

Gregory E. Hicks PT, PhD, FAPTA, FGSA

Distinguished Professor of Health Sciences, Department of Physical Therapy
Associate Vice President for Clinical and Translational Research, University of Delaware
PI and Director, Delaware Clinical and Translational Research ACCEL Program
ORCID: 0000-0001-8611-994X

Date: May 2025

Work Contact Info:

University of Delaware
Department of Physical Therapy
540 S. College Ave, STAR Campus
Newark, DE 19713
Phone: (302) 831-2690
Email: ghicks@udel.edu

Education

Institution	Degree	Years	Field of Study
University of Delaware, Newark, DE	BA	1988-1992	Biological Sciences
University of Delaware, Newark, DE	BA	1992-1993	English (Business/Technical Writing)
University of Delaware, Newark, DE	MPT	1993-1995	Physical Therapy
University of Pittsburgh, Pittsburgh, PA	PhD	1998-2002	Rehabilitation Science Advisor: Anthony Delitto, PT, PhD, FAPTA

Post Graduate Education and Training

2002-2004 Post-Doctoral Fellowship in Epidemiology of Aging, National Institute on Aging—National Institutes of Health, Longitudinal Studies Section, Clinical Research Branch, Baltimore, MD, Mentors: Luigi Ferrucci MD, PhD and Eleanor Simonsick, PhD

Licensure: Delaware Physical Therapist #J1 0000993

Work Experience

1995-1997 Staff Physical Therapist, Schweizer's Therapy and Rehabilitation, New Castle, DE

1996-1998 Clinical Instructor and Teaching Assistant, Department of Physical Therapy, University of Delaware, Newark, DE

1997-1998 Clinic Director and Physical Therapist, Schweizer's Therapy and Rehabilitation at Wilmington Hospital, Wilmington, DE

1998-2000 Research Associate and Trial Coordinator: "Clinical Research Center for Work-Related Low Back Injuries—A Randomized Trial," Department of Physical Therapy, University of Pittsburgh, Pittsburgh, PA

- 1998-2002 Adjunct Clinical Faculty, Department of Physical Therapy, University of Pittsburgh, Pittsburgh, PA
- 2000-2002 Research Associate: "A Randomized Clinical Trial of Treatments for Lumbar Spinal Stenosis," Department of Physical Therapy, University of Pittsburgh, Pittsburgh, PA
- 2001-2002 Study Coordinator: "Performance Based Measures of Unilateral Knee Osteoarthritis," Department of Physical Therapy, University of Pittsburgh, Pittsburgh, PA
- 2002-2004 Intramural Research Training Award Post-Doctoral Fellow, National Institute on Aging—National Institutes of Health, Gerontology Research Center, Clinical Research Branch, Baltimore, MD
- 2004-2006 Assistant Professor, Department of Physical Therapy and Rehabilitation Science, University of Maryland School of Medicine, Baltimore, MD
- 2004-2006 Assistant Professor, Department of Epidemiology and Preventive Medicine, University of Maryland School of Medicine, Baltimore, MD
- 2007-2012 Assistant Professor, Department of Physical Therapy, University of Delaware, Newark, DE
- 2007-Present Adjunct Faculty, Department of Epidemiology and Public Health, University of Maryland School of Medicine, Baltimore, MD
- 2012-2017 Associate Professor (with Tenure), Department of Physical Therapy, University of Delaware, Newark, DE
- 2014-2019 Chair, Department of Physical Therapy, University of Delaware, Newark, DE
- 2017-2022 Professor, Department of Physical Therapy, University of Delaware, Newark, DE
- 2019-2020 Deputy Dean, College of Health Sciences, University of Delaware, Newark, DE
- 2020-Present Associate Vice President for Clinical & Translational Research, University of Delaware, Newark, DE
- 2020-Present PI & Director, Delaware Clinical and Translational Research ACCEL Program
- 2022-Present Distinguished Professor of Health Sciences, Department of Physical Therapy, University of Delaware, Newark, DE

Professional Memberships

- 1998-Present Member, American Physical Therapy Association
- 1998-Present Member, Orthopedic Section, American Physical Therapy Association

2001-Present Member, Research and Geriatric Sections, American Physical Therapy Association

2003-Present Member, Gerontological Society of America

2023-Present Member, International Association for the Study of Pain

Honors and Awards

1992 Induction into Mortar Board National Honor Society, University of Delaware

1993-1995 Presidential Fellowship Award, University of Delaware

2002-2004 Intramural Research Training Award, Post-Doctoral Fellowship, National Institute on Aging—National Institutes of Health

2004 Health Science Research Award, Gerontological Society of America.
Paper: Trunk Muscle Composition as a Predictor of Physical Function in the Health ABC Study: The Moderating Role of Back Pain.

2006 First Place: Junior Faculty: Bio-Medical/Basic Science Category: University of Maryland Aging Research and Women's Health Research Poster Day:
Low 25 (OH) D concentrations are associated with significant pain in older women, but not men: Findings from the InCHIANTI study

2007 Honorary Membership, Israeli Physical Therapy Society

2009 Invited Member of the Spinal Disorders and Back Pain Expert Panel for the Global Bone and Joint Decade Network Conference, Washington DC, October 2009 (APTA Representative)

2013 University of Delaware College of Health Sciences Excellence in Research Award

2016 Ellen C. Ross Memorial Lectureship, Rutgers University— School of Health Related Professions, Doctoral Program in Physical Therapy

2018 University of Delaware College of Health Sciences Inaugural Diversity Advocate Award

2018 Elected Catherine Worthingham Fellow in recognition of lasting and significant advances in science, education, and practice of the profession of Physical Therapy, American Physical Therapy Association

2019 Endowed Scully Scholar Lectureship, University of Pittsburgh—School of Health and Rehabilitation Sciences

2020 Inaugural Lynda D. Woodruff Lectureship on Diversity, Equity and Inclusion in Physical Therapy, Physical Therapy Leadership Institute

2021	Excellence in Rehabilitation of Aging Persons Award, Gerontological Society of America
2021	Elected as Fellow of the Gerontological Society of America
2022	John P. Maley Award from the Academy of Physical Therapy Research— In recognition of outstanding leadership in research, APTA
2023	Axe Family Distinguished Honors Alumni Lecturer Award, University of Delaware Honors College
2023	Lucy Blair Service Award, American Physical Therapy Association
2024	Steven J. Rose Excellence in Research Award, Academy of Orthopaedic Physical Therapy, APTA
2025	Marian Willams Award for Research in Physical Therapy, APTA

Administrative Service

National Service

2003-2004	FELCOM Laboratory Representative, Clinical Research Branch, National Institute on Aging—National Institutes of Health
2003-Present	Abstract Reviewer, Combined Sections Meeting of the American Physical Therapy Association
2004-2015	Abstract Reviewer, Annual Scientific Meeting for the Gerontological Society of America
2005-2009	Member, Orthopedic Section Research Committee, American Physical Therapy Association
2005-2007	Co-Convener, Epidemiology of Aging Interest Group Symposium, Gerontological Society of America
2005-2010	Moderator, Orthopaedic Research Platform Sessions, Combined Sections Meeting of the American Physical Therapy Association
2010-Present	Member, Academy of Geriatric Physical Therapy Research Committee, American Physical Therapy Association
2019-2020	Director, Board of Directors for the American Physical Therapy Association
2019-2023	Member, Scientific and Practice Affairs Committee, American Physical Therapy Association
2020-2022	Member, CAPTE Diversity, Equity and Inclusion Task Force
2023	Member, Search Committee for PTJ's next Editor in Chief

University Service

2008	Clinical Staff Search Committee, University of Delaware Physical Therapy Clinic, Newark, DE
2008-2009	College of Arts and Sciences Faculty Senate, University of Delaware, Newark, DE
2009-2012	College of Health Sciences Governance Committee, University of Delaware, Newark, DE
2009-Present	Chair, Diversity Committee, Department of Physical Therapy, University of Delaware, Newark, DE
2009	Faculty Search Committee, Department of Physical Therapy, University of Delaware, Newark, DE
2010	Search Committee for the Director of the Entry Level Doctor of Physical Therapy Program, Department of Physical Therapy, University of Delaware, Newark, DE
2010-11	Search Committee for Faculty Epidemiologist, College of Health Sciences, Department of Behavioral Health and Nutrition, University of Delaware, Newark, DE
2010-11	Search Committee for Unidel Chair of Health Sciences, College of Health Sciences, University of Delaware, Newark, DE
2010-Present	Admissions Committee, Department of Physical Therapy, University of Delaware, Newark, DE
2011-2012	Faculty Search Committee, College of Health Sciences, Department of Kinesiology and Applied Physiology, University of Delaware, Newark, DE
2011-2012	Faculty Search Committee, College of Health Sciences, Department of Physical Therapy, University of Delaware, Newark, DE
2011-2012	Search Committee for Director of Development, College of Health Sciences, University of Delaware, Newark, DE
2012-2015	College of Health Sciences Committee on Promotion and Tenure, University of Delaware, Newark, DE
2012-Present	Director, Advancing Diversity in Physical Therapy (ADaPT) Program, Department of Physical Therapy, University of Delaware, Newark, DE
2013	Search Committee for Associate Director of the Entry Level Doctor of Physical Therapy Program, College of Health Sciences, University of Delaware, Newark, DE

2013	Faculty Search Committee, College of Health Sciences, Department of Kinesiology and Applied Physiology, Athletic Training, University of Delaware, Newark, DE
2013	Search Committee for Biostatistician, College of Health Sciences, University of Delaware, Newark, DE
2013-2016	College of Health Sciences Diversity Committee, University of Delaware, Newark, DE
2014	Faculty Search Committee, Department of Physical Therapy, University of Delaware, Newark, DE
2014	Clinic Search Committee, Department of Physical Therapy, University of Delaware, Newark, DE
2015-Present	UD Research Council, University of Delaware, Newark, DE
2015-Present	UD ADVANCE-NSF Internal Advisory Board, University of Delaware, Newark, DE
2015	Delaware Will Shine Strategic Planning Implementation Committee, University of Delaware, Newark, DE
2016	Chair, Search Committee for Department Chair, Department of Kinesiology and Applied Physiology, College of Health Sciences, University of Delaware, Newark, DE
2017	Appointed Member, Provost's Committee on NC State Bill #2, University of Delaware, Newark, DE
2017-2025	Board Member, UD African Heritage Caucus
2018	Working Group for the Development of a UD Graduate College
2019	Member, Search Committee for Senior Associate Dean of Nursing, School of Nursing, College of Health Sciences, University of Delaware, Newark, DE
2019-2022	Steering Committee Member, Middle States Commission on Higher Education Self-Study Steering Committee, University of Delaware
2020	Taskforce for Learning Goals & Assessment, University of Delaware
2021-2025	Co-Chair, UD African Heritage Caucus
2023-2025	Member, Provost's Advisory Council on the Cochrane Scholar's Program
2023-2025	Faculty Search Committee, Department of Physical Therapy, University of Delaware, Newark, DE

Manuscript Reviewer

2004-Present *Archives of Physical Medicine and Rehabilitation*
2004-Present *Journal of Gerontology: Medical Sciences*
2005-Present *Geriatric Nursing*
2006-Present *Pain*
2006-Present *Physical Therapy*
2007-Present *Pain Medicine*
2007-Present *Arthritis Care and Research*

Editorial Board Membership

2005-2016 *Journal of Gerontology, Medical Sciences*
2009-Present *Pain Medicine*—Pain and Aging Section
2016-2019 *Physical Therapy Journal*
2017-Present Associate Editor, *Journal of Gerontology, Medical Sciences*
2024-Present Associate Editor, *Physical Therapy & Rehabilitation Journal*

Appointments, Study Sections, Advisory Boards and Data Safety Monitoring Boards

2008	University of Pittsburgh Claude Pepper Older American's Independence Center Grant Reviewer
2009	NIH-NIAMS Special Emphasis Panel, April 2009
2010	Ad Hoc Reviewer, Neurological, Aging, Musculoskeletal Epidemiology NIH Study Section, February 2010
2011	Member Conflict Special Emphasis Panel, ZRG1 PSE-M (03), May 2011
2011-2016	Data Safety & Monitoring Board, Optimizing Care for Older Adults with Low Back Pain and Depression (NIA 5R01AG033575-02, PI: JF Karp)
2011	Ad Hoc Reviewer, Musculoskeletal Rehabilitation Science NIH Study Section, 10/14/2011
2012-2013	Member, Scientific Review Committee for the Foundation for Physical Therapy
2012	Ad Hoc Reviewer, Neurological, Aging, Musculoskeletal Epidemiology NIH Study Section, 10/11/2012
2013	Ad Hoc Reviewer, Musculoskeletal Rehabilitation Science NIH Study Section, 6/2013
2013	Mail Reviewer, Musculoskeletal Rehabilitation Science NIH Study Section and Aging and Geriatric Systems Study Section, Fall 2013
2013-2019	Data Safety & Monitoring Board, Fibromyalgia Activity Study with TENS (NIAMS UM1 AR063381, PI: K Sluka)

