**Karen Frost Bertocci, PhD, MBA**

Assistant Professor, Bioengineering, J.B. Speed School of Engineering

Injury Research, Assessment & Prevention (iRAP) Laboratory

University of Louisville

Louisville KY

502-852-0279

[k.bertocci@louisville.edu](mailto:k.frost@louisville.edu)

**Education**

2008 Certificate, Clinical Research, Epidemiology & Statistics

School of Public Health and Information Science

University of Louisville

2004 PhD, Health and Rehabilitation Sciences, University of Pittsburgh

1997 MBA, Palumbo Donahue School of Business, Duquesne University

1987 BA, English Writing/Communications, University of Pittsburgh

**Appointments and Positions**

Academic

2012 – Present University of Louisville Assistant Professor

Bioengineering

2009 – 2012 Mechanical Engineering Assistant Professor

2007 – 2009 Mechanical Engineering Sr. Postdoctoral Fellow

2004 - 2005 University of Louisville Postdoctoral Fellow

School of Nursing Orthopedic Rehabilitation

2004 University of Pittsburgh Postdoctoral Fellow

Integrative Graduate Education National Science Foundation & Research Traineeship Program

1999 - 2004 University of Pittsburgh Predoctoral Fellowship

Rehabilitation Science & Technology National Institute for Disability

and Rehabilitation Research

#### Non-Academic Positions

2010 – present Bearcat Innovations LLC Co-founder

2000 - 2003 Dynamic Contours, LLC Project Manager

Pittsburgh, PA

1995 - 1999 Logica Carnegie Group Manager, Contract

Pittsburgh, PA Administration

1991 - 1994 Children’s Hospital of Pittsburgh Project Specialist

Pittsburgh, PA

1987 - 1991 Kleen All of America, Inc. Manager, Regulatory

Pittsburgh, PA Compliance

1987 - 1990 GEB Consulting, Inc. Consultant

Pittsburgh, PA

##### Membership in Professional and Scientific Societies

2012 – present American College of Rheumatology Member

Assoc. of Rheum. Health Professionals

2000 – present Rehabilitation Engineering Society of Member

North America

2004 – 2008 American College of Sports Medicine Member

2002 – 2005 Western Pennsylvania Arthritis Fnd. Member

##### Honors and Professional License

2004 Postdoctoral Fellowship, National Science Foundation

Integrative Graduate Education & Research Traineeship Program

2002 Best Poster Award, Frontiers in Rehabilitation Research

2001 Arthritis Foundation Doctoral Dissertation Award

1999-2001 Pre-doctoral Fellowship, National Institute on Disability Rehabilitation

