

**MARK D. GEIL****CURRICULUM VITAE**

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**Educational Background**

Ph.D.	Biomedical Engineering	1997	Ohio State University Columbus, OH
	Dissertation:	"Effectiveness evaluation and functional theoretical modeling of dynamic elastic response lower limb prosthetics"	
	Committee:	Necip Berme, Ph.D. Mohamad Parnianpour, Ph.D. Peter M. Quesada, Ph.D. Sheldon R. Simon, MD	
B.S.	Mechanical Engineering ( <i>Summa cum Laude</i> )	1993	North Carolina State University Raleigh, NC

**Employment History**

Interim Assistant Dean for Research, Wellstar College of Health and Human Services	2020-present
Chair, Department of Exercise Science and Sport Management Professor Kennesaw State University, Kennesaw, GA	2018-present
Chair, Department of Kinesiology and Health Professor	2016-2018
Associate Professor	2015-2018
Assistant Professor	2007-2015
Director, Biomechanics Laboratory	2004-2007
Director, Biomechanics Graduate Program	
Member, Graduate Faculty Georgia State University, Atlanta, GA	
Professor (Joint Appointment), Department of Physical Therapy Georgia State University, Atlanta, GA	2016-present
Adjunct Professor, School of Biological Sciences Georgia Institute of Technology, Atlanta, GA	2013-present
Faculty member, Honors College Georgia State University, Atlanta, GA	2013-2018

Founding Director, Center for Pediatric Locomotion Sciences, Georgia State University, Atlanta, GA	2013-2016
Adjunct Research Fellow, Rocky Mountain University of Health Professions Provo, UT	2005-present
Assistant Professor, School of Applied Physiology, Academic Coordinator, Master of Science program in Prosthetics and Orthotics Georgia Institute of Technology, Atlanta, GA	2002-2004
Assistant Professor, Health and Performance Sciences, Faculty, Center for Human Movement Studies Georgia Institute of Technology, Atlanta, GA	1997-2002
Graduate Research Associate, Department of Surgery, Ohio State University, Columbus, OH	1996-1997
National Science Foundation Fellow, Ohio State University, Columbus, OH	1994-1997
University Fellow, Biomedical Engineering Center, Ohio State University, Columbus, OH	1993-1994
Summer Intern, Network Administration, IBM Research Triangle Park, NC	1989-1993

## **Professional Training and Certifications**

*Evaluation and Management of Pediatric Toe Walking from PT and OT Perspectives, Progressive GaitWays LLC, 4/25/2013.*

*Global Education Initiative, Georgia State University, 5/4/2012.*

*Professional Development in Evidence Based Practice: Justifying Patient Care, American Academy of Orthotists and Prosthetists, 10/27/2007.*

*TracerCAD Premier Standard Seminar, Ohio Willow Wood, 2/14/2003.*

## **Research**

### **Publications**

#### **Peer-Reviewed Journal Articles**

**Geil MD**, Rahnama L, Sergeant E, Soulis K, Jarrells J, Poisal M. Influence of non-immersive avatar-based gamification on the Hawthorne Effect in pediatric gait. *Gait and Posture*. In second review.

Kariba F, Nouredin K, Mohsen A, **Geil MD**, Rahnama L. Rehabilitative ultrasound imaging of the levator scapula muscle at rest and during contraction: technical description and reliability. *Journal of Bodywork and Movement Therapies*, In Review.

- Manizeh S, Pegah K, Raziyyeh B, Rima G, Nouredin K, **Geil MD**, Rahnama L. Effects of two exercise programs on neck proprioception in patients with chronic neck pain: A randomized clinical trial. *Musculoskeletal Science and Practice*. In Review.
- Mohsen S, Nureddin K, Parisa S, **Geil MD**, Rahnama L. The effects of walking with reverse heel shoes combined with routine physical therapy program on knee pain, range of motion, stride length, and the walking speed in people with knee osteoarthritis: A randomized clinical trial. *The Knee*. In Review.
- Geil MD**, Safaeepour Z, Giavedoni B, Coulter CP. Walking kinematics in young children with limb loss using early versus traditional prosthetic knee prescription protocols. *PLoS ONE* 15(4): e0231401, 2020. PMID: 32275734 PMCID: PMC7147787 <https://doi.org/10.1371/journal.pone.0231401>  
[Selected for Gillette Children's Hospital OPS multi-center Journal Club 9/25/2020]
- Cain MS, Ban R, Chen YP, **Geil MD**, Goerger B, Linens S. Four-Week Ankle Rehabilitation Programs in Adolescents with Chronic Ankle Instability. *Journal of Athletic Training*. 55(8):801-810, 2020. PMID: 32577737 PMCID: PMC7462179 (available on 2021-08-01) DOI: 10.4085/1062-6050-41-19
- Geil MD**, Agnew S, Gharai MH. Dynamic stiffness of pediatric prostheses during rapid loading. *Journal of Prosthetics and Orthotics*. 32(4):245-250, 2020. <https://doi.org/10.1097/jpo.0000000000000279>
- Eshraghi A, Safaeepour Z, **Geil MD**, Andrysek J. Walking and balance in children and adolescents with lower-limb amputation: a review of the literature. *Clinical Biomechanics*. 59:181-198, 2018. PMID: 30268996. <https://doi.org/10.1016/j.clinbiomech.2018.09.017>
- Balsamo B, **Geil MD**, Ellis R, Wu J. Confirmation bias affects user perception of knee braces. *Journal of Biomechanics*. 75:164-170, 2018. PMID: 29724537. <https://doi.org/10.1016/j.jbiomech.2018.04.028>  
[One of three *Journal of Biomechanics* Featured Articles for June 2018]
- Safaeepour Z, Eshraghi A, **Geil MD**. The effect of damping in prosthetic ankle and knee joints on the biomechanical outcomes: A literature review. *Prosthetics and Orthotics International*. 41(4):336-344, 2017. PMID: 27940898.
- Ajisafe T, Wu J, **Geil MD**. Toe spatiotemporal differences between transition steps when ascending shorter flight stairways of different heights. *Applied Ergonomics*. 59:203-208, 2017.
- Geil MD**, Wasco K, Wu J, Coulter C, Safaeepour Z, Wang YT. A Pilot Investigation of the Effect of Postural Control Strategies and Balance in Children with Unilateral Lower-limb Amputation. *Journal of Prosthetics and Orthotics*. 28(4):180-185, 2016.
- Fanchiang H, **Geil MD**, Wu J, Ajisafe T, Chen Y. The effects of walking surface on the gait pattern of children with idiopathic toe walking. *Journal of Child Neurology*. 31(7):858-863, 2016.
- Herrin K, **Geil MD**. A comparison of orthoses in the treatment of idiopathic toe walking: a randomized controlled trial. *Prosthetics and Orthotics International*. 40(2):262-269, 2016.
- Fanchiang H, **Geil MD**, Wu J, Chen Y, Wang YT. The effects of vibration on the vibration perception threshold of children with idiopathic toe walking. *Journal of Child Neurology*. 30(8):1010-1016, 2015.
- Geil MD**, Coulter CP. Analysis of locomotor adaptations in young children with limb loss in an early prosthetic knee prescription protocol. *Prosthetics and Orthotics International*. 38(1): 54-61, 2014.
- Geil MD**. A Novel Method for the Measurement of Linear Body Segment Parameters during Clinical Gait Analysis. *Gait and Posture*. 38, 1061-1063, 2013.
- Geil MD**, Coulter-O'Berry C, Schmitz M, Heriza C. Crawling Kinematics in an Early Knee Protocol for Pediatric Prosthetic Prescription. *Journal of Prosthetics and Orthotics*. 25(1):22-29. 2013.
- Cobb SC, Tis LL, Johnson JT, Wang T, **Geil MD**. Custom-molded foot-orthosis intervention and multi-segment medial foot kinematics during walking. *Journal of Athletic Training*. 46(4): 358-365, 2011.
- Hafner BJ, **Geil MD**. Dissemination of state-of-the-science conference information to orthotic and prosthetic practitioners. *Journal of Prosthetics and Orthotics*. 23(1), 40-49, 2011.

- Geil MD.** Laboratory balance assessment. *Journal of Prosthetics and Orthotics* 22(5). 2010. P46-P49. [INVITED]
- Geil MD,** O'Berry C. Temporal and Spatial Parameters of Crawling in Children with Limb Loss: Implications on Prosthetic Knee Prescription. *Journal of Prosthetics and Orthotics.* 22(1), 21-25, 2010.
- Cobb SC, Tis LL, Johnson JT, Wang T, **Geil MD,** McCarty F. The effect of low-mobile foot posture on multi-segmental medial foot model gait kinematics. *Gait and Posture* 30, 334-339, 2009.
- Geil MD.** Assessing the state of clinically applicable research for evidence based practice in prosthetics and orthotics. *Journal of Rehabilitation Research and Development* 46(3). 305-314. 2009. [INVITED]
- Limroongreungrat W, Wang YT, Chang L, **Geil MD,** Johnson JT. An instrumented wheel system for measuring 3-D pushrim kinetics during racing wheelchair propulsion. *Research in Sports Medicine: An International Journal,* 17(3), 182-194, 2009.
- Geil MD,** Smith A. Accuracy and reliability of a system for the digital capture of infant head shapes in the treatment of cranial deformities. *Journal of Prosthetics and Orthotics.* 20(2), 35-38, 2008.
- Geil MD.** Consistency and accuracy of digital measurement of transtibial amputee anthropometrics with optical and electromagnetic CAD systems. *Journal of Rehabilitation Research and Development.* 44(4), 515-524, 2007.
- Sawers A, Parsons S, **Geil MD,** Hovorka C. Positive model temperature and its effect on stiffness and percent crystallinity of polypropylene. *Journal of Prosthetics and Orthotics.* 19(3), 75-83, 2007.
- Plank LH, Giavedoni B, Lombardo JR, **Geil MD,** Reisner A. Comparison of infant head shape changes in deformational plagiocephaly following treatment with a cranial remolding orthosis using a non-invasive laser shape digitizer. *Journal of Craniofacial Surgery.* 17(6), 1084-1091, 2006.
- Geil MD.** Consistency and accuracy of measurement of lower extremity amputee anthropometrics. *Journal of Rehabilitation Research and Development.* 42(2), 131-140, 2005.
- Geil MD,** Lay AM. Plantar foot pressure responses to changes during dynamic transtibial alignment in a clinical setting. *Prosthetics and Orthotics International.* 28(2), 105-114, 2004.
- Geil MD.** Variability among practitioners in dynamic observational alignment of a transfemoral prosthesis. *Journal of Prosthetics and Orthotics.* 14(4), 159-164, 2002.
- Geil MD.** An iterative method for viscoelastic modeling of prosthetic Feet. *Journal of Biomechanics.* 35(10), 1405-1410, 2002.
- Geil MD.** The role of footwear on kinematics and plantar foot pressure in fencing. *Journal of Applied Biomechanics.* 18(2), 155-162, 2002.
- Geil MD.** Energy loss and stiffness properties of dynamic elastic response prosthetic feet. *Journal of Prosthetics and Orthotics.* 13(3), 70-73, 2001.
- Geil MD,** Parnianpour M, Quesada PM, Berme N, Simon SR. Comparison of methods for the calculation of energy storage and return in a Dynamic Elastic Response prosthesis. *Journal of Biomechanics.* 33(12), 1745-1750, 2000.
- Geil MD,** Parnianpour M., Berme N. Significance of non-sagittal power terms in analysis of a solid-ankle prosthetic foot. *Transactions of the ASME: Journal of Biomechanical Engineering,* 121(5), 521-524, 1999.
- Geil MD,** Parnianpour M, Berme N, Simon SR. A technique for the incorporation of component geometry into models of dynamic elastic response prosthetic feet. *Integrated Design and Process Technology: Healthcare Engineering.* 1, 25-29, 1998. [INVITED]
- Geil MD,** Engin AE. Below-knee amputee biomechanics: a review of available prosthetic designs and dynamic elastic response prosthetic feet. *Journal of Rheumatology and Medical Rehabilitation.* 6(3):191-201, 1995.

### Book Chapters

- Geil MD.** "Optical and electromagnetic shape-capturing systems for limb anthropometrics," in Handbook of Anthropometry: Physical Measures of Human Form in Health and Disease. Editor: Victor R. Preedy. Springer US, 2012. Part 1, pp. 115-126.
- Hovorka CF, **Geil MD**, Lusardi M. "Principles Influencing Orthotic and Prosthetic Design: Biomechanics, Device-User Interface, and Related Concepts," in Orthotics and Prosthetics in Rehabilitation. 2nd ed. St. Louis: Saunders Elsevier, 2007. pp. 135-154.
- Parente MA, **Geil MD**. "In the future: Surgical and educational advances and challenges," in Prosthetics and Patient Management: A Comprehensive Clinical Approach. Thorofare, NJ: Slack Incorporated, 2006. pp. 225-234.
- Parente MA, **Geil MD**, Monroe, B. "In the future: Prosthetic advances and challenges," in Prosthetics and Patient Management: A Comprehensive Clinical Approach. Thorofare, NJ: Slack Incorporated, 2006. pp. 207-224.
- Geil MD.** "Energy storage and return in dynamic elastic response prosthetic feet," in Pediatric Gait: A New Millennium in Clinical Care and Motion Analysis Technology. Harris, Gerald F and Peter A Smith, eds. New Jersey: IEEE Press, 2000. pp. 134-142.