2013-2023	Executive Committee, Comprehensive Opportunities in Rehabilitation Research Training (CORRT) Multicenter Career Development Program for Physical and Occupational Therapy
2014	Chair, Scientific Review Committee, Foundation for Physical Therapy
2015	Ad Hoc Reviewer, Musculoskeletal Rehabilitation Science NIH Study Section, 6/2015
2015-2019	Advisory Committee Member, National Advisory Board on Medical Rehabilitation Research, NIH
2016-2017	Invited Member, Federal Pain Research Strategy Working Group on Prevention of Acute and Chronic Pain, NIH and Interagency Pain Research Coordinating Committee
2016-Present	External Advisory Board, University of Pittsburgh Epidemiology of Aging Training Grant (T32 AG000181)
2017-2018	Chair, National Advisory Board on Medical Rehabilitation Research, NIH
2018	Ad Hoc Reviewer, Neurological, Aging, Musculoskeletal Epidemiology NIH Study Section, 06/2018
2019-2023	Chartered Member, Neurological, Aging, Musculoskeletal Epidemiology NIH Study Section & Aging, Injury, Musculoskeletal and Rheumatologic Disorders Study Section, Center for Scientific Review
2020	Co-Chair for the Emotion Behavior Neuropsychology Subgroup, NINDS/NICHD Common Data Elements (CDEs) Working Group for the Rehabilitation CDE Project
2021	Distinguished Guest Discussant, Performance Improvement Presentations for Graduating DPT Class of 2021, University of Pittsburgh
2021-Present	Chair, External Advisory Committee, Center for Pacific Innovations, Knowledge, and Opportunities (PIKO) [Hawaii CTR: NIH U54GM138062]
2022-Present	Executive Committee, Training in Grantsmanship for Rehabilitation Research [TIGRR: NIH R25HD074546]
2023-2024	Member, NIAMS Clinical Trials Working Group
2023	Ad Hoc Reviewer, NICHD T32 Special Emphasis Panel (ZHD1 DSR-R), 11/2023
2023-Present	External Advisory Committee, Delaware State University's Interdisciplinary Health Equity Research (NIMHD, RCMI Award)
2024	Editorial Board Reviewer, NIH Director's Early Independence Award (DP5) Program, March 2024

2024-Present Advisory Board, Rehabilitation Medicine Scientist Training Program [RMTSP: NIH R25HD098048]

2025 Ad Hoc Reviewer, NIGMS CTR-D/CTR-N Special Emphasis Panel, 3/2025

Students and Trainees

Advisor

(Complete) J. Megan Sions	PhD Biomechanics & Movement Sciences, University of Delaware
(Complete) Victoria Allen	PhD Applied Physiology, University of Delaware
(Complete) Peter Coyle	PhD Biomechanics & Movement Sciences, University of Delaware
(Complete) Patrick Knox	PhD Biomechanics & Movement Sciences, University of Delaware
(Current) Felix Marechal	PhD Biomechanics & Movement Sciences, University of Delaware

Committee

(Complete) Hayley Smitheman	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Karin Silbernagel
(Complete) Allison Miller	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Darcy Reisman
(Complete) Emma Beisheim	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: J. Megan Sions
(Complete) Jessica Galgiani	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Susanne Morton
(Complete) Dana Matthews	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Daniel White
(Complete) Hiral Master	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Daniel White
(Complete) Marissa Scibilia	PhD Nursing Science, University of Delaware Advisor: Ingrid Pretzer-Aboff
(Complete) Catherine Schmidt	PhD Rehabilitation Sciences, MGH Institute of Health Professions Advisor: Jonathan Bean
(Complete) Won Sung	PhD Rehabilitation Sciences, Drexel University Advisor: Sheri Silfies
(Complete) Portia Flowers	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Joseph Zeni and Lynn Snyder-Mackler
(Complete) Sumayeh Abujaber	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Joseph Zeni and Lynn Snyder-Mackler
(Complete) Scott Biely	PhD Rehabilitation Sciences, Drexel University Advisor: Sheri Silfies
(Complete) Valerie Sabol	PhD Nursing, University of Maryland, Baltimore Advisor: Barbara Resnick
(Complete) Chris D'Adamo	PhD Epidemiology, University of Maryland, Baltimore Advisors: Michelle Shardell and Ram Miller
(Complete) Stephanie DiStasi	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Lynn Snyder-Mackler
(Complete) David Logerstedt	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Lynn Snyder-Mackler
(Complete) Margie Roos	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Katherine Rudolph
(Complete) Andrew Lynch	PhD Biomechanics & Movement Sciences, University of Delaware Advisor: Lynn Snyder-Mackler
(Complete) Peemongkon Wattananon	PhD Rehabilitation Sciences, Drexel University Advisor: Sheri Silfies

Mentor

J. Megan Sions	Post-Doctoral Fellow
----------------	----------------------

Gali Dar	Post-Doctoral Fellow
Joseph Zeni	NIH K-12 Scholar
Daniel White	NIH K-12 Scholar
Corey Simon	Duke Pepper Center Scholar

Grant Support

Ongoing Research

U54GM104941C (Hicks)	9/25/2013 - 6/30/2028	4.10 acad, 1.00 summer
NIH/NIGMS	Direct—\$20,000,000	

Delaware Clinical and Translational Research ACCEL Program

The overall goal of the ACCEL Program remains to provide the key components to allow growth in strategic areas to improve the health of the citizens of Delaware and the nation
Role: PI

T32HD007490E (Reisman)	5/1/2020 - 4/30/2025	0.70 academic
NIH	\$203,448	

NIH RENEWAL PT/PHD PREDOCTORAL TRAINING PROGRAM

The goal of this pre-doctoral training program is to continue to improve the quality and quantity of individuals who will contribute to the knowledge and evidence that drives best practice in physical rehabilitation.
Role: Co-Investigator

R01AG071585 (Morton)	2/1/2022 - 1/31/2027	1.2 academic
NIH/NIA	Direct—\$504,778	

Pain and Motor Learning in Older Adults

The purpose of this project will be to thoroughly examine the effects of pain on motor learning processes in young and older adults with and without chronic pain.
Role: Co-I

R25HD109110 (Hicks/Skidmore)	9/1/2022 – 8/31//2027	0.60 academic
NIH/NICHHD	Direct—\$341,743	

Turning the TiDe: Training Diverse Clinical Scientists in Rehabilitation Research

The overall goal is to build a pipeline of diverse rehabilitation scientists who will improve our capacity to address issues of health inequity in rehabilitation care.
Role: MPI

R25HD1103555 (Field-Fote/Hicks)	4/2023 - 3/2028	0.60 academic
NIH/NICHHD	Direct—\$372,125	

Intensive Rehabilitation Research Grant Writing Workshops in the United States (TIGRR)

The goal of the proposed program is to develop a cadre of well-trained, rehabilitation researchers whose expertise will foster better rehabilitation research. Importantly, we will work to increase the representation of women, persons with disability, and underserved minorities. We will utilize a yearlong research education experience that includes an intensive grant writing program that uses TIGRR workshops as the centerpiece.
Role: Executive Committee

Pending

Completed

R01AG041202 (Hicks) 9/1/2018 - 5/31/2023 (NCE thru 5/2025) 3.78 academic
NIH/NIA Direct—\$4,303,347

Chronic Low Back Pain in Older Adults: The Role of Co-Existing Hip Impairments

The long-term goal of this line of research is to develop and test a standardized rehabilitation approach for older adults with chronic LBP that is specifically designed to optimize mobility function by addressing pain and the unique impairments identified during the initial funding period of this grant

Role: PI

5K12HD055931-14 (Mueller) 9/1/2020 - 12/31/2023 1.00 academic
UW/NIH Sub-Contract—\$31,000

Multicenter Career Development Program for Physical & Occupational Therapy

Comprehensive Opportunities in Rehabilitation Research Training (CORRT) is a Multicenter Career Development Program for Physical and Occupational Therapists. It provides funding for new investigators to acquire the research skills necessary to become independent investigators in rehabilitation approaches.

Role: Site PI

R01NR018684-01 (Tulsky) 7/22/2020 - 6/30/2021 0.60 academic
NIH \$249,199

Measuring Symptom Clusters in People with Sudden-Onset Disabilities (Supplement)

The work proposed with this administrative supplement is needed to evaluate the generalizability of the symptom clusters identified in parent grant Aim 1 to a mild cognitive impairment (MCI)/Alzheimer's disease (AD) population. Additionally, this will allow us to develop resources and collect pilot data to support an application for funding to study symptom clusters in MCI and AD.

Role: Co-Investigator

R03 HD088668 (J.M. Sions) 04/01/2017-03/31/2019 0.60 calendar (5%)
NICHD \$100,000 – Direct \$156,000 - Total Cost

Trunk Muscle Characteristics and their Association with Balance, Function, and Participation among Individuals with Amputations

This study will allow us to determine whether trunk muscle impairments and asymmetries are associated with the presence of a unilateral lower limb amputation (LLA), as well as balance, physical function, and societal participation among individuals with LLAs.

Role on Project: Co-Investigator

1R01AG048069-01 (J. Guralnik) 9/30/15—4/30/19 1.2 calendar (10%)
NIA \$974,160 – Direct \$1,427,012 - Total Cost

Statistical Methods for Vitamin D Targets for Functional Outcomes in Older Adults

The purpose of this project is to identify and validate 25-hydroxyvitamin D targets for falls reduction, mobility, activities of daily living, and instrumental activities of daily living (functional outcomes); and gait speed, muscle strength, and frailty (proximal conditions) using 4 prospective cohort studies comprising >12,500 older adults: Health, Aging, and Body Composition, Invecchiare in Chianti, Osteoporotic Fractures in Men, and Study of Osteoporotic Fractures.

Role on Project: Co-Investigator

1R01AG041202 (G. Hicks) 8/01/12—6/31/18 3.6 calendar (30%)
NIA \$1,600,065 – Direct \$2,338,160 - Total Cost
Chronic Low Back Pain in Older Adults: The Role of Co-Existing Hip Impairments
The purpose of this project is to examine the impact of co-existing clinical hip impairments on spinal pain and functional limitations in older adults with chronic low back pain using a longitudinal cohort design.
Role on Project: Principal Investigator

4R37 AG009901-05 (J. Magaziner) 8/1/11 - 6/30/16 0.60 calendar (5%)
NIA \$4,781,737 – Direct \$7,205,844 - Total Cost
Effects of Multi-Modal Exercise Intervention Post Hip Fracture
The primary goals proposed for this study are: (1) to study some of the key mechanisms on the pathway to changes in community ambulation in response to a Multi-modal Exercise Intervention (MMEI); and (2) test, in a preliminary manner through a pilot/feasibility study of a different sample of patients, the additional benefit of adding a protein supplement following MMEI sessions to determine if there are important changes in bone, muscle, inflammation, and function.
Role on Project: Co-Investigator

2R01 AR048212-06 (L. Snyder-Mackler) 12/01/10—11/30/15 0.60 calendar (5%)
NIAMS
Can Neuromuscular Training Alter Movement Patterns?
The goal of this application is to continue to examine outcomes of specialized neuromuscular and muscle strength training that may prevent post-traumatic osteoarthritis (OA), to obtain preliminary information about who has the potential to develop early signs of OA, and develop strategies to prevent structural changes in the joints of these individuals.
Role on Project: Co-Investigator

No number (G. Hicks) 2012-2013 Academic Year
University of Delaware, President's Diversity Initiative Award. \$40,000
Development of the ADaPT Program (Advancing Diversity in Physical Therapy). A jointly sponsored program between the Departments of Physical Therapy and Kinesiology & Applied Physiology to develop a mentoring program, undergraduate research program and a new bridge course in anatomy as a means of attracting a more diverse group of students into the College of Health Sciences and the nationally ranked doctoral program in PT.
Role on Project: Principal Investigator

No number (G. Hicks) 11/08—12/12
University of Delaware,
Cross College Cluster in Aging Initiative Research on Aging Grant. \$20,000
Funding to supplement ongoing project "Mechanisms of Disability in Older Adults with Chronic Low Back Pain."
Role on Project: Principal Investigator

No number (G. Hicks) 12/01/10—09/30/12
University of Delaware Research Foundation, Inc. \$45,000
The Effectiveness of Hip-Focused Treatment for Older Adults with Chronic Low Back Pain
The purpose of this project is to examine the effectiveness of typical spine-focused physical therapy augmented by manual therapy and exercise focused on the hip, to reduce pain and

improve functional capacity of older adults with chronic low back pain. This work will serve to collect pilot data for future randomized trials on this topic

Role: Principal Investigator

1 R21 HD057274-01 (G. Hicks) 07/01/08—1/31/12 1.8 calendar (15%)
NICHD \$420,750

Trunk Muscle Training + NMES: Improving Function in Elders with Chronic Back Pain

The purpose of this project is to examine the effectiveness of trunk muscle training, both volitionally and augmented by neuromuscular electrical stimulation, to reduce pain and improve functional capacity of older adults with chronic low back pain. This study also proposes to examine changes in trunk muscle composition with this intervention via MRI.

