

## STEM OUTREACH PLAN

Our mission, Project Gravitational Response In Tissue (GRIT), will be launched in a payload on board a sounding rocket, a smaller rocket used to collect data over a short period of time. The payload includes new technology called organs-on-chips (OoCs); OoCs are stem cells simulated within a chip, acting as different tissues. GRIT uses three chips: an eye, liver, and skeletal muscle tissue. We can collect data from each of these as the sounding rocket enters hypergravity and microgravity, experiencing up to 25 g-forces. The collected data will benefit many, but primarily NASA astronauts. By providing direct information on tissue decay, GRIT will help advance technology in space exploration, allowing astronauts to go further and faster under different gravitational conditions.

One of GRIT's target audiences is students interested in STEM and NASA's advances in space exploration.

6th to 8th grade (6-8) students can participate in designing cardboard models of different organs-on-chips.

9th to 12th grade (9-12) students can watch the launch live. Guest speakers presenting information about NASA's upcoming plans, Artemis, and Gateway, a concept space station around the moon. Where our research could be used in new technology.

College students