CURRICULUM VITAE

LaDora V. Thompson, PhD, PT, FAPTA

PROFESSIONAL ADDRESS
Travis M. Roy Endowed Professor in Rehabilitation Sciences
Department of Physical Therapy
Boston University
College of Health & Rehabilitation Sciences: Sargent College
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IDENTIFYING INFORMATION

Education

Degree	Institution	Date Degree Granted
B.S. (cum laude)	Marquette University, Milwaukee, WI Physical Therapy	1984
Ph.D. [Robert H. Fitts]	Marquette University, Milwaukee, WI Biology: Muscle and Exercise	1991
Postdoctoral training	Marquette University, Milwaukee, WI Muscle Physiology	1991-1993
Postdoctoral training	Smith College, North Hampton, MA Molecular Biology Workshop	1994

Certifications, Licenses

Physical Therapist, Minnesota	#9838	2014 – present
Physical Therapist, Wisconsin	#2878-024	1984 – present

Academic Appointments

Boston University College of Health & Rehabilitation Sciences: Sargent College – Boston, Dept. of PT

Professor (with tenure)	2016 – present
Travis Roy Endowed Professor	2016 – present
Chair	2016 – 2019

Boston University College of Health & Rehabilitation Sciences: Sargent College – Boston, Rehabilitation Sciences Graduate Program

Professor (with tenure)	2016 – present

Boston University College of Health & Rehabilitation Sciences: Sargent College – Boston, Dept. of Health Sciences and Human Physiology Graduate Program

Professor (with tenure)	2016 – present

University of Minnesota Medical School – Twin Cities, Program in Physical Therapy
Professor (with tenure) 2008 – 2016
Associate Professor (with tenure) 1999 – 2008
Assistant Professor 1993 – 1999

University of Minnesota Medical School – Twin Cities, Dept. of Integrated Biology & Physiology
Professor (with tenure) 2008 – 2016

University of Minnesota Medical School – Twin Cities, Department of Physiology
Associate Professor (with tenure) 1999 – 2008
Assistant Professor 1993 – 1999

University of Minnesota – Twin Cities, Rehabilitation Science Graduate Program
Graduate Faculty member 1997 – 2016

University of Minnesota – Twin Cities, Advanced Masters in Physical Therapy
Graduate Faculty member 1993 – 1997

Academic Administrative Appointments

Boston University: Undergraduate Research Opportunities Program
Faculty Advisory Committee 2021 – present

Boston University College of Health & Rehabilitation Sciences: Sargent College – Boston, Dept. of PT/AT
Chair 2016 – 2019

Boston University College of Health & Rehabilitation Sciences: Sargent College – Boston, Rehabilitation Sciences
Steering Committee 2016 – 2019

Boston University College of Health & Rehabilitation Sciences: Sargent College – Boston, Graduate Professional Programs
Member 2016 – 2019

Boston University College of Health & Rehabilitation Sciences: Sargent College – Boston, Undergraduate Programs
Member 2016 – 2019

University of Minnesota Medical School – Twin Cities, Program in Physical Therapy
Director 2013 – 2016
Interim Director 2012 – 2013

University of Minnesota – Twin Cities, Rehabilitation Science PhD Program
Director 1999 – 2003

Clinical/Hospital Appointments

Sacred Heart Rehabilitation Hospital – Milwaukee, WI, Physical Therapist, 1984 – 1986

Presbyterian Home – Milwaukee, WI, Physical Therapist, 1988 – 1991

St. Michael Hospital – Milwaukee, WI, Physical Therapist, 1984 – 1986

NorthShore Rehab – Milwaukee, WI, Physical Therapist, 1986 – 1988

Consulting Positions

1. University of Minnesota, University of Minnesota Building Interdisciplinary Research Careers in Women's Health (BIRCWH) K12, Interdisciplinary Advisory Council (IAC) member and IAC member, 2021, 2022, 2023 (present)
2. University of Maryland, Claude S. Pepper Center, Baltimore, MD, External Review Board, 2020, 2021, 2022, 2023 (present)
3. Tulane University, COBRE in Aging and Regenerative Medicine, New Orleans, LA, External Review Board, 2022, 2023 (present)
4. University of Southern California, Division of Biokinesiology and Physical Therapy, Academic Program Review, 2022
5. Georgia Institute of Technology, Atlanta, GA, School of Applied Physiology – External Review, 2016
6. Ellison/American Federation in Aging Research Foundation, New York City, NY, Postdoctoral Fellow Review Committee, 2010 – 2012
7. University of Maryland, Claude S. Pepper Center, Baltimore, MD, External Review Board, 2007 – 2009
8. Supercentenarian Research Foundation, Los Angeles, CA, Scientific Advisory Board, 2007 – 2009
9. NIH, NIH CSR Review Workshop: Integrated Biology II, Washington, DC, Invited attendee, 2007 – 2009
10. Donald W. Reynolds Foundation, Las Vegas, NV, Consultant, 2007
11. Temple University, Department of PT/College of Health Professions, Philadelphia, PA, External Reviewer, 2006
12. Donald W. Reynolds Foundation, Las Vegas, NV, Consultant, 2005
13. Pennington Scientific Symposium "Mechanisms & Retardation of Aging", Baton Rouge, LA, Consultant, 2003

Current Membership and Offices in Professional Organizations

American Physical Therapy Association	1982 – 2002; 2012 – present
RIPPT Secretary (elected)	2016 – 2019
American Aging Association	2005 – present
Executive Board (elected)	2011 – 2018
Scientific Advisory Board (elected)	2008 – 2018
Gerontological Society of America	1996 – present
Board of Directors – Secretary (elected)	2021 – present

HONORS AND AWARDS

Boston University

- Inaugural Travis M. Roy Endowed Professor in Rehabilitation Sciences, 2016 – present
- Boston University's Frank George Award, 2021

University of Minnesota

- Committee on Institutional Cooperation –Academic Leadership Program Fellow, University of Minnesota representative, 2013 – 2014
- Women's Faculty Cabinet – UofMN Medical School representative, 2010 – 2013
- Mid-Career Women in Science – UofMN Medical School representative, 2003
- Inaugural Fesler-Lampert Chair in Aging Studies, Center on Aging Chair, 2000 – 2001
- Early-Career Women in Science – UofMN Medical School representative, 1995
- National Brookdale Fellowship on Aging – UofMN Candidate, 1994