Role on Project: Principal Investigator

R01 AG029315 (J. Magaziner/M. Hochberg) 03/01/07—02/29/12 0.60 calendar (5%)

NIA \$531,495

The Epidemiology of Bone Strength and Muscle Composition After Hip Fracture in Men

This ancillary study is designed to extend the investigation of the hip fracture consequences further by examining trajectories of change in bone strength, bone metabolism, muscle composition, hormones, and markers of inflammation following hip fracture, and by comparing these changes in men and women during the year following a hip fracture.

Role: Co-Investigator and Rehabilitation Scientist

P20 RR16458 (T. Buchanan) 01/05/09—5/31/10
NCRR \$50,000

Functional Recovery after Lumbar Spinal Stenosis Surgery: A Preliminary Study

The pilot project is funded by the Center of Biomedical Research Excellence at the University of Delaware. The purpose of the project is to examine the role of muscle impairments in the recovery of function after surgery for lumbar spinal stenosis.

Role on Project: Principal Investigator

R37 AG009901 (J. Magaziner/M. Hochberg) 03/15/05—02/28/10 0.60 calendar (5%)

NIA \$679,691

Sequelae of Hip Fracture in Men: An Epidemiologic Study

The primary aims of the proposed study are: 1) to describe the trajectories of components of bone strength, including bone mineral density, ultrasound properties, and bone geometry in men with hip fractures during the year after fracture and contrast this with these components in women with hip fractures; 2) to describe the trajectories of other aspects of non-bone components of body composition, including muscle and fat mass in men during the year after hip fracture and to contrast these with observations in women; 3) to describe the trajectories of physical activity, neuromuscular function, and functional performance in men and to compare these to trajectories observed in women during the year after fracture.

Role: Co-Investigator and Rehabilitation Scientist

1K12HD055931-01 (M. Mueller) 01/01/08—12/31/09 9.0 calendar (75%)
NICHD

Multicenter Career Development Program for Physical and Occupational Therapy
(Comprehensive Opportunities in Rehabilitation Research Training-CORRT)

The overall goal of this proposal is to establish a Multicenter Physical Therapy and Occupational Therapy Career Development Program (PT/OT CDP) designed to provide new investigators with the skills needed to lead research programs that validate

rehabilitation approaches, optimize treatments, and incorporate new technologies to maximize the potential of all people.

Role: Faculty Scholar

No number (G. Hicks) 06/01/07—05/31/08 1.0 calendar
University of Delaware Research Foundation, Inc. \$25,000
Trunk Muscle Training to Improve Function in Older Adults with Chronic Low Back Pain: A Pilot Trial

The purpose of this project is to examine the effectiveness of trunk muscle training augmented by neuromuscular electrical stimulation, to reduce pain and improve functional capacity of older adults with chronic low back pain. This work will serve to collect pilot data for future randomized trials on this topic

Role: Principal Investigator

K12 HD42489 (P. Langenberg) 07/01/05—01/31/07 9.0 calendar 75%
NICHD

Maryland's Organized Research Effort in Women's Health (MORE-WH)
(Building Interdisciplinary Research Careers in Women's Health)

This program is designed to foster interdisciplinary research in women's health among junior faculty scholars working together with senior faculty mentors to bridge the gap between specialized training and independent research careers.

Role: Faculty Scholar

No number (G. Hicks) 07/01/05—06/30/06
UMB School of Medicine \$15,000

Antioxidants and Functional Performance in Hip Fracture Patients

The purpose of this project is to measure serum levels of antioxidants in stored serum samples collected from patients in one of the Baltimore Hip Studies cohorts at the baseline clinic visit to evaluate their predictive value for functional capacity in older persons at six and twelve months post-hip fracture.

Role: PI

Publications

Refereed Journals:

1. Fritz JM, Wainner RS, Hicks GE. The Use of Non-Organic Signs and Symptoms as a Screening Tool for the Development of Chronicity in Patients with Acute Low Back Pain. *Spine* 25(15):1925-31, 2000
2. George SZ, Hicks GE, Vogt MT, Nevitt MA, Cauley JA. The Relationship Between Lumbar Lordosis and Radiological Variables and Lumbar Lordosis and Clinical Variables in Older, African-American Women. *Journal of Spinal Disorders and Techniques* 16(2):200-6, Apr 2003
3. Childs JD, Piva SR, Erhard RE, Hicks G. Side-to-side weight-bearing asymmetry in patients with low back pain. *Manual Therapy* 8(3):166-9, Aug 2003.
4. Piva SR, Erhard RE, Childs JD, Hicks G. Reliability of measuring iliac crest height in standing and in sitting positions using a new measurement device. *Journal of Manipulative and Physiologic Therapeutics* 26(7):437-41, Sept 2003

5. Hicks GE, Fritz JM, Delitto A, Mishock J. Interrater Reliability of Clinical Examination Measures for Identification of Lumbar Segmental Instability. *Archives of Physical Medicine and Rehabilitation* 84:1858-64, Dec 2003
6. Hicks GE, Simonsick EM, Harris TB, Newman AB, Weiner D, Nevitt M, Tylavsky F. Cross-sectional Associations Between Trunk Muscle Composition, Back Pain and Physical Function in the Health ABC Study. *J Gerontol A Biol Sci Med Sci*. 2005 Jun; 60(7):882-7
7. Hicks GE, Fritz JM, Delitto A, McGill SM. Preliminary Development of a Clinical Prediction Rule for Determining Which Patients with Low Back Pain will Respond to a Stabilization Exercise Program. *Archives of Physical Medicine and Rehabilitation*. 2005 Sep; 86(9):1753-62.
8. Hicks GE, Simonsick EM, Harris TB, Newman AB, Weiner D, Nevitt M, Tylavsky F. Trunk Muscle Composition as a Predictor of Physical Function in the Health ABC Study: The Moderating Role of Back Pain. *J Gerontol A Biol Sci Med Sci*. 60(11):1420-4, November 2005
9. Ericksen JJ, Bean JF, Kiely D, Hicks GE, Leveille SG. Does gynecological surgery contribute to low back problems in later life? An analysis of the Women's Health and Aging Study. *Archives of Physical Medicine and Rehabilitation*. 2006 Feb;87(2):172-6.
10. Cecchi F, Debolini P, Lova RF, Macchi C, Bandinelli S, Bartali B, Lauretani F, Benvenuti E, Hicks G, Ferrucci L. Epidemiology of Back Pain in a Representative Cohort of Italian Persons Aged 65 and Older: The InCHIANTI Study. *Spine*. 2006 May 1;31(10):1149-55.
11. Hicks GE, George SZ, Vogt MT, Nevitt MA, Cauley JA. Measurement of Lumbar Lordosis: Inter-Rater Reliability, Minimum Detectable Change and Longitudinal Variation. *Journal of Spinal Disorders and Techniques*. 2006 Oct;19(7):501-6.
12. Miller RR, Hicks GE, Shardell MD, Cappola AR, Hawkes WG, Yu-Yahiro JA, Keegan A, Magaziner J. Association of Serum Vitamin D Levels with Inflammatory Response Following Hip Fracture * The Baltimore Hip Studies. *J Gerontol A Biol Sci Med Sci*. 2007 62: 1402-1406.
13. Hicks GE, Shardell MD, Miller RR, Bandinelli S, Guralnik JM, Cherubini A, Lauretani F, Ferrucci L. Associations between vitamin D status and pain in older adults: The InCHIANTI study. *Journal of the American Geriatrics Society*. 2008 Mar 5; [Epub ahead of print]
14. Miller RR, Shardell MD, Hicks GE, Cappola AR, Hawkes WG, Yu-Yahiro JA, Magaziner J. Association of Interleukin-6 with Lower Extremity Function Following Hip Fracture: The Role of Muscle Mass and Strength. *Journal of the American Geriatrics Society*. 2008 Jun;56(6):1050-6. Epub 2008 Apr 11.
15. Hicks GE, Gaines JM, Shardell MD, Simonsick EM. Associations of back and leg pain with health status and functional capacity of older adults: Findings from the

Retirement Community Back Pain Study. *Arthritis Rheum*. 2008 Aug 29;59(9):1306-1313. [Epub ahead of print]

16. Shardell M, Hicks GE, Miller RR, Kritchevsky S, Andersen D, Bandinelli S, Cherubini A, Ferrucci L. Association of low vitamin D levels with the frailty syndrome in men and women. *J Gerontol A Biol Sci Med Sci*. 2009 Jan 20. [Epub ahead of print]
17. Hicks GE and Manal TJ. Psychometric properties of commonly used low back disability questionnaires: Are they useful for older adults with low back pain? *Pain Med* 2009 Jan;10(1):85-94.
18. Yu-Yahiro J, Resnick B, Orwig D, Hicks G, Magaziner J. Design and Implementation of a Home-Based Exercise Program Post-Hip Fracture: The Baltimore Hip Studies Experience. *PM&R* 2009 April; 1(4):308-18.
19. Hicks GE, Morone N, Weiner DK. Degenerative lumbar disc and facet disease in older adults: prevalence and clinical correlates. *Spine*. 2009 May 20;34(12):1301-1306.
20. Miller RR , Ballew S, Shardell M, Hicks GE, Resnick B, Hawkes W, Magaziner J. Repeat Falls and the Recovery of Social Participation in the Year Post Hip Fracture. *Age and Ageing*. 2009 Jul 8. [Epub ahead of print]
21. Sabol V, Resnick B, Galik E, Gruber-Baldini A, Morton PG, Hicks GE. Anemia and Impact on Function in Nursing Home Residents: What Do We Know? *J Am Acad Nurse Pract*. 2010 Jan;22(1):3-16. PMID: 20074191
22. Resnick B, Hicks GE, Orwig D, Yu-Yahiro J, Magaziner J. Review of the Impact of Exercise Interventions on Function Post Hip Fracture and Recommendations for Future Interventions. *International Journal of Disability, Community and Rehabilitation*. 2010; 9(1).
23. Shardell M, Hicks GE, Miller RR, Langenberg P, Magaziner J. Pattern-mixture models for analyzing normal outcome data with proxy respondents. *Statistics in Medicine*. 2010 June 30; 29(14):1522-38. PMID: 20535763
24. Shardell M, Hicks GE, Miller RR, Magaziner J. Semiparametric regression models for repeated measures of mortal cohorts with non-monotone missing outcomes and time-dependent covariates. *Statistics in Medicine*. 2010 Jun 18. [Epub ahead of print] PMID: 20564729
25. Sabol V, Resnick B, Galik E, Gruber-Baldini A, Morton PG, Hicks GE. Anemia Evaluation and Management in Nursing Home Residents. *West J Nurs Res*. 2010 Jun;32(4):447-61. PMID: 20685904
26. Sabol V, Resnick B, Galik E, Gruber-Baldini A, Morton PG, Hicks GE. Exploring the Factors that Influence Functional Performance Among Nursing Home Residents. *J Aging Health*. 2011 Feb;23(1):112-34. Epub 2010 Oct 4. PMID: 20921327

27. Kesar T, Binder-Macleod SA, Hicks GE, Reisman DS. Minimum detectable change for gait variables collected during treadmill walking in individuals post-stroke. *Gait Posture*. 2011 Feb; 33(2):314-7. Epub 2010 Dec 22. PMID: 21183350
28. Sions JM, Hicks GE. Fear avoidance beliefs are associated with disability in older American adults with low back pain. *Phys Ther*. 2011 Apr;91(4):525-34. Epub 2011 Feb 24. PMID:21350033
29. Shardell M, Alley D, Hicks GE, El-Kamary SS, Miller RR, Semba RD, Ferrucci L. Low-serum carotenoid concentrations and carotenoid interactions predict mortality in US adults: the Third National Health and Nutrition Examination Survey. *Nutrition Research* 2011 Mar;31(3):178-89. PMID: 21481711
30. D'Adamo CR, Shardell MD, Hicks GE, Orwig DL, Hochberg MC, Semba RD, Yu-Yahiro, JA, Ferrucci L, Magaziner J, Miller RR. Serum vitamin E concentrations among highly-functioning hip fracture patients are higher than in non-fracture controls. *Nutrition Research* 2011 Mar;31(3):205-14. PMID: 21481714
31. D'Adamo CR, Miller RR, Hicks GE, Orwig DL, Hochberg MC, Semba RD, Yu-Yahiro, JA, Ferrucci L, Magaziner J, Shardell MD. Serum vitamin E concentrations and recovery of physical function during the year after hip fracture. *J Gerontol A Biol Sci Med Sci*. 2011 Jul;66(7):784-93. PMID: 21486921
32. Hicks GE. Invited Commentary on "Low inter-rater reliability of examiners performing the prone instability test, a clinical test for lumbar shear instability." *Arch Phys Med Rehabil*. 2011 Jun; 92(6):920-2. PMID: 21621669.
33. Alley DE, Hicks GE (Alternate Corresponding Author), Shardell MD, Hawkes W, Miller RR, Craik RL, Mangione KK, Orwig DL, Hochberg MC, Resnick B, Magaziner J. Meaningful improvement in gait speed in hip fracture recovery. *J Amer Geriatr Soc*. 2011 Sep;59(9):1650-7. PMID: 21883109
34. Hicks GE, Shardell MD, Alley DE, Miller RR, Bandinelli S, Guralnik JM, Lauretani F, Simonsick EM, Ferrucci L. Absolute strength and loss of strength as predictors of mobility decline in older adults: The InCHIANTI study. *J Gerontol A Biol Sci Med Sci*. 2012 Jan;67(1):66-73.. PMID: 21546582
35. Hicks GE, Benvenuti B, Fiaschi V, Lombardi B, Segenni L, Stuart M, Pretzer-Aboff I, Gianfranco G, Macchi C. Adherence to a community-based exercise program is a strong predictor of improved back pain status in older adults: An observational study. *Clin J Pain*. 2012 Mar-Apr;28(3):195-203. PMID:21750458
36. Katzman W, Cawthon P, Hicks GE, Vittinghoff E, Shepherd J, Cauley JA, Harris TB, Simonsick EM, Strotmeyer E, Womak C, Kado DM. The relationship between spinal muscle composition and prevalence of hyperkyphosis in healthy community-dwelling older men and women. *J Gerontol A Biol Sci Med Sci*. 2012 Feb;67(2):191-5. PMID: 21878482
37. Shardell M, Alley DE, Miller RR, Hicks GE, Magaziner J. Comparing reports from hip-fracture patients and their proxies: implications on evaluating sex differences in

disability and depressive symptoms. *J Aging Health*. 2012 Apr;24(3):367-83. PMID: 22210805