### Edited Reports

- Berke GM, **Geil MD**, Nation K, eds. (2012) Proceedings: Microprocessor-Controlled Prosthetic Knees. Official Findings of the State-of-the-Science Conference. 83 pgs.
- Geil MD.** Research to Determine Candidacy for Advanced Prosthetic Components. Funding Recommendation presented by O&P Alliance Research Subgroup to Patient-Centered Outcomes Research Institute. 2012.
- Geil MD**, Michael JW, Nation K, eds. (2010) What Have We Learned? A retrospective on the success of the Academy's federal grant for education, research, and awareness. Washington, DC, American Academy of Orthotists and Prosthetists. 8 pgs.
- Geil MD**, Michael JW., eds. "Advanced Education & Research Training Initiative [AERTI] 2009". Washington, DC, American Academy of Orthotists and Prosthetists. 15 pgs.

### Data Sets

- Geil MD**, Safaeepour Z. Gait analysis results for different pediatric prosthetic knee prescription protocols. *Dryad*. 2020. <https://doi.org/10.5061/dryad.0rxwdbw4>

### Ancillary Book Materials

- Geil MD.** Test Bank for McLester, J. Applied Biomechanics. Thomson Wadsworth Publishing, 2007.

### On-Line Courses for Research Dissemination

- Geil MD.** Laboratory Balance Assessment (Module 10). Certificate Program for Professional Development: The Effect of AFOs on Balance. American Academy of Orthotists and Prosthetists Paul E. Leimkuehler Online Learning Center. March 2012.
- Geil MD**, Kistenberg RS. Clinical standards of practice on prosthetic ankle/foot mechanisms. American Academy of Orthotists and Prosthetists Paul E. Leimkuehler Online Learning Center. October 2007.
- Geil MD**, Hovorka CF, Kistenberg RS. Prosthetic Foot/Ankle Mechanisms. American Academy of Orthotists and Prosthetists Paul E. Leimkuehler Online Learning Center, October 2006.

- Hovorka CF, **Geil MD**. Clinical standards of practice on the orthotic management of the neuropathic foot. American Academy of Orthotists and Prosthetists Paul E. Leimkuehler Online Learning Center. April 2006.
- Hovorka CF, **Geil MD**. Orthotic treatment of deformational plagiocephaly, brachycephaly and scaphocephaly. American Academy of Orthotists and Prosthetists Paul E. Leimkuehler Online Learning Center, January 2006.
- Geil MD**, Hovorka CF. Orthotic treatment of idiopathic scoliosis and Scheuermann's Kyphosis. American Academy of Orthotists and Prosthetists Paul E. Leimkuehler Online Learning Center, August 2004.  
(Course featured in instructional package "Creating a Module for the Academy's Online Learning Center")

### Abstracts

- Safaeepour Z, **Geil MD**. The effect of different placement of heel rockers on kinematics of lower-limb joints in healthy subjects. *American Academy of Orthotists and Prosthetists Journal of Proceedings*. 2016.
- Safaeepour Z, **Geil MD**. Evaluation of a viscoelastic ankle-foot prosthesis at slow and normal walking speeds on an able-bodied subject. *American Academy of Orthotists and Prosthetists Journal of Proceedings*. 2016.
- Gharaei M, **Geil MD**. The role of amputation level and prosthetic foot type on kinematic and kinetic outcomes during slope walking. *American Academy of Orthotists and Prosthetists Journal of Proceedings*. 2016.
- Fanchiang, HD, **Geil, MD**. Stance-controlled ankle foot orthosis and active alert system, Stanford-Taiwan Biomedical Fellowship Program, Taiwan, 2013.
- Russell B, **Geil M**, Wu J, Hoiriis K. Variability and asymmetry of vertical ground reaction forces during walking in adults with chronic low back pain, before and after chiropractic care. Proceedings of the World Federation of Chiropractic, 12th Biennial Congress, Durban, South Africa, April 10-13, 2013. Page 215.
- Russell B, **Geil M**, Wu J, Hoiriis K. Asymmetry of vertical ground reaction forces during walking in adults with chronic low back pain, before and after chiropractic care. *J Chiropr Educ* 2013;27(1):78.
- Russell BS, **Geil MD**, Wu J, Hoiriis KT. Variability of vertical ground reaction forces in patients with chronic low back pain, before and after chiropractic care. *J Chiropr Educ* 2012;26(1):108.
- Coulter-O'Berry C, **Geil MD**. Gait Society Presentation: Development of upright postures and movement in children. American Academy of Orthotists and Prosthetists, 2012.  
<http://www.oandp.org/publications/jop/2012/2012-75.pdf>
- Chang L, Wang YT, Tis L, **Geil MD**, Shapiro D. Effects of Two Stroke Patterns on Upper Extremity Kinematics in Wheelchair Propulsion. *Medicine and Science in Sport and Exercise*. 42, 2010.
- Reid ML, **Geil MD**, Coulter-O'Berry C. Landing patterns in children with unilateral lower extremity amputations. *The Association of Children's Prosthetic-Orthotic Clinics 2009 Annual Meeting Abstracts*, 28-30. 2009.
- Wasco KJ, **Geil MD**, Coulter-O'Berry C. The effect of posterior backpack loads on static balance and postural sway in children with unilateral lower extremity amputations. *The Association of Children's Prosthetic-Orthotic Clinics 2009 Annual Meeting Abstracts*, 30-31. 2009.
- Reid ML, **Geil MD**. Landing patterns in children with unilateral lower extremity amputation. *American Academy of Orthotists and Prosthetists Journal of Proceedings*. 2009.
- Wasco, KJ, **Geil MD**. The effect of posterior backpack loads on static balance and postural sway in children with unilateral lower extremity amputation. *American Academy of Orthotists and Prosthetists Journal of Proceedings*. 2009.
- Coulter-O'Berry C, **Geil MD**. Bilateral knee flexion indicates symmetry during use of articulating prosthetic knees in crawling children. *American Academy of Orthotists and Prosthetists Journal of Proceedings*. 2009.

- Geil MD.** Comparison of Measurements of Residual Limb Shape using CAD versus Conventional Devices. *American Academy of Orthotists and Prosthetists Best of the Thranhardt Award Lecture Series.* 2007.
- Limroongreungrat W, Wang YT, **Geil MD**, Johnson JT, Johnsons BF, Chang L. Comparisons of Three-Dimensional Pushrim Forces during Three Racing Speeds of Wheelchair Propulsion: 548. *Medicine and Science in Sports and Exercise*, 39, 2007.
- Cobb S, Tis L, Wang T, Johnson J, **Geil M.** Investigation of the effect of foot structure on gait kinematics using a multi-segment foot model. *Medicine and Science in Sports and Exercise.* 38(5):S256, 2006.
- Geil MD**, Coulter-O'Berry C. Biomechanical response to immobilization of the knee joint in infant crawling. *American Academy of Orthotists and Prosthetists Journal of Proceedings.* 2005.
- Geil MD.** Amputee anthropometrics: Reliability and accuracy of analog and CAD/CAM measurement devices. *American Academy of Orthotists and Prosthetists Journal of Proceedings.* 2005.
- Hovorka CF, **Geil MD.** Biomechanical outcomes of new techniques and technology in transfemoral prosthetics: a case study approach. *Proceedings of the 11th World Congress of the International Society for Prosthetics and Orthotics*, 2004.
- Geil MD**, Tate M, Elliot K. Accuracy and reliability of amputee anthropometrics measured with traditional techniques versus CAD/CAM technologies. *ISPO World Congress Conference Proceedings.* 415, 2004.
- Hovorka CF, **Geil MD.** Biomechanical outcomes of new techniques and technology in transfemoral prosthetics: a case study approach for practitioners. *American Academy of Orthotists and Prosthetists Journal of Proceedings.* 2004.
- Geil MD**, Hovorka CF. Written comment suggesting priority: Quantification of rehabilitation outcomes in prosthetics and orthotics. *Federal Register.* Vol 67, No. 96, 2003.
- Giavendonni B, **Geil MD**, Coulter-O'Berry C. The impact of articulated knees on infants and toddlers. *American Academy of Orthotists and Prosthetists Journal of Proceedings.* 2002.
- Geil MD.** Quantification of Dynamic Prosthetics Alignment Similarities among Multiple Practitioners. *American Academy of Orthotists and Prosthetists Journal of Proceedings.* 2002.
- Geil, MD.** Amputee gait accommodation to prosthesis alignment by multiple practitioners. *Gait and Posture.* 16(Suppl. 1), S76-S77, 2002.
- Geil MD.** Prosthetics and Gait Analysis: Pitfalls and Potential. *Gait and Posture.* 9(2), 103, 1999.
- Geil MD**, Parnianpour M, Quesada PM, Berme N, Simon SR. The use of direct measurement of ankle kinetics in the calculation of energy storage and return in a Dynamic Elastic Response prosthesis. *Gait and Posture*, 7(2), 150, 1998.
- Geil MD**, Parnianpour M, Berme N, Simon SR. Quantitative assessment of below-knee amputee gait. In: RESNA '97, June 20-24, Pittsburgh, Pennsylvania, 555-557, 1997.
- Geil MD**, Berme N, Simon SR. The limitations of inverse dynamics for the analysis of below-knee amputee gait with a Dynamic Elastic Response prosthesis. *Gait and Posture* 5 (2): 140, 1997.
- Quesada PM, Wasielewski RC, **Geil MD.** Determination of prosthetic hip replacement loosening from dynamic rotational joint stiffness. *BED-Vol. 29*, American Society of Mechanical Engineers. Hochmuth RM, et al., ed., 559-560.
- Quesada PM, Wasielewski RC, **Geil MD.** Quantification of dynamic rotational joint stiffness to identify patients with loose prosthetic femoral stems. *Gait and Posture.* 3 (2): 100, 1995.

### Non-Refereed Publications

- Geil MD.** Blinking lights don't make a better knee brace – fighting cognitive biases in testing orthopedic devices. *The Conversation.* August 28, 2019. [Over 1,600 readers, republished by over 355 news organizations]
- Geil MD.** Military-funded prosthetic technologies benefit more than just veterans. *The Conversation.* May 24, 2017. [Over 26,000 readers, republished by over 2,700 news organizations]
- Geil MD.** JPO Editor's Comments. *Journal of Prosthetics and Orthotics.* 28(3), 93-94, 2016.

**Geil MD.** Perspective: Trial a First Step for O&P in Use of Randomized, Double-Blinded Rigorous Testing. *O&P News*. 24(7),26, 2015.

**Geil MD.** Recommendations for Research on Microprocessor Knees. *Journal of Prosthetics and Orthotics* 25(4S), P76-P79, 2013.

Berke GM, **Geil MD.** Microprocessor Knee Manufacturers Forum Report. *Journal of Prosthetics and Orthotics* 25(4S), P80-P83, 2013.

**Geil MD.** Perspective: Making the case for Knowledge Translation. *The O&P Edge*. March 2011, 108.

Limroongreungrat W, **Geil MD**, Wang T. Measuring Pushrim Forces During Racing Wheelchair Propulsion: A Future Tool for Training? *Challenge Magazine*. In Press.

**Geil MD**, Coulter-O'Berry C, Giavedoni B. Effectiveness of Early Prosthetic Knee Function in Infants and Toddlers. *The Academy Today*. Vol. 3 No. 1, February 2007: A10-A11.

**Geil MD.** Six-year-old spastic diplegia with and without AFOs 2D vs. 3D. *Clinical Gait Analysis page*, Case of the Week, 5/12/2005.

Hovorka CF, **Geil M.** O&P Business News. Vol. 11, No. 4:12-15, July 15, 2002.

Giavedoni BJ, Coulter-O'Berry C, **Geil MD.** Movement Masters. *Advance: for Directors of Rehabilitation*. 11(7):43-44, 2002.

**Geil MD.** The Biomechanics of Fencing. *American Fencing*. Winter 2001, 23-25.

**Geil MD.** A Journey of Rehab for Land Mine Survivors: Part 1. *Ability Magazine*. 2000(1): 49-55.

**Geil MD.** A Journey of Rehab for Land Mine Survivors: Part 2. *Ability Magazine*, 2000(2): 27-31.

**Geil MD.** Gait Analysis aids Land Mine Survivors. *BioMechanics Magazine*. March 2000.

**Geil MD.** Sport Science: Push comes to shove. *American Fencing, Official Publication of the United States Fencing Association*. Fall 1998, 5-6.

## Patents

### STANCE-CONTROLLED ARTICULATED ANKLE-FOOT ORTHOSIS

U.S. Patent number 9,433,255 Stance-Controlled Articulated Ankle Foot Orthosis

## Grants

(MD Geil PI for all proposals unless otherwise noted)

### Pending

Identifying the Unknown Etiologies of Idiopathic Toe Walking, 7/2021-6/2024. NIH R15, \$424,000.

### Funded

Do Sensory Insoles Increase Heel Contact in Children Diagnosed with Idiopathic Toe Walking? 8/2019-7/2020. Office of Research, Kennesaw State University, \$14,960.

Influence of non-immersive virtual reality gamification on pediatric gait. 7/2019-6/2020. Idoneus Digital, Inc., \$854.

US-Australia Partnership to Improve the Lives of Children with Idiopathic Toe Walking. 10/2017-6/2018. GSU College of Education and Human Development Global Initiative Grant, \$3,000.

Multi-site Assessment of the Effectiveness of the Early Knee Prosthetic Prescription Protocol for Young Children. 8/2014-7/2019. The Gerber Foundation #1828-3236, \$281,170.

Assessment of Field-Based Motion Analysis as an Outcome Measure: Project Hope Belize and the World Pediatric Project. 9/2014-8/2015, Georgia State University College of Education Office of International Programs, \$3,500.



Dynamic Contributions to Femoroacetabular Impingement in Adolescent Athletes: A Biomechanical and Clinical Study. 8/2013-7/2014. Willimon SC, Geil MD, and Riboh JC, Co-PIs. Children's Healthcare of Atlanta Friends Research Fund, \$4,465.

Dynamic Contributions to Femoroacetabular Impingement in Adolescent Athletes: A Biomechanical and Clinical Study. Willimon SC, Riboh JC, Co-PIs. 7/2013-6/2014. Piedmont Orthopedic Foundation Research Grant. \$5,000.

