Progress Report

Title: Active Ankle/Foot Orthotic (AFO) to Enhance Walking and Balance

Names: Jessica Hause: Co-leader
Erin Main: Co-leader
Emily Andrews: BSAC
Josh White: Communicator
Tony Schuler: BWIG

Date: March 2, 2007 – March 8, 2007

Problem Statement:
Create a device that actively enhances forefoot step-off and increases proprioception to improve balance for people experiencing ankle weakness, foot-drop and the inability to walk and balance safely as a result of various neurological diseases such as Charcot-Marie-Tooth disease, multiple sclerosis and stroke. The device should be non-obtrusive, fit in a shoe, comfortably attach to the leg, and be economical.

Last Week’s Goals:
- Continue brainstorming design ideas and details
- Continue researching gait
- Finalize our three main design ideas
- Establish a final budget
- Look into material costs
- Create mid-term report
- Create mid-term paper
- Meet with client to present our preliminary design ideas

Summary of Accomplishments:
- We finalized our design matrix
- E-mailed client to inform him of our presentation and he is planning on attending
- E-mailed patient to inform her of our presentation and to ask her about taking part in a gait analysis. She agreed to release her medical information and participate in the gait analysis.
- E-mailed Professor Thelen to arrange a meeting with him to discuss gait patterns. He e-mailed back saying that he is willing to meet with us, but a time is still being finalized.
- Created the power point for out final presentation
- Began to establish mid-term paper
- Finalized PDS and posted it on website

This Week’s Goals:
- Finish mid-term paper
• Complete per evaluations
• Meet with patient and have her participate in a gait analysis
• Meet with Professor Thelen and discuss gait patterns
• Finalize budget, after hopefully hearing back from companies that we contacted
• Begin to think about our final design and evaluate design matrix

**Project Schedule:**

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<th>Jan</th>
<th>February</th>
<th>March</th>
<th>April</th>
<th>May</th>
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<td><strong>Project Research</strong></td>
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**Difficulties:**

Our team recently received an e-mail from our patient informing us that she has just purchased the top of the line AFO from our orthotic specialist Dr. Amyx. We are now struggling with possible ideas on how to proceed with our project, considering our very limited budget.

**This Week’s Activities:**

3/2/2007  Team: Meet during class to finish design matrix  2 hours
3/3/2007  Jess:  Finalized PDS  1 hour
3/4/2007  Team:  Meet to start power point presentation  2 hours
3/5/2007  Emily:  Worked on power point presentation  1 hour
3/5/2007  Tony:  Generated future work ideas  1 hour
3/6/2007  Team:  Meet to finish power point presentation  3 hours
3/6/2007  Tony:  Updated website  1 hour
3/6/2007  Erin:  Progress report  1 hour
3/7/2007  Team:  Meet to work on presentation  1 hour
Overall Total Hours:

Individual

Erin: 26 hours
Jess: 36 hours
Josh: 35 hours
Tony: 34 hours
Emily: 35 hours

Team Total 176 hours

Week Total 46 hours