- Medical Bulletin – Featured Researcher, 1994

National

- Fellow of the American Physical Therapy Association (FAPTA), August 2022
- American Aging Association, Denham Harman Award, May 2022
- American Aging Association Fellow, June 2016
- Marquette University Professional Achievement Award, April 2014
- Gerontological Society of America Fellow, 2011
- GSA Research Presentation (New Orleans) highlighted in USAToday Nov 21, 2010, http://www.usatoday.com/yourlife/fitness/exercise/2010-11-21-staying-fit-old-age_N.htm
- Ninth International Symposium on Neurobiology and Neuroendocrinology of Aging Travel Award, 2006
- Brazilian Physical Therapy National Congress (COBRAF), Keynote Speaker, 2005
- GRC-Biology of Aging Poster Award (oral presentation), France, 2004
- GRC-Biology of Aging Travel Award, Ventura California, 2003
- American Physical Therapy Association, Section on Geriatrics "Joan Mills Award", 1999
- NIA Workshop, Sarcopenia, Arlie, Virginia (selected attendee), 1994
- Featured Researcher in *PT Magazine of Physical Therapy*, APTA, 1994
- NASA Postdoctoral Fellowship, 1992
- American Heart Association Pre-doctoral Fellowship, 1989 – 1991
- Foundation for Physical Therapy Doctoral Scholarships, 1987 – 1991
- Marquette University Graduate Fellowship, 1988

RESEARCH AND SCHOLARSHIP

Grants and Contracts

Current Grant Support –

Travis M. Roy Endowed Professorship (PI: Thompson)
Travis M. Roy Endowment for Research, 2016 – present

Principal Investigator
MPI (Thompson, Brown-Borg)
NIH/NIA, Frailty: Prediction of Onset and Progression, R56AG067724-01, 2020 – 2023 (nce)
Total cost = $759,561

GEMSSTAR Mentor
Danny Roh, MD, PhD
NIH/NIA, Role of Senescence in the Impaired Wound Healing of Aging, R03AG067983-01, 2020-2023 (nce)
Total cost = $330,000

Principal Investigator
NIH/NIA *Academic Leadership Award: The Translational Rehabilitation in Geroscience Initiative*, K07AG072124-01, 2021-2026
Total cost = $790,466

K25 Career Development Award- Consultant/Co-Mentor
Brendan Erk, PhD
NIH/NIA, MRI of Sarcopenia in Heart Failure, K25AG070321-01A1, 2022-2027
Total cost for year 01= $134,142

Principal Investigator
MPI (Thompson, Brown-Borg)
Hevolution Foundation, Cellular Mechanisms of Frailty Onset, AGE-003, 2023 - 2028
Total cost = $3,840,660

Significant Personnel/Consultant
PI Elise Morgan
NIH/NIA, Tailoring of cellular mechanical microenvironments to rescue age-related impairments in bone regeneration, 1R01AG073671-01A1, 2022-2026
Total cost = $$4,522,953

Pending Grant Support

NSF Research Traineeship Program (NRT), affiliated faculty
MPI: Morgan, Dunlop, Khalil, Chen
NSF, NRT-URoL: A Convergent Training Program in Biological Control
Submitted Fall 2022

F31 Predoctoral Individual NRSA Fellowship- Co-mentor
PI Amber Normann
NIH/NCI, Prehabilitation in Cancer
Submitted Fall 2022

Grant Support – External (left at U of MN when moved to BU, October 2016)

Co-Investigator **(**Chow, PI)
NIH/NIDDK, Training Effects on Skeletal Muscle Lipid Dynamics, R01 DK098203, 2014 – present,
Annual direct cost = $381,727

Principal Investigator
MPI (Thompson, Ferrington)
NIH/NIA, Training Program: Functional Proteomics of Aging, T32 AG029796, 2008 – present,
Annual direct cost = $448,786

Co-Investigator (Arriaga, PI)
NIH/NIA, Interplay between Lipophagy and Mitophagy in Skeletal Muscle Aging, R01 AG020866, 2001 – present,
Total cost = $1,566,894

Past Grant Support - External

National Research Foundation of Korea, Global Research Network (PI: Kim, Thompson)
A pre-clinical approach for the enhancement of quality of life in patients with DMD, 2016 – 2019,
Annual direct cost = $77,700 (in 1,000 KRW)

Steering Committee Member (Felson, PI)
NIH, Boston University Clinical and Translational Science Institute, KL2 TR001411, 2015 – 2019,
Annual direct cost = $647,476

Co-Investigator **(**Kirkland, PI)
NIH/NIA, Geroscience Network, R24 AG04439602, 2013 – present, Annual direct cost = $141,869

Principal Investigator (MPI)
NIH/NIA, Oxidative Stress and Disease Gordon Research Conference and Gordon Research Seminar, R13 AG055293, 2016 – 2017, Annual direct cost = $53,700

Principal Investigator
NIH/NIA, Structural and Calcium Regulatory Protein in Sarcopenia, R01 AG017768, 2001 – 2014, Total cost = $2,909,420

Co-Mentor (Verma, PI)
NIH/NIAMS, Treatment of MD By Increased Angiogenesis F30AR066454, 2015 – 2018, Annual direct cost = $44,036

Mentor (Graber, PI)
NIH/NIA, Pre-doctoral F31 Fellowship Award, F31 AG044108, 2012 – 2014, Total cost = $72,156

Principal Investigator
NIH/NIA, American Aging Association Annual Meeting, R13 AG044134, 2013 – 2014, Total cost = $46,990

Principal Investigator
Biospheres Industry award, Assessing Nanoparticles: A Pilot Study, 2012– 2013, Total cost = $10,000

Preceptor (Day, Thomas, PI)
NIH/NIAMS, Training Program in Muscle Research, T32 AR007612, 2001 – 2011, Total cost = ~$2,340,000

Co-Investigator (Ferrington, PI)
NIH/NIA, Immunoproteasome: A Key Component of the Cellular Stress Response, R21 AG032391 2008 – 2011, Total cost = $314,667

Principal Investigator
NIH/NIA, ARRA Supplement to R01 AG017768, 2009 – 2010, Total cost = $49,594

Principal Investigator
NIH/NIA, Supplement for Structural and Calcium Regulatory Protein in Sarcopenia, R01 AG017768S1, 2007 – 2008, Total cost = $68,575

Co-Investigator (Arriaga, PI)
NIH/NIA, Giant Mitochondria in Aging, R01 AG20866, 2007 – 2011, Total cost = $1,463,030

Principal Investigator (Thompson, Brown-Borg)
NIH/NIA, Gordon Research Conference Biology of Aging, R13 AG030289, 2007 – 2008, Total direct cost = $50,000

Co-Investigator (Thomas, PI)
NIH/NIA, Oxidative Stress and the Proteomics of Aging, R01 AG026160, 2004 – 2009, Total cost = $2,192,614