38. Shardell M, D'Adamo C, Alley DE, Miller RR, Hicks GE, Milaneschi Y, Semba RD, Cherubini A, Bandinelli S, Ferrucci L. Serum 25-Hydroxyvitamin D, Transitions between Frailty States, and Mortality among Older Adults: The Invecchiare in Chianti Study. *J Amer Geriatr Soc*. 2012 Feb;60(2):256-64. PMID:22283177
39. D'Adamo CR, Miller RR, Shardell MD, Orwig DL, Hochberg MC, Ferrucci L, Semba RD, Yu-Yahiro JA, Magaziner J, Hicks GE. Higher serum concentrations of dietary antioxidants are associated with lower levels of inflammatory biomarkers during the year after hip fracture. *Clin Nutr*. 2012 Oct;31(5):659-65. PMID: 22365613
40. Shardell M, Simonsick EM, Hicks GE, Resnick B, Ferrucci L, Magaziner J. Sensitivity Analysis for Nonignorable Missingness and Outcome Misclassification from Proxy Reports in Aging Research. *Epidemiology*. 2013 Mar;24(2):215-23. PMID:23348065
41. Lynch AD, Logerstedt DS, Grindem H, Eitzen I, Hicks GE, Axe MJ, Enerbretsen L, Risberg MA, Snyder-Mackler L. Consensus criteria for defining 'successful outcome' after ACL injury and reconstruction: A Delaware-Oslo ACL cohort investigation. *Br J Sports Med*. 2013 Jul 23. doi: 10.1136/bjsports-2013-092299. [Epub ahead of print] PMID: 23881894
42. Biely SA, Silfies SA, Smith SS, Hicks GE. Clinical Observation of Standing Trunk Movements: What do the Aberrant Movement Patterns Tell Us? *J Orthop Sports Phys Ther*. 2014 Jan 22. [Epub ahead of print] PMID: 24450372
43. Sions JM, Velasco TO, Teyhen DS, Hicks GE. Ultrasound Imaging: Intra- and Inter-Examiner Reliability for Multifidus Muscle Thickness Assessment in Adults Aged 60-85 Years versus Younger Adults. *J Orthop Sports Phys Ther*. 2014 Jun;44(6):425-34. doi: 10.2519/jospt.2014.4584. Epub 2014 Apr 25. PMID: 24766356
44. Sions JM, Velasco TO, Teyhen DS, Hicks GE. Reliability of Ultrasound Imaging for the Assessment of Lumbar Multifidi Thickness in Older Adults with Chronic Low Back Pain. *J Geriatr Phys Ther*. 2015 Jan-Mar;38(1):33-9. doi: 10.1519/JPT.0000000000000021. PMID: 24743751
45. Shardell M, Hicks GE. Statistical analysis with missing exposure data measured by proxy respondents: a misclassification problem within a missing-data problem. In press: *Statistics in Medicine*. 2014 Jun 17. [Epub ahead of print] PMID: 24935824
46. Shardell M, Hicks GE, Ferrucci L. Doubly robust estimation and causal inference in longitudinal studies with dropout and truncation by death. *Biostatistics*. 2015 Jan;16(1):155-68. doi: 10.1093/biostatistics/kxu032. Epub 2014 Jul 4. PMID: 24997309
47. Shardell M, Semba RD, Kalyani RR, Hicks GE, Bandinelli S, Ferrucci L. Serum 25-Hydroxyvitamin D, Plasma Klotho, and Lower-Extremity Physical Performance Among Older Adults: Findings From the InCHIANTI Study. *J Gerontol A Biol Sci*

Med Sci. 2015 Sep;70(9):1156-62. doi: 10.1093/gerona/glv017. Epub 2015 Mar 7. PMID: 25748032

48. Miller RR, Eastlack M, Hicks GE, Alley DE, Shardell M, Orwig D, Goodpaster B, Chomentowski P, Hawkes W, Hochberg M, Ferrucci L, Magaziner J. Asymmetry in CT scan measures of thigh muscle 2 months after hip fracture: The Baltimore Hip Studies. *J Gerontol A Biol Sci Med Sci*. 2015 Jun; 70(6):753-6. doi: 10.1093/gerona/glr188. PMID: 25958401
49. Dar G, Hicks GE. The immediate effect of dry needling on multifidus muscles' function in healthy individuals. *J Back Musculoskelet Rehabil*. 2015 Sep 6. [Epub ahead of print] PMID: 26406203
50. Resnick B, Gruber-Baldini AL, Hicks G, Ostir G, Klinedinst NJ, Orwig D, Magaziner J. Measurement of Function Post Hip Fracture: Testing a Comprehensive Measurement Model of Physical Function. *Rehabil Nurs*. 2015 Oct 23. doi: 10.1002/rnj.235. [Epub ahead of print] PMID: 26492866
51. Coyle PC, Sions JM, Velasco TO, Hicks GE. Older adults with chronic low back pain: A clinical population vulnerable to frailty? *J Frailty Aging*. 2015; 4(4):188-90. doi: 10.14283/jfa.2015.75. PMID: 27031017
52. Sions JM, Teyhen DS, Hicks GE. Criterion Validity of Ultrasound Imaging: Assessment of Multifidi Cross-Sectional Area in Older Adults with and without Low Back Pain. *J Geriatr Phy Ther*. 2015 Dec 23. [Epub ahead of print] PMID: 26703525
53. Hicks GE, Sions JM, Velasco TO, Manal TJ. Trunk Muscle Training Augmented with Neuromuscular Electrical Stimulation Appears to Improve Function in Older Adults with Chronic Low Back Pain: A Randomized Preliminary Trial. *Clin J Pain*. 2016 Jan 5. [Epub ahead of print] PMID: 26736024
54. Sions JM, Smith AC, Hicks GE, Elliott, JM. Trunk Muscle Size and Composition Assessment in Older Adults with Chronic Low Back Pain: An Intra-examiner and Inter-examiner Reliability Study. *Pain Med*. 2015 Dec 7. pii: pnv023. [Epub ahead of print] PMID: 26814258
55. Rathbun AM, Shardell M, Orwig D, Hebel JR, Hicks GE, Beck T, Hochberg MC, Magaziner J. Differences in the Trajectory of Bone Mineral Density Change Measured at the Total Hip and Femoral Neck Between Men and Women Following Hip Fracture. *Arch Osteoporos*. 2016; 11:9. doi: 10.1007/s11657-016-0263-6. Epub 2016 Feb 4. PMID: 26847627
56. Resnick B, Klinedinst NJ, Yerges-Armstrong L, Magaziner J, Orwig D, Hochberg MC, Gruber-Baldini AL, Hicks GE, Dorsey SG. Pain, Genes and Function in the Post-Hip Fracture Period. *Pain Manag Nurs*. 2016 Jun;17(3):181-96. doi: 10.1016/j.pmn.2016.03.003. PMID: 27283266
57. Sions JM, Hicks GE. Back Stiffness is Associated with Physical Health and Low Back Pain-Related Disability in Community-Dwelling Older Adults. *Pain Med*. 2016 Jun 10. pii: pnw107. [Epub ahead of print] PMID:27288949

58. Roos MA, Reisman DS, Hicks G, Rose WC, Rudolph KS. Development of the modified Four Square Step Test and its reliability and validity in people with stroke. *J Rehabil Res Dev*. 2016;53(3):403-12. doi: 10.1682/JRRD.2014.04.0112. PMID: 27271003
59. Coyle PC, Sions JM, Velasco TO, Hicks GE. Lumbar mobility and performance-based function: an investigation in older adults with and without chronic low back pain. *Pain Med*. 2016 Jun 26. pii: pnw136. [Epub ahead of print] PMID: 27346888
60. Gill SV, Hicks GE, Zhang Y, Niu J, Apovian CM, White DK. The association of waist circumference with walking difficulty among adults with or at risk of knee osteoarthritis: the Osteoarthritis Initiative. *Osteoarthritis Cartilage*. 2016 Aug 1. pii: S1063-4584(16)30197-2. doi: 10.1016/j.joca.2016.07.011. [Epub ahead of print] PMID: 27492464
61. Rathbun AM, Shardell M, Orwig D, Hebel JR, Hicks GE, Beck TJ, Magaziner J, Hochberg MC. Difference in the trajectory of change in bone geometry as measured by hip structural analysis in the narrow neck, intertrochanteric region, and femoral shaft between men and women following hip fracture. *Bone*. 2016 Aug 26;92:124-131. doi: 10.1016/j.bone.2016.08.020. [Epub ahead of print] PMID:27569519
62. Sions JM, Coyle PC, Velasco TO, Elliott JM, Hicks GE. Multifidi Muscle Characteristics and Physical Function among Older Adults with and without Chronic Low Back Pain. *Arch Phys Med Rehabil*. 2016 Aug 30. pii: S0003-9993(16)30903-0. doi: 10.1016/j.apmr.2016.07.027. [Epub ahead of print] PMID: 27590444
63. Rathbun AM, Shardell M, Orwig D, Gruber-Baldini AL, Ostir G, Hicks GE, Miller RR, Hochberg MC, Magaziner J. Effects of prefracture depressive illness and postfracture depressive symptoms on physical performance after hip fracture *J Am Geriatr Soc*. 2016 Sept 27. doi: 10.1111/jgs.14487. [Epub ahead of print] PMID:27673273
64. Sions JM, Elliott JM, Pohlig RT, Hicks GE. Trunk Muscle Characteristics of the Multifidi, Erector Spinae, Psoas and Quadratus Lumborum in Older Adults with and without Chronic Low Back Pain. *J Orthop Sports Phys Ther*. 2017 Mar;47(3):173-179. doi: 10.2519/jospt.2017.7002. Epub 2017 Feb 3. PMID: 28158957
65. Hicks GE, Sions JM, Coyle PC, Pohlig RT. Altered Spatiotemporal Characteristics of Gait in Older Adults with and without Chronic Low Back Pain. *Gait Posture*. 2017 Apr 23;55:172-176. doi: 10.1016/j.gaitpost.2017.04.027. [Epub ahead of print] PMID: 28458149
66. Coyle PC, Schrack JA, Hicks GE. Pain Energy Model of Mobility Limitation in the Older Adult. *Pain Med*. 2018 Aug 1;19(8):1559-1569. doi: 10.1093/pm/pnx089. PubMed PMID: 28531299; PubMed Central PMCID: PMC6084583.
67. Megan Sions J, Angelica Rodriguez C, Todd Pohlig R, Evan Hicks G (names were published incorrectly on PubMed), Charles Coyle P. Epidural Fat and Its Association with Pain, Physical Function, and Disability Among Older Adults with Low Back Pain and Controls. *Pain Med*. 2017 Sep 14. doi: 10.1093/pm/pnx163. [Epub ahead of print] PMID: 29024961
68. Rathbun AM, Magaziner J, Shardell MD, Yerges-Armstrong LM, Orwig D, Hicks GE, Hochberg MC. Older men who sustain a hip fracture experience greater declines in bone mineral density at the contralateral hip than non-fractured comparators.

Osteoporos Int. 2017 Oct 24. doi: 10.1007/s00198-017-4280-0. [Epub ahead of print] PMID: 29063216

69. Hicks GE, Sions JM, Velasco TO. Hip Symptoms, Physical Performance and Health Status in Older Adults with Chronic Low Back Pain: A Preliminary Investigation. *Arch Phys Med Rehabil.* 2018 Jul;99(7):1273-1278. 2017 Oct 27. pii: S0003-9993(17)31288-1. doi: 10.1016/j.apmr.2017.10.006. [Epub ahead of print] PMID: 29111171
70. Wattananon P, Ebaugh D, Biely SA, Smith SS, Hicks GE, Silfies SP. Kinematic Characterization of Clinically Observed Aberrant Movement Patterns in Patients with Non-specific Low Back Pain: A Cross-sectional Study. *BMC Musculoskelet Disord.* 2017 Nov 15;18(1):455. doi: 10.1186/s12891-017-1820-x. PMID: 29141615
71. Simonsick EM, Aronson B, Schrack JA, Hicks GE, Jerome GJ, Patel KV, Studenski SA, Ferrucci L. Lumbopelvic Pain and Threats to Walking Ability in Well-Functioning Older Adults: Findings from the Baltimore Longitudinal Study of Aging. *J Am Geriatr Soc.* 2018 Feb 7. doi: 10.1111/jgs.15280. [Epub ahead of print] PMID: 29411349
72. Resnick B, Hebel JR, Gruber-Baldini AL, Hicks GE, Hochberg MC, Orwig D, Eastlack M, Magaziner J. The impact of body composition, pain and resilience on physical activity, physical function and physical performance at 2 months post hip fracture. *Arch Gerontol Geriatr.* 2018 Feb 15;76:34-40. doi: 10.1016/j.archger.2018.01.010. [Epub ahead of print] PMID: 29455057
73. Rathbun AM, Shardell MD, Stuart EA, Gruber-Baldini AL, Orwig D, Ostir GV, Hicks GE, Hochberg MC, Magaziner J. Persistence of depressive symptoms and gait speed recovery in older adults after hip fracture. *Int J Geriatr Psychiatry.* 2018 Feb 26. doi: 10.1002/gps.4864. [Epub ahead of print] PMID: 29480573
74. Gatchel RJ, Reuben DB, Dagenais S, Turk DC, Chou R, Hershey A, Hicks G, Licciardone JC, Horn SD. Research Agenda for the Prevention of Pain and Its Impact: Report of the Work Group on the Prevention of Acute and Chronic Pain of the Federal Pain Research Strategy. *J Pain.* 2018 Mar 22. pii: S1526-5900(18)30107-X. doi: 10.1016/j.jpain.2018.02.015. [Epub ahead of print] PMID: 29578089
75. Pugliese JM, Sions JM, Velasco TO, Hicks GE. Use of trunk muscle training and neuromuscular electrical stimulation to reduce pain and disability in an older adult with chronic low back pain: A case report. *Physiother Theory Pract.* 2018 Apr 4:1-8. doi: 10.1080/09593985.2018.1457745. [Epub ahead of print] PMID: 29617180
76. Simon CB, Hicks GE. Paradigm Shift in Geriatric Low Back Pain Management: Integrating Influences, Experiences, and Consequences. *Phys Ther.* 2018 May 1;98(5):434-446. doi: 10.1093/ptj/pzy028. PMID: 29669088
77. Coyle PC, Pugliese JM, Sions JM, Eskander MS, Schrack JA, Hicks GE. Energy Impairments in Older Adults with Low Back Pain and Radiculopathy: A Matched Case-Control Study. *Arch Phys Med Rehabil.* 2018 Nov;99(11):2251-2256. doi: 10.1016/j.apmr.2018.03.016. Epub 2018 Apr 24. PubMed PMID: 29698638; PubMed Central PMCID: PMC6200651.

78. Orwig D, Hochberg MC, Gruber-Baldini AL, Resnick B, Miller RR, Hicks GE, Cappola AR, Shardell M, Sterling R, Hebel JR, Johnson R, Magaziner J. Examining Differences in Recovery Outcomes Between Male and Female Hip Fracture Patients: Design and Baseline Results of a Prospective Cohort Study from the Baltimore Hip Studies. *J Frailty Aging*. 2018;7(3):162-169. doi: 10.14283/jfa.2018.15. PMID:30095146
79. Hicks GE, Shardell MD, Miller RR, Eastlack M, Orwig DL, Goodpaster BH, Chomentowski PJ, Hochberg MC, Rathbun AM, Cauley JA, Harris T, Satterfield S, Schafer AL, Magaziner J. Trunk Muscle Composition 2 Months after Hip Fracture: Findings from the Baltimore Hip Studies. *Arch Phys Med Rehabil*. 2018 Dec 19. pii: S0003-9993(18)31537-5. doi: 10.1016/j.apmr.2018.10.023. [Epub ahead of print] PMID:30578772
80. Coyle PC, Pugliese JM, Sions JM, Eskander MS, Schrack JA, Hicks GE. Pain Provocation and the Energy Cost of Walking: A Matched Comparison Study of Older Adults with and without Chronic Low Back Pain with Radiculopathy. *J Geriatr Phys Ther*. 2019 Apr 15. doi: 10.1519/JPT.0000000000000212. [Epub ahead of print] PMID: 30998562
81. Hicks GE. Addressing Balance, Mobility and Falls: Are We Moving the Needle on Fall Prevention? *J Gerontol A Biol Sci Med Sci*. 2019 Mar 20. pii: glz064. doi: 10.1093/gerona/glz064. [Epub ahead of print] PMID:30892593
82. Sions JM, Crippen DC, Hicks GE, Alroumi AM, Manal TJ, Pohlig RT. Exploring Neuromuscular Electrical Stimulation Intensity Effects on Multifidus Muscle Activity in Adults With Chronic Low Back Pain: An Ultrasound Imaging-Informed Investigation. *Clin Med Insights Arthritis Musculoskelet Disord*. 2019 May 20;12:1179544119849570. doi: 10.1177/1179544119849570. eCollection 2019. PMID: 31205429
83. Sung W, Hicks GE, Ebaugh D, Smith SS, Stackhouse S, Wattananon P, Silfies SP. Individuals With and Without Low Back Pain Use Different Motor Control Strategies to Achieve Spinal Stiffness During the Prone Instability Test. *J Orthop Sports Phys Ther*. 2019 Dec;49(12):899-907. doi: 10.2519/jospt.2019.8577. Epub 2019 Aug 3. PMID: 31378122
84. Rathbun AM, Magaziner J, Shardell MD, Beck TJ, Yerges-Armstrong LM, Orwig D, Hicks GE, Ryan AS, Hochberg MC. Differences in geometric strength at the contralateral hip between men with hip fracture and non-fractured comparators. *Bone*. 2020 Mar;132:115187. doi: 10.1016/j.bone.2019.115187. Epub 2019 Dec 5. PMID: 31812699
85. Beisheim EH, Seth M, Horne JR, Hicks GE, Pohlig RT, Sions JM. Sex-specific Differences in Multisite Pain Presentation among Adults with Lower-Limb Loss. *Pain Practice*. 2021 Apr;21(4):419-427. <https://doi.org/10.1111/papr.12969>. PMID: 33251680
86. Coyle PC, O'Brien VA, Edwards DG, Pohlig RT, Hicks GE. Markers of Cardiovascular Health in Older Adults with and without Chronic Low Back and

Radicular Leg Pain: A Comparative Analysis. *Pain Med.* 2021 Feb 15:pnaa426. doi: 10.1093/pm/pnaa426. Online ahead of print. PMID: 33585935

87. Knox PJ, Coyle PC, Pugliese JM, Pohlig RT, Sions JM, Hicks GE. Hip osteoarthritis signs and symptoms are associated with increased fall risk among community-dwelling older adults with chronic low back pain: a prospective study. *Arthritis Res Ther.* 2021 Mar 3;23(1):71. doi: 10.1186/s13075-021-02455-5. PMID: 33658074; PMCID: PMC7927382.
88. Shardell MD, Cappola AR, Guralnik JM, Hicks GE, Kritchevsky SB, Simonsick EM, Ferrucci L, Semba RD, Shaffer NC, Harris TB, Eiriksdottir G, Gudnason V, Cotch MF, Orwoll E, Ensrud KE, Cawthon PM. Sex-specific 25-hydroxyvitamin D threshold concentrations for functional outcomes in older adults: PROject on Optimal Vitamin D in Older adults (PROVIDO). *Am J Clin Nutr.* 2021 Apr 7:nqab025. doi: 10.1093/ajcn/nqab025. Online ahead of print. PMID: 33826696
89. Sions JM, Beisheim EH, Hoggarth MA, Elliott JM, Hicks GE, Pohlig RT, Seth M. Trunk Muscle Characteristics: Differences Between Sedentary Adults with and without Unilateral Lower-Limb Amputation. *Arch Phys Med Rehabil.* 2021 Jul;102(7):1331-1339. doi: 10.1016/j.apmr.2021.02.008. Epub 2021 Mar 5. PMID: 33684366
90. Coyle PC, Sions JM, O'Brien V, Pohlig R, Hicks GE. Hip range of motion and strength predict 12-month physical function outcomes in older adults with chronic low back pain – the Delaware Spine Studies. *ACR Open Rheumatol.* 2021 Sep 15. doi: 10.1002/acr2.11342. Online ahead of print. PMID: 34524738
91. Hicks GE, Pohlig RT, Coyle PC, Sions JM. Classification of geriatric low back pain based on hip characteristics with a 12-month longitudinal exploration of clinical outcomes: findings from Delaware Spine Studies. *Phys Ther.* 2021 Dec 1;101(12):pzab227. doi: 10.1093/ptj/pzab227. PMID: 34636887
92. Beisheim EH, Pohlig RT, Medina J, Hicks GE, Sions JM. Body Representation among Adults with Phantom Limb Pain: Results from a Foot Identification Task. *Eur J Pain.* 2022 Jan;26(1):255-269. doi: 10.1002/ejp.1860. Epub 2021 Sep 17. PMID: 34490685
93. Knox PJ, Pohlig RT, Pugliese JM, Coyle PC, Sions JM, Hicks GE. Aberrant Lumbopelvic Movements Negatively Affect Prospective Physical Function in Older Adults with Chronic Low Back Pain. *Arch Phys Med Rehabil.* 2022 Mar;103(3):473-480.e1. doi: 10.1016/j.apmr.2021.08.014. Epub 2021 Sep 20. PMID: 34547273
94. Orwig DL, Abraham DS, Guralnik JM, Hochberg MC, Cappola AR, Golden J, Gruber-Baldini A, Hicks GE, Miller RR, Resnick B, Shardell M, Sterling RS, Bajracharya R, Magaziner J. Sex Differences in Recovery Across Multiple Domains among Older Adults with Hip Fracture. *J Gerontol A Biol Sci Med Sci.* 2022 Jul 5;77(7):1463-1471. doi: 10.1093/gerona/glab271. PMID: 34555162
95. Beisheim EH, Pohlig RT, Hicks GE, Horne JR, Medina J, Sions JM. Mechanical Pain Sensitivity in Post-Amputation Pain. *Clin J Pain.* 2021 Oct 6. doi: 10.1097/AJP.0000000000000989. Online ahead of print. PMID: 34620753

96. Seth M, Coyle PC, Pohlig RT, Beisheim EH, Horne JR, Hicks GE, Sions JM. Gait asymmetry is associated with performance-based physical function among adults with lower-limb amputation. *Physiother Theory Pract*. 2022 Nov;38(13):3108-3118. doi: 10.1080/09593985.2021.1990449. Epub 2021 Oct 17. PMID: 34657569
97. Seth M, Beisheim EH, Pohlig RT, Horne JR, Hicks GE, Sions JM. Vibration sensitivity is associated with functional balance following unilateral transtibial amputation. *Arch Rehabil Res Clin Transl*. 2021 Oct 12;3(4):100161. doi: 10.1016/j.arrct.2021.100161. eCollection 2021 Dec. PMID: 34977543
98. Knox PJ, Pohlig RT, Pugliese JM, Coyle PC, Sions JM, Simon CB, Hicks GE. Standardized Assessment of Movement-Evoked Pain Ratings is Associated with Functional Outcomes in Older Adults with Chronic Low Back Pain. *Clin J Pain*. 2021 Dec 27. doi: 10.1097/AJP.0000000000001016. Online ahead of print. PMID: 34954729
99. Beisheim-Ryan EH, Hicks GE, Pohlig RT, Medina J, Sions JM. Body Image and Perception among Adults with and without Phantom Limb Pain. *PM R*. 2023 Mar;15(3):278-290. doi: 10.1002/pmrj.12750. Epub 2022 Feb 9. PMID: 34914201
100. Pugliese JM, Coyle PC, Sions JM, Piva SR, George SZ, Weiner DK, Simon CB Hicks GE. The Manual Therapy and Strengthening for the Hip (MASH) trial: Protocol for a Multisite Randomized Trial of a Subgroup of Older Adults with Chronic Back and Hip Pain. *Phys Ther*. 2022 Jan 1;102(1):pzab255. doi: 10.1093/ptj/pzab255. PMID: 34751784
101. Beisheim-Ryan EH, Pohlig RT, Hicks GE, Horne JR, Sions JM. Post-Amputation Pain: Comparing Pain Presentations between Adults with and without Increased Amputated-Region Sensitivity. *Pain Pract*. 2023 Feb;23(2):155-166. doi: 10.1111/papr.13172. Epub 2022 Oct 27. PMID: 36250812
102. Seth M, Pohlig RT, Beisheim EH, Stauffer SJ, Horne J, Hicks GE, Sions JM. Residual and sound limb hip strength distinguish between sedentary and non-sedentary adults with transtibial amputation. *Int J Rehabil Res*. 2022 Jun 1;45(2):137-145. doi: 10.1097/MRR.0000000000000520. Epub 2022 Feb 7. PMID: 35131977.
103. Coyle PC, Pohlig RT, Knox P, Pugliese JM, Sions JM, Hicks GE. Trajectories of physical function and disability over 12 months in older adults with chronic low back pain. *J Geriatr Phys Ther*. 2022 Sep 16. doi: 10.1519/JPT.0000000000000365. Online ahead of print. PMID: 36125915
104. Seth M, Pohlig RT, Hicks GE, Sions JM. Clinical mobility metrics estimate and characterize physical activity following lower-limb amputation. *BMC Sports Sci Med Rehabil*. 2022 Jul 7;14(1):124. doi: 10.1186/s13102-022-00518-x. PMID: 35799260
105. Eastlack M, Miller RR, Hicks GE, Gruber-Baldini A, Orwig DL, Magaziner J, Ryan AS. Thigh muscle composition and its relationship to functional recovery post-

hip fracture over time and between sexes. *J Gerontol A Biol Sci Med Sci*. 2022 Dec 29;77(12):2445-2452. doi: 10.1093/gerona/glac112. PMID: 35580856

