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Curriculum Vitae
Jon Pearlman, PHD

NAME: Jonathan Lee Pearlman

BUSINESS ADDRESS: University of Pittsburgh
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BUSINESS 412-822-3685

EDUCATION AND TRAINING

UNDERGRADUATE:

Dates Attended	Name/Location of Institution	Degree Received, Year
1998	UC Berkeley Berkeley, CA	BS, 1998 Major: Mechanical Engineering

GRADUATE:

Dates Attended	Name/Location of Institution	Degree Received, Year
2002	Cornell University Ithaca, NY	M.Sc., 2002 Mechanical Engineering
2007	University of Pittsburgh Pittsburgh, PA	Ph.D., 2007 Rehabilitation Science and Technology

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APPOINTMENTS AND POSITIONS

ACADEMIC:

Years Inclusive	Name/Location of Institution /Organization	Rank/Title or Position
2007-	University of Pittsburgh Department of Rehabilitation Science and Technology Pittsburgh, PA	Assistant Professor Primary Appointment
2008-	VA Pittsburgh Healthcare System Human Engineering Research Laboratories Pittsburgh, PA	Biomedical Engineer and Associate Director of Engineering (until 2015), Associate Director of Product Innovation and Translation (ongoing)
2012-	University of Pittsburgh Department of Bio-Engineering Pittsburgh, PA	Assistant Professor Secondary Appointment

TEACHING

Years Inclusive	Name/Location of Institution /Organization	Rank/Title or Position
2011-	University of Pittsburgh Rehabilitation Engineering Design Fall/Spring (HRS 1706/2706 & 1718/2718)	Lead Instructor

CONSULTING

Years Inclusive	Name/Location of Institution /Organization	Rank/Title or Position
2002-2003 Ithaca, NY	Cornell University	Clinical Research Consultant
2006	Whirlwind Wheelchairs International	Consultant
2006- 2006-	World Health Organization Engineering/product design clients	Special Consultant Consultant
2007-	Expert witness for wheeled mobility device failure	Consultant
2013-	Food and Drug Administration	Special Federal Employee

PROFESSIONAL ORGANIZATIONS, COMMITTEES & LICENSURE

Year	Organization/Committee/Licensure
1998-	ASME Member
2003-	RESNA Member
2007-2009	Chair, RESNA Special Interest Group(SIG) on Assistive Technology For Developing Countries (SIG17)
2008-	Member, ISO 7176 and ANSI/RESNA Wheelchair Standards Committee
2009-	EIT Certification
2012-	VA Integrated Product Team member on wheeled mobility
2012-	Member USAID Evidenced Based Practice Committee on Wheelchairs
2014-	Director, International Society of Wheelchair Professionals

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AWARDS

Year	**Title of Award** (student's name, if received by advisee)
1995	ASEE Best Student Design Award
2005	Rory A Cooper/Dion Johnson Award
2010	Sean and Stephanie Shimada Award (Yasmin Garcia)
2012	Best Mentor Award in NSF REU
2012, 2013	Sean and Stephanie Shimada Award (Jonathan Duvall)
2012-2014	University of Pittsburgh Innovation Award
2013	RST Thomas J. O'Connor Award (Maria Toro)
2014	Rory A Cooper/Dion Johnson Award (Maria Toro)
2014	RST Todd Hargroder Award (Maria Toro)
2014	University of Pittsburgh's Selfless Spirit Award (Jonathan Duvall)
2014-2017	IGERT Fellowship (Jonathan Duvall)

2015 RESNA Emerging Leader Award (Maria Toro)

2015 RESNA Student Scientific Paper Winner (Maria Toro)

2015 Rory A Cooper/Dion Johnson Award (Jonathan Duvall)

2015 VA Research Week Young Investigator Poster Competition - 1st place (Anand Mhatre)

PUBLICATIONS

Peer Reviewed Journal articles (*= advisee is lead author)

1. Kopperdahl, D. L., **Pearlman, J. L.**, & Keaveny, T. M. (2000). Biomechanical consequences of an isolated overload on the human vertebral body. *J Orthop Res, 18*(5), 685-690.

2. **Pearlman, J. L.**, Roach, S. S., & Valero-Cuevas, F. J. (2004). The fundamental thumb-tip force vectors produced by the muscles of the thumb. *J Orthop Res, 22*(2), 306-312.

3. **Pearlman, J. L.**, Cooper, R. A., Karnawat, J., Cooper, R., & Boninger, M. L. (2005). Evaluation of the safety and durability of low-cost non programmable electric powered wheelchairs. *Arch Phys Med Rehabil, 86*(12), 2361-2370

4. Wolf, E., **Pearlman, J.**, Cooper, R. A., Fitzgerald, S. G., Kelleher, A., Collins, D. M., Cooper, R. (2005). Vibration exposure of individuals using wheelchairs over sidewalk surfaces. *Disabil Rehabil, 27*(23), 1443-1449.

5. **Pearlman, J.**, Cooper, R. A., Zipfel, E., Cooper, R., & McCartney, M. (2006). Towards the development of an effective technology transfer model of wheelchairs to developing countries. *Disabil Rehabil Assist Technol, 1*(1-2), 103-110.

6. Cooper, R. A., Cooper, R. M., Tolerico, M., Guo, S., Ding, D. (2006). Advances in electric powered wheelchairs, Topics in spinal cord injury rehabilitation. (Issue Editor: Michael L. Boninger, MD). 11(4), 15-29.

7. Wolf, E., Cooper, R. A., **Pearlman, J.**, Fitzgerald, S. G., & Kelleher, A. (2007). Longitudinal assessment of vibrations during manual and power wheelchair driving over select sidewalk surfaces. *J Rehabil Res Dev, 44*(4), 573-580.

8. Zipfel, E., Cooper, R. A., **Pearlman, J.**, Cooper, R., & McCartney, M. (2007). New design and development of a manual wheelchair for India. *Disabil Rehabil, 29*(11-12), 949-962.

9. Authier, E. L., **Pearlman, J.**, Allegretti, A. L., Rice, I., & Cooper, R. A. (2007). A sports wheelchair for low-income countries. *Disabil Rehabil, 29*(11-12), 963-967.

10. Liu, H. Y., Cooper, R. A., **Pearlman, J.**, Cooper, R., & Connor, S. (2008). Evaluation of titanium ultralight manual wheelchairs using ANSI/ RESNA standards. *J Rehabil Res Dev, 45*(9), 1251-1267.

11. **Pearlman, J.**, Cooper, R., Chhabra, H. S., & Jefferds, A. (2009). Design, development and testing of a low-cost electric powered wheelchair for India. *Disabil Rehabil Assist Technol, 4*(1), 42-57.