A Physics-Based Model for Biomechanics Laboratory Education. 5/2014-8/2014. University System of Georgia STEM II Initiative, \$7,500.

Funding to Support Federal Grant Submissions. Georgia State University Special Research Initiatives. \$5,000, 2013.

Prior Knowledge Inventory Test (PKIT) Grant, Georgia State University Center for Instructional Innovation, \$1,000, 2012.

Fulbright Senior Specialist Grant for project at Roehampton University, London, 2/16/2012-3/1/2012.

Software for Real-Time Musculoskeletal Visualization and Analysis in Biomechanics. Georgia State University Technology Fee Grant. Geil MD and Wu J, Co-PIs, 7/1/11-6/30/12, \$7,546.

Minimizing Bracing in the Treatment of Idiopathic Toe Walking. Orthotic and Prosthetic Education and Research Foundation, Geil MD and Herrin K, Co-PIs. May 2011-April 2012, \$24,979.

Advancing Orthotic and Prosthetic Care Through Research, Standards of Practice, and Outreach. United States Department of Education, 10/1/2008-9/30/2010, \$982,530.

Summer Physics Experience for High School Students. STEM Faculty Fellowship Grant, Georgia State University, Perera U, PI, 4/1/09-6/30/10, \$7,500.

Acquisition of an Instrumented Treadmill for Biomechanical Research and Instruction. Research and Instructional Infrastructure Grant, Department of Kinesiology and Health, Georgia State University. Wu J, PI, 5/1/09-6/30/09, \$20,805.

High-speed video for student biomechanics analysis projects, Georgia State University Technology Fee Grant, Geil MD and Wu J, Co-PIs. 7/1/08-6/30/09, \$57,674.97.

Analysis of Locomotor Adaptations During Early Walking in Children with Transfemoral Limb Loss. Research Initiation Grant, Georgia State University. Geil MD, PI. 7/1/08-6/30/09. \$9,916.70

Determining the Stabilizing Features of the SofTec Genu in a Comparison Study Using a Knee Simulator. Bauerfeind USA, Inc., 7/1/2007-11/30/2007, \$1,200.64.

Professional Continuing Education Course Development for Outcome Measures in Prosthetics, Prosthetics Research Study (from Department of Education funds), 8/14-10/30/06, Geil MD and Kistenberg RS, co-PIs, \$30,338.

Professional Continuing Education Course Development for Clinical Standards of Practice on Prosthetic Ankle/Foot Mechanisms, Prosthetics Research Study (from Department of Education funds), 1/06 to 7/06, Geil MD and Kistenberg RS, co-PIs, \$28,540.

Class Response System for Anatomical and Biomechanical Review, Georgia State University Technology Fee Grant Program, 7/1/05 to 6/30/06, \$23,006. (Funded in kind through donation of class-response system.)

Professional Continuing Education Course Development for Clinical Standards of Practice on the Orthotic Management of the Neuropathic Foot, Prosthetics Research Study (from Department of Education funds), 5/05 to 9/05, Geil MD and Hovorka CF, co-PIs, \$26,997.

Research Collaboration in Lower Extremity Prosthetics, Georgia State College of Education Travel Award, 4/05, \$608.

Rehabilitation for Children with Transfemoral Amputations, Georgia State College of Education Proposal Development Grants for GRA Support, 3/05 to 5/05, \$6,000.

Professional Continuing Education Course Development for Clinical Standards of Practice on the Orthotic Management of Deformational Plagiocephaly, Prosthetics Research Study (from Department of Education funds), 10/1/04 to 12/31/04, Geil MD and Hovorka CF, co-PIs, \$20,043.

Professional Continuing Education Course Development for Orthotic Treatment of Idiopathic Scoliosis and Scheuermann's Kyphosis, Prosthetics Research Study (from Department of Education funds), 3/04 to 6/04, Geil MD and Hovorka CF, co-PIs, \$21,838.

Development and Biomechanical Analysis of a Polypropylene Prosthetic Foot, Emory/Georgia Tech Biomedical Technology Research Center, 7/00 to 6/01, \$23,722

Global Partnership for Amputee Land Mine Survivors. Georgia Board of Regents Office of International Education, 3/00-2/01, \$7,000.

Improved Prosthetic Rehabilitation for Land-Mine Survivors in the Republic of Georgia and Beyond. Georgia Board of Regents Office of International Education, 7/99-7/00, \$22,000

Analysis of fencing biomechanics for injury prevention, shoe design, and athlete training. United States Olympic Committee, 8/1/98 to 12/31/99, \$30,225.

Analysis of material and structural properties of dynamic elastic response prosthetic feet, Veterans Administration Rehabilitation Research and Development Center, 10/17/97 to 12/31/98, \$11,107.15

Dynamic elastic response prosthetic feet: functional theoretical modeling and effectiveness evaluation by kinematic, kinetic, and electromyographic gait analysis. Department of Surgery Medical Research and Development Fund, The Ohio State University, 11/15/96 to 5/31/98, \$9,990

## **Meetings and Symposia**

### **Research Presentations**

**Geil MD**, Safaeepour Z, Giavedoni B, Coulter C. "Are gait kinematics different in young children who receive working prosthetic knees?" American Society of Biomechanics Annual Meeting, Atlanta, GA, 8/7/2020. [One of two papers selected out of over 900 as finalist for *Clinical Biomechanics* Award.]

**Geil MD**, Rahnama L, Jarrells J, Poisal M, Sergeant E, Soulis K. "Effectiveness of a gamification intervention to limit the Hawthorne Effect in pediatric gait analysis." American Society of Biomechanics Annual Meeting, Atlanta, GA, 8/7/2020.

Herrin K, **Geil MD**, Williams C, Rahnama, L. "Use of nearly-invisible, non-restrictive sensory insoles as treatment for Idiopathic Toe Walking: A case series." American Society of Biomechanics Annual Meeting, Atlanta, GA, 8/7/2020.

**Geil MD**, Rahnama L, Jarrells J, Poisal M, Sergeant E, Soulis K. "Effectiveness of a gamification intervention to limit the Hawthorne Effect in pediatric gait analysis." 10<sup>th</sup> Annual Southeastern Pediatric Research Conference, scheduled for Atlanta, GA, 6/12/2020 (moved online due to COVID-19).

**Geil MD**, Rahnama L, Williams C, Jarrells J, Poisal M, Sergeant E, Soulis K. "Non-restrictive sensory insole treatment for Idiopathic Toe Walking: A case series." 10<sup>th</sup> Annual Southeastern Pediatric Research Conference, scheduled for Atlanta, GA, 6/12/2020 (moved online due to COVID-19).

**Geil MD**, Safaeepour Z, Coulter C, Giavedoni B. "Walking kinematics in young children with limb loss using early versus traditional prosthetic knee prescription protocols." Association of Children's Prosthetic-Orthotic Clinics Annual Meeting, 5/21/2020 (moved online due to COVID-19).

**Geil MD**. "Confirmation Bias Affects User Perception of Orthopedic Devices." 17<sup>th</sup> World Congress of the International Society for Prosthetics and Orthotics, Kobe, Japan, 10/8/2019.

**Geil MD**. "Gait Outcomes for Children in a Conventional versus Early Prosthetic Knee Prescription Protocol." 17<sup>th</sup> World Congress of the International Society for Prosthetics and Orthotics, Kobe, Japan, 10/8/2019.

Wells M, **Geil MD**, Safaeepour Z, Yang F. "Quantification of vaulting in healthy adults walking with an immobilized knee." XXVII Congress of the International Society of Biomechanics ISB/ASB, Calgary, Alberta, Canada, August 2019.

Poisal M, Hurley K, **Geil MD**. "Biomechanical implications of knee flexion in a young adult with a history of resolved idiopathic toe walking: A case study." National Conference on Undergraduate Research, Kennesaw, GA, 4/12/2019.

- DeWees T, **Geil MD**, McMulkin M. "Outcomes in Orthotic Treatment of Toe Walking." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, FL, 3/7/2019. [INVITED]
- Gard S, **Geil MD**. "The '3 Rs' of the *JPO*." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, FL, 3/8/2019. [INVITED]
- Geil MD**. "Multi-site Assessment of the Effectiveness of the Early Knee Prosthetic Prescription Protocol for Young Children" The Gerber Foundation Board Meeting, Grand Rapids, MI, 11/15/2018. [INVITED]
- Geil MD**, Safaeepour Z, Coulter C, Giavedoni B. "Spatiotemporal Gait Asymmetry in Children with Lower Limb Amputation Using Different Prosthetic Knee Protocols." Gait and Clinical Movement Analysis Society Annual Meeting, Indianapolis, IN, 5/24/2018.
- Geil MD**, Safaeepour Z. "Assessment of Gait Kinematic Parameters in Young Children with Limb Loss Using Two Different Prosthetic Prescription Protocols." Association of Children's Prosthetic-Orthotic Clinics Annual Meeting, Grand Rapids, MI, 4/13/2018.
- Geil MD**. "The Integrated Child: The systems that contribute to motor development and what happens when they malfunction." Australian Paediatric Podiatry Association, Melbourne, Australia, 4/10/2018. [INVITED]
- Geil MD**. "Biomechanics of Human Locomotion with a Prosthesis." Peninsula Health Frankston Hospital, Monash University, Frankston, Victoria, Australia, 4/9/2018. [INVITED]
- Geil MD**, Safaeepour Z. "Knee, hip, and ankle kinematics in young children walking with prosthetic knee joints." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, New Orleans, LA, 2/15/2018. [Additional INVITED "Community Talk" focused discussion session.]
- Geil MD**, Balsamo B. "Does Expectation of Higher Performance in a Knee Brace Actually Affect Gait?" International Society of Biomechanics in Sports 35<sup>th</sup> International Conference, Cologne, Germany, 6/15/2017.
- Geil MD**, Basile S, Oliver J. "Effect of Fatigue on Kinematics and Kinetics of Youth Runners: A Pilot Study." International Society of Biomechanics in Sports 35<sup>th</sup> International Conference, Cologne, Germany, 6/16/2017.
- Geil MD**, Safaeepour Z, Giavedoni B, Coulter C. "Biomechanical Comparison of Prosthetic Knee Prescription Protocols in Children with Limb Loss." Southeastern Pediatric Research Conference, Atlanta, GA, 6/9/2017.
- Geil MD**, Balsamo B. "The Role of Expectation Bias in Gait Characteristics and Orthosis Perception." Gait and Clinical Movement Analysis Society Annual Meeting, Salt Lake City, UT, 5/25/2017.
- Geil MD**, Safaeepour Z. "Kinematics Comparison of Early Knee versus Traditional Knee Prosthetic Prescription in Young Children with Amputation." Gait and Clinical Movement Analysis Society Annual Meeting, Salt Lake City, UT, 5/25/2017.
- Geil MD**. "The Role of Expectation Bias in Orthosis Use and Perception." American Academy of Orthotists and Prosthetists Live Webinar, 12/15/2016.
- Geil MD**. Training Program for Elite Athlete Coach Delegation from China General Sports Administration, Atlanta, GA  
 "Limits of human performance: biomechanical factors," 12/9/2016  
 "Prostheses and running: comparative advantages or disadvantages," 12/8/2016  
 "The use of temporospatial and kinematic data in modern professional sports," 12/5/2016  
 "Introduction to sports biomechanics," 11/2/2016
- Geil MD**, Safaeepour Z, Eshraghi A. "The effect of damping in prosthetic ankle and knee joints on biomechanical outcomes: A literature review." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, FL, 3/11/2016.
- Geil MD**. "The Art of Making Prosthetics: A Cautionary Tale." STEAM<sup>3</sup> National Conference, Georgia State University, Atlanta, GA, 9/11/2015. [INVITED]
- Geil MD**, Herrin K. "A comparison of orthoses in the treatment of idiopathic toe walking: A randomized controlled trial." ATD Journal Club, Gillette Children's Hospital, St. Paul MN (via teleconference), 8/7/2015. [INVITED]