106. Knox PJ, Pugliese JM, Pohlig RT, Coyle PC, Sions JM, Hicks GE. A Clinical Measure of Trunk Neuromuscular Function Predicts Falling in Older Adults with Chronic Low Back Pain. *J Geriatr Phys Ther*. 2024 Jan-Mar 01;47(1):13-20. doi: 10.1519/JPT.0000000000000372. Epub 2023 Feb 23.. PMID: 36827686
107. Knox PJ, Simon CB, Pohlig RT, Pugliese JM, Coyle PC, Sions JM, Hicks GE. Movement-Evoked Pain Versus Widespread Pain: A Longitudinal Comparison in Older Adults with Chronic Low Back Pain from the Delaware Spine Studies. *J Pain*. 2023 Jun;24(6):980-990. doi: 10.1016/j.jpain.2023.01.012. Epub 2023 Jan 24. PMID: 36706887
108. Simon CB, Hicks GE, Goode A, Pieper C, Byers Kraus V, Keefe FJ, Colon-Emeric C. A Novel Movement-Evoked Pain Provocation Test for Older Adults with Persistent Low Back Pain: Safety, Feasibility, and Associations with Self-Reported Physical Function and Usual Gait Speed. *Clin J Pain*. 2023 Apr 1;39(4):166-174. doi: 10.1097/AJP.0000000000001101. PMID: 36943160
109. Knox PJ, Simon CB, Pohlig RT, Pugliese JM, Coyle PC, Sions JM, Hicks GE. Construct Validity of Movement-Evoked Pain Operational Definitions in Older Adults with Chronic Low Back Pain. *Pain Med*. 2023 Aug 1;24(8):985-992. doi: 10.1093/pm/pnad034. PMID: 36944266
110. Sions JM, Seth M, Beisheim-Ryan EH, Hicks GE, Pohlig RT, Horne JR. Adults with lower-limb amputation: Reduced multifidi muscle activity and extensor muscle endurance is associated with worse physical performance. *Clin Physiol Funct Imaging*. 2023 Sep;43(5):354-364. doi: 10.1111/cpf.12833. Epub 2023 May 24. PMID: 37177877
111. Stevens-Lapsley J, Hicks GE, Zimney K, Slaven EJ, Manal TJ, Jeffries LM. Research Agenda for Physical Therapy from the American Physical Therapy Association. *Phys Ther*. 2023 Sep 15:pzad126. doi: 10.1093/ptj/pzad126. Online ahead of print. PMID: 37712887
112. Hicks GE, George SZ, Pugliese JM, Coyle PC, Sions JM, Piva S, Simon CB, Kakyomya J, Patterson CG. Hip-focused physical therapy versus spine-focused physical therapy for older adults with chronic low back pain at risk for mobility decline (MASH): a multicentre, single-masked, randomised controlled trial. *Lancet Rheumatol*. 2024 Jan;6(1):e10-e20. doi: 10.1016/S2665-9913(23)00267-9. PMID: 38258673; PMCID: PMC10806342.
113. Knox PJ, Simon CB, Pohlig RT, Pugliese JM, Coyle PC, Sions JM, Hicks GE. Examining Psychological Factors as Contributors to Pain, Disability, and Physical Function in Geriatric Chronic Low Back Pain: A Prospective Analysis of the Delaware Spine Studies Cohort. *J Pain*. 2024 Jun;25(6):104448. doi: 10.1016/j.jpain.2023.12.005. Epub 2023 Dec 18. PMID: 38122878.
114. Knox PJ, Simon CB, Hicks GE. Preliminary characterization of age and chronic low back pain effects on multimodal pain sensitivity: a comparison study in

older adults with and without chronic low back pain. J Pain. 2024 Aug;25(8):104509. doi: 10.1016/j.jpain.2024.03.005. Epub 2024 Mar 12. PMID: 38484855.

115. Cappola AR, Abraham DS, Kroopnick JM, Huang Y, Hochberg MC, Miller RR, Shardell M, Hicks GE, Orwig D, Magaziner J. Sex-specific associations of vitamin D and bone biomarkers with bone density and physical function during recovery from hip fracture: the Baltimore Hip Studies. Osteoporos Int. 2025 Mar 20. doi: 10.1007/s00198-025-07446-9. Online ahead of print. PMID: 40111479
116. Knox PJ, Simon CB, Pohlig RT, Pugliese JM, Coyle PC, Sions JM, Hicks GE. Effects of Individual Psychological Factors and Cumulative Psychological Distress on Prospective Pain Quality in Older Adults with Chronic Low Back Pain. Clin J Pain. 2025 Apr 29. doi: 10.1097/AJP.0000000000001294. Online ahead of print. PMID: 40296268
117. Pugliese JM, Sions JM, Knox PJ, Pohlig RT, Hicks GE. Clinical characterization of hip subgroups in geriatric chronic low back pain. Arch Phys Med Rehabil. 2025 May 5:S0003-9993(25)00678-1. doi: 10.1016/j.apmr.2025.04.018. Online ahead of print. PMID: 40335002

Non-Refereed Journals:

Fritz JM, Hicks GE, Mishock J. The Role of Muscle Strength in Low Back Pain. *Orthopaedic Physical Therapy Clinics of North America* 2000; 9(4):529-548.

Book Chapter:

Fritz JM, Hicks GE. Exercise Protocols for Low Back Pain. In: Liemohn W, editor. *Exercise Prescription and the Back*. New York: McGraw-Hill, 2001: 167-182.

Hicks GE, Miller RR. Physiological Resilience. In: Resnick B, Roberta K, and Gwyther L, editors. *The Handbook of Resilience in Aging: The Key to Successful Aging*. New York: Springer Publishing, 2010

Abstracted Scientific Presentations:

1. Hicks GE, Fritz JM, Mishock J. The Reliability of Clinical Examination Measures Used for Patients with Suspected Lumbar Segmental Instability. Combined Sections Meeting of the American Physical Therapy Association, February 2000.
2. Piva SR, Erhard RE, Childs JD, Hicks GE. Reliability of measuring iliac crest height in standing and in sitting positions using a new measurement device. Fourth Interdisciplinary World Congress on Low Back and Pelvic Pain, Montreal Canada, November 2001.
3. Hicks GE, George SZ, Vogt MT, Nevitt MA, Cauley JA. Measurement of Lumbar Lordosis: Inter-Rater Reliability and Longitudinal Variation. Annual Meeting of the International Society for the Study of the Lumbar Spine, Cleveland, OH, 2002.
4. George SZ, Hicks GE, Vogt MT, Nevitt MA, Cauley JA. The Relationship Between Lumbar Lordosis and Radiological Variables and Lumbar Lordosis and Clinical Variables in Older, African-American Women. Annual Meeting of the International Society for the Study of the Lumbar Spine, Cleveland, OH, 2002.

5. VanSwearingen J, Brach JS, Hicks GE. Relation of Pathology, Impairment, and Disability in Women with Osteoarthritis of the Knee. Physical Therapy 2003: Annual Conference and Exposition of the American Physical Therapy Association.
6. VanSwearingen J, Brach JS, Hicks GE. Reliability of Performance-Based Measures of Impairment and Disability in Women with Osteoarthritis of the Knee. Physical Therapy 2003: Annual Conference and Exposition of the American Physical Therapy Association.
7. Hicks GE, Simonsick EM, Harris TB, Newman AB, Weiner D, Nevitt M, Tylavsky F. Cross-sectional Associations Between Trunk Muscle Composition, Back Pain and Physical Function in the Health ABC Study. 56th Annual Scientific Meeting for the Gerontological Society of America, November 2003.
8. Hicks GE, Fritz JM, Delitto A, McGill SM. Preliminary Clinical Prediction Rule for Determining Response to a Lumbar Stabilization Program. Combined Sections Meeting of the American Physical Therapy Association, February 2004.
9. Hicks GE, Simonsick EM, Harris TB, Newman AB, Weiner D, Nevitt M, Tylavsky F. Trunk Muscle Composition as a Predictor of Physical Function in the Health ABC Study: The Moderating Role of Back Pain. 57th Annual Scientific Meeting for the Gerontological Society of America, November 2004.
10. Miller RR, Cappola AR, Shardell M, Hicks GE, Hawkes W, Hebel JR, Yu-Yahiro J, Magaziner J. Inflammation And Muscle Strength In The Year Following Hip Fracture: The Baltimore Hip Studies. Presented at the Gerontological Society of America Annual Meeting, Dallas, TX, November, 2006.
11. Hicks GE, Shardell MD, Miller RR, Bandinelli S, Guralnik JM, Cherubini A, Lauretani F, Ferrucci L. Low 25 (OH) D concentrations are associated with significant back pain in older women, not men: The InCHIANTI study. Presented at the American Geriatrics Society Annual Meeting, Seattle, WA, May 2007.
12. Miller RR, Hicks GE, Shardell MD, Orwig D, Hawkes WG, Yu-Yahiro JA, Magaziner J. Effect of Home-Based Exercise on Markers of Inflammation in the Year Post Hip Fracture. Presented at the Gerontological Society of America Annual Meeting, San Francisco, CA, November 2007.
13. Hicks GE, Shardell MD, Miller RR, Newman AB, Spencer M, Satterfield S, Nevitt M, Simonsick EM. Are There Racial Differences in Musculoskeletal Pain in Older Adults? Findings from the Health, Aging and Body Composition Study. Presented at the Gerontological Society of America Annual Meeting, San Francisco, CA, November 2007.
14. Hicks GE, Gaines JM, Simonsick EM. Impact of Low Back Pain on Health-Related Quality of Life in Continuing Care Retirement Communities. Presented at the Gerontological Society of America Annual Meeting, San Francisco, CA, November 2007.
15. Hicks GE, Shardell M, D'Adamo C, Magaziner J, Orwig D, Miller R. Association of Serum Carotenoid Levels with Recovery of Physical Function after Hip Fracture: The

Baltimore Hip Studies. Gerontological Society of America; National Harbor, Maryland. November 2008.

16. Andersen D, Miller R, Shardell M, Hicks GE, Magaziner J, Orwig D. Association of Pre-Fracture Frailty with Inflammatory Response Following Hip Fracture. Gerontological Society of America; National Harbor, Maryland. November 2008
17. D'Adamo C, Shardell M, Miller R, Orwig D, Magaziner J, Hicks GE. Associations between Serum Antioxidants and Inflammatory Markers in Older Adults after Hip Fracture. Gerontological Society of America; National Harbor, Maryland. November 2008
18. Matheny M, Shardell M, Hicks GE, Miller R, Magaziner J, Orwig D. Association between Inflammatory Markers and Depressive Symptoms in Older Adults after Hip Fracture. Gerontological Society of America; National Harbor, Maryland. November 2008
19. Chan J, Miller R, Shardell M, Hicks GE, Magaziner J, Orwig D. The Effect of Inflammatory Markers on Bone Mineral Density Following Hip Fracture. Gerontological Society of America; National Harbor, Maryland. November 2008
20. D'Adamo, Shardell M, Miller RR, Hicks G, Orwig D, Hochberg M, Ferrucci L, Magaziner J. The associations between baseline serum vitamin E concentrations and recovery of physical function during the year after hip fracture. Gerontologist, 49:211-211, 2009 Oct.
21. Hicks GE, Shardell M, Miller RR, Alley D, Cherubini A, Bandinelli S, Ferrucci L. Longitudinal associations of vitamin D with muscle composition and strength: The InChianti Study. Gerontologist, 49:215-215, 2009 Oct.
22. Shardell M, Hicks GE, Miller RR, Alley D, Cherubini A, Bandinelli S, Ferrucci L. Associations of 25(OH)D levels with decline and recovery from the prefrail state: The InChianti Study. Gerontologist, 49:215-215, 2009 Oct.
23. Miller RR, Hicks GE, Shardell M, Orwig D, Yu-Yahiro J, Hochberg M, Streeten EA, Magaziner J. Longitudinal associations of serum vitamin D levels with recovery of walking ability following hip fracture: The Baltimore Hip Studies. Gerontologist, 49:215-215, 2009 Oct.
24. Eastlack M, Miller RR, Hicks GE, Goodpaster B. Thigh muscle composition findings 2 months after admission for hip fracture: The Baltimore Hip Studies. Gerontologist, 49:374-374, 2009 Oct.
25. Shardell M, Alley DE, Miller RR, Hicks GE. Joint effects of physical activity and vitamin D on longevity: NHANES III. Gerontologist, 50:439, 2010 Oct.
26. Miller RR, Shardell M, Alley DE, Hicks GE, Anderson D, Orwig D, Yu-Yahiro J, Magaziner J. Pre-fracture physical activity and post-fracture inflammation: The Baltimore Hip Studies. Gerontologist, 50:439, 2010 Oct