12. Liu, H. Y., **Pearlman, J.**, Cooper, R., Hong, E. K., Wang, H., Salatin, B., & Cooper, R. A. (2010). Evaluation of aluminum ultralight rigid wheelchairs versus other ultralight wheelchairs using ANSI/RESNA standards. *J Rehabil Res Dev, 47*(5), 441-455.

13. Wang, H., Liu, H. Y., **Pearlman, J.**, Cooper, R., Jefferds, A., Connor, S., & Cooper, R. A. (2010). Relationship between wheelchair durability and wheelchair type and years of test. *Disabil Rehabil Assist Technol, 5*(5), 318-322.

14. *Jefferds, A. N., Beyene, N. M., Upadhyay, N., Shoker, P., **Pearlman, J. L.**, Cooper, R. A., & Wee, J. (2010). Current state of mobility technology provision in less-resourced countries. *Phys Med Rehabil Clin N Am, 21*(1), 221-242.

15. *Mason, Z. D., **Pearlman, J.**, Cooper, R. A., & Laferrier, J. Z. (2011). Comparison of prosthetic feet prescribed to active individuals using ISO standards. *Prosthet Orthot Int, 35*(4), 418-424.

16. Hong E., **Pearlman J.**, Salatin B., Wang H., Liu H., Cooper R. A., Hargroder T.(2011). Design and Development of a lightweight durable adjustable composite backrest mounting. *Assistive Technology*, 23(1), 24-35

17. *Jefferds, A. N., **Pearlman, J. L.**, Wee, J., & Cooper, R. A. (2011). International mobility technology research: a Delphi study to identify challenges and compensatory strategies. *Assist Technol, 23*(4), 232-242.

18. Laferrier J.Z., Rice I., **Pearlman J.**, Sporner M., Cooper R.M., Liu H., Cooper RA., (2012) Technology to Improve Sports Performance in Wheelchair Sports, *Sports Technology*, pp. 4-19, Vol. 5, No. 1-2

19. *Toro M.L., Garcia Y., Ojeda A. M., Dausey D. J., **Pearlman J.**(2012). Quantitative Exploratory Evaluation of the Frequency, Causes and Consequences of Rehabilitation Wheelchair Breakdowns Delivered at a Paediatric Clinic in Mexico, **Disability, CBR & Inclusive Development**, pp. 48-64, Vol. 23, No. 3.

20. Wollstein, R., Rodgers, J., Ogden, T., Loeffler, J., & **Pearlman, J.** (2012). A Novel Splint for Proximal Interphalangeal Joint Contractures: A Case Report. *Arch Phys Med Rehabil*.

21. Beyene, N. M., Steinfeld, A., **Pearlman, J**., & Cooper, R. A. (2012). Exploration of health perceptions and assistive technology use by driving status as related to transportation independence in New Delhi, India. *Disabil Rehabil Assist Technol, 7*(4), 314-322.

22. *Garcia-Mendez, Y., **Pearlman, J. L.**, Cooper, R. A., & Boninger, M. L. (2012). Dynamic stiffness and transmissibility of commercially available wheelchair cushions using a laboratory test method. *J Rehabil Res Dev, 49*(1), 7-22.

23. *Gebrosky, B.T., **Pearlman, J.L.**, Cooper, R.A., Cooper, R., Kelleher, A.K. (2013). Evaluation of Lightweight Wheelchairs using ANSI/RESNA Testing Standards. *JRRD*

24. *Goldberg, M. R., & **Pearlman, J. L.** (2013). Best Practices for Team-Based Assistive Technology Design Courses. *Ann Biomed Eng*. doi: 10.1007/s10439-013-0798-2

25. *Garcia Mendez Y., **Pearlman J. L**., Boninger M. L., Cooper R. A., (2013) Health Risks of Vibration Exposure to Wheelchair Users in the Community. *J Spinal Cord Med.* DOI: 10.1179/2045772313Y.0000000124.

26. Souza A., **Pearlman J. L.,** Cooper R. M., Kelleher A. R., Gebrosky B., Cooper R. A., (2013) Evaluation of Scooters Using ANSI/RESNA Testing Standards, *Journal of Rehabilitation Research and Developmen*t. pp. 1017-1034, Vol. 50, No.7

27. **Jonathan Pearlman** PhD, Rory Cooper PhD, Jonathan Duvall BS & Ryan Livingston (2013): Pedestrian Pathway Characteristics and Their Implications on Wheelchair Users, *Assistive Technology: The Official Journal of RESNA*, DOI:10.1080/10400435.2013.778915.

28. *Duvall J., Cooper R. A., Sinagra E., Stuckey D., Brown J., **Pearlman J.**, (2013) Development of Surface Roughness Standards for Pathways Used by Wheelchairs, **Transportation Research Record**, no. 2387, pp. 149-156

29. Goldberg, M.R., Karimi, H.A., **Pearlman, J.L.** (2014). Interactive, mobile, AGIle and novel education (IMAGINE): a conceptual framework to support students with mobility challenges in higher education. *Disability and Rehabilitation: Assistive Technology.*

30. Hong, E.K., Dicianno, B.E., Pearlman, J.L., Cooper, R, Cooper R.A. (2014). Comfort and stability of wheelchair backrests according to the TAWC (tool for assessing wheelchair discomfort). *Disability and Rehabilitation: Assistive Technology.* July, 2014.

31. Karimi, H.A, Dias, M.B., **Pearlman, J.L.**, Zimmerman, G.J. (2014). Wayfinding and Navigation for People with Disabilities Using Social Navigation Networks, *European Alliance for Innovation/IEEE ColabroateCOM* special Issue on Wayfinding.

32. *Mandala, M., Goldberg, M., **Pearlman, J.** (2014) Combining Veterans And Teachers in A Unique Service Learning Experience, International Journal For Service Learning in Engineering. *Special Edition*, pp. 381-405, Fall 2014

33. Hong, E.K., Cooper R.A., **Pearlman, J.L**., Dicianno, B., Cooper R. (2015) Comfort and stability of wheelchair backrests according to the TAWC (tool for assessing wheelchair discomfort). *Disability and Rehabilitation: Assistive Technology*. July, 2015.

34. *Mhatre, A., Duvall, J., Ding D., Cooper, R.A., **Pearlman J.** (in press, 2016). Development of a bed-integrated weight measurement system for people with disabilities. *Disability and Rehabilitation: Assistive Technology.*

35. *Toro, M. Eke, C. **Pearlman, J.** (accepted with revision). The impact of the World Health Organization 8-steps in wheelchair service provision in wheelchair users in a less resourced setting: a cohort study in Indonesia. *BMC Health Services Research*

36. YK Wu, HY Liu, A Kelleher, J Pearlman, RA Cooper., Evaluating the usability of a smartphone virtual seating coach application for powered wheelchair users, Medical Engineering & Physics, 2016

37. Nickel, E., Hansen, A., Pearlman, J., Goldish, G., (2016) A Drive System to add Standing Mobility to a Manual Standing Wheelchair, Assistive Technology: The Official Journal of RESNA.

INVITED TALKS:

Event: 3rd Annual Oakland Transportation Fair. Role: one of three panelists discussing transportation issues focused on accessibility. September 2015

Event: Symposium of Medical Bioengineering, hosted by Universidad Autonoma del Estado de Mexico. August 21st, 2014. Title of Talk: Professionalization of Wheelchair Services Worldwide.

Event: Launch of the Global Business Institute at Pitt's Katz School of Business, September 5th, 2014. Title of Talk: Transformative Experiences through Global Service Learning

Book Chapters, Sections, and Invited Articles or Magazines

1. Wolf, E.J., Collins, D., Chavez, E., **Pearlman, J.L.**, Karmarkar A., Cooper R., Cooper, R.A. (2005), Mobility Aids, In J. Webster (Ed.), *Wylie Encyclopedia of Medical Devices and Instrumentation* (544-555). New York, NY: John Wylie & Sons, Inc.

2. **Pearlman, J.L.**, Cooper, R.A. (2006). Wheeled Mobility: Wheelchairs and Personal Transportation. In G. Wnek & G. Bowlin (Eds.), *The Encyclopedia of Biomaterials and Biomedical Engineering (*3083-3092). New York, NY: Informa Healthcare.

3. **Pearlman, J.L.,** Cooper, R.A., (2007). Technology Transfer, In R.A. Cooper, H. Ohnabe, D.A. Hobson (Eds.), *An Introduction to Rehabilitation Engineering* (67-76). Boca Raton, FL: Taylor & Francis Group.

4. Koontz, A., **Pearlman, J.L.,** Impink, B., Cooper, R.A., Wilkinson, M. (2007). Wheelchairs, In R.A. Cooper, H. Ohnabe, D.A. Hobson (Eds.), *An Introduction to Rehabilitation Engineering* (129-156). Boca Raton, FL: Taylor & Francis Group.

5. **Pearlman, J.L.**, Cooper, R.A., Krizack, M, Lindsley, A., Wu, Y., Reisinger, KD, . . . Noon, J. (March/April 2008). Lower-Limb Prostheses and Wheelchairs in Low-Income Countries (An Overview). *IEEE Engineering In Medicine and Biology Magazine,* 12-22.

Selected Conference Abstracts, Poster Presentations, or Podium Presentations

1. Hollerbach, K., Perfect, S., **Pearlman, J.L.**, Hollister, A., Beaubien, B. (1997) A 3-D Finite Element Model of the Index Finger. Proceedings of the 1997 ASME Bioengineering Conference, Sun River, OR.

2. Kuxhaus, L., **Pearlman, J.L.**, Weisman M., Valero-Cuevas, F.J. (2003), Predicting Changes In Thumb-Tip Force After Nerve Impairment. Proceedings of the American Society of Biomechanics, Toledo, OH.

3. **Pearlman, J.L.**, Weisman M., Roach, S.S., Hermanson, J.W., Valero-Cuevas, F.J. (2003), The Fundamental Thumb-tip Force Vectors Produced By The Muscles Of The Thumb. Proceedings of the American Society of Biomechanics. Toledo, OH.

4. **Pearlman, J.L.**, Weisman M., Roach, S.S., Hermanson, J.W., Valero-Cuevas, F.J. (2003), Thumb-tip Force Vectors Produced By Individual Muscles Of the Thumb Do Not Superimpose Linearly. Proceedings of the IEEE Engineering in Medicine and Biology Society, Cancun, Mexico.

5. **Pearlman, J.L.**, Zipfel, E., Cooper, R.A., (2004) Meeting the Need for Wheelchairs and other Assistive Technologies in the Developing World: A Call For More Action. Proceedings of the 2004 Engineering for a Sustainable World Conference, Stanford, CA.

6. Zipfel, E., Cooper, R.A., McCartney, M., Duncan, J., Ammer, W., **Pearlman, J.L.**, (2004) Design and Development of a Manual Wheelchair for India, Proceedings of the 2004 Rehabilitation Engineering Society of North America. Orlando, FL.

7. Kelleher A.R., Cooper, R.A., Wolf E., Fitzgerald, S.F., **Pearlman, J.L.**, (2004) Revaluation of the Vibration Exposure Power Wheelchair Users Experience When Driving Over Selected Sidewalk Surfaces, Proceedings of the 2004 Rehabilitation Engineering Society of North America. Orlando, FL.

8. **Pearlman, J.L.**, Cooper, R.A., Wolf E., Kelleher A.R., Fitzgerald, S.F., Ammer, W., (2004) Vibrations During Manual Wheelchair Propulsion Over Selected Sidewalk Surfaces Are Sensitive To Weather-Related Surface Wear. Proceedings of the 2004 Rehabilitation Engineering Society of North America. Orlando, FL.

9. Zipfel, E., **Pearlman, J.L.**, Cooper, R.A., (2004) Meeting the Need for Wheelchairs and other Assistive Technologies in the Developing World. Poster Presentation at the World Bank Disability Conference, Washington, DC., November 30-December 1, 2004.

10. **Pearlman, J.L.**, Cooper, R.A., Karnawat, J., Cooper R., Boninger, M.L., Economical (K0010) Power Wheelchairs Have Poor Reliability and Important Safety Problems: An ANSI/RESNA Wheelchair Standards Comparison Study. Proceedings of the 2005 Rehabilitation Engineering Society of North America, Atlanta, GA., June 25-27, 2005.

11. **Pearlman, J.L.,** Cooper, R.A., Cooper R., Zipfel, E., McCartney, M., A Demonstration of the Manufacturing Model of Transferring Wheelchair Technology to Developing Countries. Proceedings of the 2005 Rehabilitation Engineering Society of North America. Atlanta, GA., June 25-27, 2005.

12. Wolf, E.J., Cooper, R.A., **Pearlman, J.L**., Collins, D., Kelleher, A., Longitudinal Assessment of Vibrations during Electric Powered Wheelchair Propulsion over Selected Sidewalk Surfaces. Proceedings of the 2005 Rehabilitation Engineering Society of North America. Atlanta, GA., June 25-27, 2005.

13. Cowan, R., Boninger, M.L., Mercer, J.L., **Pearlman, J.L.**, Koontz, A., Cooper, R.A., Factors Affecting Start-Up Propulsion Forces. Proceedings of the 2005 Rehabilitation Engineering Society of North America. Atlanta, GA., June 25-27, 2005.

14. Mercer, J.L., Boninger, M.L., Koontz, A., **Pearlman, J.L.**, Boninger, D., Cooper R.A., Effect of Weight On Wheelchair Propulsion Over Various Surfaces. Proceedings of the 2005 Rehabilitation Engineering Society of North America. Atlanta, GA., June 25-27, 2005.

15. Zipfel, E., Cooper, R.A., **Pearlman, J.L.**, McCartney, M., Puhlman, J., Design and Development of a New Tilt-in-Space Pediatric Wheelchair. Proceedings of the 2005 Rehabilitation Engineering Society of North America. Atlanta, GA., June 25-27, 2005.

16. McNeal, A., Cooper, R.A., **Pearlman, J.L.**, (2005) Critical Factors For Wheelchair Technology Transfers To Developing Countries—Materials and Design Constraints. Proceedings of the 2005 Rehabilitation Engineering Society of North America. Atlanta, GA., June 25-27, 2005.

17. Mercer J, Boninger ML, Koontz AM, **Pearlman J**, Cooper RA, Kinetic Analysis of Manual Wheelchair Propulsion Over Three Surfaces, Proceedings of the XXth Congress of the International Society of Biomechanics and 29th Annual Meeting of the American Society of Biomechanics, Cleveland State University, OH, CD-ROM, August 1-5, 2005.

18. **Pearlman J**, A Demonstration of the Manufacturing Model of Transferring Wheelchair Technology to Developing Countries,Proceedings of the 20th Japanese Conference on the Advancement of Assistive and Rehabilitation Technology (RESJA), Saga City, Japan, September 2005.

19. Cooper, RA, **Pearlman J**, Cooper RM, Symposium on Wheelchairs and Seating, Proceedings of the 20th Japanese Conference on the Advancement of Assistive and Rehabilitation Technology (RESJA), Saga City, Japan, p. 178, September 2005.

20. **Pearlman, J.L.,** Cooper, R.A., Zipfel, E., McCartney, M., Puhlman, J., Stegall, N. (2006) A Power Wheelchair Design Appropriate For The Physical, Cultural, Technological, And Economic Conditions In India. Proceedings of the 2006 Rehabilitation Engineering Society of North America, Atlanta, GA.

21. **Pearlman, J.L.,** (2006) Review of Literature Related to Wheelchairs for Developing Countries, *World Health Organization/International Society of Prosthetics and Orthotics/US Agency for International Development Consensus Conference on wheelchair provision in developing countries*. Bangalore, India.

22. Wolf EJ, **Pearlman J**, Cooper RA, Fitzgerald SG, Kelleher AR, Collins DM, Boninger ML, Cooper RM, Smith DR, Vibration Exposure of Individuals Using Wheelchairs Over Concrete Paver Surfaces, 8th International Conference on Concrete Block Paving, San Francisco, CA, November 6-8, 2006.

23. **Pearlman J**, Wheelchair Provision in Developing Countries, Consensus Conference on Wheelchairs in Developing Countries, Bangalore, India, November 6-11, 2006.

24. **Pearlman J**, Role of Users in Research and Design, Consensus Conference on Wheelchairs in Developing Countries, Bangalore, India, November 6-11, 2006.

25. **Pearlman J**, Review of Literature on Wheelchairs for Developing Countries, Consensus Conference on Wheelchairs in Developing Countries, Bangalore, India, November 6-11, 2006.

26. **Pearlman J**, Designing Wheeled Mobility Devices for Remote Environments: A Case Study From India, International Seating Symposium, p. 147, Orlando, FL, March 8-10, 2007.

27. **Pearlman J**, Seating and Mobility Issues in Developing Countries: Current Issues and Progress, European Seating Symposium, Dublin, Ireland, May 2-4, 2007.

28. **Pearlman, J.L.,** Jefferds, A., Nagai, I., Chhabra, H.S., Cooper, R.A., Designing Assistive Technology For Less-Resourced Environments: An Online Method to Gage Accessibility Barriers and Collect Design Advice. Proceedings of the 2007 Rehabilitation Engineering Society of North America, Phoenix, AZ., June 15-19, 2007.

29. Zipfel E, Cooper RA, Boninger DS, **Pearlman J**, McCartney M, Product Development of a Pediatric Wheelchair, Proceedings of the Annual RESNA Conference, Phoenix, AZ, CD-ROM, June 15-19, 2007.

30. Liu H, Cooper RA, Fitzgerald SG, **Pearlman J**, Connor S, Souza AL, Evaluation of Titanium Wheelchairs Using the ANSI/RESNA Standards, Proceedings of the Annual RESNA Conference, Phoenix, AZ, CD-ROM, June 15-19, 2007.

31. Ding D, Cooper RA, **Pearlman J**, Incorporating Participatory Action Design into Research and Education, International Conference on Electrical Engineering, Coimbra, Portugal, September 3-7, 2007.

32. Cooper RA, **Pearlman J**, Cooper RM, International Research and Development: Indian Spinal Injuries Center - University of Pittsburgh Collaboration, pp. 40-41, Proceedings of the International Spine and Spinal Injuries Conference, New Delhi, India, February 22-24, 2008.

33. **Pearlman J**, Cooper RA, Jefferds A, Vidhani J, Upadhyay N, Design And Testing Of A Low Cost, Single Motor Propelled Electric Powered Wheelchair For India (SIMPL-EPW), Proceedings of the Annual RESNA Conference, Arlington VA, CD-ROM, June 26-30, 2008.

34. **Pearlman J**, Cooper RA, Improving Assistive Technology with Participatory Design Methods, International Conference on Mechanics in Medicine and Biology, Pittsburgh, PA, July 23-25, 2008.

35. Cooper RA, **Pearlman J**, Chhabra HS, Cooper RM, Collaborative Training & Research in Assistive Technology: University of Pittsburgh and Indian Spinal Cord Injuries Centre as a Model, International Spinal Cord Injury (ISCoS) Annual Scientific Meeting and 3 Day Workshop on Spinal Cord Injury Management, Durban, South Africa, September 1-4, 2008.

36. Beyene N, Jefferds A, **Pearlman J**, International Training and Research on the Impact of Assistive Technologies for People with Disabilities in India, National Science Foundation Engineering Education Awardees Conference, Reston, VA, February 1-3, 2009.

37. Hong E, **Pearlman J**, Salatin B, Wang H, Liu H, Cooper RA, Hargroder T, Design Changes of a Lightweight, Durable, Adjustable Composite Backrest Mounting,Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference, CD-Rom, June 23-27, 2009.

38. Molinero A, Collins DM, Teodorski E, Cooper RA, **Pearlman J**, Karmarkar A Manual Wheelchair Propulsion Over Cross-Sloped Surfaces With Varying Characteristics and Users – Perceptions of Difficulty, Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference, CD-Rom, June 23-27, 2009.

