

Registration Form

TEAM INFORMATION

Team Name/Project Title: Power Lynx-Knee Brace

Department: Mechanical Engineering/Electrical Engineering

Faculty Advisor(s): Peter Jenkins

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Team Members: Jon Debauge, Christie Gardner, Beatriz Bermudez, Tidiani Sanogo, Ben Clint, Michael James, John Motheith, Tonia Sehkar

PROJECT INFORMATION

Description: Designing a knee brace that utilizes the mechanical energy produced during the act of walking and converting to electrical energy for later use.

Abstract:

Producing electrical energy while putting little to no reaction forces upon the legs to do so is the primary focus of this project. This includes designing a medical grade knee brace that will have a one way bearing attached in a fixed position to harness the mechanical energy at the optimum moment to not strain the output of the person. The one way bearing will then be connected to a series of gears that will turn a generator and charge an external battery pack.

Illustration:

