

CURRICULUM VITAE

Janet Ann Kneiss
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EDUCATION

2014	DPT, Physical Therapy, MGH Institute of Health Professions, Boston MA
2010	PhD, Health Practice Research - (Biomechanics Focus), University of Rochester, Rochester, NY
2002	MS, Physical Therapy, Nazareth College, Rochester, NY
2000	BS, Physical Therapy, Nazareth College, Rochester, NY
1992	BBA, Marketing, Kent State University, Kent, OH

LICENSURE

Physical Therapist, New York #024265 (inactive)
Physical Therapist, Massachusetts #19351

PROFESSIONAL EXPERIENCE/POSITIONS

2013-present	Biomotion Lab Manager
2010-present	Assistant Professor, MGH Institute of Health Professions
2006-2010	Research Associate, Ithaca College – Movement Analysis Laboratory
2006-2010	Lecturer, Ithaca College, Department of Physical Therapy
2007-2008	Chair Doctoral Student Forum- University of Rochester School of Nursing

PEER REVIEWED PUBLICATIONS

Olsan, T.H., **Kneiss, J.A.** "Collaborative Care." *The Journal of New York State Nurses Association*. (2008).

Houck, J., **Kneiss, J.**, Bukata, S., Puzas, E. "Analysis of Vertical Ground Reaction Force Variables During a Sit to Stand Task in Subjects Recovering from a Hip Fracture." *Clinical Biomechanics*, 26 (2011) 470-476.

Kneiss, JA, Houck, J., Bukata, S., Puzas, E. "Influence of Upper Extremity Assistance on Lower Extremity Force Application Symmetry in Individuals Post- Hip Fracture During the Sit to Stand Task." *JOSPT* (2012), 5(42) 474-481.

Elsa CR, **Kneiss J.A.** Wood LJ "Induction of IL-6 cytotoxic chemotherapy is associated with loss of lean body mass in tumor-free female mice." *Biological Research for Nursing*, 2014 Nov 18:1-9. DOI: 10.1177/1099800414558087

Kneiss, JA, Hilton TN, Tome, J, Houck JR. "Weight-bearing asymmetry in individuals post-hip fracture during the sit to stand task." *Clinical Biomechanics*. 2015 Jan;30(1):14-21. doi: 10.1016/j.clinbiomech.2014.11.012. Epub 2014 Nov 29.

Karim, R, **Kneiss, J.A.** "Dementia Syndrome." *PT NOW*, American Physical Therapy Association, 2017.

Zablotny, C, Reik, L, **Kneiss, J**, Tome, J. "Validity of Visual Assessment of Sit to Stand After Hip Fracture." Journal of Geriatric Physical Therapy, Accepted for publication March, 2018.

PUBLICATIONS UNDER REVIEW

Callahan J, **Kneiss J**, Kirwan H, Hancock CL, Scarborough DM, Sharma N
"Improving Gait Function in an Individual with Lower Extremity Dystonia: A Case Report"

Houck J., Riek, L., Tome, J, **Kneiss, J**, Hilton T. "Cohort Study of Prognostic Factors at Discharge from Home Care that Predict 6 Month Perceived Function in Community Dwelling Participants Post Hip Fracture."

FUNDED RESEARCH GRANTS (COMPLETED)

2012-2013

Project Title: "Feasibility of implementing a portable sit to stand measure among participants with hip fracture who have mild cognitive impairments" July 2012-July 2013.
Funding Agency: MGH Institute of Health Professions, Faculty Research Fellowship; \$10,000.
PI: Janet A. Kneiss, PhD
Role: Primary Investigator (Design, recruitment, data collection and analysis)

CURRENT RESEARCH GRANTS (UNDER REVIEW)

2017

Project Title: "Neuromuscular Dysfunction Among Fatigued and Non-Fatigued Breast Cancer Survivors"
Funding Agency: NIH, National Institute on Aging
PI: Kneiss, Janet A, PhD; Wood, Lisa J, PhD
Role: Co-Primary Investigator
Funding type: R-21 Exploratory Grant, \$275,000
Status: Pending, Score: 12th Percentile

2018

Project Title: "Fatigability and Function in breast cancer survivors with and without clinically significant cancer related fatigue"
Funding Agency: NIH, National Cancer Institute
PI: Wood, Lisa J, PhD
Role: Co Investigator
Funding type: R-21 Exploratory Grant, \$275,000
Status: Pending

COMPLETED RESEARCH GRANTS

2006-2010

Project Title: Center of Research Translation Project 2: Effect of Teraparotide on Functional Recovery after Pelvic Insufficiency Fractures
Funding Agency: NIH (R01)
PI: Randy Rosier, PhD MD; Edward J. Puzas, PhD
Role: Sub Investigator (data collection and analysis)

2006-2010

Project Title: Reliability and Validity of the Instrumented Sit to Stand Test in Subjects after Hip Fracture

Funding Agency: NIH (subcontract)
 Co-Investigators: Jeff Houck, PT, PhD; Edward J. Puzas, PhD
 Role: Sub Investigator (recruitment, data collection and analysis)

2009-2010

Project Title: Reliability and Validity of a portable Sit to Stand Test in Subjects after Hip Fracture
 Funding Agency: NIH (subcontract)
 Co-Investigators: Jeff Houck, PT, PhD; Edward J. Puzas, PhD
 Role: Sub Investigator (recruitment, instrument design)

2008-2009

Project Title: A Prospective, Randomized, Controlled, Multi-Center, Pivotal Human Clinical Trial to Evaluate the Safety and Effectiveness of *GEM OS1™* Compared to Autologous Bone Graft as a Bone Regeneration Device in Foot and Ankle Fusions
 Funding Agency: Industry Funded: BioMimetic Therapeutics Inc.
 PI: Judith Baumhauer, MD
 Role: Physical Therapist

2007-2008

Project Title: Effects of Bracing and Strengthening Exercise for stage II PTTD
 Funding Agency: AOFAS, NIH R15
 PI: Jeff Houck, PT, PhD
 Role: Research Assistant

Research Presentations (Refereed)

Kneiss, J.A, Slipp, L. American Physical Therapy Association, Combined Sections Meeting, Indianapolis, IN 2015. "In Home Functional Assessment of Participants Post Hip Fracture with Mild Cognitive Impairment Using Vertical Ground Reaction Force During a Sit to Stand"
Platform Presentation

K.D.Gross, **J.Kneiss**, A. Klein, U. Dutt. American Physical Therapy Association, Massachusetts Chapter 2012. Norwood, MA. The relationship of toe-out walking with clinical characteristics of 1st metatarsophalangeal joint osteoarthritis in older adults.
Platform Presentation

Kneiss, J., Houck, J., Bukata, S., Puzas, E. American Physical Therapy Association, Combined Sections Meeting, Las Vegas, NV 2009. "Influence of Arms on Vertical Ground Reaction Force Asymmetry in subjects with Hip Fracture during the Sit to Stand Task"
Platform Presentation

Kneiss, J., Houck, J., Bukata, S., Puzas, E. Gait and Clinical Motional Analysis Society Annual Meeting, Richmond VA, 2008. "Reliability and Validity of an Instrumented Sit-to-Stand for Hip Fracture."
Platform Presentation

Kneiss, J, Slipp, L. "In Home Assessment of Functional Performance in Cognitively Impaired Older Adults Post-Hip Fracture." Massachusetts ADRC/Boston University ADC/Harvard NeuroDiscovery Center's 27th Annual Poster Symposium. Boston, MA, 2014.
Poster Presentation

Houck, J., Rumsey, L., **Kneiss, J.**, Tome, J., Bukata S., Puzas, E., Hilton, T. "Movement Patterns of Participants after Hip Fracture in Acute and Home Care Settings." American Physical Therapy Association Combined Sections Meeting, Chicago, IL, 2012.

Poster Presentation

Kneiss, J., Houck, J., Bukata, S., Puzas, E. American Physical Therapy Association, Combined Sections Meeting, New Orleans, LA, 2011. "The Effect of a Weighted Vest on Participants with Hip Fracture during a Sit to Stand Task."

Poster Presentation

Poole T., **Kneiss J.**, Hilton, T., Houck, J. American Physical Therapy Association, Combined Sections Meeting, New Orleans, LA, 2011. "Reliability of Isometric Hip Strength in Subjects Post Hip Fracture and Healthy Controls"

Poster Presentation

Kneiss, J., Houck, J., Bukata. MGH-Annual Scientific Advisory Committee Poster Session, 2011. "Hip and Knee Kinetics Post Hip Fracture during a Sit to Stand Task."

Poster Presentation

Kneiss, J., Houck, J., Bukata, S., Puzas, E. American Society of Biomechanics, Annual Meeting, Providence, RI, 2010. "Compensatory Movement Patterns Post Hip Fracture."

Poster Presentation

Kneiss, J., Yelle, R., Houck, J. American Society of Biomechanics. Annual meeting, State College, PA 2009. "Influence of asymmetry of lower extremity force on center of mass velocity during a sit to stand task among subjects with hip fracture."

Poster Presentation

Invited Research Presentations

Callahan, J., **Kneiss, J.**, MGH outpatient clinical meeting; Boston, MA. "Clinical Gait Observation and Analysis" 2012.

Kneiss, J., BWH at Foxboro Outpatient and Sports monthly meeting, "Restorative Care for Hip Fracture" Foxboro, MA. 2012.

Kneiss, J., American Physical Therapy Association, Finger Lakes District Meeting Spring, 2008, Orthopedic Update. "Pelvic Insufficiency Fractures."

Kneiss, J., American Physical Therapy Association, Finger Lakes District Meeting Spring, 2009, Orthopedic Update. "EBP: Restorative Care for Hip Fracture."

Research Skills:

Technical:

Kinematic: (Optotrak, Northern Digital Inc, Canada; Trackstar, IL; Motion Analysis, CA)

Kinetic: (Kisler Inc, NY; Bertec, OH)

Plantar Pressure: Insole and overground (Pedar and Emed, Novel Inc)

Electromyography: (Delsys System)

Strength: (Biodex™)

Software:

Motion Monitor: (Innsport Training Inc, USA)

Pedar, Novel(Novel Inc, MN)
 Statistical Analysis Software: SPSS/PAWS
 Endnote®
 Refworks
 Excel (macro's): Microsoft
 Matlab

TEACHING EXPERIENCE:

Revised curriculum 2016-Present

2017-present Lead Faculty Instructor and Coordinator of Anatomy: Gross Anatomy

MGH Institute of Health Professions

Role: Faculty in the Physical Therapy graduate program (between 68 and 75 students). Responsibilities include; lecturer and facilitator, course management, curriculum development and writing/administering exams. Coordinator and liaison between MGHHP and Harvard Medical School, collaborator of Anatomy for Occupational Therapy, Physician Assistant and Physical Therapy graduate programs.

2016-present Lead Faculty Instructor: Musculoskeletal Examination and Treatment of the Lower Extremity

MGH Institute of Health Professions

Role: Faculty in the Physical Therapy graduate program (between 68 and 75 students). Responsibilities include; lecturer and facilitator, course management, curriculum development and writing/administering exams.

2016-present Lead Faculty Instructor: Musculoskeletal Examination and Treatment of the Upper Extremity

MGH Institute of Health Professions

Role: Faculty in the Physical Therapy graduate program (between 68 and 75 students). Responsibilities include; lecturer and facilitator, course management, curriculum development and writing/administering exams.

2016-present Session Faculty Instructor: Biomechanics, Gait and Functional Analysis

MGH Institute of Health Professions

Role: Faculty in the Physical Therapy graduate program (between 68 and 75 students). Responsibilities include; lecturer and facilitator, curriculum development and writing/administering exams.

2010-2017 Faculty Instructor: Gross Anatomy MGH Institute of Health Professions

Role: Faculty in the Physical Therapy graduate program (between 68 and 75 students). Responsibilities include; lecturer, course management, curriculum development and writing/administering exams.

2010-present Lead Faculty Instructor: Directed Research MGH Institute of Health Professions

Role: Faculty in the Physical Therapy graduate program working with 5-10 DPT students on research projects.