& Research, Research Training in Rehabilitation Sciences

**Publications**

Peer Reviewed Journal Articles

1. Ahmed M, Campbell-Kyureghyan N, **Frost K**, Bertocci G, Identifying challenges to securing wheeled mobility devices using tiedown and occupant restraint systems from the user perspective, IIE Transactions on Occupational Ergonomics and Human Factors (In Press, May 2014).
2. Stillman M\*\*, **Frost K**, Smalley C, Bertocci G, Williams S, “Health care utilization and barriers experienced by individuals with spinal cord injury”, Archives of Physical Medicine & Rehabilitation, 2014, Feb (DOI: 10.1016/j.apmr.2014.02.005).
3. Bertocci G, **Frost K\***, Smalley C, “Public transit bus ramp slopes measured in situ”, Disability & Rehabilitation: Assistive Technology, 2014 May (doi:10.3109/17483107.2014.913714).
4. **Frost K**, Bertocci G, Salipur Z, “Wheelchair Securement and Occupant Restraint System (WTORS) Practices in Public Transit Buses”, Assistive Technology, 2013, Mar;25(1):16-23.
5. Salipur Z, **Frost K**, Bertocci G, “Investigation of wheelchair instability during transport in large, accessible transit vehicles”, Journal of Rehabilitation Research and Development, 2012, 49(6).
6. Ahmed M, Campbell-Kyureghyan N, **Frost K**, Bertocci G, Ergonomic evaluation of a wheelchair transportation securement system, Work: A Journal of Prevention, Assessment and Rehabilitation, 2012, 41: 4924-4930.
7. **Frost K**, van Roosmalen L, Bertocci G, “Wheeled mobility device transportation safety in fixed route and demand-responsive public transit vehicles”, Assistive Technology, 2012 Jun;24(2):87-101.
8. **Frost K**, Bertocci G, Sison S, “Ingress/Egress Incidents Involving Wheelchair Users in a Fixed-Route Public Transit Environment”, Journal of Public Transportation, 2010 Dec;13(4):42-62.
9. **Frost K**, Bertocci G, “Retrospective review of adverse incidents involving passengers seated in wheeled mobility devices while traveling in large accessible transit vehicles”, Medical Engineering and Physics, 2010 Apr; 32(3):230-236.
10. Jaggers JR, Swank AM, **Frost KL**, Lee CD, “The acute effects of dynamic and ballistic stretching on vertical jump height, force, and power”, J Strength Cond Res. 2008 Nov;22(6):1844-9.
11. Nyland J, **Frost K**, Quesada P, Angeli C, Swank A, Topp R, Malkani AL. “Self-reported chair-rise ability relates to stair-climbing readiness of total knee arthroplasty patients: A pilot study”, Journal of Rehabilitation Research and Development 2007;44(5):751-60.
12. Jaggers JR, Simpson CD, **Frost KL** Quesada PM, Topp R, Swank AM, Nyland J, “Prehabilitation Before Knee Arthroplasty Increases Postsurgical Function: A Case Study”, J of Strength and Conditioning Research, 2007, Vol 21 (2): 632-634.
13. Miller T, Simpson C, **Frost KL**, Topp R, Swank A, Quesada P, Nyland J, Malkani A, Boardley D, “Preoperative measures of strength, pain and function as predictors of functional outcomes in TKA patients post-surgery, Medicine & Science in Sports and Exercise, 2006, Vol 38.
14. Ridner L, Topp RV, **Frost KL**, “Methodological Issues in Identifying Sexuality for Research” American Journal of Men’s Health, 2007 Vol 1(1): 87-90.
15. **Frost KL**, Bertocci GE, Wassinger CA, Munin MC, Burdett RG, Fitzgerald S, “Isometric Performance Following Total Hip Replacement and Rehabilitation” Journal of Rehabilitation Research and Development, 2006, 43(4): 435-444.
16. **Frost KL**, Topp RV, “Physical Activity Prescription for the Hypertensive Patient”, Nurse Pract, 2006, Vol 31(4): 29-37.
17. Topp RV, **Frost KL**, “Exercise for the Inactive Hypertensive Patient”, Ethnicity and Disease, 2006, Vol 16(S4): S27-S34.
18. Ridner L, **Frost KL**, LaJoie S, “Health Information And Risk Behaviors Among Gay, Lesbian And Bisexual College Students” Journal of the American Academy of Nurse Practitioners, 2006, Vol 18(8): 374-378.
19. Bertocci GE, Munin MC, **Frost KL,** Burdett RG, Wassinger CA, Fitzgerald S, “Isokinetic Performance Following Total Hip Replacement”, American Journal of Physical Medicine and Rehabilitation, January 2004, Vol 83, 1-9.

*\* denotes junior faculty; research mentor – K. Frost*

*\*\* denotes co-first author paper*

Conference Proceedings

Smalley CS, **Frost KL**, Bertocci G, “Ramp slopes encountered by wheeled mobility device users in public transit buses”, Rehabilitation Engineering Society of North America, Annual Conference, Bellevue, WA, June 2013

Ahmed M, Campbell-Kyureghyan N, **Frost KL**, Bertocci G, “Ergonomic evaluation of a wheelchair transportation securement system”, International Ergonomics Association, World Congress, Recife, Brazil, April 2012*.*

**Frost KL**, Barker JB, “An in-depth study of wheelchair access and equipment use on buses“, American Public Transportation Association Bus and Paratransit Annual Conference, Memphis, TN, May 2011.