39. Jefferds, A.N., Beyene, N., Upadhyay N., Shoker, P., **Pearlman, J.L.**, Cooper, R.A., User Satisfaction and Wheelchair Skills in India: A Pilot Study, *Proceedings of the Rehabilitation*

Engineering and Assistive Technology Society of North America Conference, New Orleans, LA., June 23-27, 2009.

40. Liu H, **Pearlman J**, Hong E, Salatin B, Wang H, Cooper RM, Cooper RA, Comparison of Durability and Cost Effectiveness Between Aluminum and Titanium Ultralight Rigid Frame Manual Wheelchairs, Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference, CD-Rom, June 23-27, 2009.

41. **Pearlman J.L.**, Cooper R., Chhabra, H.S., Jefferds, BS, Anbarasan, I. (2009) Designing Medical Products for Developing Countries: An Effective, Low-Cost Tool For Gathering and Interpreting the Mobility Needs of Wheelchair Users in India. *ASME IDETC/CIE.* San Diego, CA., August 30-September 2, 2009

42. **Pearlman, J.L., (2010)** What We Know and Need to Find Out About the Health Implications of Vibrations on Wheelchair Users, *International Seating Symposium,* Vancouver, BC, Canada.

43. Winter, A., Bollini, M., DeLatte, D., **Pearlman, J.L.,** and Scolnik, N. (2010) The Design, Fabrication, and Performance of the East African Trial Leveraged Freedom Chair. *Proceedings of ASME 2010 International Design Engineering Technical Conference, IDETC/CIE.* Montreal, Quebec, Canada.

44. Kumar A, **Pearlman JL**, Mason Z, Karmarkar A, Cooper RA, Cooper RM, Mechanical Testing of Heavy Duty Prosthetic Feet, UPMC Institute of Rehabilitation Research Day, June 2, 2010.

45. Kumar A., **Pearlman J.L.**, Mason Z., Karmarkar A., Cooper R.M., Laferrier J.Z., Cooper R.A. (2010) Mechanical Testing of Heavy Duty Prosthetic Feet , *Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference,* Las Vegas, NV., June 26-30, 2010

46. Wang H., Liu H., **Pearlman J.L.**, Jefferds A., Cooper R.M., Cooper R.A., Seventeen Years of Wheelchair Life-cycle Testing—the Impact of Time, Materials and Wheelchair Designs on Durability and Value, *Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference,* Las Vegas, NV., June 26-30, 2010.

47. Hong E, **Pearlman J**, Dicianno BE, Cooper RM, Cooper RA, Comfort and stability of manual wheelchair backrest through the TAWC (Tool for Assessing Wheelchair disComfort), International Seating Symposium, Nashville TN, March 3-5, 2011.

48. *Garcia-Mendez, Y., **Pearlman, J. L.**, Cooper, R. A., & Boninger, M. L., Vibration dampening characteristics of wheelchair cushions. Paper presented at the 27th International Seating Symposium, Nashville, TN., March 3-5, 2011.*

49. Condiotti, J.L., **Pearlman, J.L**., Gebrosky, B., Duvall, J., Cooper, R.A., Upgrade to Power Steering of the Single Motor Propelled Wheelchair (SIMPL-WC). *Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference, Toronto, Canada, June 5-8, 2011.*

50. Garcia, Y., **Pearlman, J.L.**, Hayashi, S., Vazquez, J.J., Cooper, R.A., Boninger, M.L., Measuring Vibration Exposure to Wheelchair Users in the Community. *Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference, Toronto, Canada, June 5-8, 2011.*

51. Perilstein, P., **Pearlman J.L.**, Manual Wheelchair Safety? Adverse Reports to the FDA. *Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference, Toronto, Canada, June 5-8, 2011.*

52. Toro, M.L., Garcia, Y., Ojeda A.M., Dausey, D., **Pearlman, J.L.** (2012) Evaluation of the Incidence of Failures in depot-style WCs in a Pediatric Rehabilitation Facility in Mexico. *Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference. Baltimore, MD.*

53. Kamerath JH, Garcia-Mendez Y, Cooper RA, **Pearlman J**, Vibration Exposure in Wheelchair Users : An Observational Cohort Study, AAP Annual Meeting, Las Vegas NV, February 28-March 3, 2012.

54. *Garcia-Mendez, Y., **Pearlman, J. L**., Cooper, R. A., & Boninger, M. L. (March, 2012). Assessing the risk of vibration exposure during wheelchair propulsion. Paper presented at the 28th International Seating Symposium, Vancouver, BC, Canada.*

55. *Goldberg M, **Pearlman J**, "Technology Innovations for Persons with Disabilities (TIPeD): A Program to Develop Impactful Technologies and Teach Students the Fundamentals of Entrepreneurship", Proceedings of the National Collegiate Innovators and Inventors Alliance (NCIIA), San Francisco, March 2012.*

56. Mandala M, Houston E, Teodorski E, Grindle GG, Sporner ML, **Pearlman J**, Cooper RA, An Example Of Using End-User Feedback To Prioritize Research And Development Projects, Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference, Baltimore, MD, CD-ROM, June 28-July 3, 2012.

57. Worobey, L., Oyster, M, **Pearlman, J.L.**, Toro, M.L., Boninger, M.L,. Increases in Wheelchair Repairs, Breakdowns, and Adverse Consequences for People With Traumatic Spinal Cord Injury. *Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference. Baltimore, MD, June 28-July 3, 2012.*

58. Duvall, J., Cooper, R., Sinagra, E., Stuckey, D., Brown, J., **Pearlman, J**., **Development of Surface Roughness Standards for Pathways Used by Wheelchairs** presented at the Transportation Research Board annual meeting 2013.

59. Toro ML, Dausey D, **Pearlman J**, 4R Model for Lifelong Mobility: Increasing Wheelchair Lifecycle in Less Resourced Settings, International Seating Symposium, Nashville TN, March 5-9, 2013.

60. Toro ML, Garcia-Mendez Y, Dausey DJ, **Pearlman J**, Comparison of a Manual Wheelchair Designed and Produced in Mexico to a Wheelchair Produced in China Based on ISO Testing and Clinician and User Feedback, **Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference**, Seattle, WA, June 20-24, 2013.

61. Sinagra E, Duvall J, Brown J, Stuckey D, **Pearlman J**, Cooper RA, Development of a Sidewalk Roughness Measurement Tool, Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference, Seattle, WA, June 20-24, 2013.

62. Telson J, **Pearlman J**, Cooper RA, Ding D, An Initial Design Review of an Overhead Kitchen Robot Appliance: The Kitchenbot, Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference, Seattle, WA, June 20-24, 2013.

63. Medina H, Tull RG, **Pearlman J**, Goldberg MR, QoLT Engineering Education Outreach Facilitates Systems Analysis Study for Wheelchair Use in Mexico, Global Student Forum/World Engineering Education Forum, Cartagena, Colombia, September 21-27, 2013.

