



### **Crew 207 – Medical Makers**

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Medical Makers is a global community of innovators, patients, and healthcare providers who use low-cost technologies to make sustainable solutions to save lives, time, and money. Medical Makers host Medical Make-A-Thons worldwide to crowdsource low-cost, high-quality, life-changing 3D printable solutions for 3D4MD's digital library.

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Our MDRS projects include:

- Piloting drones to survey and print a 3D map of MDRS and the surrounding Mars-like terrain

- Printing open-source, lower-cost labware to provide more affordable STEM learning opportunities for the 90% of the world's population who do not have a university education
- Testing a low-cost, high-fidelity, 3D printed thoracentesis trainer designed to allow healthcare trainees and professionals to attain and maintain life-saving surgical skills to serve the 5 billion people lack access to safe, timely, and affordable surgical care
- Identifying essential items that can be 3D printed on demand locally to save lives, time and money for the 3.75 billion people who live in remote or rural areas, the 136 million people who require humanitarian aid, and astronauts on long space missions
- Using reusable, personalized, biodegradable 3D printed straws to reduce the amount of plastic waste that end up in landfills
- Demonstrating the technical feasibility of bike-powered 3D printing by Martian analogue astronauts -- who are following the International Space Station exercise bike schedule -- to empower the 1 billion people without access to electricity to use portable 3D printing technologies