Buning ME, Kary P, **Frost KL,** “Students who ride seated in wheelchairs: survey of state director”, Rehabilitation Engineering Society of North America, Annual Conference, Toronto, CA, June 2011.

**Frost KL**, Bertocci G, Wheelchair securement and occupant restraint practices in large accessible transit vehicles, Rehabilitation Engineering Society of North America, Annual Conference, New Orleans, 2009.

Sisson S\*, **Frost KL**, Bertocci G, “Wheelchair Ingress/Egress Activities in Large Accessible Transit Vehicles”, Rehabilitation Engineering Society of North America, Annual Conference, **Honorable Mention, Student Scientific Paper Competition**, Washington DC, Jun 2008.

Sison S\*, **Frost K**, Bertocci G, Wheelchair Ingress/Egress Activities in Large Accessible Transit Vehicles, E-Expo, Louisville, KY, March 2008.

Hemberger\* E, **Frost KL**, Bertocci G, Pierce MC, “Identification of a Low-Risk Fracture Zone for Pediatric Buckle Fractures”, Research Louisville!, **Medical School Dean’s Award for Outstanding Research**, Oct 2007.

**Frost KL**, Bertocci G, “Wheelchair Rider Incidents on Public Transit Buses: A 4-Year Retrospective Review of Metropolitan Transit Agency Records”, Rehabilitation Engineering Society of North America, Annual Conference, Phoenix AZ, Jun 2007.

Hemberger\* E, **Frost KL**, Bertocci G, Pierce MC, “Identification of a Low-Risk Fracture Zone for Pediatric Spiral Femur Fractures”, Research Louisville**!, 2nd Place Winner – First Year Medical Student Research Poster Competition**, Oct 2006.

Jaggers J, Simpson C, **Frost** **KL**, Swank AM, Topp RV, Nyland J, Quesada PM, Malkani A, “Prehabilitation Prior To Knee Arthroplasty Increases Postsurgical Function: A Case Study”, American College of Sports Medicine, Denver CO, Jun 2006.

Miller T, Simpson C, **Frost KL**, Topp RV, Swank AM, Quesada PM, Nyland J, Malkani A, Boardley D, “Preoperative Measure of Strength, Pain and Function As Predictors of Functional Outcomes in TKA Patients Post-Surgery”, American College of Sports Medicine, Denver CO, Jun 2006.

Topp RV, **Frost KL**, Nyland J, Quesada PM, Swank AM, Malkani A, “Preoperative Strength, Pain and Perceived Functioning as Predictors of Postoperative Objective Functioning After Total Knee Arthroplasty, Midwest Nursing Research Society 30th Annual Conference, April 2006.

Malkani A, **Frost KL**, Topp RV, Swank AM, Nyland J, Quesada PM, Durham M, “Prehabilitation Improves Gait Speed After Total Knee Arthroplasty”, American Academy of Orthopaedic Surgeons, 73rd Annual Meeting, March 2006.

Naeger CW, Brown KB, Swank AM, **Frost KL**, Quesada PM, Nyland J, Topp RV, “Eight Weeks Prehabilitation Increases Functional Performance: A Case Study of Total Knee Arthroplasty”, American College of Sports Medicine, Nashville, TN, June 2005.

**Frost KL**, Bertocci GE, Wassinger CA, Munin MC, “Relationship Between Biomechanical and Perceived Physical Functioning Following Total Hip Arthroplasty and Rehabilitation”, Research Louisville, Louisville, KY, November 2004

Velidandla\* RR, **Frost KL**, Nyland J, Topp RV, ”Correlation of Objective and Perceived Physical Functioning After Total Knee Arthroplasty and Rehabilitation”, Research Louisville, Louisville, KY, November 2004.