Principal Investigator
NIH/NIA, Myosin Modifications in Aged Muscle, K02 AG021626, 2003 – 2008, Total cost = $540,876

Co-Investigator (Arriaga, PI)
NIH/NIA, Aging of the Subcellular Muscle Proteome, R21 AG025371, 2005 – 2007, Total cost = $334,125

Co-Investigator (Arriaga, PI)
NIH/NIA, Defining Heteroplasmy at the Single Mitochondrion Level, R01 AG20866, 2002 – 2006, Total cost = $1,111,044

Principal Investigator
NIH/NIA, Age and Muscle Strength – Role of Myosin, R03 AG018156, 2000 – 2001, Total cost = $74,000

Principal Investigator
AHA, Grant-in-Aid, Heart Failure and Exercise: Single Skeletal Muscle Fiber Function #9807918X, 1998 – 2001, Direct cost = $90,000

Principal Investigator
Foundation for Physical Therapy Research Grant, Influence of Inactivity and Exercise on Single Muscle Fibers, 1997 – 1999, Direct cost = $30,000

Co-Investigator (Valberg, PI)
Southern California Equine Foundation, Calcium Sensitivity of Skeletal Muscle and the Effect of Altered Dietary Cation-anion Difference on Tying-up, 1998 – 1999, Annual direct cost = $36,037

Principal Investigator
AHA – Minnesota Affiliate Grant-in-Aid, Maximal Shortening Velocity, Force-Velocity and Power Characteristics of Adult and Aged Rat Muscle Fibers Following Disuse #07045757, 1995 – 1998, Annual direct cost = $48,000

Principal Investigator
AHA – Minnesota Affiliate, Grant-in-Aid, Alterations in Skeletal Muscle with Aging and Disuse #07045757, 1994 – 1995, Annual direct cost = $24,000

Co-Investigator (Donaldson, PI)
NIH/NIAMS, Skeletal Muscle Excitation-Contraction Coupling R01 AR35132, 1994 – 1995, Annual direct cost = $91,363

Past Grant Support - University

Principal Investigator
Minnesota Medical Foundation, Piximus - equipment award, 2012 – 2013, $30,000

Principal Investigator
UofMN Critical Care Center, Frailty and Inflammation, pilot research, 2011 – 2013, Direct cost = $10,000

Principal Investigator
Paul & Sheila Wellstone MD Center, NASH Award, Protein and Gene Expression with Inactivity 2005 – 2006, Annual direct cost = $10,000

Principal Investigator
Minnesota Medical Foundation, Permeabilized fiber test system – MMF Equipment Award, 2005 – 2006, $25,000

Co-Investigator (Ferrington, PI)
Paul & Sheila Wellstone MD Center, NASH Award, The Proteasome and Muscle Wasting 2004 – 2005, Direct cost = $50,000

Principal Investigator
Minnesota Medical Foundation, MMF Equipment Award, Cryostat, 2000 – 2001, $25,000

Co-Investigator (Valberg, PI)
Minnesota Equine Research Center, Research Grant, Muscle Calcium Regulation in Recurrent Exertional Rhabdomyolysis (“tying-up”), 1998 – 1999, Direct cost = $19,920

Principal Investigator
Minnesota Medical Foundation, Research Grant, Effects of Clenbuterol on Skeletal Muscle Function: During a Period of Imposed Inactivity, 1997 – 1999, Annual direct cost = $5,000

Principal Investigator
Graduate School, Grant-in-Aid, Aged Skeletal Muscle Single Fiber Function Following Hindlimb Unweighting, 1994 – 1995, Direct cost = $13,772

Principal Investigator
Minnesota Medical Foundation, MMF Equipment Award, Contractile Properties of Aged Skeletal Muscle Fibers, 1994 – 1995, $17,000

Publications

Peer-Reviewed Publications

1. Perazza LR, Gower AC, Brown-Borg HM, Divieti-Pajevic P, **L.V. Thompson**, Protectin DX as a therapeutic strategy against frailty in mice *Geroscience* in revision.

2. Roto-Cataldo AV, Collimore AN, Spangler J, Braga-Ribeirinha L, Hutchinson K, Wang QM, **Thompson LV**, Awad, LN., Enhancing neuroplasticity in the chronic phase after stroke: effects of a soft robotic exosuit on exercise intensity and brain-derived neurotrophic factor *Engineering in Medicine and Biology,* in review

3. Perazza LR, Avers D, **L.V. Thompson**, Measurement of Frailty: Tools and Interpretation *Topics in Geriatric Rehabilitation,* in press.
   Defined intellectual content, manuscript preparation, editing, and review.

4. Perazza LR, Wei G, **L.V. Thompson**, Fast and slow skeletal myosin binding protein-C and aging. *Geroscience.* 2023 Apr;45(2):915-929. doi: 10.1007/s11357-022-00689-y. Epub 2022 Nov 21. PMID: 36409445
   Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review

5. Perazza, LA, Brown-Borg H, **L.V. Thompson**, Physiological Systems in Frailty, *Comprehensive Physiology*, .2022 Apr 26;12(3):3575-3620. doi: 10.1002/cphy.c210034.PMID: 35578945
   Defined intellectual content, manuscript preparation, editing, and review.

6. Kwak, D. and **L.V. Thompson**, Frailty: Past, Present, and Future? *Sports Medicine and Health Sciences,* November 2020, DOI: 10.1016/j.smhs.2020.11.005
   Defined intellectual content, manuscript preparation, editing, and review.

7. Baumann, CW, Kwak, D., and **L.V. Thompson**, Phenotypic Frailty Assessment in Mice: Development, Discoveries and Experimental Considerations. *Physiology*, 2020 Nov 1;35(6):405-414. doi:10.1152/physiol.00016.2020. PMID: 33052773
   Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review

8. Kwak, D., Wei, G, **L.V. Thompson**, and JH Kim, Short-term ONX-0914 administration: Performance and muscle phenotype in Mdx mice. Accepted to *International Journal of Environmental Research and Public Health*, 2020 Jul 19;17(14):5211. doi: 10.3390/ijerph17145211. PMID: 32707682
   Guarantor of integrity of entire study, defined intellectual content, manuscript preparation, editing, and review.

9. Chen, CN, Liao YH, Tsai, SC, and **L.V. Thompson**, Age-dependent effects of caloric restriction on mTOR and ubiquitin-proteasome pathways in skeletal muscles. *Geroscience*, 2019 41(6):871-880, doi: 10.1007/s11357-019-00109-8. PMID: 31676964
   Defined intellectual content, manuscript preparation, editing, and review.