64. Mhatre, A., **Development of a business model canvas for E-Scale technology.** Presented at the 1st Gear Enterprise Creation Team Development Program by Pitt Innovation Institute. University of Pittsburgh. 2014.

65. Duvall, J., Sinagra, E., Stuckey, D., Cooper, R., **Pearlman, J**. **Proposed Surface Roughness Standard for Pathways Used by Wheelchairs** poster presented at the Transportation Research Board annual meeting 2014

66. Sinagra, E., Duvall, J., Cooper, R., Stuckey, D., Kortum, A., **Pearlman, J**. **Development and Characterization of Pathway Measurement Tool (PathMeT)** poster presented at the Transportation Research Board annual meeting 2014.

67. Toro M, **Pearlman J**, Oyster M, Boninger ML, Type and Frequency of Reported Wheelchair Repairs and Adverse Consequences Among People with Spinal Cord Injury, **Proceedings of the Rehabilitation Engineering and Assistive Technology Society of North America Conference**, June 11-15, 2014.

68. Mandala M, Goldberg M, **Pearlman J**, Cooper RA, Research Experience for Veterans and Teachers: Motivation, Program Description, Outcomes and Expectations for the Future, ASME IDETC/CIE, Buffalo NY, August 17-20, 2014.

69. Duvall, J., **Pearlman, J**., Sinagra, E., **Development of Sidewalk Roughness Standards and Pathway Measurement Tool** poster presented at the Pro Walk/Pro Bike/Pro Place Conference Pittsburgh, September 8-11, 2014.

70. Toro M, Burrola Y, **Pearlman J**, Goldberg M, Augustine N, Profesionalizan do los servicios de sillas de ruedas en el mundo: Sociedad Internacional de Profesionales de Sillas de Ruedas. I Jornada Internacional de Actualizacion, evidencias y accesibilidad en sillas de ruedas. Universidad Rey Juan Carlos, Madrid, España, 2015.

71. Duvall, J., Sinagra, E., Cooper, R., **Pearlman, J**. **Characterizing Roughness of Pedestrian Pathways Using Vibration Data and Support Vector Machine Analysis** poster presented at the Transportation Research Board annual meeting 2015.

72. Duvall, J., **New methods to measure and design ADA compliant curb ramps and sidewalks**. Presented at Research and Education in Transportation Engineering forum at the University of Pittsburgh 2015

73. Duvall, J., Mhatre, A., **Design and Commercialization of a Throwing Chair**. Presented at the SHRS Travelling Circus Program at the Human Engineering Research Laboratories. 2015.

74. Mhatre, A., Duvall, J., **Pearlman, J**., **Development of E-Scale for Veterans and People with Disabilities**. Poster presented at the 2015 VA Research Week Young Investigator Poster Contest. VA Pittsburgh Healthcare System 2015.

75. Mhatre, A., Duvall, J., **Pearlman, J**., **Development of E-Scale for People with Disabilities**. Poster presented at the 11th Annual Rehabilitation Institute Research Day. University of Pittsburgh. 2015.

76. Worobey LA, Toro ML, Oyster ML, **Pearlman J**, Boninger ML, The Current State of Wheelchair Testing, Repairs, Consequences, and Maintenance, International Seating Symposium, Nashville, TN, February 26-28, 2015.

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77. Toro ML, **Pearlman J**, Pedersen J, Shea M, Basic Wheelchair Maintenance Training for Manual and Power Wheelchair Users, International Seating Symposium, Nashville, TN, February 26-28, 2015

78. Toro ML, **Pearlman J**, Development of a manual wheelchair and power wheelchair maintenance program, Rehabilitation Engineering and Assistive Technology Society of North America Conference, Denver CO, June 10-14, 2015.

79. Nickel E, Hansen A, **Pearlman J**, Goldish G, A Drive system to add standing mobility to a manual standing wheelchair, Rehabilitation Engineering and Assistive Technology Society of North America Conference, Denver CO, June 10-14, 2015.

Popular Media

1. Karmarker A., **Pearlman J**., Zipfel E., India: Making Mobility Real, PN, pp. 12-16, Vol. 60, No. 8, August 2006
2. **Pearlman J.**, Pitt and India join forces to build wheelchair, The Pitt News, pp. 2, Vol. 101, Issue 125, March 17, 2011
3. **Pearlman J.**, Walsh Wants Ramps Solved "Yesterday", The Boston Courant, pp. 9-14, Vol. XIX, No. 33, May 23-29, 2014
4. **Pearlman J.**, A Path to Success, University of Pittsburgh Innovation Institute, pp. 14-15, 2014 Annual Report
5. **Pearlman J.**, Pitt Heads Group to Professionalize Wheelchair Service, University Times, Vol. 47, Issue 23, July 23, 2015
6. **Pearlman, J.** These Scientists Are Building Fitness Trackers that Work With People with Disabilities. FastCompany CoExist, March 2016. Link
7. **Pearlman, J**.Pittsburgh researchers develop scale to help people with mobility issues. Pittsburgh Post Gazette, May 11th, 2016. Link

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PROFESSIONAL ACTIVITIES

JOURNAL & GRANT REVIEWER

- Assistive Technology (editorial board member)
- Journal of Orthopaedic Research
- Journal of Rehabilitation Research and Development
- Prosthetics and Orthotics International
- Disability and Rehabilitation: Assistive Technology
- Archives of Physical Medicine & Rehabilitation
- Veterans Administration (Grants)

- Paralyzed Veterans of America (Grant)
- VentureWell (Grant)
- Pitt's Center for Medical Innovation (Grant)
- Coulter Program (Grant)
- Paralyzed Veterans of America (Grant)

STUDENT/ACADEMIC POSITIONS

1/1996 – 5/1998	Research Intern: Lawrence Livermore National Laboratory
3/1997 – 5/1998	Research Assistant: U.C. Berkeley Orthopaedic Biomechanics Lab
9/1998 - 8/2000	Graduate Researcher: Cornell University, Ithaca, NY
1/2001 - 6/2001	Teacher's Assistant: Cornell University, Biomechanical Analysis
7/2001 - 8/2002	Graduate Researcher: Cornell University
8/2001 - 12/2001	Teacher's Assistant: Cornell University, Neuromuscular Biomechanics
8/2003 - 8/2007	Graduate Researcher: Human Engineering Research Lab, Pittsburgh, PA
1/2004 - 5/2004	Teacher's Assistant: University of Pittsburgh, Social Aspects of Disability
8/2004 - 12/2004	Teacher's Assistant: University of Pittsburgh, Assistive Technology