- Fanchiang H, **Geil MD**. "Stance-Controlled Ankle-Foot Orthosis for Equinus Gait." World Association for Chinese Biomedical Engineers World Congress on Bioengineering, Singapore, 7/7/2015.
- Geil MD**, Fanchiang HD. "Walking Surface Ameliorates Equinus Gait in Children with Idiopathic Toe Walking." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, New Orleans, LA, 2/21/2015.
- Basile S, Gharaei MH, **Geil MD**. "Prosthetic Knee Joint Center of Rotation Error in Gait Analysis." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, New Orleans, LA, 2/20/2015.
- Geil MD**. "Multi-site comparison of treatment protocols for young children with lower limb loss". Center for Research on Atypical Development and Learning, Atlanta, Georgia, 10/17/2014. [INVITED]
- Geil MD**. "Novel Design for Mechanical Stance-Controlled AFO for Non-Spastic Equinus Gait". American Orthotic and Prosthetic Association National Assembly, Las Vegas, Nevada, 9/5/2014.
- Geil MD**. "Plantar Foot Surface Ameliorates Equinus Gait in Children with Idiopathic Toe Walking". American Orthotic and Prosthetic Association National Assembly, Las Vegas, Nevada, 9/6/2014.
- Fanchiang HD, **Geil MD**. "The influences of walking surface on kinematics and heel rise event timing of typically developing children". Gait & Clinical Movement Analysis Society 2014 Conference, Newark, Delaware, 6/25/2014.
- Fanchiang HD, **Geil MD**. "Understanding the influences of vibration on kinematics of children with idiopathic toe walking." Gait & Clinical Movement Analysis Society 2014 Conference, Newark, Delaware, 6/25/2014.
- Fanchiang HD, **Geil MD**. "Change in vibration perception threshold following a dose of whole-body vibration in typically developing children and children with idiopathic toe walking". Gait & Clinical Movement Analysis Society 2014 Conference, Newark, Delaware, 6/25/2014.
- Fanchiang HD, **Geil MD**. "The effects of walking surface on gait kinematics children with idiopathic toe walking". Gait & Clinical Movement Analysis Society 2014 Conference, Newark, Delaware, 6/25/2014.
- Fanchiang HD, **Geil MD**. "Stance-controlled ankle-foot orthosis for equinus gait". Gait & Clinical Movement Analysis Society 2014 Conference, Newark, Delaware, 6/25/2014.
- Geil MD**. "Gait Analysis in A Clinical Setting: From Observation to Appropriate Instrumentation". Georgia Society of Orthotists and Prosthetists Annual Meeting, Atlanta, GA, 4/4/2014. [INVITED]
- Fanchiang HD, **Geil MD**. "The effects of walking surface on gait pattern of typically developing children". Southern District AAHPERD Convention, Lexington, KY, 2/19/2014.
- Fanchiang HD, **Geil MD**. "The effects of walking surface on gait pattern of children with idiopathic toe walking". Southern District AAHPERD Convention, Lexington, KY, 2/19/2014.
- Fanchiang HD, **Geil MD**. "The effects of vibration on the gait pattern of typically developing children". Southern District AAHPERD Convention, Lexington, KY, 2/19/2014.
- Fanchiang HD, **Geil MD**. "The effects of vibration on the gait pattern of children with idiopathic toe walking". Southern District AAHPERD Convention, Lexington, KY, 2/19/2014.
- Geil MD**, Ramstrand N. "Gait Analysis in the Clinical Setting". 1.5 hour presentation/workshop. American Orthotic & Prosthetic Association O&P World Congress, Orlando, FL, 9/21/2013. [INVITED]
- Geil MD**, Coulter C. "Children with limb loss utilize a prosthetic knee joint when crawling". American Orthotic & Prosthetic Association O&P World Congress, Orlando, FL, 9/21/2013.
- Geil MD**, Wasco K. "Postural control strategies and balance in children with unilateral lower-limb loss with heavy backpack loads". American Orthotic & Prosthetic Association O&P World Congress, Orlando, FL, 9/21/2013.
- Geil MD**, Brock A. "Gait symmetry in children with limb loss wearing heavy backpacks". American Orthotic & Prosthetic Association O&P World Congress, Orlando, FL, 9/21/2013.

- Russell B, **Geil MD**, Wu J. "Variability of vertical ground reaction forces in adults with chronic low back pain, before and after a limited protocol of chiropractic care", American Society of Biomechanics Annual Meeting, Omaha, NE, July 7, 2013.
- Geil MD**. "State of the Science Conference Impact and Format". SSC Review Meeting, Chicago, IL, July 26, 2013. [INVITED]
- Geil MD**. "Experience with online course development from State of the Science Conference Proceedings." SSC Review Meeting, Chicago, IL, July 26, 2013. [INVITED]
- Russell B, **Geil MD**, Wu J. "Variability and asymmetry of vertical ground reaction forces during walking in adults with chronic low back pain, before and after chiropractic care", World Federation of Chiropractic Conference, Durban, South Africa, April 10, 2013.
- Brock A, **Geil MD**. "Kinetic symmetry in children with limb loss walking with backpack loads." Association of Children's Prosthetic and Orthotic Clinics Annual Meeting. Atlanta, Georgia, 3/2013.
- Russell B, **Geil MD**, Wu J. "Asymmetry of vertical ground reaction forces during walking in adults with chronic low back pain, before and after chiropractic care", Association of Chiropractic Colleges Educational Conference and Research Agenda Conference, Washington, DC, March 14, 2013.
- Geil, MD**. "Microprocessor controlled prosthetic knees: A review of the literature from 2010-2013." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, FL, February 23, 2013. [INVITED]
- Geil, MD**. "Future research recommendations for microprocessor-controlled prosthetic knees." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, FL, February 23, 2013. [INVITED]
- Herrin, K, **Geil, MD**. "Minimizing Bracing in the Treatment of ITW: A Randomized Controlled Trial." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, FL, February 22, 2013. [INVITED]
- Geil MD**, Meurer LM. "Prosthesis alignment and uneven terrain." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, FL, February 22, 2013.
- Herrin, K, **Geil, MD**. "Minimizing Bracing in the Treatment of ITW: A Randomized Controlled Trial." American Academy of Orthotists and Prosthetists Webinar. November 28, 2012. [INVITED]
- Geil, MD**. "Research in Prosthetics and Orthotics: Design, Prescription, and Alignment." GSU-UGA Biomechanics Symposium. November 16, 2012. [INVITED]
- Geil, MD**. "Summary Findings of the Academy Sponsored Systematic Literature Review: The Effects of AFOs on Balance." 2012 American Orthotic and Prosthetic Association National Assembly. Boston, MA, September 2012. [INVITED]
- Russell B, **Geil MD**, Wu J, Hoiriis, K. "Variability of vertical ground reaction forces in adults with chronic low back pain, before and after chiropractic care." Association of Chiropractic Colleges Educational Conference and Research Agenda Conference. March 15, 2012.
- Coulter-O'Berry, C, **Geil MD**. "Development of upright postures and movement in children." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Atlanta, GA, March 2012. [INVITED]
- Geil, MD**. "Summary Findings of the Academy Sponsored Systematic Literature Review: The Effects of AFOs on Balance." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Atlanta, GA, March 2012. [INVITED]
- Herrin K, Barner K, **Geil MD**. Clinical outcomes after orthotic treatment of idiopathic toe walking: AFO vs. FO. American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Atlanta, Georgia, 3/2012.
- Geil MD**, Herrin K. Is a rigid footplate as effective as an articulated AFO in controlling idiopathic toe walking? American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Atlanta, Georgia, 3/2012.
- Geil, MD**. "A Behavioral Gait Adaptation? "The Biomechanics of Locomotion in Children with Idiopathic Toe Walking." Faculty Research Seminar Series, Roehampton University, London, England, February 21, 2012. [INVITED]

- Coulter-O'Berry C, **Geil MD**, Schmitz ML, Heriza C. Functional and kinematic advantages of providing knee components in the first prosthesis of infants and toddlers with high level lower limb amputations. 2012 Pediatric Research Retreat: Frontiers in Pediatric Science. Emory + Children's Pediatric Research Center. Atlanta, GA, 1/27/2012.
- Herrin K, Barner K, **Geil MD**. Parental report versus laboratory data: which is more reliable in determining the most effective orthotic treatment for children with idiopathic toe walking? 2012 Pediatric Research Retreat: Frontiers in Pediatric Science. Emory + Children's Pediatric Research Center. Atlanta, GA, 1/27/2012.
- Geil MD**, Coulter-O'Berry C. The role of a prosthetic knee in the kinematics of early walking. 2012 Pediatric Research Retreat: Frontiers in Pediatric Science. Emory + Children's Pediatric Research Center. Atlanta, GA, 1/27/2012.
- Geil MD**, Herrin K. Implications of orthotic control of the talocrural joint in idiopathic toe walking. Pac Rim 2012: A Pacific Forum for Physical Rehab. United States National Member Society of the International Society for Prosthetics and Orthotics, Honolulu, Hawaii, 1/24/2012.
- Geil, MD**. "Summary Findings of the Academy Sponsored Systematic Literature Review: The Effects of AFOs on Balance." 2011 One-Day Seminar Certificate Program: The Effect of AFOs on Balance. Chicago, IL, October 28, 2011. [INVITED]
- Herrin K, Barner K, **Geil MD**. Minimizing bracing in the treatment of idiopathic toe walking: A pilot study to compare functional outcomes after treatment with an articulated ankle foot orthosis and a rigid carbon fiber footplate. North Carolina chapter of the American Academy of Orthotists and Prosthetists, Charlotte, NC 10/21/2011.
- Geil, MD**. "Core Concepts in Normal Human Locomotion Kinetics." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, Florida, March 16, 2011. [INVITED]
- Geil, MD**. "Grant Retrospective: Clinical Messages." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, Florida, March 16, 2011.
- Geil, MD**. "Selective joint control in the orthotic treatment of pediatric Idiopathic Toe Walking." Georgia Institute of Technology School of Applied Physiology Seminar Series, Atlanta, February 9, 2011. [INVITED]
- Geil, MD**. "Considerations of Function, Biomechanics, and Motor Development in Prosthetic Rehabilitation of Children with Limb Loss" Hanger Prosthetics and Orthotics Education Fair. Reno, Nevada, February 2, 2011. [INVITED]
- Geil, MD**. "Human Biomechanics and Lower Limb Prosthetics." Full day seminar, Ohio Willow Wood Corporation, Mt. Sterling, Ohio, September 9, 2010. [INVITED]
- Geil, MD**. "Laboratory Balance Assessment." State of the Science Conference on Ankle Foot Orthoses and Balance, Chicago, June 23, 2010. [INVITED]
- Geil MD**, Coulter-O'Berry C. Clearance adaptations in children with limb loss during early walking. Association of Children's Prosthetic-Orthotic Clinics Annual Meeting with the Orthopaedic Rehabilitation Association, Clearwater Beach, Florida, 6/2/2010.
- Geil MD**, Coulter-O'Berry C, Heriza CB. The role of a prosthetic knee on temporal and spatial parameters of crawling. Association of Children's Prosthetic-Orthotic Clinics Annual Meeting with the Orthopaedic Rehabilitation Association, Clearwater Beach, Florida, 6/2/2010.
- Geil, MD (Chair)**, Hafner B, Hall M. "Evidence Based Practice: Justifying Patient Care." New England Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Manchester, New Hampshire, October 15-16, 2009. [INVITED]
- Geil, MD**. "Defining and Motivating Evidence Based Practice." New England Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Manchester, New Hampshire, October 15, 2009. [INVITED]
- Geil, MD**. "Critical Evaluation of Evidence." Northwest Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Manchester, New Hampshire, October 16, 2009. [INVITED]

- Geil, MD (Chair)**, Stevens, P.. "Evidence Based Practice: Justifying Patient Care." Northern Plains Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Vadnais Heights, Minnesota, September 11, 2009. [INVITED]
- Geil, MD.** "Defining and Motivating Evidence Based Practice." Northern Plains Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Vadnais Heights, Minnesota, September 11, 2009. [INVITED]
- Geil, MD.** "Accessing and Assessing Available Resources." Northern Plains Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Vadnais Heights, Minnesota, September 11, 2009. [INVITED]
- Geil, MD.** "Critical Evaluation of Evidence." Northern Plains Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Vadnais Heights, Minnesota, September 11, 2009. [INVITED]
- Geil, MD (Chair)**, Gard, S., Michael, JM. "Evidence Based Practice: Justifying Patient Care." Midwest Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Lake Geneva, Wisconsin, June 12-13, 2009. [INVITED]
- Geil, MD.** "Defining and Motivating Evidence Based Practice." Midwest Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Lake Geneva, Wisconsin, June 12, 2009. [INVITED]
- Geil, MD.** "Critical Evaluation of Evidence." Midwest Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Lake Geneva, Wisconsin, June 13, 2009. [INVITED]
- Geil, MD (Chair)**, Hafner B, Stevens P. "Evidence Based Practice: Justifying Patient Care." Northwest Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Bellevue, Washington, April 30, 2009. [INVITED]
- Geil, MD.** "Defining and Motivating Evidence Based Practice." Northwest Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Bellevue, Washington, April 30, 2009. [INVITED]
- Geil, MD.** "Critical Evaluation of Evidence." Northwest Chapter of the American Academy of Orthotists and Prosthetists Annual Meeting, Bellevue, Washington, April 30, 2009. [INVITED]
- Reid, ML, **Geil MD.** Landing patterns in children with unilateral lower extremity amputation. American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Atlanta, Georgia, 3/6/2009.
- Geil MD.** "Motion Biomechanics and Prosthetic Rehabilitation in Children with Lower Limb Loss." College of Education Advisory Board Meeting, Atlanta, March 3, 2009. [INVITED]
- Geil MD.** "Biomechanics of Functional Movement and Prosthetic Rehabilitation in Children with Lower Limb Loss." CRADL Works-In-Progress, Center for Research on Atypical Development and Learning, Georgia State University, Atlanta, January 23, 2009. [INVITED]
- Geil MD.** "Understanding and Improving Movement in Individuals with Lower Extremity Loss." Atlanta Clinical and Translational Science Institute Exercise Research Symposium, Emory University. Atlanta, October 2, 2008. [INVITED]
- Reid, M, **Geil MD**, Tis LL, Coulter-O'Berry C. "Comparison of ground reaction force and lower extremity kinematics in children with lower limb amputation and children without lower limb amputation performing a drop landing." Southeastern Meeting of the American Society of Biomechanics, Birmingham, Alabama, 4/28/2008.
- Geil MD**, Coulter-O'Berry C, Giavedoni, B. "Functional and biomechanical implications of early prosthetic knee fitting in an infant with transfemoral amputation: A case study." Association of Children's Prosthetic-Orthotic Clinics Annual Meeting, Montreal, Quebec. 4/12/2008.
- Geil, MD (Chair)**, Hafner B, Stevens P. "Evidence Based Practice: Justifying Patient Care." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, Florida, March 1, 2008. [INVITED]
- Geil, MD.** "Defining and Motivating Evidence Based Practice." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, Florida, March 1, 2008. [INVITED]