10. Baumann, CW, Kwak, D., and **L.V. Thompson**, Sex-specific components of frailty in C57BL/6 mice. *Aging*, (Albany NY). 2019 Jul 29;11(14):5206-5214. Doi: 10.18632/aging.102114. PMID: 31355774
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual

content, manuscript preparation, editing, and review

11. Carter, CS, Justice, JN, and **L. Thompson**, Lipotoxicity, aging, and muscle contractility: does fiber type matter? *Geroscience*, 2019. Jun;41(3):297-308. doi: 10.1007/s11357-019-00077-z. Epub 2019 Jun 22. Review. PMID: 31227962
    Defined intellectual content, manuscript preparation, editing, and review.

12. Graber, TG, Fandrey KR, and **L.V. Thompson**, Novel individualized power training protocol preserves physical function in adult and older mice. *Geroscience.* 2019 Apr;41(2):165-183. doi: 10.1007/s11357-019-00069-z. PMID: 31076998
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review

13. Kim, JH, Graber, TG, Liu, H, Asakura A, and **L.V. Thompson**, Increasing myosin light chain 3f (MLC3f) protects against a decline in contractile velocity. *PLoS One*. 2019 Apr 9;14(4):e0214982. doi: 10.1371/journal.pone.0214982.PMID: 30964931
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review

14. Kwak, D., Baumann, CW, and **L.V. Thompson**, Identifying characteristics of frailty in female mice using a phenotype assessment tool. *Journals of Gerontology, A Biol Sci Med Sci.,* 2019, Apr 8. pii: glz092. doi: 10.1093/gerona/glz092. PMID: 30958526
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review

15. Liu, H. and **L.V. Thompson**, Skeletal muscle denervation investigations: Selecting an experimental control wisely. *Am J Physiol Cell Physiol.* 2019 Mar 1;316(3):C456-C461. doi: 10.1152/ajpcell.00441.2018. Epub 2019 Jan 9. PMID: 30624984
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review

16. Baumann, CW, Kwak, D., and **L.V. Thompson**, Assessing onset, prevalence and survival in mice using a frailty phenotype. *Aging*, (Albany NY). 2018 Dec 18;10(12):4042-4053. doi: 10.18632/aging.101692. PMID: 30562163
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review

17. Snow, L., Low, W., and **L.V. Thompson**, Distinct patterns of fiber-type adaptation in rat hindlimb muscles 4 weeks after hemorrhagic stroke. *Am J Phys Med Rehabil.* 2019 Apr;98(4):266-274. doi: 10.1097/PHM.0000000000001062. PMID: 30286018
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review

18. Baumann, C.W., Kwak, D., Ferrington, D.A., and **L.V. Thompson**, Downhill exercise alters immunoproteasome content in mouse skeletal muscle. *Cell Stress and Chaperones*, 2018 Jul;23(4):507-517. doi: 10.1007/s12192-017-0857-y. PMID: 29124664
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review

19. Liu, H., Ferrington, D.A., Baumann, C., and **L.V. Thompson**, Denervation-induced activation of the standard proteasome and immunoproteasome. *PlosOne*, 2016 Nov 22;11(11):e0166831. Doi: 10.1371/journal.pone.0166831 PMID: 27875560
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual

content, manuscript preparation, editing, and review. IF=3.54

20. Baumann, C., Liu, H.M., and **L.V. Thompson**, Denervation-induced activation of the ubiquitin-proteasome system reduces skeletal muscle quantity not quality. *PLoS One*, 2016 Aug 11;11(8):e0160839. Doi: 10.1371/journal.pone.0160839 PMID: 27513942
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=3.23

21. Baumann, C., Kwak, D., Liu, H., and **L.V. Thompson,** Age-induced oxidative stress: how does it influence skeletal muscle quantity and quality? *J Appl Physiol*, 2016 Nov 1;121(5):1047-1052. Doi: 10.1152/ japplphysiol.00321.2016. PMID: 27197856
    Conducted literature search, manuscript preparation, editing, and review. IF=3.06

22. Graber, T.G., Kim, J.H., Grange, R.W., McLoon, L.K., and **L.V. Thompson**, C57BL/6 Lifespan Study: Age-related declines in muscle power production and contractile velocity, *AGE*, June;37(3):9773. Doi:10.1007/s11357-9773-1. Epub 2015 Apr 17 PMID: 25893911
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=3.45

23. Graber, T.G., Ferguson-Stegall, L., Liu, H., and **L.V. Thompson,** Voluntary aerobic exercise reverses frailty in old mice. *J Gerontol A Biol Sci Med Sci*, 2015 Sep;70(9):1045-58. Doi:10.1093/Gerona/glu163. Epub 2014 Sep 30 PMID: 25271307
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=5.42

24. Chen, C-N, Graber, T.G., Bratten, WM, Ferrington, D.A., and **L.V. Thompson**. Immunoproteasome in animal models of Duchenne muscular dystrophy: a comparative study. *J Muscle Res Cell Motil*, 2014 Apr;35(2):191-201. doi: 10.1007/s10974-014-9385-x. Epub 2014 Jun 17. PMID: 24934129
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=2.09

25. Kim, J.H. and **L.V. Thompson**, Non-weightbearing-induced muscle weakness: the role of myosin quantity and quality in MHC type II fibers. *Am J Physiol Cell Physiol*, 2014 Jul 15;307(2):C190-4. doi: 10.1152/ajpcell.00076.2014. Epub 2014 May 14. PMID: 24829495
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=3.78

26. Liu, H., Graber, T.G., Ferguson-Stegall, L., and **L.V. Thompson,** Clinically-relevant frailty index for mice. *J Gerontol A Biol Sci Med Sci*, 2014 Dec;69 (12):1485-91. doi: 10.1093/gerona/glt188. Epub 2013 Dec 132013 Dec 13. PMID:24336799
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=5.42

27. Romanick, M., **Thompson, L.V.**, and H.M. Brown-Borg. Murine models of atrophy, cachexia, and sarcopenia in skeletal muscle. *Biochim Biophys Acta*, 2013 Mar 20. Doi:pii:S0925-4439(13)00085-0. 10.1016. PMID: 23523469
    Defined intellectual content, manuscript preparation, editing, and review. IF=4.38

28. Graber, T.G., Ferguson-Stegall, L., Kim, J.H., and **L.V. Thompson.** C57BL/6 Neuromuscular healthspan scoring system. *J Gerontol A Biol Sci Med Sci*, 2013 Nov;68(11):1326-36. Doi: 10.1093/Gerona/glt032. PMID: 23585418
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=5.42

29. Chen, C-N and **L.V. Thompson.** Interplay between aging and unloading on oxidative stress in fast-twitch muscles. *J Gerontol A Biol Sci Med Sci*, 2013 Jul;68(7):793-802. Doi:10.1093/Gerona/gls240. PMID: 23213028
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=5.42