27. Hicks GE, Shardell M, Alley DE, Miller RR, D'Adamo C, Magaziner J. Association of serum carotenoid levels with recovery of physical activity after hip fracture: The Baltimore Hip Studies. *Gerontologist*, 50:439, 2010 Oct.
28. Hicks GE, Sions JM, Velasco T. Spatiotemporal parameters of gait in older adults with and without chronic low back pain. *Transactions Vol. 36*, Long Beach, CA, 2011 Annual Meeting of the Orthopaedic Research Society.
29. Sions JM, Velasco T, Hicks GE. Rehabilitative ultrasound imaging of the posterior trunk muscles in older adults with and without chronic low back pain: an investigation of measurement and procedural reliability. *Transactions Vol. 36*, Long Beach, CA, 2011 Annual Meeting of the Orthopaedic Research Society.
30. Hicks GE, Sions JM. Chronic Low Back Pain and Performance-Based Function in Older Adults: A Case-Control Study. *J Orthop Sports Phys Ther* 2011;41(1): A29
31. Sions JM, Hicks GE. Asymmetry of the Lumbar Multifidi in Older Adults with Chronic Low Back Pain as Compared to Healthy Controls. *J Orthop Sports Phys Ther* 2011;41(1): A13
32. Hicks GE, Sions JM, Velasco T. The Relationship between Hip Impairments and Chronic Low Back Pain in Older Adults: A Preliminary Study. *Osteoarthritis and Cartilage Vol. 19 Supplement 1*, Page S214, San Diego, CA, 2011 World Congress on Osteoarthritis.
33. Sions JM, Hicks GE. Criterion Validity of Rehabilitative Ultrasound Imaging for the Paraspinal Muscles in Older Adults. Presented at the Combined Sections Meeting of the American Physical Therapy Association, February 2012.
34. Velasco T, Sions JM, Hicks GE. Hip Manual Therapy for Older Adults with a Primary Complaint of Chronic Low Back Pain and Co-Existing Hip Impairments: A Case Series. Presented at the Combined Sections Meeting of the American Physical Therapy Association, February 2012.
35. Hicks GE, Sions JM, Velasco T, Shardell M. Hip Impairments and Function in Older Adults with Chronic Low Back Pain: The Delaware Spine Studies. *Gerontological Society of America*; San Diego, CA. November 2012.
36. Bean JF, Anderson DE, Latham N, Pensheng NI, Leveille SG, Hicks GE, Bouxsein ML, Jette AM. Two clinical measures that may be useful in evaluating trunk muscle composition and physiology among older primary care patients. *International Conference on Frailty and Sarcopenia Research*; Orlando, FL. December 2012.
37. Hicks GE, Manal TJ, Sions JM, Velasco T, Shardell M, Snyder-Mackler L. A trunk muscle training program augmented with neuromuscular electrical stimulation appears to improve function in older adults with chronic low back pain: A pilot randomized trial. *Gerontological Society of America*; New Orleans, LA. November 2013.

38. Allen V, Sions JM, Hicks GE. Contributions of comorbidity burden to physical performance in older adults with chronic low back pain. Gerontological Society of America; New Orleans, LA. November 2013.
39. Sions JM, Hicks GE. High fear avoidance beliefs are associated with poorer physical performance in older adults with chronic low back pain. Gerontological Society of America; New Orleans, LA. November 2013.
40. Shardell M, Hicks GE, Ferrucci L. Causal inference in studies of older adults with dropout and death: Vitamin D and gait speed in the InChianti Study. Gerontological Society of America; New Orleans, LA. November 2013.
41. Hicks GE. Symposium: Exploring Function in the Older Adult with Chronic Low Back Pain: The Delaware Spine Studies. Gerontological Society of America; Washington, DC. November 2014.
 - a. Allen V, Coyle P, Sions JM, Hicks GE. Contributions of cardiovascular risk to physical performance in older adults with chronic low back pain.
 - b. Coyle P, Allen V, Velasco T, Sions JM, Hicks GE. Improved trunk mobility is linked to better physical function in older adults with chronic low back pain.
 - c. Hicks GE, Sions JM, Velasco T. Psychosocial Contributors to Differences in Performance-Based vs. Self-Reported Function Among Older Adults with Chronic Low Back Pain
 - d. Sions JM, Hicks GE. Chronic low back pain intervention: Exercise + NMES versus Exercise.
42. Sions JM, Elliott JM, Hicks GE. No Difference in Multifidi and Erector Spinae Cross-Sectional Area and Intramuscular Fat between Older Adults with and without Chronic Low Back Pain. Combined Sections Meeting: Indianapolis, IN: February 2015
43. Coyle P, Sions JM, Velasco TV, Hicks GE. The Relationship between Self-Rated Health and Changes in Function in Older Adults with Chronic Low Back Pain. Combined Sections Meeting: Indianapolis, IN. February 2015
44. Hicks GE, Shardell M, Miller R, Orwig D, Hochberg M, Magaziner J. Trunk Muscle Composition 2 Months After Hip Fracture: The Baltimore Hip Studies. International Conference on Frailty and Sarcopenia Research; Boston, MA. April 2015.
45. Sions JM, Coyle P, Velasco, T, Elliott J, Hicks GE. Exploration of Trunk Muscle Composition and Select Physical Performance Measures: A Preliminary Analysis among Older Adults with and without Chronic Low Back Pain. International Conference on Frailty and Sarcopenia Research; Boston, MA. April 2015.
46. Sions JM, Coyle P, Velasco T, Hicks GE. Multifidi Activity Helps to Explain Clinical Measures in Older Adults with Low Back Pain. 2016 American Institute of Ultrasound in Medicine Convention: New York, NY. March 2016
47. Hicks GE, Sions JM, Velasco, T. Hip symptoms contribute to low back pain-related disability in older adults with a primary complaint of low back pain: The Delaware Spine Studies. Conference: World Congress of the Osteoarthritis-Research-Society-

International (OARSI) on Osteoarthritis Location: Amsterdam, Netherlands. Date: MAR 31-APR 03, 2016. Osteoarthritis and Cartilage. Volume: 24 Supplement: S Pages: S439-S439. Published: APR 2016

48. Hicks GE, Sions JM, Velasco, T. Co-existing hip symptoms are associated with self-efficacy and pain-related fear in older adults with a primary complaint of low back pain: The Delaware Spine Studies. Conference: World Congress of the Osteoarthritis-Research-Society-International (OARSI) on Osteoarthritis Location: Amsterdam, Netherlands. Date: MAR 31-APR 03, 2016. Osteoarthritis and Cartilage. Volume: 24 Supplement: S Pages: S441-S441. Published: APR 2016
49. Sions JM, Coyle P, Velasco, T, Elliott J, Hicks GE. Older adults with low back pain who meet a clinical cluster for hip OA have ultrasound joint morphological findings consistent with hip OA. Conference: World Congress of the Osteoarthritis-Research-Society-International (OARSI) on Osteoarthritis Location: Amsterdam, Netherlands. Date: MAR 31-APR 03, 2016. Osteoarthritis and Cartilage. Volume: 24 Supplement: S Pages: S248-S248. Published: APR 2016
50. Coyle PC, McIntire R, Pohlig R, Hicks GE. The mediating role of depressive symptoms in the relationship between chronic pain and sedentary behavior in older adults: a secondary analysis of the Southeastern Pennsylvania Health Survey 2012. American Physical Therapy Association's Combined Sections Meeting; Anaheim, CA. February 2016.
51. Velasco TO, Sions JM, Coyle P, Hicks GE. A Comparison of Older Adults with and without Chronic Low Back Pain: Are Abdominal Muscle Differences Present at Rest and During a Straight Leg Raise? American Physical Therapy Association: Combined Sections Meeting; Anaheim, CA. February 2016.
52. Sions JM, Coyle P, Hicks GE. Lumbar Exercises & Neuromuscular Electrical Stimulation versus Exercises Alone: Changes in Lumbar Multifidi Activity May be Related to Electrical Stimulation Intensity. American Physical Therapy Association: Combined Sections Meeting; Anaheim, CA. February 2016.
53. Sions JM, Coyle P, Velasco TO, Hicks GE. Multifidi Activity Helps to Explain Clinical Measures in Older Adults with Low Back Pain. American Institute of Ultrasound in Medicine Convention; New York, NY. March 2016.
54. Sions JM, Pohlig RT, Hicks GE. Older Adults with a Primary Complaint of Low Back Pain: Hip Strength Helps to Explain Physical Performance. Combined Sections Meeting; San Antonio, TX. February 2017
55. Sions JM, Rodriguez C, Hicks GE. Epidural Fat and Its Association with Pain, Physical Function, and Disability among Older Adults with Low Back Pain, Low Back Pain Plus Leg Pain, and Controls. Combined Sections Meeting; San Antonio, TX. February 2017
56. Rathbun AM, Magaziner J, Shardell MD, Yerges-Armstrong LM, Orwig D, Hicks GE, Hochberg MC. Older men who sustain a hip fracture experience greater than expected declines in bone mineral density at the contralateral hip. Annual Meeting of the American Society for Bone and Mineral Research; Denver, CO. Sept 2017

57. Sions JM, Hicks GE. Using Ultrasound Imaging to Dose Neuromuscular Electrical Stimulation in Patients with Back Pain. Combined Sections Meeting. New Orleans, LA. February 2018
58. Sions JM, Alroumi AM, Crippen DC, Hicks GE. Fear-Beliefs and Low Back Pain-Related Disability Help Explain Immediate Response to Neuromuscular Electrical Stimulation in Adults with Low Back Pain. Combined Sections Meeting. Washington, DC. January 2019
59. Beisheim EH, Hicks GE, Sions JM. Associations between Trunk Muscle Function, Physical Performance, and Community Participation in Adults with Lower-Limb Amputation: A Preliminary Data Analysis. Combined Sections Meeting. Washington, DC. January 2019
60. Knox PJ, Coyle PC, Pugliese JM, Sions JM, Hicks GE. Hip-spine syndrome: a risk factor for multiple falls? Platform Presentation at the Combined Sections Meeting of the American Physical Therapy Association; Denver, CO. February 2020.
61. Hicks GE, Coyle PC, Sions JM, Knox PJ. Chronic low back pain in older adults: the role of co-existing hip impairments. Gerontological Society of America, Annual Scientific Meeting, Philadelphia, PA. November 2020
62. Knox PJ, Coyle PC, Pugliese JM, Pohlig RT, Sions JM, Hicks GE. The Link between Aberrant Lumbopelvic Movements and Physical Function in Geriatric Low Back Pain. Platform Presentation for the Marilyn Gossman Graduate Student Research Forum at the Combined Sections Meeting of the American Physical Therapy Association; February 2021.
63. Knox PJ, Coyle PC, Pugliese JM, Pohlig RT, Sions JM, Hicks GE. Movement-Evoked Pain: A Unique Construct that is Associated with Lower Extremity Functional Performance in Older Adults with Chronic Low Back Pain. Poster Presentation for the Rehabilitation Section at the American Academy of Pain Medicine Conference; April 2021.
64. Beisheim EH, Pohlig RT, Medina J, Hicks GE, Sions JM. Mental Rotation and Phantom Limb Pain: Evaluating Body Representation among Adults with Lower-Limb Loss. Combined Sectional Meeting. San Antonio, TX. 2/4/22
65. Knox PJ, Coyle PC, Pugliese JM, Pohlig RT, Sions JM, Hicks GE. A Comparison of Movement-Evoked Pain Calculation Methods in Older Adults with Chronic Low Back Pain. Platform Presentation at the Combined Sections Meeting of the American Physical Therapy Association; San Antonio, TX. February 2022.
66. Knox PJ, Pohlig RT, Pugliese JM, Sions JM, Hicks GE. Aberrant Lumbopelvic Movements Predict Falling in Older Adults with Chronic Low Back Pain. Poster Presentation for the Combined Sections Meeting of the American Physical Therapy Association; San Antonio, TX. February 2022.
67. Seth M, Pohlig RT, Hicks GE, Sions JM. Clinical Measures of Mobility Estimate Daily Physical Activity Following Lower-Limb Amputation. 48th Academy Annual Meeting and Scientific Symposium. Atlanta, GA. 3/5/22

