- **Title**: Smart Walker, BME 402

- **Date**: 3/7/25 - 3/13/25

Last Name	First Name	Role	Email
Nimunkar	Amit	Advisor	ajnimunkar@wisc.edu
Kutschera	Dan	Client	kutschera@att.net
BlomWillis	Nolan	Communicator	blomwillis@wisc.edu
Schiltz	Eva	BSAC	emschiltz@wisc.edu
Parsons	Jacob	BPAG	jcparsons@wisc.edu
Waldenberger	James	BWIG	jwaldenberge@wisc.edu
Kolnik	Owen	Leader	okolnik@wisc.edu

- **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 fabrication of the protoboard. Also worked on troubleshooting issues with the display.

- **Difficulties / advice requests**: No difficulties or advice requests for this coming week.

- **Major team goals for the next week**: Test the complete circuit and begin to integrate the wiring and power system into the walker. Print the new load cell holder design and evaluate the wobbliness.

- **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: Print and begin testing with the new load cell holder design.

  Jacob: Test the complete code with all of the electrical components that are in the perf-board.

  Nolan: Help with new load cell holder design as well as testing of components

  James: Help Jacob with testing the perf-board and fix any issues.

  Owen: Print new load cell holder design and evaluate wobble.

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	20%	N
Final Presentations	4/25	Team	0%	N
Final Deliverables	4/30	Team	0%	N

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

  Team:

  Eva: Updated the current load cell holders design.

  Jacob: Made the compiled code for the entire walker system. I also resolved the small issue we ran into with the screens.

  Nolan: Met with Mr. Kutschera to discuss the budget concerns and talk about where team is heading in last few weeks. Also obtained 2nd walker.

  James: Purchased perf-boards and soldered entire perf-board setup.

  Owen: Printed wire conduits and IR sensor holder (3 iterations). Worked on new Load cell holder design in SolidWorks.

  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