30. Kim, J.H., Kwak, H.B., **Thompson, L.V.**, and J.M. Lawler. Contribution of oxidative stress to pathology in diaphragm and limb muscles with Duchenne muscular dystrophy. *J Muscle Res Cell Motil*, DOI 10.1007/s10974-012-9330-9. PMID: 23104273
    Defined intellectual content, manuscript editing and review. IF=2.09

31. Kim, J.H. and **L.V. Thompson.** Inactivity, age, and exercise: single fiber power generation. *J Appl Physiol*, 2013 Jan;114(1):90-8. doi: 10.1152/japplphysiol.00525.2012. Epub 2012 Oct 25. PMID: 23104693
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=3.06

32. Snow, L.M., Low, W.C., and **L.V. Thompson**. Skeletal muscle plasticity after hemorrhagic stroke: influence of spontaneous physical activity. *Am J Phys Med Rehabil*, 2012 Nov;91(11):965-76. Doi:10.1097/PHM.0b013e31825f18e1. PMID: 22760110
    Developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=2.20

33. Kim, J.H. and **L.V. Thompson**. Differential effects of mild therapeutic exercise during a period of inactivity on power generation in soleus type I single fibers with age. *J Appl Physiol*, 112(10):1752-61, 2012. PMID: 22422796
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=3.06

34. Templeton, D.L., Mosser, K.H.H., Chen CN, Stone, M.D., John, R., Dengel, D.R., and **L.V. Thompson.** Effects of left ventricular assist devisce (LVAD) placement on myocardial oxidative stress markers. *Heart, Lung, and Circulation*, 2012 Sep;21(9):586-97. Epub 2012 May 29. PMID: 22647559
    Defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=1.44

35. Kim, J.H., Torgerud, W.S., Mosser, K.H.H., Hirai, H., Watanabe, S., Asakura, A. and **L.V. Thompson**. Myosin light chain 3f attenuates age-induced decline in contractile velocity in MHC type II single muscle fibers. *Aging Cell* 11(2):203-12, 2012. DOI: 10.1111/j.1474-9726.2011.00774. PMID: 22103752
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=6.34

36. **Thompson, L.V.** Seeking the fountain of youth. *Exerc Sport Sci Rev*, 2011 Jul;39(3):112. PMID: 21701280
    Conducted literature search, manuscript preparation, editing, and review. IF=4.26

37. McLoon, L.K., Park, H., Kim, J.H., Pedrosa-Domellöf, F. and **L.V. Thompson**. A continuum of myofibers in adult rabbit extraocular muscle: force, shortening velocity, and patterns of myosin heavy chain co-localization. *J Appl Physiol*, 111:1178-1189, 2011. PMCID: PMC3191789
    Defined intellectual content, guarantor of integrity of single fiber physiological experiments, contributed to study concept and design, manuscript editing and review. IF=3.06

38. Kostal, V., Leva, K., Swift, M., Skillrud, E., Chapman, M., **Thompson, L.V.,** and E.A. Arriaga. Semi-automated image analysis: detecting carbonylation in subcellular regions of skeletal muscle. *Analytical and Bioanalytical Chemistry*, 400(1):213-22, 2011. PMID: 21327623
Defined intellectual content, contributed to study concept and design, data acquisition, manuscript preparation, editing, and review. IF=3.44

39. Xu, X., **Thompson, L.V**., Navratil, M., and E.A. Arriaga. Analysis of superoxide production in single skeletal muscle fibers. *Analytical Chemistry,* 1;82(11):4570-6, 2010. PMID: 20446672
Defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=5.64

40. Xu, X, Chen, C-N, Arriaga, E.A. and **L.V. Thompson**. Asymmetric superoxide release inside and outside the mitochondria in skeletal muscle under conditions of aging and disuse. *J Appl Physiol*, 109(4):1133-9, 2010. PMID: 20689097
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=3.06

41. Roe, M.R., McGowan, T., **Thompson, L.V.**, and T.J. Griffin. Targeted ^{18}O-labeling for improved proteomic analysis of carbonylated peptides by mass spectrometry. *J Am Soc for Mass Spec*, 21(7):1190-203, 2010. PMID: 20434358
Defined intellectual content, contributed to study concept and design, manuscript preparation, editing, and review. IF=2.95

42. Chen, C-N, Brown-Borg, H., Rakoczy, S.G., Ferrington, D.A., and **L.V. Thompson**. Aging impairs the expression of glutamate cysteine ligase catalytic subunit in soleus muscle under stress. *J Gerontol A Biol Sci Med Sci*. 65(2):129-37, 2010. PMID: 20018823
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=5.42

43. Sanchez, O. Walseth,T., Snow, L.M., Serfass, R., and **L.V. Thompson**. Skeletal muscle sorbitol levels in diabetic rats with and without insulin therapy and endurance exercise training. *Exp Diabetes Res*, 2009;2009:737686. Epub 2009 Nov 23. PMID: 200168
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=4.33

44. Snow, L.M. and **L.V. Thompson**. Influence of insulin and muscle fiber type in N-e-carboxymethyl)lysine accumulation in soleus muscle of rats with streptozotocin-induced diabetes mellitus. *Pathobiology*, 76:5: 227-234, 2009. PMID: 19816082
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=2.48

45. Feng, J., Xie, H., Meany, D.L., **Thompson, L.V.**, Arriaga, E.A., and T.J. Griffin. Quantitative proteomic profiling of muscle type and age-dependent protein carbonylation in rat skeletal muscle mitochondria. *J Gerontol A Biol Sci Med Sci*. 63(11):1137-52, 2009. PMID: 19038828
Defined intellectual content, contributed to study concept and design, manuscript preparation, editing, and review. IF=5.42

46. **Thompson, L.V.** Age-related muscle dysfunction. Experimental Gerontology, 44(1-2):106-11, 2009. PMID: 18657920
Conducted literature search, manuscript preparation, editing, and review. IF=3.49

47. Chen, C-N, Ferrington, D.A., and **L.V. Thompson**. Carbonic Anhydrase III and Four-and-a-Half LIM Protein 1 are preferentially oxidized with muscle hindlimb unloading. *J Appl Physiol*, 105(5):1554-61, 2008. PMID: 18756007

Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=3.06

48. Lehman SL, **L.V. Thompson.** Skeletal muscle fatigue: the tortoise's advantage. *Exerc Sport Sci Rev*. 37(1):2, 2009. PMID: 19098517.

