



Project Grant Appa(Gr71.5 i)r71Tc otc 0 Tw1 Tf 1.001 Tcw 5.

Jim Lipsey Engineering Manager, Mechatronics Team, CBM
Michael Wehner CTRS, ATP, Manger, Therapeutic Recreation

Develop a novel adaptive bike braking system for people who have tetraplegia.

Cyclist who do not have hand and finger function can propel the adaptive handcycles with specialized pedals (quad grips), however they cannot independently operate typical lever actuated brake levers. I believe an elbow actuated system would be more functional. The proposed system the "Tetra Brake" would use scapular retraction and shoulder extension to actuate brakes.

Meet with CBM engineering team to brainstorm potential solutions. Develop a prototype in CAD, order parts from suppliers, assemble and fit to the trike, Testing of the braking system with a user, create a summary report.

Developing prototype, sourcing parts, assembly and fitting to trike, and testing

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