- Geil, MD.** "Critical Evaluation of Evidence." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, Florida, March 1, 2008. [INVITED]
- Geil, MD (Chair),** Neumann E, Gard S, Campbell J, Stevens P, Fish D. "Evidence Based Practice: Justifying Patient Care." Hanger Prosthetics and Orthotics Education Fair. Reno, Nevada, January 30, 2008. [INVITED]
- Geil, MD.** "Forming a Question in the Search for Evidence." Hanger Prosthetics and Orthotics Education Fair. Reno, Nevada, January 30, 2008. [INVITED]
- Geil, MD.** "Searching for Evidence." Hanger Prosthetics and Orthotics Education Fair. Reno, Nevada, January 30, 2008. [INVITED]
- Geil, MD.** "Understanding Statistics." Hanger Prosthetics and Orthotics Education Fair. Reno, Nevada, January 30, 2008. [INVITED]
- Geil, MD (Chair),** Katz D, Neumann E, Gard S, Hafner B, Campbell J, Stevens P, Fish D. "Evidence Based Practice: Justifying Patient Care." American Academy of Orthotists and Prosthetists One-Day Seminar. Chicago, October 26, 2007. [INVITED]
- Geil, MD.** "Statistics." American Academy of Orthotists and Prosthetists One-Day Seminar. Chicago, October 26, 2007. [INVITED]
- Geil MD,** Coulter-O'Berry C, Giavedoni B. "Biomechanical Implications of Early Prosthetic Knee Fitting in an Infant with Transfemoral Amputation: A Case Study." 12<sup>th</sup> World Congress of the International Society for Prosthetists and Orthotists, Vancouver, British Columbia, 8/2/2007.
- Geil MD,** Orenfurff M, Ramstrand N. "Instructional Course: Practical Motion Analysis for Evidence-Based Practice." 12<sup>th</sup> World Congress of the International Society for Prosthetists and Orthotists, Vancouver, British Columbia, 7/31/2007.
- Geil MD.** "Accuracy and Utility of Digital Shape Capture in Lower Limb Prosthetic Anthropometrics." 12<sup>th</sup> World Congress of the International Society for Prosthetists and Orthotists, Vancouver, British Columbia, 7/31/2007.
- Geil MD.** "Measurement and Outcomes: Practical Tools for Analysis of Motion and Evidence-Based Practice." Association of Children's Prosthetic-Orthotic Clinics Annual Meeting, Atlanta, April 14, 2007. [INVITED]
- Geil MD.** "Effect of Ankle-Foot Orthoses on Ankle and Knee Kinematics in an Individual with Spastic Diplegia." Association of Children's Prosthetic-Orthotic Clinics Annual Meeting, Atlanta, 4/13/2007.
- Geil MD.** "CAD Systems Produce Consistent and Accurate Measurements of Clinically Useful Residual Limb Anthropometric Measures. Association of Children's Prosthetic-Orthotic Clinics Annual Meeting, Atlanta, 4/13/2007.
- Geil MD,** Hafner B, Katz D. "Evidence Based Practice: Justifying Patient Care." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, San Francisco, 3/23/07. [INVITED]
- Geil MD.** "Comparison of Measurements of Residual Limb Shape using CAD versus Conventional Devices." American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, San Francisco, 3/22/2007.
- Geil MD.** "Grading of Recommendations Assessment, Development and Evaluation (GRADE) Rating System." Standards Development for American Academy of Orthotists and Prosthetists Evidence Reports, Seattle, 1/20/07. [INVITED]
- Geil MD.** "Elements of a Peer Reviewed Manuscript." Evidence Based Practice: Justifying Patient Care, Chicago, 12/1/06. [INVITED]
- Geil MD.** "Statistics: What the Current Practitioner Needs to Know and Possible Ways to Teach that Content." Evidence Based Practice: Justifying Patient Care, Chicago, 12/1/06. [INVITED]
- Geil MD.** "Improving locomotion of persons with transfemoral limb loss through low-cost prosthetic knee design." State-of-the-Science Conference on Improved Technology Access for Landmine Survivors, Chicago, 8/17/06. [INVITED]



- Geil MD.** “Biomechanical and developmental implications of prosthetic knee prescription in children with limb loss.” Kinesiology and Health Research Symposium, Georgia State University, 4/5/06. [INVITED]
- Coulter-O’Berry C, **Geil MD.** “Comparisons of knee, shoulder, and pelvic movements during crawling in infants and toddlers with knee disarticulation or trans femoral amputation levels who are fitted in prostheses with and without articulating knee components.” Southeast Biomechanics Conference, Atlanta, 3/30/06.
- Russell G, **Geil MD.** “Documenting changes in patients with low back pain, before and after spinal manipulation: a preliminary report.” Southeast Biomechanics Conference, Atlanta, 3/30/06.
- Geil MD.** “Clinical Gait Analysis: Strategies, Techniques, and Technologies” and Graduate Seminar. Columbia University Annual Conference in the Movement Sciences: Gait & Posture: Underlying Mechanisms & Rehabilitative Strategies, 4/22/05-4/23/05. [INVITED]
- Geil MD,** Lay A. “Plantar pedobarographic quantification of dynamic transtibial prosthetic alignment in a clinical setting.” Gait and Clinical Movement Analysis Society 10<sup>th</sup> Anniversary Meeting, Portland, Oregon, 4/6/2005.
- Geil MD.** “Amputee Anthropometrics: Reliability and Accuracy of Analog and Digital Measurement Devices.” American Academy of Orthotists and Prosthetists and Association of Children’s Prosthetic-Orthotic Clinics Joint Annual Meeting, Orlando, Florida, 3/19/2005.
- Geil MD,** Coulter-O’Berry C. “Biomechanical Response to Immobilization of the Knee Joint in Infant Crawling.” American Academy of Orthotists and Prosthetists and Association of Children’s Prosthetic-Orthotic Clinics Joint Annual Meeting, Orlando, Florida, 3/18/2005.
- Hovorka CF, **Geil MD.** Biomechanical Outcomes of New Techniques and Technology in Transfemoral Prosthetics: A Case Study Approach for Practitioners. American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, New Orleans, LA, February 25-28, 2004.
- Geil MD.** “Computer Aided Design Finds a Clinical Purpose: Digital Shape Capture and Anthropometrics in Transtibial Amputees.” Ohio State University Department of Mechanical Engineering Seminar, 2/4/05. [INVITED]
- Orendurff M, **Geil MD.** “Clinical interpretation of cerebral palsy gait analysis data: models, measures, and meaning.” 11<sup>th</sup> World Congress of the International Society for Prosthetics and Orthotics, Hong Kong. Instructional Course, 8/6/04. [INVITED]
- Geil MD.** “Accuracy and reliability of amputee anthropometrics measured with traditional techniques versus CAD/CAM technologies.” 11<sup>th</sup> World Congress of the International Society for Prosthetics and Orthotics, Hong Kong, 8/6/04.
- Lin R, Parente M, **Geil MD.** “Gait and Physical Assessment for O&P Professionals.” Clinical Techniques Course, Newington, CT, 6/4/2004 – 6/5/2004. [INVITED]
- Lin R, **Geil MD.** “Clinical Techniques Workshop: Clinical Assessment.” American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, New Orleans, 2/26/2004 and 2/27/2004. [INVITED]
- Geil MD.** “Innovation in Prosthetics: Restoring Function and Hope.” Featured Speaker, Innovation Celebration, Fernbank Science Center, Atlanta, 2/17/2004. [INVITED]
- Hovorka CF, **Geil MD.** Biomechanical Outcomes of New Techniques and Technology in Transfemoral Prosthetics: A Case Study Approach for Practitioners. Florida Academy of Orthotists and Prosthetists Annual Meeting, St. Augustine, FL, September 11-13, 2003.
- Geil MD.** “Dynamic Prosthetic Alignment.” Seminário Internacional de Ortopedia Técnica, Sao Paulo, Brazil, 4/25/2003. [INVITED]
- Geil MD.** “Amputee Motor Control during Prosthetic Alignment.” Georgia Society of Orthotists and Prosthetists Annual Meeting, 2/7/2003. [INVITED]
- Geil MD.** “Neuromotor accommodation to multiple transfemoral prosthesis alignments.” IV World Congress of Biomechanics, Calgary, Alberta, 8/4/02.
- Geil MD.** “Amputee gait accommodation to prosthesis alignment by multiple practitioners.” Gait and Clinical Movement Analysis Society Annual Meeting, Chattanooga, 4/17/02.

- Geil MD.** “Quantification of dynamic prosthetic alignment similarities among multiple practitioners.” American Academy of Orthotists and Prosthetists Annual Meeting, Orlando, 3/21/02.
- Geil MD.** “Assessing Gait Outcomes from Optimized Dynamic Prosthetic Alignments.” Georgia Society of Orthotists and Prosthetists Annual Meeting, Atlanta, 2/23/02. [INVITED]
- Geil MD.** “The Role of Gait Analysis in Dynamic Prosthetic Alignment.” American Academy of Orthotists and Prosthetists CEC Conference, Savannah, Georgia, 6/1/01. [INVITED]
- Geil MD, Coulter-O’Berry C, Giavedoni B.** “Pilot study on the impact of articulated knees on infants and toddlers.” Association of Child Prosthetic and Orthotic Clinics Annual Meeting, Houston, 4/7/01.
- Geil MD.** “Frontiers in Prosthetic and Orthotic Research and Education.” Georgia Society of Orthotists and Prosthetists, Atlanta, 2/24/01. [INVITED]
- Geil MD.** “Energy Storage and Return in Dynamic Elastic Response Prosthetic Feet.” Shriners Pediatric Motion Analysis Workshop, Chicago, 7/22/2000. [INVITED]
- Geil MD.** “Structural Properties and Viscoelastic Modeling of Dynamic Elastic Response Prosthetic Feet.” American Society of Biomechanics Annual Meeting, Chicago, 7/19-7/23/2000.
- Geil MD.** “Biomechanics of Fencing.” Science and Medicine in Fencing Seminar held at Junior/Cadet World Championships, South Bend, Indiana, 4/16/2000. [INVITED]
- Geil MD.** “Determination of Parameters Indicating Effectiveness of the Fencing Lunge.” Southeast American College of Sports Medicine 28<sup>th</sup> Annual Meeting, Charlotte, North Carolina, 1/28/2000.
- Geil MD.** Tutorial: “Prosthetics and Gait Analysis: Pitfalls and Potential.” 1999 Gait and Clinical Movement Analysis Annual Meeting, Dallas, Texas, 3/10/99.
- Geil MD, Parnianpour M, Berme N, Simon SR.** “A Technique for the Incorporation of Component Geometry into Models of Dynamic Elastic Response Prosthetic Feet.” Third Biennial World Conference on Integrated Design and Process Technology, Berlin, Germany, 7/6/98. [INVITED]
- Geil MD.** “The Use of Direct Measurement of Ankle Kinetics in the Calculation of Energy Storage and Return in a Dynamic Elastic Response Prosthesis.” North American Society of Gait and Clinical Movement Analysis Annual Meeting, San Diego, California. 4/17/98.
- Geil MD.** “New Methods for the Evaluation of Energy-Storing Lower Limb Prosthetics.” Department of Veterans Affairs Research Seminar, Atlanta VA Rehabilitation Research and Development Center, 12/10/97.
- Geil MD.** “Quantitative Assessment of Below-Knee Amputee Gait.” RESNA ’97, Pittsburgh, Pennsylvania, 6/24/97.
- Geil MD.** “The Limitations of Inverse Dynamics for the Analysis of Below-Knee Amputee Gait with a Dynamic Elastic Response Prosthesis.” North American Society of Gait and Clinical Movement Analysis Annual Meeting, Chicago, Illinois, 4/10/97.
- Quesada P, Geil MD.** “Determination of Prosthetic Hip Replacement Loosening from Dynamic Rotational Joint Stiffness.” ASME Bioengineering Conference, Beaver Creek, Colorado, 6/2/95.

### *Invited Attendance at Research-Related Meetings*

- 10/12/12 – 10/13/12 2013 Orthotics and Prosthetics World Congress Planning Committee, American Orthotic and Prosthetic Association, Orlando.
- 9/6/2012 (Co-Chair) Eleventh State of the Science Conference Manufacturers Forum, “Microprocessor-Controlled Prosthetic Knees”, Boston.
- 6/9/10 – 6/11/10 Priorities in Biomechanics Conference, University of Delaware, Newark. (Only representative from state of Georgia)
- 8/16/06 State-of-the-Science in Improved Technology Access for Landmine Survivors, Chicago.
- 10/3/05 Annual Meeting, RERC on Improved Technology Access for Landmine Survivors, Chicago.

10/1/04 Annual Meeting, RERC on Improved Technology Access for Landmine Survivors, Chicago.  
5/17/02 State-of-the-Science in Prosthetics and Orthotics NIDRR Meeting, Chicago.

### Invited Education-Related Presentations

**Geil, MD**, Perera, AGU, He, X, Morrow, C. "Research framework for summer physics camp." Institute for the Scholarship of Teaching and Learning, Amicalola Falls, Georgia, June 1-2, 2009. [INVITED]  
**Geil MD**, Hovorka CF. "The Georgia Tech Master's Program: Surmounting the Challenges." Advanced Education Meeting in Prosthetics and Orthotics, Seattle, 3/19/2004. [INVITED]  
**Geil MD**. "The State of Research and Education in Prosthetics and Orthotics." Seminário Internacional de Ortopedia Técnica, Sao Paulo, Brazil, 4/26/2003. [INVITED]  
**Geil MD**, Hovorka CF. "Higher education and the future of orthotics and prosthetics." American Academy of Orthotists and Prosthetists CEC-1, New Orleans, 6/14/02. [INVITED]  
**Geil MD**. "Master's Level Education in Prosthetics and Orthotics." American Academy of Orthotists and Prosthetists CEC Conference, Savannah, Georgia, 6/2/01. [INVITED]

### Invited Attendance at Education-Related Meetings

3/14/2011 Residency Mentor and Director Training Module Development Meeting, National Commission on Prosthetic and Orthotic Education, Orlando, FL.  
9/26/2010 Residency Director Training Committee Meeting, National Commission on Prosthetic and Orthotic Education, Orlando, FL.  
2/7/02 National Association of Prosthetic and Orthotic Educators Annual Meeting, Dallas  
2/3-2/4 2000 Georgia Conference on Teaching and Learning, Kennesaw, Georgia.  
3/18-19/99 Georgia Conference on College and University Teaching, Kennesaw, Georgia.  
Session Moderator: Health Care/Interdisciplinary Studies.  
11/6/98 Board of Regents Conference on Teaching and Learning, Atlanta, Georgia.