Conducted literature search, manuscript preparation, editing, and review. IF=4.26

49. Feng, J., Navratil, M., **Thompson, L.V**., and E.A. Arriaga. Principal component analysis reveals age- and muscle-type related differences in protein carbonyl profiles of muscle mitochondria. *J Gerontol A Biol Sci Med Sci*. 63(12):1277-88, 2008. PMID: 19126840

Defined intellectual content, contributed to study concept and design, data acquisition, manuscript preparation, editing, and review. IF=5.42

50. Feng, J., Navratil, M., **Thompson, L.V**., and E.A. Arriaga. Estimating relative carbonyl levels in muscle microstructures by fluorescence imaging. *Analytical and Bioanalytical Chemistry*, 391(7):2591-8, 2008. PMID: 18548236

Defined intellectual content, contributed to study concept and design, data acquisition, manuscript preparation, editing, and review. IF=3.44

51. Arora, P., Husom, A.D., Ferrington, D.A., and **L.V. Thompson**. Age-dependent effects of treadmill exercise during a period of inactivity. *Experimental Gerontology*, Jul;43(7):668-73, 2008. PMID: 18445515

Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=3.49

52. Chen, C-N, Brown-Borg, H.M., Rakoczy, S.G. and **L.V. Thompson**. Muscle disuse: adaptation of antioxidant systems is age-dependent. *J Gerontol A Biol Sci Med Sci*. 63(5): 461-466, 2008. PMID: 18511748

Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=5.42

53. Prochniewicz, E, Lowe, D.A., Spakowicz, D., Higgins, L., O'Conor, K., **Thompson, L.V.**, Ferrington, D.A., and D.D. Thomas. Functional, structural and chemical effects of hydrogen peroxide oxidation of muscle fibers: an in vitro model of muscle aging. *Am J Physiol Cell Physiol*, 294: C613-C626, 2008. PMID: 18003749

Guarantor of integrity of physiological experiments within the study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=3.78

54. Snow, L.M., Fugere, N.A., and **L.V. Thompson**. Advanced glycation end-product accumulation and associated protein modification in skeletal muscle with aging. *J Gerontol A Biol Sci Med Sci*, 62 (11):1204-1210, 2007. PMID: 18000139

Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=5.42

55. Chen, C.N., and **L.V. Thompson.** Ischemia-reperfusion, Oxidative stress and muscle dysfunction. *Formosa Journal of Physical* Therapy 32(4): 226-233, 2007

Conducted literature search, manuscript preparation, editing, and review. IF=1.45

56. Prochniewicz, E, **Thompson, L.V.** and D.D. Thomas. Age-related decline in actomyosin structure and function, *Experimental Gerontology*, 42(10):931-8, 2007. PMID: 17706387
Conducted literature search, manuscript preparation, editing, and review. IF=3.49

57. Zhong, S. and **L.V. Thompson.** The roles of myosin ATPase activity and myosin light chain content in the slowing of type II fibers with hindlimb unweighting. *Am J Physiol Cell Physiol*, 293: C723-C728, 2007. PMID: 17494635
Guarantor of integrity of entire study, developed study concept and design, data acquisition, defined intellectual content, manuscript preparation, editing, and review. IF=3.78

58. Harrison, A., Anderson, B., **Thompson, L.V.**, L.K. McLoon. Three-dimensional localization of neuromuscular junctions in normal and botulinum toxin treated adult extraocular muscles. *Invest Ophthalmol Vis Sci*. 48:3594–3601, 2007. PMID: 17652728
Defined intellectual content, contributed to study concept and design, data acquisition, manuscript preparation, editing, and review. IF=3.40

59. Zhong, S., Chen, C.N., and **L.V. Thompson.** Sarcopenia of aging: functional, structural and biochemical alterations. *Brazilian Journal of Physical* Therapy 11 (2): 91-97, 2007.
Conducted literature search, manuscript preparation, editing, and review. IF=0.90

60. Warner, H.R. and **L.V. Thompson.** New approaches to aging research. *Reviews in Clinical Gerontology*. doi: 10.1017/S0959259807002092, Published online by Cambridge University Press 10 Apr 2007.
Conducted literature search, manuscript preparation, editing, and review. IF=0.18

61. Meany, D., **Thompson, L.V.,** and Arriaga, E.A. Simultaneously monitoring the superoxide in the mitochondrial matrix and extramitochondrial space by micellar electrokinetic chromatography with laser-induced fluorescence. *Analytical Chemistry* 79(12) pp 4588 – 4594, 2007. PMID: 17492834
Developed concept and design, conducted literature search, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=5.64

62. **Thompson, L.V.** Oxidative Stress, Mitochondria and mtDNA-mutator mice. *Experimental Gerontology* 41 (12): 1220-1222, 2006. PMID: 17126516
Conducted literature search, manuscript preparation, editing, and review. IF=3.49

63. Meany, D., Xie, H., **Thompson, L.V.**, Arriaga, E.A., and Griffin, T.J. Identification of carbonylated proteins from enriched rat skeletal muscle mitochondria using affinity chromatography-stable isotope labeling and tandem mass spectrometry. *Proteomics* 7:1150-1163, 2007. PMID: 17390297
Developed concept and design, conducted literature search, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=3.81

64. Snow, L.M., Lynner, C.B., Nielsen, E.M., Neu, H.S., and **L.V. Thompson**. Advanced glycation end product in diabetic rat skeletal muscle in vivo. *Pathobiology*, 73: 244-251, 2006. PMID: 17314495
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=2.48

65. **L.V. Thompson**, Durand, D., Fugere, N.A., Ferrington, D.A. Myosin and actin expression and oxidation in aging muscle. *J Appl Physiol* 101(6):1581-7, 2006. PMID: 16840579
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=3.06

66. Ahmadzadeh, H., Andreyev, D., Arriaga, E.A., and **L.V. Thompson**. Capillary electrophoresis reveals changes in individual mitochondrial particles associated with skeletal muscle fiber type and age. *J Gerontol A Biol Sci Med Sci,* 61(12):1211-8, 2006. PMID: 17234813

Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=5.42

67. Fugere, N.A., Ferrington, D.A. and **L.V. Thompson.** Protein nitration with aging in the rat semimembranosus and soleus muscles. *J Gerontol A Biol Sci Med Sci*, 61(8):806-12, 2006. PMID: 16912096
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=5.42

68. Zhong, S., Lowe, D.A. and **L.V. Thompson.** Effects of hindlimb unweighting and aging on rat semimembranosus muscle and myosin. *J Appl Physiol*, 101:873-880, 2006. PMID: 16690785
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=3.06