ADDITIONAL EXPERIENCE

- 6/1992-8/1993 Machinist: MicroDyne Inc., Escondido, CA
- 5/1998-8/1998 Computer Scientist: Lawrence Livermore National Laboratory
- 10/2001-12/2001 Volunteer Engineer: TAG Medical, Kibbutz Ga'aton, Israel
- 2/2003-5/2003 Volunteer Engineer: Piña Palmera, Zipolite, Mexico
- 9/2003-11/2003 Volunteer Engineer: PROJIMO Clinic, Coyotitán, Mexico

TRAVEL EXPERIENCE & LANGUAGE TRAINING

- India (Delhi & Kanpur) , Mexico (Coyotitán, Zipolite, Irapuato), Israel (Nahariya), Japan, China (Hong Kong, Xian, Dalian), Philippines (Cagayan de Oro), Colombia (Cali), Switzerland (Geneva), England (Bristol), Ireland (Dublín)
- Language Education: Spanish (conversation-level proficiency)

STUDENTS ADVISED

Graduate

1. Brad Dicianno, MD (Co-advisor; MS, Bioengineering, U-Pitt), 2008
   - Hired as Associate Medical Director, Human Engineering Research Laboratories
2. Eun-kyong Hong (Co-advisor; MS Rehab Science & Technology, U-Pitt), 2009
   - Enrolled in PhD Program at U-Pitt
3. Alexandra Jefferds (Primary Advisor, Rehab Science & Technology, U-Pitt), MS, 2009
   - Hired as Rehab Engineer at Washington, DC Health Clinic in 2012
4. Ben Salatin (Co-advisor, Rehab Science & Technology, U-Pitt), MS, 2011
   - Hired as Rehab Engineer at the Richmond VAMC in 2011
5. HsinYi Liu (Co-advisor; MS, Rehab Science & Technology, U-Pitt), PhD, 2012
   - Enrolled in PhD Program at U-Pitt
6. Hong-wu Wang (Co-advisor, Rehab Science & Technology, U-Pitt), PhD, 2012
   - Hired as Post-Doc student at U-Pitt in 2012
7. Yasmin Garcia (Primary Advisor, Rehab Science & Technology, U-Pitt), MS, 2012
   - Hired as Medical Faculty at Universidad Autonoma Del Estado De Mexico in 2012

- Hired as Rehab Engineer at Children's Rehabilitation Institute of TeletonUSA in 2015

8. Nadwa Onwi (Co-advisor, Rehab Science & Technology, U-Pitt), MS 2013
9. Josh Telson (Co-advisor, Rehab Science & Technology, U-Pitt), MS 2013
   - Hired as design engineer at 4-Moms
10. Jonathan Duvall (Primary Advisor, Rehab Science & Technology, U-Pitt), MS 2013
    - *Current Phd Student*
11. Eric Sinagra (Primary Advisor, Rehab Science & Technology, U-Pitt), MS 2014
    - Started www.pathvu.com
12. Eric Williams (Primary Advisor, Rehab Science & Technology, U-Pitt), MS Expected 2015
13. Maria Toro (Primary Advisor, Rehab Science & Technology, U-Pitt), PhD Expected 2015
14. Mahender Mandala (Primary Advisor, Rehab Science & Technology, U-Pitt), PhD Expected 2015
14. Jonathan Duvall (Primary Advisor, Rehab Science & Technology, U-Pitt), PhD Expected 2017
15. Anand Mhatre (Primary Advisor, Rehab Science & Technology, U-Pitt), PhD Expected 2017

Undergraduate

1. Jaideep Karnawat (IIT-Kanpur) Summer 2004. Testing of low-cost power wheelchairs.
2. Neil Stegal (CMU) Summer 2005. Design of a low-cost power wheelchair for India.
3. Amy McNeal (Pitt) Summer 2006. Mechanical testing of low-carbon steel.
4. Mary Wu (John's Hopkins) Summer 2007. Development of a cable steering system.
5. Pitt Bio-E Student Team (2008/2009) Development of a upper extremity prosthesis.
6. Pitt Bio-E Student Team (2008/2009) Development of an advanced caster system.
7. Viviana Valenzuela De La Vega (Auburn Univ.) Summer 2009. Backrest scan evaluation.
8. Miriam Zisook (RISD) Summer 2009. Development of a novel finger splint.
9. Jonathan Duvall (Pitt), Summer 2010. Development of an active anti-tip system for wheelchairs.
10. Phil Perilstein (Bucknell), Summer 2010. FDA evaluation of wheelchair failures.
11. Robin Bratcher (UMBC), Summer 2010. Wheelchair Design project
12. Dan Hefley (Pitt, with Ashli Molinero), Summer 2010. Social perceptions of disability on twitter.
13. Diana Stuckey (Pitt) Spring-Fall 2012. Development of pathway roughness standard
14. Ian McIntyre (Pitt) 2012-2014. Development of Pathway Measurement Tool
    - Co-founder of Pathway Accessibility Solutions, Inc.
15. Tianyang Chen (Pitt) 2012-2014. Development of Pathway Measurement Tool
    - Co-founder of Pathway Accessibility Solutions, Inc.
16. Logan Cooper (CalPoly) Summer 2012. Development of manual wheelchair active anti-tip.
17. Samuel Bucior (Pitt), Summer 2013. Wheelchair shop project with Teleton Mexico.
18. Karl Olsheski (Pitt) Summer 2013. Development of low-cost bed scale.
19. Chika Eke (University of Portland), Summer 2014. Impact of wheelchair provision in Indonesia.
    - Graduate Student at MIT Media Lab
20. Monique Tillis (Southern University and A & M) Summer 2014. Development of bedscale App.
21. Zack Merrill (Pitt), Summer 2014. Wheelchair design
22. Jeff Deeley (Pitt) Fall 2014, Summer 2015. Development of Pathlock, Development of bedscale
23. Sam Waters (Pitt) Spring-Summer 2015. Development of curb-ramp measurement device.
24. Daniel Ferris (Pitt) Spring 2015. Development of low-cost bed scale.
25. Katee Coleman (Pitt) Summer 2015. Development of multi-user E-Scale app.
26. Madhur Maholtra (Pitt) Summer 2015. Interface design for PeerAGE and E-Scale
27. Olivia Pascazi (Pitt) Summer 2015. Advocacy projects for ISWP
28. Abhir Yavalkar (Pitt) Summer 2015. Business and Marketing projects for ISWP
29. Ernest Liu (NYU) Summer 2015. Development of a Hybrid Version of the WHO Training Materials

