

The countdown is on to determine which SD43 science experiment will go to space!

277 team proposals from over 1600 grade 5-12 students at several SD43 schools were initially reviewed. 30 proposals were shortlisted and further reviewed by a panel of experts with science, technology and proposal writing backgrounds from SD43, SFU, Finger Food Studios, Urthecast, and MacDonald, Dettwiler and Associates.

From there, eight proposals were further shortlisted and discussed in depth by the panel to narrow it down to the final three which will be put forward to SSEP and NCSSE in Washington, DC. From those three, the final proposal will be selected that will blast off on a rocket heading to the International Space Station where the experiment will be conducted by astronauts. The data outcomes will be returned to the students for analysis.



The top eight proposals are listed below with the first three being the three finalists:

- The Effects of Microgravity on the Growth of *Saccharomyces Cerevisiae* (Dr. Charles Best Secondary – Karina Moreno, Saba Khangholi, Sarah Nobrega, Tessa Tennant)
- The Effects of Microgravity on Concrete used in Building Structures (Riverside Secondary – Brenda Shen and Alexa Durand)
- The Effects of Microgravity on Cell Density and Biofilm formation of *Staphylococcus aureus* (Inquiry Hub Secondary – Mike Rosliko)
- How does microgravity affects the dissolution of proteins in gastric acid? (Dr. Charles Best Secondary – Ely Jamieson, Colin Montgomery, Steven Ono, Kimia Rostin, Tiffany Wu)
- Does Penicillin Kill E.Coli faster once it has been handled in microgravity? (Eagle Mountain Middle – Olivia Zuzolo, Sofia Jimenez, Ava Alcos, Rebecca Pin)
- Type 1 Diabetes – Rate of Replication of Islets of Langerhans Cells in Microgravity (Dr. Charles Best Secondary – Elena Bruneau, Raymund Koh, Jasmin Malhi, Omron Samadi, Wen Qing (Grace) Sun)
- The Effects of Microgravity on kidney bean germination (iHub – Jazmine Khaseipoul)
- The Effects of Microgravity on trypsin decomposition of proteins - Dr. Charles Best Secondary – Catherine Shin)

Congratulations to all students on the 277 teams for their excellent proposals, commitment to the program, and effort in advancing their knowledge of science. Special congratulations to the top eight finalists and the three from which the final proposal will be selected.

More information will come on the one finalist, the launch and the experiment on the ISS.