69. Arriaga, E, Ahmadzadeh, H, and **L.V. Thompson**. On-column labeling for capillary electrophoretic analysis of individual mitochondria directly sampled from tissue cross sections. *Anal Bioanal Chem*, 384(1):169-74, 2006. PMID: 16320040
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=3.44

70. Snow, L.M., Sanchez, O.A, McLoon, L., Serfass, R.C. and **L.V. Thompson.** Myosin heavy chain isoform expression in diabetic rats with peripheral neuropathy. *Acta Histochemica*, 107(3):221-229, 2005. PMID: 16054675
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=1.71

71. Snow, L.M., Sanchez, O.A, McLoon, L., Serfass, R.C. and **L.V. Thompson.** Effect of endurance exercise on myosin heavy chain isoform expression in diabetic rats with peripheral neuropathy. *Am J of Phys. Med. Rehab*, 84(10):770-9, 2005. PMID: 16205433
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=2.20

72. Snow, L.M, McLoon, L., and **L.V. Thompson**. Adult and developmental myosin heavy chain isoforms in soleus muscle of aging Fischer Brown Norway rat. *Anat Rec A Discov Mol Cell Evol Biol.* 286(1):866-73, 2005. PMID: 16086433
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=1.973

73. Prochniewicz, E, Thomas, D.D., and **L.V. Thompson**. Age-related decline in actomyosin function. *J Gerontol A Biol Sci Med Sci*, 60(4):425-43, 2005. PMID: 15933379
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=5.42

74. Sanchez, O.A, Snow, L.M., Lowe, D.A., Serfass, R.C., and **L.V. Thompson.** Effects of endurance exercise-training on single fiber contractile properties of insulin-treated streptozotocin-induced diabetic rats. *J Appl Physiol*, 99(2):472-8, 2005. PMID: 15831797
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=3.06

75. Husom, A.D., Ferrington, D.A., and **L.V. Thompson**. Age-related differences in the adaptive potential of type I skeletal muscle fibers. *Experimental Gerontology*, 40:227-235, 2005. PMID: 15763400
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=3.49

76. Ferrington, D.A., Husom, A.D., and **L.V. Thompson**. Altered proteasome structure, function, and oxidation in aged muscle. *FASEB*, 19(6):644-6, 2005. PMID: 15677694
Developed study concept and design, conducted literature search, defined intellectual content, manuscript preparation, editing, and review. IF=5.04

77. Lowe, D.A., Husom, A.D., Ferrington, D.A., and **L.V. Thompson**. Myofibrillar myosin ATPase activity in hindlimb muscles from young and aged rats. *Mech of Ageing and Development*, 125:9. 619-627, 2004. PMID: 15491680
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=3.40

78. Husom, A.D., Peters, E.A., Kolling, E.A., Fugere, N.A., **Thompson, L.V**. and D.A. Ferrington. Altered proteasome function and subunit composition in aged muscle. *Archives of Biochemistry and Biophysics*; 421(1): 67-76, 2004. PMID: 14678786
Developed concept and design, conducted literature search, defined intellectual content, manuscript preparation, editing, and review. IF=3.02

79. Ahmadzadeh, H., Johnson, R., **Thompson, L.V.**, and E Arriaga. Direct sampling from muscle cross-sections for electrophoretic analysis of individual mitochondria. *Analytical Chemistry*, 76: 315-3211, 2004. PMID: 14719877
Guarantor of integrity of histological experiments within the study, contributed to study concept and design, manuscript editing and review. IF=5.64

80. Lowe, D.A., Warren, G.L., Snow, L.M., **Thompson, L.V**. and D. D. Thomas. Muscle activity and aging affect myosin structural distribution and force generation in rat fibers. *J Appl Physiol*, 96(2): 498-506, 2004. PMID: 14514706
Developed concept and design, conducted literature search, defined intellectual content, manuscript preparation, editing, and review. IF=3.06

81. Gehrke, A., Krull, M., McDonald, R., Sparby, T., Thoele, J., Troje, S., ZumBerge, J., and **L.V. Thompson.** The effects of non-weightbearing on skeletal muscle in older rats: an interrupted bout versus an uninterrupted bout. *Biological Research for Nursing*, 5 (3):195-202, 2004. PMID: 14737920
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=1.43

82. Fox, J., Garber, P., Hoffman, M., Johnson, D., Schaefer, P., Vien, J., Zeaton, C. and **L.V. Thompson.** Morphological characteristics of skeletal muscles with gender and age. *Aging/Clinical & Exper Research* 15: 264-269, 2003. PMID: 14582690
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=1.22

83. Groskreutz, J.J. and **L.V. Thompson**. Enzymatic alterations in single type IIB skeletal muscle fibers with inactivity and exercise in 12 and 30 month old rats. *Aging/Clinical & Exper Research* 14:347-353, 2002. PMID: 12602568
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=1.22

84. Lowe, DA, Thomas, D.D., and **L.V. Thompson**. Force generation, but not myosin ATPase activity, declines with age in rat muscle fibers. *Am J Physiol Cell Physiol* 283:187-192, 2002. PMID: 12055087
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript preparation, editing, and review. IF=3.78

85. **Thompson, L.V.** Skeletal muscle adaptations and rehabilitation. *Journal of Orthopedic and Sports Physical Therapy*, 32 (2): 34-35, 2002. PMID: 11838580
Conducted literature search, manuscript preparation, editing, and review. IF=3.01

86. **Thompson, L.V.** Skeletal muscle adaptations with age, inactivity and therapeutic exercise. *Journal of Orthopedic and Sports Physical Therapy*, 32 (2): 44-57, 2002. PMID: 11838580
Conducted literature search, manuscript preparation, editing, and review. IF=3.01

87. Ojala, B.E., Page, L.A., Moore, M.A., and **Thompson, L.V.** The effects of inactivity on glycolytic capacity of single skeletal muscle fibers in adult and aged rats. *Biological Research for Nursing* 3(2):88-95, 2001. PMID: 11931526
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=1.43

88. Mlekoday, J., Mickelson, J.R., Valberg, S.J., Horton, J., Gallant, E., and **Thompson, L.V.** Calcium sensitivity of single fiber force production and actomyosin ATPase activity in Thoroughbred horses with recurrent exertional rhabdomyolysis. *Am J of Vet Res*, 62(10):1647-1652, 2001. PMID: 11592334.
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, manuscript preparation, editing, and review. IF=1.34

89. **Thompson, L.V**., Lowe, D.A., Ferrington, D.A., and Thomas, D.D. Electron paramagnetic resonance: a high-resolution tool for muscle physiology. *Exerc Sport Sci Rev*, 29:3-6, 2001. PMID: 11210444
Conducted literature search, manuscript preparation, editing, and review. IF=4.26