**Frost KL**, “Isokinetic and Isometric Performance Following Elective Hip Replacement”, conference workshop and Proceedings of the American Academy of Physical Medicine and Rehabilitation, Annual Assembly, Chicago, October 2003

Bertocci GE, Munin MC, **Frost KL**, Burdett RG, Breisinger T, “Assessment of Muscle Fatigue in Total Hip Replacement (THR) Patients as a Means to Evaluate Rehabilitation Status”, Proceedings of the Physical Medicine and Rehabilitation Conference, New Orleans, September 2001.

**Frost KL**, Fitzgerald S, Collins D, Sachs-Erickson N, “Influence of Service Dogs in Psychosocial and Functional Outcomes as Measured by the Rosenberg Self-Esteem Scale and Revised Craig Handicap Assessment and Reporting Technique (CHART)”, Proceedings of the Seating Symposium International Conference, Orlando, FL, February 2001.

Fitzgerald S, **Frost KL**, “Future of Service Dog Research: A Longitudinal Study Examining the Efficacy of Service Dogs”, Proceedings of the American Association of Spinal Cord Injury Psychologists and Social Workers, Reno, NV, September 2000.

**Frost KL**, Fitzgerald S, Bertocci GE, Munin MC, Burdett RG, “Functional Status and Well-Being following Total Hip Replacement Rehabilitation as Measured Using the SF-36”, Proceedings of the RESNA Annual Conference, Orlando, July 2000.

*\* denotes student first author co-mentored by K. Frost*

Invited Presentations and Instructional Courses

**Frost KL,** Stillman M,Stepping Up For Those Who Can’t: Accessibility Issues in the Clinic, Grand Rounds – General Internal Medicine, University of Louisville Hospital, Louisville, KY, Feb 5, 2014.

**Frost KL,** Stillman M,Stepping Up For Those Who Can’t: Accessibility Issues in the Clinic, Grand Rounds – Physical Medicine and Rehabilitation, Frazier Neuroscience and Rehab Institute, Louisville, KY, Dec 13, 2013.

**Frost KL**, Wheelchair Transportation & Safety Research: Accessibility and Usability of Public Transit Vehicles, Rehabilitation Engineering Society of North America, Annual Conference, Bellevue, WA, June 2013.

**Frost KL**, Bertocci G, Comments and Recommendations Regarding Wheelchair Accessibility Specific to Ramp Sections of ADA NPRM dated 7/26/10, U.S. Access Board Public Hearing on Accessibility Guidelines for Public Transit Vehicles, Washington DC, November 2010.

Bertocci G, **Frost KL,** Salipur Z, Train-the-Trainer Wheelchair Transportation Safety on Fixed Route Transit Vehicles,Transit Authority of River City, Louisville, KY, March 2009.

Other Publications

Smalley C, **Frost KL**, Bertocci G, Factors in Transit Bus Ramp Slope and Wheelchair-Seated Passenger Safety, Metro Magazine, April 8, 2014.

**Frost KL**, Buning ME, Using a Wheelchair on a Public Bus, Paraplegia News, Vol 63, (4), April 2009

**Frost KL**, Breisinger T, In The Swing: Clinical Protocols May Not Adequately Restore Strength After THR, Advance For Directors in Rehabilitation, January 2004

**Frost KL**, Influence of a Motivational Exercise Counseling Intervention on Rehabilitation Outcomes in Individuals with Arthritis Who Received Total Hip Replacement, PhD Dissertation, University of Pittsburgh, December 2003.

