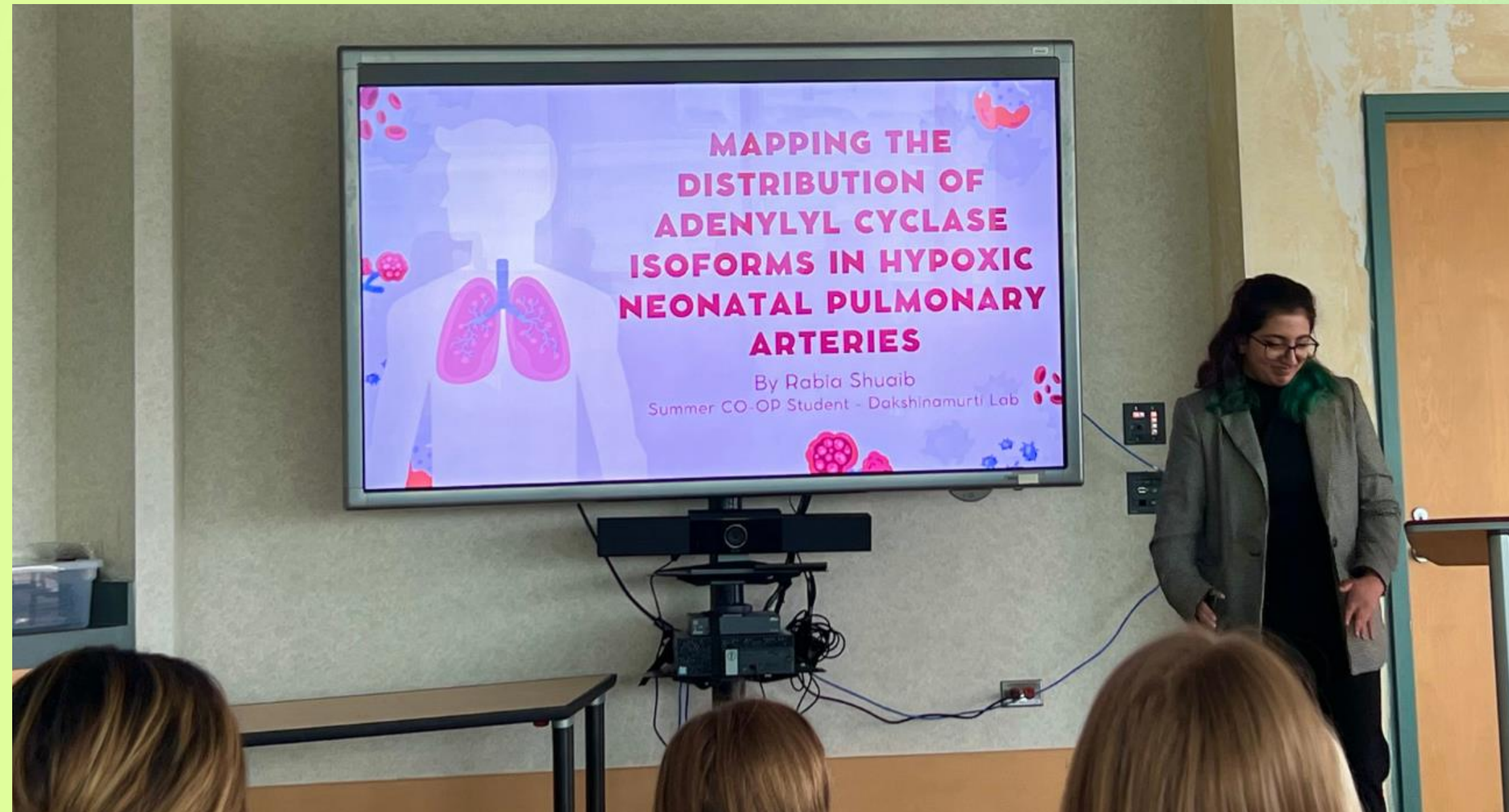
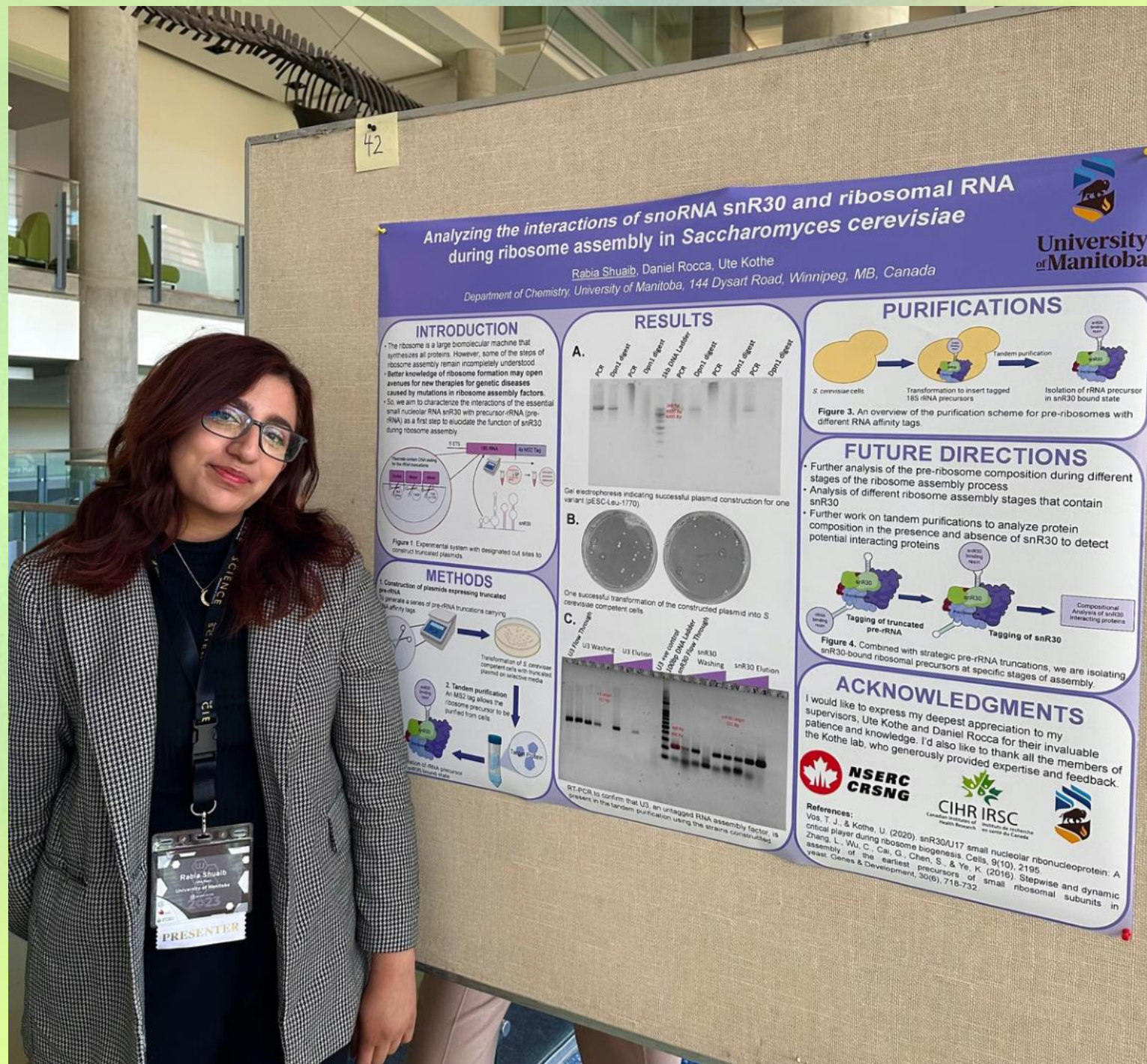
### Skills I learnt:

- Pulmonary arterial smooth muscle cell culture
- Real-time quantitative PCR (RT-qPCR)
- Western blots
- RNA Isolation
- Immunocytochemistry





# Scientific Communication Skills





# Why I recommend research?

- Helps with critical thinking
- You meet great people and form lots of connections
- Contribution to the research community
- Opportunity for hands-on learning and application
- Helps develop adaptability skills
- Sense of accomplishment



*Kothe Lab Group Picture - Summer 2022*