



Wrist Gimbal Rehabilitation Device

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Summary: A low-cost upper-extremity rehabilitation exoskeleton

Description: Wrist Gimbal is an innovative, robust, and versatile upper-extremity rehabilitation exoskeleton that enables a platform to administer robot-aided motor rehabilitation in a clinical setting to improve and assess wrist and forearm motor functions of stroke patients through therapeutic movement exercises. Wrist Gimbal includes a game-like visual interface that motivates patients to complete the exercises and is able to augment the movement tasks with easily adjustable assistive or resistive feedback forces to tailor the therapy protocol for patients' specific needs and capabilities. Currently such devices costs upwards of \$100K - we hope to have a device on the market that can retain for approximately \$20K with improved results.

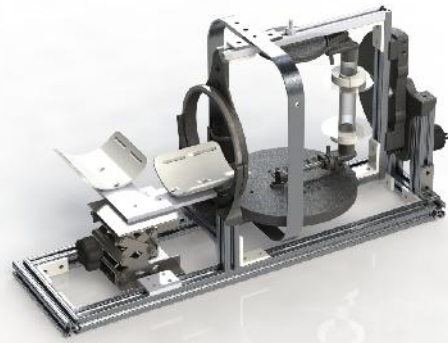
A video of the robot demonstrating key design aspects and example force-feedback modalities is available on YouTube. (<https://www.youtube.com/watch?v=3AMcRhpiETY>)

Main Advantages of this Invention

- Less expensive than current methods
- Can be used in the home as well as hospital
- Plans to use similar concepts on other body areas

Potential Areas of Application

- Rehabilitation of the wrist/arm area
- Personal health market



Stage of Development: prototype

ID number: 14041

Intellectual Property Status: US utility patent pending (application #14/741,710)

Opportunity: We are seeking an investor or strategic partner to help develop this portfolio.

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