

DESIGN FOR REHABILITATION CONTEST FOR 2023

May 31 - June 3 | Gaylord Rockies Resort & Convention Center | Aurora, Colorado

PURPOSE:

- » Connects MS clinics, engineering schools, and patients.
- » Fabricate a device that improves quality of life.
- » It's about education and rapid solutions that work for patients.
- » Expose young engineers to real-world challenges.

WHAT TO DO:

- » Identify a person (the client) diagnosed with Multiple Sclerosis (MS) with a "need" that can be helped by an assistive device not currently available.
- » The goal is that you develop and present this device.
 - ☐ The device can be purely mechanical or include electrical components and software.
 - ☐ Just software as in a written "APP" is not allowed.
 - ☐ Devices interfaced to Smart phones with APPs and other similar machines is allowed.
 - ☐ A modified commercial device is allowed.
 - ☐ No limit on size, cost, complexity in the development of the device (the CMSC does not provide funds for this.)
 - ☐ The device development should have occurred within 18 months preceding the meeting.
- » Contact your local undergraduate engineering school departments of mechanical, biomedical, or electrical engineering as soon as possible as these departments are often looking for student project ideas. Or engineering departments/faculty/students contact their local MS center.
- » Assemble the team: engineering students and their faculty advisor, health-care providers, and if possible, the patient.
 - ☐ Partnership with industry is allowed such as receiving funds (unlimited) for the project or expert mentoring for the student engineers.
 - ☐ Team should consist of at least one Multiple Sclerosis provider or health care professional (MD, PT, OT, NP, PA)
 - ☐ Including the patient/client in the team is recommended but not required. There should be a person for whom the device is intended.
 - ☐ Choose a team leader and contact person.
- » Design, build, and test the device.
 - ☐ It is recommended that the client test the device and comment on its effectiveness; but this is not required.
 - ☐ The device should be tested and demonstrated by members of the team.
- » Present your creation at CMSC 2023 and compete for \$500 cash award and plaque and time to present your device (can be a video) at the awards ceremony.

» To enter the competition, prepare:

- ☐ Letter-of-intent emailed to Christopher Luzzio, MD by April 1, 2023. Include team name, team members, general nature of your project.
 - ☐ Final Submission of entry materials by first meeting day of 2023 CMSC by email or in person at the meeting.
 - ☐ 5-10-minute video presentation of the project.
 - ☐ Power point presentation (up to 10 slides) that may serve as a deliverable for judging or a written report in similar format as published technical papers. Include purpose, design specifications, background, methods, testing, results, references if applicable.
- » Submissions will be judged according to quality, impact, presentation, and team effort. The winning team will be announced on awards ceremony day.

DEADLINES:

- » Letter of intent to enter by April 1, 2023 (sooner is better).
- » Final report submitted by email or in person by May 15, 2023.

DESIGN FOR REHABILITATION CONTEST ORGANIZERS:

- » Christopher Luzzio, MD: luzzio@neurology.wisc.edu (will be attending CMSC at the Design Booth)
- » Mikaela Morelli, BME Student: mikaelamorelli.6@gmail.com



FOR MORE INFORMATION ABOUT THE MEETING, PLEASE GO TO
WWW.MSCARE.ORG/2023