### Other

2/5/2021 Seminar: "IRB and Human Subjects Research in the Covid Context." Kennesaw State University, with Angela Bain, CIP, CIM.  
10/28/2020 Seminar: "Lions, Tigers, & Bears: How to Publish Your Research in the World of Predatory and Costly Journals." Kennesaw State University, with Randi Davis and Chelsea Dickson.  
7/2020 NCCI Network for Change and Continuous Innovation Annual Conference, Virtual.  
3/2020 American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Chicago.  
5/2019 American College of Sports Medicine Annual Meeting, Orlando, Florida.  
10/25/2016 Invited presenter, Research Essentials Honors College symposium series. Presentation: "Talking the Talk: Communicating your Research." Georgia State University.  
8/2/2016 American Society of Biomechanics Annual Meeting, Raleigh, North Carolina.  
8/14/2015 Keynote Address, White Coat Ceremony, Georgia Institute of Technology Master of Science program in Prosthetics and Orthotics. [INVITED]  
10/15/08 Presentation and Book Review: "Reveal: Where are You?" by Greg Hawkins and Cally Parkinson, Georgia State University Christian Faculty Forum.  
3/1/06 American Academy of Orthotists and Prosthetists Annual Meeting, Chicago, Illinois.  
4/16/98 National Center for Medical Rehabilitation Research Movement Analysis Workshop, San Diego, California.

Quoted in Media and Media coverage of education, research, and service activities

- 7/2020 "Young Children Can Benefit From Articulating Knee Prosthesis." *Lower Extremity Review* 12(7):25-26.
- 6/2020 Featured and quoted in "KSU researcher publishes study on flexible children's prosthetics," cover story in *kennesaw.edu* by Dave Shelles.
- 7/2018 Featured in "CPD Impact: The Integrated Child" in *Stride*, Australian Podiatry Association.
- 8/2017 Quoted in "What changes do you anticipate for wearable technology in O&P?," in *O&P News*, 28(8):16.
- 11/2016 Feature on published research in "How Much is Enough? The Orthotic Management of Idiopathic Toe Walking" by Phil Stevens, MEd CPO, FAAOP, *The O&P Edge*, November 2016.
- 10/2016 Featured, quoted, and cited in "Get Involved in O&P Research" cover story, in *O&P News*, 25(12):18-25.
- 9/2016 Featured and quoted in "Research Trials in O&P," in *O&P News*, 25(10):22-24.
- 7/2016 Quoted in "Greatest challenge to widespread use of 3-D printing", in *O&P News*, 25(8):22.
- 2014 Featured in "Foundation Backs Diverse Research on Child Health," in *The Gerber Foundation 2014 Annual report*.
- 12/2014 Featured and Quoted in "Gerber Awards", in the College of Education Magazine, Spring/Summer 2014: 12-14.
- 11/2104 Quoted in "Gait compensations vary in kids with limb length discrepancies", in *Lower Extremity Review*, November 2014.
- 11/2014 Featured and Quoted in "Toe walking researchers revisit idiopathic label", in *Lower Extremity Review*, November 2014.
- 10/2014 Featured and Quoted in "Walking Barefoot on Gravel Improves Gait for Children with Idiopathic Toe Walking", *O&P Business News*, 23(12):8, Amanda Alexander and Shaun M. Carter.
- 5/2014 Featured and Quoted in "Moving Up", *In the College of Education Magazine*, Spring/Summer 2014: 12-14, Claire Miller.
- 3/2014 Featured and Quoted in Cover Story: "Children with, without limb loss show similar stability strategies when carrying heavy loads", *O&P Business News*, 23(4):25, Casey Tingle.
- 3/2014 Quoted in "New Innovations in Pediatric Prosthetics", *O&P Business News*, 23(3):19-24, Casey Tingle.
- 2/2014 Featured and Quoted in "Children flex articulated knee when crawling", *O&P Business News*, 23(1):21-22, Casey Tingle.
- 9/2013 Featured and Quoted in "College of Education welcomes two new research centers committed to advancing children's well-being", *Research & Innovation: Research in Georgia State University's College of Education*, Fall 2013.
- 4/2013 Featured and Quoted in "Imperfect prosthetic alignment more apparent on uneven surfaces", *O&P Business News*, 22(5):12, Carey Cowles and Megan Gilbride.
- 4/2013 Featured in "McClellan delivers opening address at Academy Meeting", *O&P Business News*, 22(5):6, Carey Cowles and Megan Gilbride.
- 10/30/2012 Quoted in "Study Abroad Fair Attracts Over 1400 Students", [www.gsu.edu](http://www.gsu.edu).
- 5/2012 "Academy Meeting 'One of the Best Ever'", *The O&P Edge*, 11(5):18, Betta Ferrendelli.
- 4/2012 Featured in "Off their toes: Lower-profile device aids toe-walkers", *Lower Extremity Review*, April 2012, Emily Delzell.
- 3/2012 Quoted in cover story "PhD: O&P Education's Final Frontier." *The O&P Edge*, 11(3):26-30, Miki Fairley.
- 3/2012 Featured in "Prosthetics and Orthotics at Georgia Tech: Celebrating a Decade of Achievement." *O&P Edge*, 11(3):22, Christopher Hovorka.
- 9/2011 Quoted in cover story "The O&P Field of Dreams." *O&P Business News*. 20(11): 14-20, Anthony Calabro.

7/2011 "OPERF Announces 2011 Research Award Recipients." *The O&P Edge*, July, 2011

5/2011 Quoted in "Academy State-of-the-Science Finds Effects of AFOs on Balance Inconsistent." *O&P Business News*. 6(20):28-30, Stephanie Z. Pavlou.

3/2011 Quoted in "Research to Clinical Practice: O&P Builds the Bridge." *The O&P Edge*. March 2011:18, Miki Fairley.

2/2011 Quoted in "New HSS Center to Translate Patient and Registry Data into Helpful Outcome Studies." *O&P Business News*, 20(2):32, Susan Rapp.

10/2010 Feature article (cover story) "Taking Small Steps: Prosthetic knee research helps children with disabilities get around better, sooner". *Milestones*. Georgia State University College of Education, Claire Miller.

8/2010 Quoted in "O&P Graduates: Advice from the Profession." *The O&P Edge*. 9(8):

6/2010 "Perspective" article in "Pediatric Amputations Cost \$21.6 Million in 2003." *O&P Business News*. Stephanie Z. Pavlou

4/2009 Profile featured on Georgia State University admissions website.

7/23/08 "Firmer calves, weight loss aid: Can shoes stand on claims?" *The Atlanta Journal-Constitution*, Vikki Conwell.

3/2008 "A Better Fit." *Georgia State Magazine*, 7(1):16.

9/2007 "ACPOC 2007 Annual Meeting in Review." *ACPOC News*, 13(3): 31, 34.

6/2007 "Advancing O&P Education." *The Academy Today*, 3(3): A-14.

4/10/2007 "Director Lauded for Best Research." *Georgia State University Villager*, 7(10): 3.

3/23/2007 "Thranhardt Lectures Examine Cutting-Edge O&P Issues." *Academy Daily*, 2:1.

Winter 2006 "An Early Start: Prosthetic knees changing life for toddlers." *Georgia State Magazine*, 5(4): 12, Leah Harris.

8/15/2006 "Taking Accurate Measurements: Study finds that improper measurement techniques and inadequate understanding of devices can lead to clinically significant errors." *O&P Business News*, Kim Norton.

8/2006 Pediatric Prosthetic Knee Project, WSB-TV, Atlanta

1/2006 "Anthropometrics goes beyond immediate prosthetic benefits." *O&P Edge*. 5(1): 28-30, Miki Fairley.

1/2005 "Academy Honors Nine with Annual Awards." *O&P Almanac*.

1/2005 "Academy Announces Winners." *O&P Edge*.

5/2004 "Academy meeting broadens horizons." *O&P Edge*. 3(5):18-19.

5/15/2004 "Academy holds its second largest annual meeting and scientific symposium." *O&P Business News*.

12/28/2003 "Ideas that Mattered in 2003: Land Mine Losses. Care links two Georgias." *The Atlanta Journal-Constitution*.

11/2003 "Research: Getting to the Next Level." *O&P Edge*, Judith Phillips Otto.

3/2003 "An early leg up: children as candidates for articulated knees." *OrthoKinetic Review*, Giavedoni and O'Berry.

3/2003 "O&P Research: A Question of Quality – or Quantity?." *The O&P Edge*, cover story by Judith Otto.

12/15/2002 "Progress and Change: Step up in O&P education." *O&P Business News*.

10/14/2002 "Clough addresses technological leadership in a changing world." *The Whistle Faculty/Staff Newspaper*, Sarah Eby-Ebersole.

10/2002 Research featured in "State of the Institute Address", President Wayne Clough, Georgia Institute of Technology.

9/15/2002 "Georgia Tech offers a step up in O&P education." *O&P Business News*, Lauren Green.

9/1/2002 "Changing careers: Is O&P right for you?" *O&P Business News*, Rachel Kelly.

9/2002 "Georgia Tech starts first master's level O&P program." *NCOPE Noteworthy*.

9/2002 "New degree: Tech offers only master's in orthotics/prosthetics." *Tech Topics*.

8/19/2002 "New school, degree in Applied Physiology", *The Whistle Faculty/Staff Newspaper*, Sean Selman.

8/1/2002 "Master's offered in Applied Physiology." *Buzz Words: GT Alumni Association*.

8/2002 "Bauerfeind donates funds for Georgia Tech O&P Program." *BioMechanics*, L. Rochelle Roniger.

7/29/2002 "HPS becomes school of applied physiology, offers master's degree." *The Whistle Faculty/Staff Newspaper*, Sean Selman.

6/25/2002 "Tech launches new degree program in orthotics and prosthetics." Georgia Tech Press Release, Sean Selman.

6/15/2002 "Readers' Forum" *O&P Business News*.

6/12/2002 "Board of Regents approves MBA, other degree programs at Tech." *Technique*, Sean Caulfield.

6/2002 "Georgia Tech hosts master's program open house." *O&P Almanac*.

6/2002 "Convention Roundup: AAOP '02 - Alignment consignment." *BioMechanics*. Vol IX, No. 6, 9.

6/2002 "Convention Roundup: AAOP '02 - Articulating needs." *BioMechanics*. Vol IX, No. 6, 9-10.

5/2002 "St. Ambrose scuttles plans for master's in orthotics." *BioMechanics*, L. Rochelle Roniger.

3/15/2002 "New focused professional master's degree program." College of Sciences Press Release.

2/1/2002 "Practicing abroad: a life-changing experience." *O&P Business News*, Rachel Baxter.

6/2001 "Universities' master plan takes O&P to new level." *BioMechanics*.

12/27/2000 "New hope: Kennesaw resident returns from Republic of Georgia after visit with land mine victims." *Marietta Daily Journal*, Jaime Helmer Greenberg.

4/2000 "Mark Geil: A hero for land mine victims." *NC State Alumni Magazine*.

1/21/2000 "Tech professor gives new hope to land mine victims." *The Whistle Faculty/Staff Newspaper*, Amanda Hainsworth.

12/16/1999 "Tech scientist to ease life for amputees." *The Atlanta Journal-Constitution*, Don Melvin, Moni Basu, and Keith Graham.

12/16/1999 "From Georgia to Georgia: new hope for land-mine victims." Georgia Tech Press Release, John Taylor.

## **Teaching**

### ***Kennesaw State University***

#### Courses taught

OP 6003 Gait Analysis  
EHS 7530 Applied Kinesiology and Biomechanics

#### Participation in Other Kennesaw State Courses

1/28/2020 EHS 6530 Advanced Laboratory Techniques in Exercise Physiology. Guest Lecture  
10/29/2020 and 10/31/2020 ES 2100 Physical Activity in Health and Disease. Supply Lectures  
9/6/2018 SM 3200 Leadership and Management of Sport Organizations. Guest Lecture

### ***Georgia State University***

#### Courses taught

HON 1000 Honors Seminar: The Human Machine  
KH 2130 Introduction to the Allied Health Fields of Health, Physical Education, and Fitness  
KH 2220 Musculoskeletal Function and Human Performance I  
KH 3600 Biomechanics  
KH 4800 Research Fellowship in Exercise Science  
KH 7510 Biomechanics  
KH 7810 Directed Readings: Gait and Locomotion  
KH 8260 Occupational Biomechanics and Ergonomics  
KH 8780 Biomechanics of Sports Medicine

KH 8830 Motion Analysis  
KH 8850 Instrumentation in Biomechanics  
KH 8870 Biomechanics of Orthopedic Injuries  
KH 8980 Seminar in Biomechanics  
KH 9510 Advanced Biomechanics of Sport and Exercise  
KH 9960 Advanced Research Seminar in Kinesiology

#### Participation in Other Courses:

2/2012 Lectures in undergraduate and graduate biomechanics modules at Roehampton University, London, as part of Fulbright Senior Specialist program

#### Participation in Other Georgia State Courses:

11/2/2016 PT 7620 Movement Science II. Guest Lecture  
10/6/14 PT 7620 Movement Science II. Guest Lecture  
9/29/14 PERS 2001 Perspectives, Guest Lecture  
10/2/12 PT 7620 Movement Science II. Guest Lecture  
11/12/09 CPRS 8410 Medical and Psychological Aspects of Disability. Guest Lecture  
9/15/2009 KH 3360 Disability, Sport, and Physical Activity. Guest Lecture  
5/13/08 PT 7825 Prosthetics and Orthotics. Guest Lecture  
2005-present KH 2130, Biomechanics presentations  
2/28/07 PT 8720 Lifespan III - Pediatric Applications. Guest Lecture and Laboratory Demonstration  
10/28/05 PT 8763 Advanced Practice in Pediatric Physical Therapy. Lecture: "Pediatric Gait Analysis and Cerebral Palsy Case Study"

#### ***Georgia Institute of Technology***

##### Courses taught

APPH 6202 Clinical Gait Analysis  
APPH 6223 CAD/CAM in Prosthetics and Orthotics  
HPS 3803 Kinesiology (Taught in Oxford, England with Georgia Tech summer study abroad program)  
HPS 3803 Biomechanics of Musculoskeletal Injury  
HPS 4200 Kinesiological Basis of Human Movement

##### Note:

Summer 1999-Fall 2002 Curriculum Development for new Master of Science program in Prosthetics and Orthotics, including initial development of 14 new courses

#### Participation in Other Courses

2000-2001 ME 4182, Supervisor of research projects for 3 semesters of ME Capstone Design students. One project awarded best design for College of Engineering.  
1/25/00 ME 6783, Lecture: "Gait Analysis."  
8/21/99 Scottish Rite Children's Medical Center Residents, Lecture: "Prosthetics and Gait."  
1/14/99 Emory University Center for Rehabilitation Medicine Residents, Lecture: "Hip Biomechanics."