2010-2016 Lead Faculty Instructor: Functional Anatomy MGH Institute of Health Professions

- Role:** Faculty in the Physical Therapy graduate program (between 60 and 75 students). Responsibilities include; course coordination, lecturer, course management, curriculum development and writing/administering exams.
- 2010-2016** **Lead Faculty Instructor: Therapeutic Exercise** MGH Institute of Health Professions
- Role:** Faculty in the Physical Therapy graduate program (between 60 and 75 students). Responsibilities include; course coordination, lecturer, course management, curriculum development and writing/administering exams.
- 2010-present** **Faculty Instructor: Comprehensive Case Analysis** MGH Institute of Health Professions
- Role:** Faculty in the Physical Therapy graduate program (between 10 - 12 students). Responsibilities include; group facilitation and assessment of student presentations.
- 2006-2010** **Instructor Human Gross Anatomy** Ithaca College
- Role:** Lab instructor for undergraduates in Physical Therapy program (between 80 and 110 students). Responsibilities include lab instruction for reading and evaluating radiographs, dissection instruction, mentoring teaching assistants and administering exams.
- 2007-2008** **Research II Faculty Advisor** Ithaca College
- Role:** Mentored group of graduate PT students to complete their thesis work. Project entitled; *the Assessment of Baseline Functional Abilities in Elderly Individuals with Pelvic Insufficiency Fractures.*
- 2006-2007** **Research II Faculty Advisor** Ithaca College
- Role:** Mentored group of graduate PT students to complete their thesis work. Project entitled; *Vertical Ground Reaction Force Asymmetry During the Sit to Stand Task in Subjects with Hip Fracture.*
- 2007** **Quantitative Movement Analysis in Rehabilitation** Ithaca College
- Role:** Taught interactive lab sessions to a graduate movement analysis class focusing on normal and abnormal gait. Developed and implemented study sessions for the class on inverse dynamics.
- 2008** **Engineering Statics and Dynamics** University of Rochester, Biomechanical Engineering Department
- Role:** Presented a lecture and created a matlab project on the center of mass translation during a sit to stand task. Met with undergraduate students to assist with projects.
- 2008-2009** **Pathokinesiology** Ithaca College
- Role:** Presented lectures on hip fracture pathologies and the biomechanics of sit to stand.
- 2008** **Advanced Biomechanics Lecture** Ithaca College
- Role:** Presented lectures on the biomechanics of sit to stand to an undergraduate exercise physiology class.

CLINICAL EXPERIENCE

Lifetime Care, Rochester, New York <i>Home care physical therapist</i>	May 2006 – August 2010
Excellence in Physical Therapy, Rochester, New York <i>Outpatient physical therapist</i>	September 2002 – May 2006
ViaHealth Newark Hospital, Newark, New York <i>Outpatient/inpatient physical therapist</i>	October 2003 – June 2004
FF Thompson Hospital, Canandaigua, New York <i>Outpatient/inpatient physical therapist</i>	May 2002 – October 2003
Brockport Central Schools, Brockport, New York <i>Pediatric Physical Therapist</i>	September 2002 – February 2003

PROFESSIONAL MEMBERSHIPS

American Physical Therapy Association, 2002-present Section Member: Geriatrics, Orthopedics, Research

New York State Chapter, The American Physical Therapy Association, 2002-2010

Massachusetts Chapter, The American Physical Therapy Association, 2010-present

American Society of Biomechanics, 2009-present

PROFESSIONAL SERVICE

Committee Chair, PhD dissertation to be presented in June 2018 by Bridget Perry entitled: "The evaluation and treatment of neurologically-based oral motor impairment using biomechanical approaches."

Committee Member, PhD dissertation to be presented in April 2018 by Donna Scarborough entitled: "Variability of the kinematic sequence of baseball pitches: The search for the ideal pattern."

Reviewer, Gait and Posture. 2010 – present

Committee Member, Committee on Academic Program Standards, MGH Institute of Health Professions. 2015-2017

Committee Member, Appointment and Promotions Committee, MGH Institute of Health Professions. 2013-2017

Committee Member, Entry level admissions committee. 2010- 2013

Committee Member, Building and Research Design Committee. 2011-2013

Committee Member, Occupational Therapy Faculty Search Committee, MGH Institute of Health Professions. 2013-2014