30. Marisa Bellemare (Robert Morris) Summer 2015. Survey of disaster relief methods to support wheelchair users.

INTELLECTUAL PROPERTY

1. Full US and European Patent Application: Portable Active Compact Compression Sleeve (PACCS) (6/2008) Application # **20080319359** (privately funded)
2. Full Patent Application: Adjustable backrest hardware for a rigid backrest system for manual wheelchairs (4/2010) Application # US2010/0276975A1 *(funded with NIH SBIR)*
3. Full Patent Application: Steering Mechanism for a Personal Vehicle. (2/2011) Application # 13/022,838 *(funded by NIH SBIR)*
4. Full Patent Application: Novel splint for the treatment of contractures of the proximal inter-phalangeal joint of the hand (2/2011) Application #: US 2011/0245747 A1
5. Full Patent Awarded: Hybrid Power Operated Vehicle—a personal mobility device for people with disabilities (2/8/2011) Patent# 7,882,909 B2 *(funded by NIH SBIR)*
6. Full Patent Awarded: Improved Caster and System for Mobile Device. (3/2013) Application #:12/956,666. *(funded by NIH SBIR)*
7. Full Patent Application: Active Stability Devices And Systems for Mobile Devices, Patent Application No: 13/750,619 (8/13)
8. Full Patent Application: Seating Function Monitoring & Coaching System (1/15)
9. Full Patent Application: Pathway Measurement Devices, Systems & Methods. Patent Application No: 14/597,721 (1/15)
10. Full Patent Application & PCT: Furniture-integrated Weight Measurement System and Load Cell for Same (1/16)
11. Provisional Patent Application: Mobility Enhancement Wheelchair (7/15)

RESEARCH FUNDING

Cornell Graduate Fellowship 8/98 – 7/99
Fellow: One year of Tuition & Stipend

National Science Foundation, Graduate Research Fellowship 9/99-5/04
Fellow: Three years of Tuition & Stipend

National Science Foundation, IGERT training grant 5/04-5/07
Fellow: Three years of Tuition & Stipend

NIH SBIR Subcontract 10/08-3/10
PI: $80,000
Project: Development of a Single Motor Propelled Wheelchair.

Dept. Of Veterans Affairs Career Development Award 10/09-9/11
Principal Investigator, Mentor is Rory Cooper & Michael Boninger. Two-year salary support
Project: salary support to develop & test vibration data-logging device

VA Pilot Grant, Department of Veterans Affairs 10/09-9/11
Principal Investigator**,** $50K direct costs (**.25 FTE**)
Project: Development of a vibration datalogger system

NIDRR DRRP Subcontract 10/09-9/11
PI: $80,000
Project: Wheelchair activity monitoring of users in five national and international locations.

NIH SBIR Subcontract 1/10-12/11
PI: $40,000
Project: Development of an anti-bias caster system to help improve outdoor mobility of wheelchair users.

NCIIA Course and Program Grant 9/10-8/13
PI: $25,950
Project: Support for the Technology Innovation for People with Disabilities (TIPeD) program, which partners undergraduate business and engineering students together to develop assistive technology.

Access Board 9/10 – 8/13
PI: $300,000
Project: Development of pedestrian pathway roughness standards for safe wheelchair use in public spaces.

NIH SBIR Subcontract 10/10-9/11
PI: $40,000
Project: Evaluation of a novel drive-train system for hand-cycles.

NIH SBIR Subcontract 12/10-12/12
Co-Investigator: $**350,000**
Project: Development of a lightweight & adjustable backrest to improve the comfort and function of solid manual wheelchair backrests.

NIH SBIR Subcontract 4/11-3/13
PI: $794,102
Project: Development of a single motor propelled wheelchair.

Benter Foundation 5/11-12/11
PI: **$42,000**
Project: Development and implementation of a wheelchair services program at a Teleton clinic in Mexico.

Benter Foundation 11/11 – 8/12
PI: $40,000
Project: Comparative evaluation of activity and participation of wheelchair users provided with different types of wheelchairs in Mexico.

NIH R03 4/12 – 3/14
PI: $215,888
Project: Development of a single motor propelled wheelchair for India.

ICPI/BIA contract 6/12 – 6/13
PI: $70,000
Project: Development of a pathway measurement tool that can measure pathway surface roughness.

NIH SBIR Subcontract 08/12-7/14
PI: $424,458
Project: Development of a caster biasing system for manual wheelchairs.

Pitt Innovation in Education Award 10/12-9/13
PI: $25,000
Project: Course-development support to sponsor undergraduates to participate in international projects to design assistive devices for people with disabilities.

NSF Research Experience for Teachers 10/12-9/15
PI: $169,571 Subaward $169,571
Project: Experiential learning of teachers in assistive technology product innovation to increase the enrollment of student in STEM fields.

NIDRR DRRP 10/12 – 9/17
Co-Director: $4.5M
Project: Multi-site randomized clinical trial evaluating the impact of wheelchair skills and maintenance training on the quality of life of wheelchair users.

Benter Foundation 12/12 – 7/14
PI: $52,500
Project: Launch of a Wheelchair Service Provision Service throughout the Teleton Network.

Analysis of Teleton Data (via America Wheelchair Mission) 5/13-8/13
PI: $5,500
Project: explore health data collected by Teleton clinics in mexico

NSF Research experience for Veterans 10/13 – 9/15
PI: $75,000
Project: Immersion of Veterans in the RET program (described below).

NCIIA E-Teams (Stage I & II) 11/13-12/15
PI: $25,000
Project: Commercialization of the Pathway Measurement Tool

USAID SPANS subgrant 12/13-5/14
PI: $45,000
Project: Design, oversight and data analysis of a longitudinal controlled outcomes study of service provision in Indonesia.

NSF ATE 7/14-6/17
Co-PI: $900,000
Project: Advanced Manufacturing Training for People with Disabilities

USAID Wheelchair Secretariat 9/14-12/16
PI/Director: $2.3M
Project: Development of the International Society of Wheelchair Professionals

Paralyzed Veterans of America Research Grant 9/14-9/16

Co-PI: $150,000
Project: Evaluation of a wayfinding app for wheelchair users

NIDRR Phase II SBIR
PI on Subcontract: $100,000 10/14-9/16
Project: support development of wayfinding app for wheelchair users

Innovation Works TCC Grant 1/15-6/15
PI: $25,000
Project: Integration of wifi and cloud-based database into bed-scale device.

VA CPPF 1/15-9/15
PI: $25,000
Project: Development of the HealthHUB system which integrates a bed-scale and activity monitor for wheelchairs.

NSF I-Corps for Learning 6/15-3/15
Co-PI: $50,000
Project: Customer interviews to determine the commercial potential of PeerAGE, an online peer-assessment tool for design-based-learning projects.

NSF I-Corps 1/16-8/16
PI: $50,000
Project: Customer interviews to determine the commercial potential of E-Scale, a furniture integrated health monitoring system.

Paralyzed Veterans of America Research Grant 1/16-12/18
PI: $150,000
Project: Pilot study to develop and test the E-Scale with wheelchair users.