## **Academic Advising and Mentorship**

### **Doctoral Committee Chair**

Susan Basile 2013-2020  
Dean's Doctoral Fellow  
Department of Kinesiology and Health, Georgia State University  
Kinematics, Kinetics, and Modeling of Fatigue in Youth Distance Runners

Meredith Wells 2017-2018  
Dean's Doctoral Fellow  
Department of Kinesiology and Health, Georgia State University

Hsin-Chen FanChiang 2009-2013  
Department of Kinesiology and Health, Georgia State University  
The effects of surface and vibration on the gait pattern and vibration perception threshold of typically developing children and children with Idiopathic Toe Walking

Colleen Coulter-O'Berry 2005-2009  
Rocky Mountain University of Health Professions  
Provo, UT  
Functional and kinematic advantages of providing knee components in the first prosthesis of infants and toddlers with high level lower limb amputations.

### **Doctoral Committee Member**

Rebecca Ban 2017-present  
Department of Kinesiology and Health, Georgia State University

Matthew Beerse 2014-2018  
Dean's Doctoral Fellow  
Department of Kinesiology and Health, Georgia State University  
Development of motor adaptation to hopping on surfaces with different stiffness

Mary Spencer Cain 2014-2018  
Department of Kinesiology and Health, Georgia State University  
A randomized controlled trial investigating the effects of a 4-week ankle rehabilitation program on high school ath-letes with chronic ankle instability

Toyin Ajisfae 2009-2014  
Department of Kinesiology and Health, Georgia State University  
Adaptive locomotor strategies during raised surface negotiation

Li-Shan Chang 2005-2009  
Department of Kinesiology and Health, Georgia State University  
Effects of Stroke Patterns on Shoulder Joint Kinematics and Electromyography in Wheelchair Propulsion

Brad Hodgson 2004-2006  
Department of Kinesiology and Health, Georgia State University  
The effect of the Prevent Injury and Enhance Performance program on selected kinetic and kinematic variables associated with landing from a vertical jump in women's collegiate soccer players



Weerawat Limroongreungrat 2004-2005  
Department of Kinesiology and Health, Georgia State University  
Biomechanics of racing wheelchair propulsion: Development of an instrumented wheel force measurement system and its applications

Stephen Cobb 2004-2005  
Department of Kinesiology and Health, Georgia State University  
The kinematic effects of custom molded orthotics on the stance phase of gait using a multi-segment foot model  
Additional Doctoral Advising

Andrea Lay 2004  
Department of Biomedical Engineering, Georgia Tech

Justin Fleming, Lily Pan 2003  
Emory University DPM  
Research project: Soft Tissue Strain in Evans' Calcaneal Osteotomy

Master's Committee Chair

Brittany Balsamo 2014-2016  
Department of Kinesiology and Health, Georgia State University  
Effect on gait characteristics of expectation bias between two knee braces

Mohammad Gharai 2013-present  
Department of Kinesiology and Health, Georgia State University

Jenna Closner 2012-2015  
Department of Kinesiology and Health, Georgia State University

Jacob Meyer 2012  
Department of Kinesiology and Health, Georgia State University

Patrick Broadus 2012-present  
Department of Kinesiology and Health, Georgia State University

Alison Brock 2010-2012  
Department of Kinesiology and Health, Georgia State University  
The effects of backpack loading on gait in children with transtibial amputations

Megan Meurer 2010-2012  
Department of Kinesiology and Health, Georgia State University  
The effects of prosthesis alignment over uneven terrain

Katherine Miller 2011  
Department of Kinesiology and Health, Georgia State University

Kayamma M Lewis 2011  
Department of Kinesiology and Health, Georgia State University

Harry Sowieja 2009-2011  
Department of Kinesiology and Health, Georgia State University  
Frontal motion analysis of the knee during bicycle pedal revolutions

Brent Russell 2005-2011  
Department of Kinesiology and Health, Georgia State University  
Variability of vertical ground reaction forces in patients with chronic low back pain, before and after chiropractic care

Kevin Wasco 2006-2008  
Department of Kinesiology and Health, Georgia State University  
The effect of posterior backpack loads on postural sway in children with lower-limb amputations

Markita Reid 2006-2008  
Department of Kinesiology and Health, Georgia State University  
Comparison of ground reaction force in children with and without lower limb amputation performing a drop landing

Leah Nelson 2005  
Department of Kinesiology and Health, Georgia State University

### Master's Committee Member

Yeon-Joo Kang 2016-2018  
Department of Kinesiology and Health, Georgia State University  
The effects of unilateral ankle loading on the long-range correlation of spatiotemporal gait parameters during walking

Jason Thomas 2014-2016  
Department of Kinesiology and Health, Georgia State University  
Relationship between quadriceps muscle strength and knee joint kinematics in patients with anterior cruciate ligament reconstruction

Joshua Villalobos 2013-2014  
Department of Kinesiology and Health, Georgia State University  
Relationship between tactical formations and in-game activity profiles of youth soccer players

### External Thesis Reviewer

Sarah Mamril De Guzman 2019  
Auckland University of Technology, New Zealand  
Development of textile sensors to measure anthropometric and pressure information of children's feet

### Non-Thesis Master's Advising

#### Georgia Tech

Vibhor Agrawal	MSPO	2003-2005
Daniel Elseroad	MSPO	2003-2005
Ellen Frick	MSPO	2003-2005
David Fritz	MSPO	2003-2005
Kimberly Hill	MSPO	2003-2005
Joey Koblasz	MSPO	2003-2005
Benjamin Lucas	MSPO	2003-2005
Sarah Parsons	MSPO	2003-2005
Richard Welling	MSPO	2003-2005
Walter Moreno	Mechanical Engineering	2003-2004

Kristin Andrews	MSPO	2002-2004
Mark Holowka	MSPO	2002-2004
Susan Kestner	MSPO	2002-2004
Andrew Sawers	MSPO	2002-2004
Alejandro Aviles	MSPO	2002-2004

### Graduate Research Assistants

Kimberly Soulis	AEHS, KSU	2019-2021
Erica Sergeant	AEHS, KSU	2019-2020
Garion Williams	AEHS, KSU	2019
Justin Jarrells	AEHS, KSU	2018-2020
Katherine Hurley	AEHS, KSU	2018-2019

### Undergraduate Research Assistants/Independent Study Students

Undergraduate Research Intern, Kennesaw State University  
Micah Poisal

Undergraduate Research Intern, Department of Kinesiology and Health  
Garrett Dominy                      Fall 2016  
Diego Ferreira                        Spring 2013

Undergraduate Research Interns, Kennesaw State University:  
Lee Johnson                            Spring 2009  
Tim Palmer                                Spring 2009

### Georgia Tech

Undergraduate Research Assistants:

Nicholas Kelling	2004
Kaizad Mehta	2003
Michael Davis	1999
Raquelle Thigpen	1998

Independent Study Students:

Kyle Elliot	2004
Michael Howard	2000
Ward Altman	2000
Carly Scholttman	1999
Trisha Frederick	1998

### **Professional Development**

5/2019 "Grant Writers' Seminars & Workshops: Writing Winning Grant Proposals." Kennesaw State University.

7/8/2017-7/9/2017 "Conflict Resolution in Kinesiology Higher Education." Leadership Development Workshop, National Association for Kinesiology in Higher Education.

7/7/2016-7/8/2016 "Identity Politics." Leadership Development Workshop, National Association for Kinesiology in Higher Education

### Administrative Training

2020-2021 Deans and Chairs Leadership Development Series, Kennesaw State University

12/15/2020 Annual Reviews in the Covid Context: Best Practices, Kennesaw State University  
1/15/2020 ARD/FPA Best Practices: An Administrator's Perspective, Faculty Affairs, Kennesaw State University  
11/30/18 Students in Conflict and Crisis, Office of the Dean of Students, Kennesaw State University  
11/10/2017 Understanding and Responding to Implicit Bias, College of Education and Human Development, Georgia State University  
11/6/2017 Recognizing and Interrupting Bias in Faculty Searches, Office of Faculty Affairs, Georgia State University  
10/24/2017 Academic Leadership Development Series: Strategic Communication, Georgia State University  
9/21/2017 Academic Leadership Development Series: Time Management for Leaders, Georgia State University  
4/5/2017 Academic Leadership Development Series: Conflict Resolution, Georgia State University  
3/24/2017 Supporting Faculty in Promotion and Tenure, Georgia State University  
1/18/2017 Academic Leadership Development Series: Strategic Faculty Recruitment and Retention, Georgia State University  
12/1/2016 Academic Leadership Development Series: Budgeting for the New Higher Education Environment, Georgia State University  
11/7/2016 Legal Issues for Chairs, Georgia State University  
10/27/2016 Academic Leadership Development Series: Curriculum Management, Georgia State University  
9/15/2016 Academic Leadership Development Series: Roles of Senior Administration, Dean, Associate Dean, and Department Chair, Georgia State University  
1/30/2016 University System of Georgia New Deans and Department Chairs Workshop, Middle Georgia State University, Macon, Georgia

## **Service**

### **Editorial Boards**

Applied Bionics and Biomechanics  
Journal of Prosthetics and Orthotics

### **Professional Memberships**

Past member of:            American Society of Mechanical Engineering  
                                 American Society of Engineering Education  
                                 Phi Kappa Phi, Tau Beta Pi, Pi Tau Sigma  
                                 National Association of Prosthetic and Orthotic Educators

Current member of:       American Society of Biomechanics  
                                 American Academy of Orthotists and Prosthetists  
                                 Gait and Clinical Movement Analysis Society  
                                 International Society for Prosthetics and Orthotics  
                                 Association of Children's Prosthetic and Orthotic Clinics  
                                 National Association for Kinesiology in Higher Education

### **Invited Journal Reviewer**

Adapted Physical Activity Quarterly  
American Journal of Physical Medicine & Rehabilitation  
Archives of Physical Medicine and Rehabilitation

Annals of Biomedical Engineering  
ASME Journal of Biomechanical Engineering  
Assistive Technology  
BMC Musculoskeletal Disorders (SpringerNature)  
Clinical Biomechanics  
Disability and Rehabilitation  
Gait and Posture  
IEEE Transactions on Biomedical Engineering  
IEEE Transactions on Robotics  
International Journal of Solids and Structures  
Journal of Applied Biomechanics  
Journal of Biomechanics  
Journal of Medical Devices  
Journal of Prosthetics and Orthotics  
Journal of Rehabilitation Research and Development  
Medical Engineering and Physics  
Medicine and Science in Sports and Exercise  
PLoS ONE  
Prosthetics and Orthotics International  
Scientia Iranica  
Scientific Reports (Nature)  
Sensors  
Sports Biomechanics

*Invited Book Reviewer*

John Wiley and Sons  
Lippincott, Williams, and Wilkins  
    “ACSM’s Research Methods”, February 2013  
McGraw-Hill  
Thompson Brooks/Cole  
Wadsworth Publishing Company

*Invited Grant Reviewer*

Department of Veterans Affairs  
    Scientific Merit Review  
    Study Section member 2014-2020  
    Rehabilitation Research and Development Service, 2006-2014  
    Chair, Rehabilitation Engineering and Prosthetics/Orthotics study section, 2019-2020

National Science Foundation  
    Ad-hoc review, NSF 04-36 solicitation  
    November 2006

Arthritis Foundation  
    Technology and Biomechanics Study Section  
    Vice Chair, 2005  
    Chair, 2006

National Institute on Disability and Rehabilitation Research  
    US Department of Education  
    Field Initiated Proposal Study Section – Panel Chair – 2011  
    Switzer Fellowship Review Study Section 2005, 2007, 2009

Congressionally Directed Medical Research Programs

US Department of Defense  
2019 Orthotics and Prosthetics Outcomes Research Program (OPORP) CT scientist reviewer  
2017 OPORP Panel Chair  
2016 OPORP Prosthetics Outcome Research scientist reviewer  
2015 OPORP Prosthetics Outcome Research scientist reviewer  
2014 MRMC-BAA Military Operational Medicine online reviewer  
SPiRE, 2014  
Hypothesis Development Award, Surgical Intervention and Rehabilitation 2009  
Orthopedic Research – Device Development 2013US Army, 2005

Defense Medical Research and Development Program

US Department of Defense  
2020 DMRDP PO Panel Chair

Invited Abstract Reviewer

International Society for Prosthetics and Orthotics  
American Orthotic and Prosthetic Association  
Gait and Clinical Movement Analysis Society  
American Society of Biomechanics  
Southeast American College of Sports Medicine  
Referee, American Academy of Orthotists and Prosthetists “Best of” Residency Research Project Review