68. Knox PJ, Coyle PC, Pugliese JM, Pohlig RT, Sions JM, Hicks GE. Movement-Evoked Pain versus Widespread Pain: A Longitudinal Investigation in Older Adults with Chronic Low Back Pain. Poster presentation at the International Association for the Study of Pain World Congress; Toronto, Ontario, Canada. September 2022.
69. Knox PJ, Pohlig RT, Pugliese JM, Sions JM, Hicks GE. Examining the Fear-Avoidance Model in the context of geriatric chronic low back pain. American Physical Therapy Association, Combined Sections Meeting. San Diego, CA. February 2023
70. Coyle PC, Knox PJ, Pohlig RT, Pugliese JM, Sions JM, Hicks GE. Hip range of motion and strength predict 12-month physical function outcomes in older adults with chronic low back pain. American Physical Therapy Association, Combined Sections Meeting. San Diego, CA. February 2023
71. Sions JM, Seth M, Beisheim-Ryan EH, Hicks GE, Pohlig RT, Horne JR. Reduced Multifidi Muscle Activity and Extensor Muscle Endurance is Associated with Worse Physical Performance Post-Amputation. Combined Sections Meeting. San Diego, CA. 2/23/23
72. Simon C, Knox P, Goode A, Lentz T, George S, Hicks G, Colón-Emeric C, Keefe F. PAIN INTENSITY AND PAIN CATASTROPHIZING ARE RELATED TO PHYSICAL PERFORMANCE IN OLDER ADULTS WITH BACK PAIN. *Innov Aging*. 2023 Dec 21;7(Suppl 1):785. doi: 10.1093/geroni/igad104.2536. PMCID: PMC10737346.
73. Knox PJ, Simon CB, Pohlig RT, Pugliese JM, Sions JM, Hicks GE. Relationships between Fear-Avoidance Model Factors and Pain Quality in Geriatric Chronic Low Back Pain. American Physical Therapy Association, Combined Sections Meeting. Boston, MA. February 2024
74. Knox PJ, Simon CB, Pohlig RT, Pugliese JM, Sions JM, Hicks GE. Relationships between Fear-Avoidance Model Factors and Pain Quality in Geriatric Chronic Low Back Pain. American Physical Therapy Association, Combined Sections Meeting. Boston, MA. February 2024
75. Knox PJ, Simon CB, Hicks GE. Experimental Pain Sensitivity is Associated with Clinical Pain and Functional Outcomes in Older Adults with Chronic Low Back Pain. Poster presentation at the United States Association for the Study of Pain Annual Meeting; Seattle, Washington. April 2024.
76. Knox PJ, Simon CB, Hicks GE. A Comparison of Multimodal Pain Sensitivity in Older Adults with and without Chronic Low Back Pain. Poster presentation at the International Association for the Study of Pain World Congress; Amsterdam, Netherlands. August 2024. [accepted]
77. Knox PJ, Simon CB, Hicks GE. Methodological Examination of Capsaicin-Induced Sensitization in Geriatric Chronic Low Back Pain. Poster presentation at the International Association for the Study of Pain World Congress; Amsterdam, Netherlands. August 2024. [accepted]

Major Invited Speeches and Lectures

1. Fritz JM and Hicks GE. Diagnosis and Treatment of Lumbar Segmental Instability. Annual Conference and Exposition of the American Physical Therapy Association, June 2000.
2. Fritz JM and Hicks GE. Segmental Instability of the Lumbar Spine: Principles and Application to Physical Therapy Practice. Annual Meeting of the West Virginia Physical Therapy Association, October 2000.
3. Hicks GE. An Evidence-Based Approach to Management of Lumbar "Instability". University of Pittsburgh and Centers for Rehab Services, March 2006.
4. Hicks GE. Lumbar Segmental Instability: Prognosis and Treatment. University of Zurich, Zurich, Switzerland, April 2006.
5. Hicks GE and Manal TJ. Translating the Evidence: Monday Morning Techniques Involving Acute Low Back Pain Treatment Classification. Annual Conference and Exposition of the American Physical Therapy Association, June 2007.
6. Hicks GE and Manal TJ. Treatment Based Classification of the Spine: An Evidence-Based Journey for the Physical Therapist. Five-day course sponsored by the Israeli Physical Therapy Society. Haifa, Israel. November 2007.
7. Hicks GE. Evaluation and Management of Lumbar "Instability." Tel Aviv University, Tel Aviv, Israel, November 2007.
8. Hicks GE and Soriano R. Multidisciplinary Clinical Skills Workshop: Low Back Pain in the Elderly. American Geriatrics Society Annual Meeting, May 2008.
9. Hicks GE. Correlates and Consequences of Low Back Pain in the Elderly. Christiana Care Center on Outcomes Research, Newark, DE, September 2008.
10. Hicks GE and Soriano R. Multidisciplinary Clinical Skills Workshop: Low Back Pain in the Elderly. American Geriatrics Society Annual Meeting, May 2009.
11. Hicks GE. Factors that Predict Participation in an Adapted Physical Activity Program for Older Adults with Low Back Pain. Dipartimento delle Fragilità, Azienda Unità Sanitaria Locale 11 di Empoli, Empoli, Italy, July 2009.
12. Hicks GE, Manal TJ, Sions JM and Velasco T. Low Back Pain in Older Adults: Special Considerations and Understanding Can Lead to Improved Function. Combined Sections Meeting of the American Physical Therapy Association, February 2010.
13. Hicks GE and Soriano R. Multidisciplinary Clinical Skills Workshop: Low Back Pain in the Elderly. American Geriatrics Society Annual Meeting, May 2010.
14. Hicks GE. Keynote Address: Diagnosis vs. Classification. Israeli Physical Therapy Society 10th Annual Meeting. Tel Aviv, Israel. May 2010

15. Hicks GE. Adaptive Physical Activity Program for Older Adults with Back Pain. Israeli Physical Therapy Society 10th Annual Meeting. Tel Aviv, Israel. May 2010
16. Hicks GE. Degenerative Lumbar Disc and Facet Disease in Older Adults. Israeli Physical Therapy Society 10th Annual Meeting. Tel Aviv, Israel. May 2010
17. Hicks GE. Evaluation and Treatment of Low Back Pain in Older Adults. Two-day course sponsored by the Israeli Physical Therapy Society. Haifa and Jerusalem, Israel. May 2010.
18. Hicks GE. Chronic Low Back Pain in the Older Adult: A New Perspective on Pain Management. Fall 2010 Rehabilitation Research Seminar Series. University of Florida, College of Public Health and Health Professions. October 2010.
19. Hicks GE. Developing Innovative Interventions for Active Older Adults with Chronic Low Back Pain. Third Annual Delaware Orthopaedic Symposium. October 2010.
20. Hicks GE, Manal TJ, Sions JM and Velasco T. Challenging Ageism in Outpatient Physical Therapy Orthopaedics: Applying Evidence to the Evaluation and Treatment of Older Adults with Low Back Pain. Combined Sections Meeting of the American Physical Therapy Association, February 2011.
21. Hicks GE. Weekend Intensive Course in the Evaluation and Treatment of the Lumbar Spine. New York University Clinical Residency Advanced Certificate Program in Orthopedic Physical Therapy. March 2011.
22. Hicks GE. Multidisciplinary Clinical Skills Workshop: Low Back Pain in the Elderly. American Geriatrics Society Annual Meeting, May 2011.
23. Hicks GE. The APA Chronic Back Pain Model: Exploring Factors Associated with Success and Adherence. The Management of Chronicity Conference. Istituto Superiore di Sanita, Rome, Italy October 2011.
24. Hicks GE. Adapted Physical Activity and Rehabilitation. American Academy of Physical Medicine and Rehabilitation Annual Meeting. Orlando, FL, November 2011.
25. Hicks GE. Multidisciplinary Clinical Skills Workshop: Assistive Devices. American Geriatrics Society Annual Meeting, May 2012.
26. Hicks GE. Focusing on Physical Function in Older Adults with Chronic Low Back Pain. Boston Research Outcomes Center Research Seminar Series, Boston University School of Public Health, Boston, MA, May 2012.
27. Hicks GE. Developing a New Perspective on Pain Management for Older Adults with Chronic Low Back Pain. Christiana Care Center on Outcomes Research, Newark, DE, September 2012.
28. Hicks GE. The Role of Physical Function in the Management of Older Adults with Chronic Low Back Pain. Georgia Health Sciences University, Augusta, GA, November 2012.

29. Hicks GE. G-Codes: Implementation. Ammon Education Center, Christiana Care Health Services, Newark, DE, May 2013
30. Hicks GE. Provider Engagement in Research. DE-CTR ACCEL Conference— Learning from Each Other: Building Academic-Provider-Community Partnerships in Research, Wilmington, DE, May 2014
31. Hicks GE. Developing a New Perspective on Pain Management for Older Adults: The Journey from Post-Doc to Established Investigator. National Institute on Aging, Baltimore, MD, January 2015.
32. Hicks GE. Keynote Speech: Building Your Research Team: One Pathway to Developing an Independently Functioning Lab. Thomas Jefferson College of Health Professions Research Day, Philadelphia, PA, May 2015.
33. Hicks GE. A Primer on Incorporating Evidence-Based Principles into Everyday Clinical Practice. Christiana Care Health Services, Newark, DE, October 2015.
34. Hicks GE. Grand Rounds: Function-Focused Management of Low Back Pain in the Older Adult. Northwestern University, Chicago, IL, October 2015.
35. Hicks GE. Pain: A Rehabilitation Perspective. National Center for Medical Rehabilitation Research Advisory Board Meeting (NCMRR-NIH). Bethesda, MD, December 2015.
36. Hicks GE. Developing a New Perspective on Pain Management for Older Adults with Chronic Low Back Pain. Ohio University, Athens, OH, April 2016.
37. Hicks GE. Ellen Ross Memorial Lecture. Rutgers University, Newark, NJ, April 2016.
38. Hicks GE. Preventing Secondary Disability in Older Adults with Chronic Low Back Pain. NIH Conference (Rehabilitation Research at NIH: Moving the Field Forward). Bethesda, MD, May 2016.
39. Hicks GE. Keynote Speech: Arcadia's Health Policy and Practice Management PT Faculty Institute. Glenside, PA, August 2016
40. Hicks GE. Developing a Comprehensive Treatment Approach for Older Adults with Chronic Low Back Pain. MGH Institute of Health Professions, Boston, MA, October 2016.
41. Hicks GE. Best Practices for Diversity in Physical Therapy Education. University of Alabama at Birmingham, Birmingham, AL, January 2017.
42. Hicks GE. Keynote Talk for Rehabilitation Research Retreat: Classification and Treatment of Older Adults with Chronic Low Back Pain. University of Colorado, Denver, CO, April 2017.

43. Hicks GE and Simon CB. Geriatric Low Back Pain: Managing Influences, Experiences and Consequences. Combined Sections Meeting of the American Physical Therapy Association, January 2019.
44. Hicks GE. Developing a Function-Focused Perspective on Pain Management for Older Adults with Chronic Low Back Pain. Duke Orthopaedic and Rehabilitation Seminar Series. Duke University, Durham, NC, April 2019.
45. Hicks GE. Who Do We Want To Be? Responsible Stewardship of Our Profession. 24th Annual Endowed Scully Scholar Lecture Series. University of Pittsburgh, Pittsburgh, PA, October 2019.
46. Hicks GE. Who Do We Want To Be? Responsible Stewardship of our Profession Inaugural Lynda D. Woodruff Lecture, Physical Therapy Leadership Institute and APTA, July 2020.
47. Hicks GE. Plant the Tree Now! Diversity, Equity and Inclusion in Physical Therapy. Marilyn Gossman Endowed Lecture. University of Alabama at Birmingham, Birmingham, AL, March 2021.
48. Hicks GE. Barbara C. White Endowed Lecture. University of Florida, Gainesville, FL, April 2021.
49. Hicks GE. Understanding the Role of Co-Existing Hip Impairments in Geriatric Low Back Pain. Grand Rounds: Health and Rehabilitation Sciences, Ohio State University, Columbus, OH, April 2021.
50. Hicks GE. Diversity, Equity and Inclusion in Rehabilitation. Invited Talk for the National Advisory Board on Medical Rehabilitation Research, NIH, Bethesda, MD, May 2021.
51. Hicks GE. Health Disparities and Diversity in Rehabilitation Research. Research Roundtable for the Department of Rehabilitation Science, University of Oklahoma Health Sciences Center, Oklahoma City, OK, November 2021.
52. Hicks GE. Resiliency in Research Funding. Foundation for Physical Therapy Research Webinar. November 2021.
53. Hicks GE. Excellence in Rehabilitation of Aging Persons Award Lecture, Gerontological Society of America. November 2021.
54. Hicks GE. Breaking Down Barriers: A Pathway to Societal Impact. 2023 Eleanor Branch Distinguished Lecture, Duke University, Durham, NC. May 2023.
55. Hicks GE. Developing a Tailored Rehabilitation Approach for Geriatric Low Back Pain: Should We Focus on the Hip? 12th Annual Robert L. Lamb Distinguished Lecture, Virginia Commonwealth University, Richmond, VA. September 2023.
56. Hicks GE. Keynote Address. 2023 American Academy of Orthopaedic Manual Physical Therapists Conference, St. Louis, MO. October 2023.

57. Hicks GE. Rose Award for Excellence in Research Presentation, APTA CSM, Houston, TX. February 2025.