Book Chapters

**Bertocci, KL**, Spinal Cord Injury Patient Handbook, Accessible Health Care and the ADA, MJ Stillman, Editor, Paralyzed Veterans of America, Washington DC (*in Press*)

RV Topp, **KL Frost**, Strength Training Strategies for Individuals with Arthritis, in Resistance Training for Special Populations, in Resistance Training for Special Populations, AM Swank, Editor, ISBN-13:978-1418032180, Delmar Cengage Learning, Clifton Park, NY, May, 2009.

**Teaching and Curriculum Development**

BE 675 Rehabilitation Engineering (Lecturer – Wheelchair Use on Large Accessible Transit Vehicles), University of Louisville, Fall 2008 – present; 3 credits

NURS 651 Nursing Research (Lecturer - Research Methods Section) University of Louisville, Spring 2005 - 4 credits

HRS 2704: Rehabilitation Engineering and Assistive Technology (Teaching Assistant) University of Pittsburgh, Fall, 2002 – 3 credits

**Student Advising and Thesis Committee Participation**

Graduate Students

Raymond D’Souza; Member, Doctoral Dissertation Committee, 2010 – present, Development of a Surrogate Bruising Detection System to Describe Potential Bruising Patterns Associated with Common Childhood Fall, PhD, Mechanical Engineering, estimated completion Summer 2014.

Zdravko Salipur; Member, Doctoral Dissertation Committee, 2009-2013, Development and Validation of a Wheelchair Instability Computer Simulation Model, Dept of Mechanical Engineering, University of Louisville

Madeeha Ahmed; Member, Master’s Thesis Committee, 2009-2011, Industrial Engineering, University of Wisconsin – Milwauke

Ahmed M, Campbell-Kyureghyan N, **Frost KL**, Bertocci G, “Ergonomic evaluation of a wheelchair transportation securement system”, International Ergonomics Association, World Congress, Recife, Brazil, April 2012*.*

Indira Thirkannad, MD, MSc Research Mentor, Member of Master’s Thesis Committee, 2007-2009, School of Public Health, University of Louisville

Sheryll Sisson: MS Research Mentor, Co-Chair, Master’s Thesis Committee, 2007-2009, Department of Mechanical Engineering, University of Louisville.

Sisson S, **KL Frost**, G Bertocci, “Wheelchair Ingress/Egress Activities in Large Accessible Transit Vehicles”, Rehabilitation Engineering Society of North America, Annual Conference, **Honorable Mention, Student Scientific Paper Competition**, Washington DC, Jun 2008.

Sison S, **Frost K**, Bertocci G, Wheelchair Ingress/Egress Activities in Large Accessible Transit Vehicles, E-Expo, Louisville, KY, March 2008.

Emily Hemberger: Summer Scholar Medical Research Mentor, 2006, 2007, Injury Risk Assessment and Prevention Lab, University of Louisville

E. Hemberger, **KL Frost**, G Bertocci, MC Pierce, “Identification of a Low-Risk Fracture Zone for Pediatric Buckle Fractures”, Research Louisville!, **Medical School Dean’s Award for Outstanding Research**, Oct 2007.

E. Hemberger, **KL Frost**, G Bertocci, MC Pierce, “Identification of a Low-Risk Fracture Zone for Pediatric Spiral Femur Fractures”, Research Louisville!, **2nd Place Winner – First Year Medical Student Research Poster Competition**, Oct 2006.

Jason Jaggers: Member, Master’s Thesis Committee, 2005-2006, Department of Exercise Physiology, University of Louisville

JR Jaggers, CD Simpson, **KL Frost**, PM Quesada, RV Topp, AM Swank, JA Nyland, “Prehabilitation Before Knee Arthroplasty Increases Postsurgical Function: A Case Study”, J of Strength and Conditioning Research, 2007, Vol 21 (2): 632-634.

J Jaggers, C Simpson, **KL Frost**, AM Swank, RV Topp, J Nyland, PM Quesada, A Malkani, “Prehabilitation Prior To Knee Arthroplasty Increases Postsurgical Function: A Case Study”, American College of Sports Medicine, Denver, Jun 2006.

