

## Idea-a-Thon 2022 – Challenge

### Challenge Statement

The COVID-19 Pandemic showed the world the importance of the Global Supply Chain. For the pharmaceutical industry, this means getting supplies to manufacturing sites and medicines to people when they need it. In 2020, Merck partnered with Volansi and piloted a drone technology to deliver medicines direct to hospitals ([Merck Is Piloting A Drone Delivery Program For Medications \(forbes.com\)](https://www.forbes.com)). **This month, we challenge you to think of how you would ensure on-time delivery of refrigerated vaccines to Chaypa, a remote mountain village in Peru. Please consider the lack of electricity, changing climate, and access to local manufacturing facilities in your response.**

### Challenge Description

Build a prototype of a mechanical solution, code a webapp that helps individuals address the problem, or create a community plan to address the challenge locally. There is no single answer to this complex problem, but we are excited to see how your group tackles the challenge!

**Pick an approach that fits the strengths of your group and dive into exploring a creative solution.**

Groups will be judged on the following criteria:

1. **Solution Statement** - a clear statement of how your solution addresses the challenge
2. **Design Process** - ability to describe the research and refinement of solution idea
3. **Solution Feasibility/Practicality** - how effectively the solution addresses the challenge
4. **Solution Creativity** - is the solution a novel idea or a unique application?
5. **Model / Prototype** - was a prototype created to test the idea? *sketches or cardboard is fine; emphasis will be put on the effectiveness of the prototype to support testing over aesthetics!*

### Challenge Deliverables

- A 8 ½ x 11 fact sheet regarding your solution, submitted as a pdf
- A 2-minute video about your group's solution and how it addresses the challenge
- This video may be shown during the award ceremony for the top 3 teams
- A 15-minute virtual interview, including a 5-minute presentation and 10 minutes of Q&A with a panel of judges.

### Timeline

- Sep 23<sup>rd</sup> @ 6pm: Signup for judging interview opens via email to Team Lead and Adult Contact
- Sep 30<sup>th</sup> @ 6PM: Team materials (fact sheet, video, signed consent & release forms) due via submission form
- Oct 3<sup>rd</sup> – 7<sup>th</sup>: Judging Interviews
- Mid October: Idea-a-thon Awards Show

**Questions? Contact [idea\\_a\\_thon@midatlanticrobotics.org](mailto:idea_a_thon@midatlanticrobotics.org)**