

Title: Smart Walker, BME 402

- **Date:** 3/14/25 - 3/20/25

Last Name	First Name	Role	Email
Nimunkar	Amit	Advisor	ajnimunkar@wisc.edu
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- **Problem statement:** In the rehabilitation process of acute strokes or similar conditions, it is necessary for the patient to be able to walk independently so they can safely return home. Our team must design a device that works in conjunction with a standard walker that will measure the speed and distance the patient walks and the pressure applied to the walker.
- **Brief status update:** The team worked on furthering load cell holder design as well as completion of the electrical components.
- **Difficulties / advice requests:** No difficulties or advice requests for this coming week.

- **Major team goals for the next week:** The team will be on spring break next week!
- **Next week's individual goals:** A concise statement of intended action to continue progress on the project - be specific, i.e. what will you research.

Eva: Help with load cell walker fabrication and testing.

Jacob: Assist with any load cell. Hopefully integrate electronics into walker if load cell holders are done.

Nolan: Help with new load cell holder design and 2nd walker fabrication

James: Integrate electronics into smart walker.

Owen: To potentially fabricate the new walker. To begin preliminary testing of the load cells in the holder (old walker).

Project Goal	Deadline	Assigned	Progress	Completed
Select Journal	2/7	Team	100%	Y
Preliminary Presentation	2/7	Team	100%	Y
Preliminary Deliverables	2/26	Team	100%	Y
Invention Disclosure Report (optional)	3/7	Team	0%	N
Executive Summary	4/18	Team	0%	N
Outreach Materials	4/18	Team	80%	N
Final Presentations	4/25	Team	0%	N
Final Deliverables	4/30	Team	0%	N

- **Previous week's goals and accomplishments:**

Team: This week the team integrated the circuit into a perf-board as well as completed the compiled code. Created new load cell holder design based on Jesse's suggestions.

Eva: Looked over and suggested edits for the most recent load cell holders

Jacob: Worked with James to ensure that the final circuit and code are functional, and they are.

Nolan: Looked over new load cell holder prints with Owen and talk about the next iteration of Holders.

James: Connected all circuitry components and tested them simultaneously, along with the coding.

Owen: Worked on Load Cell holder CAD and Printing to fix wobble.

Activities: a concise accounting of time spent working on the project.

	Eva	Jacob	Nolan	James	Owen
Week 1	3 hrs	4 hrs	2.5 hrs	2 hrs	3 hrs
Week 2	2 hrs	3 hrs	5 hrs	2.5 hrs	6.5 hrs
Week 3	3 hrs	4 hrs	2.5 hrs	4 hrs	4 hrs
Week 4	2.5 hrs	8 hrs	2 hrs	4 hrs	9 hrs
Week 5	2.5 hrs	4 hrs	4.5 hrs	2 hrs	5 hrs
Week 6	3 hrs	6 hrs	5 hrs	3 hrs	7 hrs
Week 7	2 hrs	3 hrs	2 hrs	5 hrs	4 hrs
Week 8	2 hrs	5 hrs	2.5 hrs	4 hrs	12 hrs