Crystal Simpson: MS Research Supervisor, 2005, Department of Exercise Physiology, University of Louisville

Michael Durham: MS Research Supervisor 2004-2005, School of Nursing, University of Louisville

Cindy Naeger: MS Research Supervisor 2004-2005, Department of Exercise Physiology, University of Louisville

C.W. Naeger, K.B. Brown, A.M. Swank, **K.L. Frost**, P.M. Quesada, J. Nyland, R.V. Topp, “Eight Weeks Prehabilitation Increases Functional Performance: A Case Study of Total Knee Arthroplasty”, American College of Sports Medicine, Nashville, TN, June 2005.

Craig Wassinger: MS Research Supervisor, 2002-2003, Dept of Physical Therapy, University of Pittsburgh.

Christina Wong: MS Research Supervisor, 2002, Dept of Mechanical Engineering, Carnegie Mellon University

Undergraduate Students

Aislinn Cooper & Gifford Wesley; Research Sponsor, Senior Research Project, 2010-2011, Department of Psychology, Hanover College, IN.

Cooper A., Wesley G. “Short Term Effects of Animal Assisted Therapy on Emotional Wellbeing”, Undergraduate Research Conference, Butler University, IN, April 2010.

Cortney Burkholder; Internship Supervisor, Senior Sociology Internship; Summer 2012, Department of Sociology, Kent School of Social Work, University of Louisville; Benefits of Pet Therapy in Pediatric and Geriatric Health Settings.

**Research**

October 2013 to September 2015, In-Depth Investigation of Activities on Paratransit, NIDRR (Nat’l Inst. for Disability and Rehabilitation Research); $219,000, Role: **Principal Investigator**

January 2013 to December 2013, Multidisciplinary Research Grant - Pilot Study of SCI Patient Utilization and Access to Primary Care, University of Louisville, $10,000. Role: **Principal Investigator**

July 2012 to February 2013, Superior Mobility sponsored research - Development of a portable, height-adjustable transit ramp training platform for clinical use in training wheelchair users to access public transit buses; $10,000, Role: **Co-Investigator**

Nov 2011 to Oct 2013, In-Depth Assessment of Wheelchair Ramp Activities and Incidents on Public Transit Buses, NIDRR (Nat’l Inst. for Disability and Rehabilitation Research); $200,000, Role: **Principal Investigator**

Nov 2006 to Oct 2012, Rehabilitation Engineering Research Center, NIDRR; $4,500,000, Task P2 - Assessment and Monitoring of Wheelchair Transportation Activities and Incidents on Public Buses, Role: **Co-Investigator**

July 2010 to December 2011, Proof of Concept Grant – Economic Pressure Ulcer Prevention Support Surfaces, University of Louisville, $45,000, Role: **Co-Investigator**

Jan 2008 to Mar 2010, Proof of Concept Grant – Canine Pressure Ulcer Prevention Garment, University of Louisville, $22,500, Role: **Co-Investigator**

Jan 2005 to Dec 2006, Intramural Research Incentive Grant - Impact of Rehabilitation on Functioning After Total Hip Arthroplasty, University of Louisville, $10,000 Role: **Co-Investigator**

June 2004 to Nov 2006, Effect of Prehabilitation on Rehabilitation of TKA, NIH-NINR, $425,000, Role: **Co-Investigator**

Sept 2001 to Aug 2005, Assessment of Muscle Fatigue in Arthritic Total Hip Replacement Patients as a Means to Evaluate Rehabilitation Status, National Arthritis Foundation, $105,000, Role: **Co-Investigator**

Sept 2001 to Dec 2003, Investigation of the Influence of a Motivational Exercise Counseling Intervention on Rehabilitation Outcomes in Individuals With Arthritis Who Received Total Hip Replacement, National Arthritis Foundation, $20,000, Role: **Principal Investigator** (Dissertation Award)