Invited Promotion and Tenure Reviewer

2020 University of Jordan  
2019 Northwestern University Feinberg School of Medicine  
2019 University of Jordan  
2018 University of South Florida Morsani College of Medicine  
2017 University of Washington  
2016 South Dakota State University  
2016 University of Texas Southwestern School of Health Professions  
2013 Northwestern University  
2013 University of Washington  
2008 Northwestern University  
2006 Queen’s College, NY

Institute/College/Department Service

2021-present Staff Implementation Subcommittee, Presidential Task Force on Race, Kennesaw State University  
2020-present Research Advisory Council, Kennesaw State University  
2020-2021 Mandatory Training Review Project, Kennesaw State University  
2020 College Representative, Provost’s Chair/Director Advisory Group, Kennesaw State University  
2020 Member, Task Force on Student Evaluation of Instruction, Kennesaw State University  
2020 Search committee member, Dean of the Wellstar College of Health and Human Services, Kennesaw State University  
2020 Member, Task Force on Centers and Institutes, Kennesaw State University

2019-2020 Search committee member, Department Chair for Library Public Services, Kennesaw State University

2019 Session Moderator, Engineering, NCUR19 National Conference on Undergraduate Research, Kennesaw State University

2019 Vice President's Research Advisory Committee, Kennesaw State University

2019 R2 Roadmap Research Task Force, WellStar College of Health and Human Services, Kennesaw State University

3/1/2019 College representative, USG Momentum Summit, Peachtree City, GA

2018-2019 Invited member, Chairs and Directors Assembly Top Ten task force, Kennesaw State University

2018 Abstract reviewer, NCUR19 National Conference on Undergraduate Research, Kennesaw State University

2018 Chair, Search Committee, Academic Business Manager, Wellstar College of Health and Human Services, Kennesaw State University

2017-2018 Steering Committee member, American College of Sports Medicine "Exercise is Medicine" initiative, Georgia State University

2016-2018 Faculty Advisor, Georgia State Human Machines club; student organization focused on implementing 3-D printed prosthetic solutions for the developing world

2015 Chair, Search Committee, Biomechanics/Strength and Conditioning Clinical Assistant Professor position, Department of Kinesiology and Health, Georgia State University

2015 Academic Programs Consolidation Operational Working Group, Georgia State University and Georgia Perimeter College

2014-2016 Chair, SEI Subcommittee, Senate Faculty Affairs Committee  
Chaired SEI Summit and led effort to change campus-wide evaluation instrument, finally approved in March 2019

2/5/2014 Invited College of Education Representative at GSU Day at the Capitol, Atlanta

2013-2016 Chair, Committee for Research and Scholarship, College of Education, Georgia State University

2013 Chair, Committee on Cumulative Review of Tenured Faculty, College of Education, Georgia State University

2012-2013 Search Committee, Sports Medicine faculty position, Department of Kinesiology and Health, Georgia State University

2012 Faculty Annual Review Task Force, Department of Kinesiology and Health

2012-2016 University Senate  
Planning and Development Committee  
Faculty Affairs Committee

2012 Search Committee, Associate Dean for Research and Graduate Education, College of Education, Georgia State University

2011 Among 30 faculty members selected university-wide to participate in a retreat to prioritize action items in the Georgia State University Strategic Plan

2010-2011 Department Coordinator, State Charitable Contributions Program

2008-2018 Faculty member, Center for Research on Atypical Development and Learning, Georgia State University

2007-2016 Committee for Research and Scholarship, College of Education, Georgia State University

2006-2009 GSU Intellectual Property Committee  
Co-Chair, 3/2007-8/2007  
Chair, 8/2007-2009

2006-2012 GSU Kinesiology and Health Teaching Effectiveness Committee

2008-2009 Chair, Search Committee, Sports Medicine faculty position, Department of Kinesiology and Health, Georgia State University

2008-2010 Committee on Cumulative Review of Tenured Faculty, College of Education, Georgia State University  
Chair, 2009

2007 Search Committee, Biomechanics faculty position, Department of Kinesiology and Health, Georgia State University

7/2/2007 Chair, Appeal Panel, Student Affairs Committee, College of Education

2007 Search Committee, Sports Medicine clinical faculty position, Department of Kinesiology and Health, Georgia State University

1/9/2007 Research Demonstrations, College of Education at Georgia Leadership Event, Atlanta

2005-2008 Coordinator, MS program in Exercise Science, Department of Kinesiology and Health, Georgia State University

2004-2007 GSU College of Education Graduate Admissions and Appeals Committee

2004-2006 GSU College of Education Advisory Committee on International Programs

2004 Georgia State Department of Kinesiology and Health Search Committee, PC Specialist position

2001-2004 Academic Coordinator and Chair, Coordinating Committee, Master of Science program in Prosthetics and Orthotics, Georgia Tech

2001-2004 Director of Teaching Effectiveness, School of Applied Physiology, Georgia Tech

2000 Chair, National Symposium on Prosthetics and Orthotics: "Prosthetics and Orthotics for a New Millennium", Atlanta, GA

1999 Faculty Search Committee, Department of Health and Performance Sciences, Georgia Tech

1999-2001 Faculty Senate, Georgia Tech

1998 Faculty Search Committee, Department of Health and Performance Sciences, Georgia Tech

1997-1998 Admissions Volunteer: Presidential Scholarship applications essay grader, Georgia Tech

### Service to Professional Organizations

2019 Session Chair: Sport and Physical Activity, International Society for Prosthetics and Orthotics World Congress, Kobe, Japan

2019-present State of the Science Program Committee, American Academy of Orthotists and Prosthetists

2018 Session Moderator: American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, New Orleans, LA

2018 Session Facilitator, "Research in O&P," American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, New Orleans, LA

2013 Member, Task force to develop guidelines for State of the Science Conferences, American Academy of Orthotists and Prosthetists

2013 Clinical Content Committee member and abstract reviewer, 2013 O&P World Congress, American Orthotic and Prosthetic Association

2012-2013 Inaugural member, O&P Alliance Research Subgroup, for the initial purpose of providing comment to PCORI (Patient-Centered Outcomes Research Institute) regarding research topics for Federal Funding

2012-2013 Planning Committee Member, 2013 O&P World Congress, American Orthotic and Prosthetic Association

2012 Research Council Task Force on Systematic Literature Review Selection, American Academy of Orthotists and Prosthetists Research Council

2011 Session Moderator: American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Orlando, FL

2008-2016 Chair, Research Education Committee, American Academy of Orthotists and Prosthetists

2004-2008 Member, Clinical Panel, Center for International Rehabilitation Advisory Council

2009 Session Moderator: American Academy of Orthotists and Prosthetists Annual Meeting and Scientific Symposium, Atlanta, GA



2007 Judge, Best Paper, 12<sup>th</sup> World Congress of the International Society for  
Prosthetics and Orthotics, Vancouver, British Columbia

2006-2008 Project Lead and Symposium Chair, Evidence Based Practice: Justifying Patient  
Care, American Academy of Orthotists and Prosthetists Master Agenda

2006 Session Chair, Southeast Biomechanics Conference, Atlanta, GA

2006 Judge, Student Research Award, Southeast Biomechanics Conference, Atlanta,  
GA

2005-2008 Research Education Committee, American Academy of Orthotists and  
Prosthetists

2002-2008 Communications Committee member, Gait and Clinical Movement Analysis  
Society

2002-2005 E-mail list-serv Moderator, gcmas-news, Gait and Clinical Movement Analysis  
Society

2005 Session Moderator, combined meetings of the American Academy of Orthotists  
and Prosthetists and the Association of Children's Prosthetic-Orthotic Clinics

2001 Session Moderator: Prosthetics and Orthotics: Annual Meeting, North American  
Society of Gait and Clinical Movement Analysis

### Service to Profession/Industry

12/2020 Judge/Mentor, Ohio State University Biomedical Engineering Medical Device  
Prototype Idea Pitch

2019 Awards Judge, Ninth Annual Prosthetic Orthotic Research Symposium, Georgia  
Institute of Technology

2016 Graduate Student Mentor, American Society of Biomechanics

2015-2018 Member, *O&P News* Editorial Board

2012-present Member, The Ohio State University Department of Biomedical Engineering Board  
of Advisors

2008-2018 Member, School of Applied Physiology Advisory Board for Prosthetics and  
Orthotics at Georgia Tech

2011, 2012 Awards Committee, Outstanding Capstone Research Award, Prosthetic Orthotic  
Research Symposium, Georgia Institute of Technology School of Applied  
Physiology

2010-2015 Member, Practitioner Advisory Council of *O&P Business News*

2008-2012 Member, advisory board and proposal reviewer, The Orthotic and Prosthetic  
Education and Research Foundation, Inc.

2000-2002 Member, United States Fencing Association Sport Science and Technology  
Committee

2000 Presenter, Atlanta Public Science Day

2000 Founder, Global Partnership for Amputee Land Mine Survivors

1998-1999 Corresponding Scientist, Science-by-Mail Program, Museum of Science, Boston,  
MA.

### Community

2020 Research Mentor, Kennesaw Mountain High School Academy of Mathematics,  
Science, and Technology Advanced Scientific Research Program

2019 Event Supervisor for Anatomy, Georgia Elementary Science Olympiad,  
Kennesaw State University

2014 Research Mentor, North Cobb High School Magnet School for International  
Studies Advanced Scientific Research Program

2014 Science Fair judge, Acworth Elementary School

2013 Research Mentor, Fulton County Schools Talented and Gifted Internship  
Program

2012-present Middle School Teacher, Summit Baptist Church, Acworth, GA

2011	Medical mission, Project Hope Belize, Orange Walk Town, Belize
2011-present	Judge, Senior Research Presentations, North Cobb Magnet School for International Studies
2005-2017	Lab Tours, Grady High School, Kennesaw Elementary School, The Children's School, Westminster School
2004-2005	Chairman, Pastor Search Committee, Summit Baptist Church
2000-2001	Speaker, Phoenix High School "Math in the Workplace" Day, Atlanta, GA
1999-2016	Coach, Legacy Park Soccer League
1998-present	Adult Sunday School Teacher, Summit Baptist Church, Acworth, GA
1998-2012	4 <sup>th</sup> and 5 <sup>th</sup> Grade Teacher, Summit Baptist Church
1997-present	Camp Counselor, 3 <sup>rd</sup> -5 <sup>th</sup> grade students, Summit Kids Camp
1998	Coach, Butler Creek Soccer Association, State GYSA Certified

## **Honors, Awards, and Recognition**

- 2020 Finalist, *Clinical Biomechanics* Award, American Society of Biomechanics
- 2016 Article on plagiocephaly (*J Craniofacial Surgery* 2006) included in Congress of Neurological Surgeons Evidence-Based Guidelines on the role of cranial remolding orthosis therapy for patients with positional plagiocephaly (Tamber et al. *Neurosurgery*. 2016, 79(5): E632-3)
- 2016 Awarded Certificate of Appreciation for dedication and work on the Research Education Committee by the American Academy of Orthotists and Prosthetists, March 11.
- 2015 Named to inaugural edition of The O&P News 175, "an elite group of 175 professionals identified as leading innovators in the field of orthotics and prosthetics."
- 2014 Member, *Fulbright Minds*, Institute of International Education
- 2013 Outstanding Faculty Research Award, Georgia State University College of Education
- 2013 Research Award, American Academy of Orthotists and Prosthetists
- 2012 Howard R. Thranhardt Lecture Award Winner: "Is A Rigid Footplate as Effective as an Articulated AFO in Controlling Idiopathic Toe Walking?", Geil MD, Herrin K.
- 2012 Fulbright Senior Specialist Grantee
- 2011 Richard Bruch, MD Prize for Excellence in Resident Research, North Carolina chapter of the American Academy of Orthotists and Prosthetists, for Herrin K, Barner K, Geil MD. Minimizing bracing in the treatment of idiopathic toe walking: A pilot study to compare functional outcomes after treatment with an articulated ankle foot orthosis and a rigid carbon fiber footplate.
- 2010 Selected as Fulbright Senior Specialist
- 2009 Selected as Center for Teaching and Learning Mentor, Georgia State University
- 2009 Named STEM Faculty Fellow, Georgia State University.
- 2008 Article (Geil MD, Smith A. Accuracy and reliability of a system for the digital capture of infant head shapes in the treatment of cranial deformities. *Journal of Prosthetics and Orthotics*. 20(2), 35-38, 2008) selected for Self-Assessment Examination in the Journal of Prosthetics and Orthotics, 20(2), 39-40, awarded two professional continuing education credits.
- 2007 Howard R. Thranhardt Lecture Award Winner: "Comparison of Measurements of Residual Limb Shape using CAD versus Conventional Devices", Geil MD.
- 2005 Honorary Membership Award, American Academy of Orthotists and Prosthetists
- 2002 Howard R. Thranhardt Lecture Award Winner: "The impact of articulated knees on infants and toddlers", Giavedoni B, Geil MD
- 2002 Howard R. Thranhardt Lecture Award Finalist: "Quantification of dynamic prosthetic alignment similarities among multiple practitioners", Geil MD
- 1998 Class of 1969 Teaching Fellows, Georgia Institute of Technology
- 1997 Winner, Whitaker Student Scientific Paper Competition Award, RESNA 1997
- 1994-1997 National Science Foundation Graduate Fellow
- 1993 Ohio State University Graduate Fellow

1989-1993 North Carolina State University John T. Caldwell Scholar (University's highest scholarship)  
1992 North Carolina State University Golden Chain Society (*"The Golden Chain is the highest honor that can be bestowed upon a rising senior at N.C. State."*)  
1993 Mechanical Engineering Senior Award: Humanities, North Carolina State University  
1991 Outstanding Mechanical Engineering Sophomore, North Carolina State University  
1989-1993 North Carolina Fellow