Sept 2001 to Dec 2002, A Steering Interface for Powered Mobility, NIH SBIR Grant, $100,000, Role: **Principal Investigator**

Sept 2000 to Sept 2001, Assessment of Muscle Fatigue in Arthritic Total Hip Replacement Patients as a Means to Evaluate Rehabilitation Status; NIH Multipurpose Arthritis and Musculoskeletal Diseases Center; $60,000 direct, Role: **Co-Investigator**

Aug 2000 to Aug 2001, The Auto-Contour Wheelchair Seat Cushion, NIH SBIR Grant, $100,000, Role: **Principal Investigator**

Jan 2000 – Dec 2000, Evaluation of the Effectiveness of Wheelchair Assistance Dogs, Veterans Administration Center of Excellence on Wheelchairs and Related Technology, Role: **Co-Investigator**

May 1999 to Dec 1999, Cardiovascular Follow-Up Study in Patients with Systemic Lupus Erythematosus, National Arthritis Foundation, $70,000, Role: **Clinical Coordinator**

**Patents and Research Disclosures**

2013 Ramp Slope Feedback System, Provisional Patent Application, Serial No. 61/779,660, filed March 2013

2012 Canine Pressure Ulcer Prevention Garment, U.S. Patent 8,161,916, filed January 5, 2010; issued April 24, 2012

* *Optioned by Vivorte, LLC July 2013*

2011 Pressure Relieving Support Surface For Animals, U.S. Utility Patent, Serial No. 13/096,586

**Service**

2013 - Present Member, Rehabilitation Research and Development Service Scientific Merit Review Board, Department of Veterans Affairs

2013 - 2014 Scientific Outreach, Manual High School student mentorship

2012 Sponsored Programs Administration Task Group, University of Louisville, Member

2012 Injury Prevention; peer review of manuscripts

2012 Faculty Consultant, University of Louisville Administrative Efficiencies Committee; Susan Howarth, Director of Budget, Office of Vice President for Finance. Survey development, data collection and analysis

2012 Assistive Technology Technician, Assistive Technology Resource Center, Frazier Rehab Institute; assist in service delivery 1-day per week

2011 – 2012 Business Efficiencies Task Force, J.B. Speed School of Engineering, University of Louisville, Member

2010 – Present Journal of Rehabilitation Research & Development; peer review of manuscripts

2010 – Present Journal of Public Transportation; peer review of manuscripts

2008 – Present Journal of Rehabilitation Medicine, peer review of manuscripts

2008 – Present Assistive Technology, peer review of manuscripts

2008 – Present Disability and Rehabilitation (International); peer review of manuscripts

2008 - 2009 Medical Engineering and Physics, Wheelchair Transportation Safety Special Issue, peer review of manuscripts

2004 - 2005 NIH STTR/SBIR Clinical Sciences Special Emphasis Section: Musculoskeletal Rehabilitation Sciences Study Section, Grant Proposal Reviewer

2003 – 2010 Rehabilitation Engineering Society of North America; Conference Paper Reviewer

Other Activities

2010 – Present ANSI/RESNA Committee on Wheelchairs and Transportation

2006 – 2012 Board of Directors and Vice President; Grants/Fundraising Chairperson (2008-2011); Member (2006-present), Wonderful Animals Giving Support (W.A.G.S.) Pet Therapy of KY; provider of volunteer pet therapy services

2010 - 2011 Society of Women Engineers, Community Outreach Committee; faculty mentor, “Dogs on Wheels”; assisted with grant efforts and oversight of effort to work with local Girl Scouts to construct canine wheelchairs

2008 Meeting Coordinator, Working Group 6 – Wheelchair Transportation Safety, International Standards Organization bi-annual meeting

2002 - 2004 In-service presentations, “Latest Developments & Research in Total Hip Arthroplasty” to inpatient and outpatient physical therapy departments University of Pittsburgh Medical Center (UPMC)