90. Lowe, D.A., Surek, J.T., Thomas, D.D., and **Thompson, L.V.** Electron paramagnetic resonance reveals age-related myosin structural changes in rat skeletal muscle fibers. *Am J Physiol*, 280 (3):C540-547, 2001. PMID: 11171573
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, manuscript editing and review. IF=3.78

91. Herrera, N.M., Zimmerman, A.N., Dykstra, D.D. and **Thompson, L.V**. The effects of Clenbuterol in the prevention of muscle atrophy in simulated bed rest. *Arch Phys Med Rehab.* 82:930-934, 2001. PMID: 11441380
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=2.57

92. Ness, K.K., Gray K, Snell, S.V. and **Thompson, L.V.** The effects of a physical therapist designed strengthening and aerobic conditioning program on strength, balance and physical performance in individuals with chronic alcoholism. *Issues on Aging*, 23(2):14-18, 2000.
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=NA

93. **Thompson L.V.** and Brown, M.B. Age-related changes in contractile properties of single skeletal fibers from the soleus muscle. *J Appl Physiol*, 86(3):881-886, 1999. PMID: 10066700
Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=3.06

94. **Thompson, L.V**., Johnson, S.A., and Shoeman, J.A. Single soleus muscle fiber function after hindlimb unweighting in adult and aged rats. *J Appl Physiol*, 84:1937-1942, 1998. PMID: 9609787

Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=3.06

95. **Thompson, L.V.,** Contractile properties and protein isoforms of single skeletal muscle fibers from 12- and 30-month-old Fischer 344 Brown Norway F1 Hybrid rats. *Aging/Clinical & Exper Research*, 11/2:109-118, 1999. PMID: 10386171
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=1.22

96. Sandmann, M.E, Shoeman, J.A. and **Thompson, L.V**. The fiber-type specific effect of inactivity and intermittent weight-bearing on the gastrocnemius muscle of an aged animal population. *Arch Phys Med Rehab*, 79:658-662, 1998. PMID: 9630145
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=2.57

97. **Thompson, L.V.** and Shoeman, J.A. Contractile function of single muscle fibers after hindlimb unweighting in aged rats. *J Appl Physiol*, 84(1):229-235, 1998. PMID: 9451640
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=3.06

98. Alley, K.A. and **Thompson, L.V**. Influence of simulated bed rest and intermittent weight-bearing exercise on single skeletal fiber function in aged rats. *Arch Phys Med Rehab*, 78:19-25; 1997. PMID: 9014952
    Guarantor of integrity of entire study, developed study concept and design, defined intellectual content, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=2.57

99. Carney-Anderson, L., **Thompson, L.V.,** Huetteman, D.A., and Donaldson, S.K. GTP_gS removal of D600 block of skeletal muscle excitation-contraction coupling. *Am J Physiol* 272 (Cell Physiol.41): C572-C581, 1997. PMID: 9124301
    Data acquisition, manuscript editing and review. IF=3.78

100. Balog, E.M., **Thompson, L.V.** and Fitts, R.H. The role of sarcolemma action potentials and excitability in muscle fatigue. *J Appl Physiol* 76(5): 2157-2162, 1994. PMID: 8063681
    Data acquisition, manuscript editing and review. IF=3.06

101. **Thompson, L.V.,** Balog, E.M. and Fitts, R.H. Muscle fatigue in the frog semitendinosus: The role of intracellular pH. *Am J Physiol*. 262 (Cell Physiol.31): C1507-1512, 1992. PMID: 1616012
    Guarantor of integrity of entire study, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=3.78

102. **Thompson, L.V**. and Fitts, R.H. Muscle fatigue in the frog semitendinosus: The role of the high energy phosphates and inorganic phosphate. *Am. J. Physiol.* (Cell Physiol.32): C803-809, 1992. PMID: 1415669
    Guarantor of integrity of entire study, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=3.78

103. **Thompson, L.V**., Balog, E.M., Riley, D.A. and Fitts, R.H. Muscle fatigue in the frog semitendinosus: Alterations in contractile function. *Am. J. Physiol*. 262 (Cell Physiol.31): C1500-1506, 1992. PMID: 1535482

Guarantor of integrity of entire study, data acquisition, conducted literature search, manuscript preparation, editing, and review. IF=3.78

Peer-Reviewed Publications – In Revision

Snow, L.M. and **L.V. Thompson**. Endurance exercise in diabetes: advanced glycation endproduct accumulation in muscle.

Invited Reviews

1. **Thompson, L.V.** Physical activity and exercise: identification of benefits. *Orthopedic and Physical Therapy Clinics of North America,* 10:2, 193-212, 2001.
2. **Thompson, L.V.** Aging muscle: Characteristics and strength training. *Issues on Aging* 18(1): 25-30, 1995.
3. **Thompson, L.V**. Effects of age and training on skeletal muscle physiology and performance. *Physical Therapy* 74(1):71-81, 1994. PMID: 8265730

Non-Peer-Reviewed Publications

1. Fandrey, K., Meuwissen, J., Reed, K., and **L.V. Thompson**. Fighting Frailty: A Call to Action. *Gerinotes*, 23(4): 23-26, 2016.
2. Knoebel, H.L., Rychly, E.C., **Thompson, L.V.,** and Ness, K.K. Alcoholism in the elderly, *Gerinotes*, 8(5): 21-23, 2001.
3. **Thompson, L.V.** Osteoarthritis and exercise: a brief perspective, *Gerinotes*, 8(3):5-6, 2001.
4. **Thompson, L.V.** Collaborative research, why and how? *Gerinotes*, 7(5):24-26, 2000.
5. **Thompson, L.V.** Linking basic bench research to the clinic. *Gerinotes*, 2000.
6. **Thompson, L.V.** Steps to identify the research article that is beneficial to you. *Gerinotes*, 2000.
7. **Thompson, L.V.** Improve mobility in the elderly – Reviewing the wellness exercise program. *Gerinotes*, 6(2):15, 1999.
8. **Thompson, L.V.** Suggestions to cope with change in the physical therapy environment. *Gerinotes*, 5(6):13, 1998.
9. **Thompson, L.V.** What is frailty? *Gerinotes*, 4(6):27,1997.
10. **Thompson, L.V.** Research article review. *Gerinotes*, 4(5):21-22,1997.
11. **Thompson, L.V.** Literature review. *Gerinotes*, 4(3):30,1997.
12. **Thompson, L.V.** Current Literature: Can Tai Chi be used as an intervention? *Gerinotes*, 3(4):26, 1996.
13. **Thompson, L.V.** and Kingdon, B. Current literature: article review. *Gerinotes,* 3(3):16, 1996.
14. **Thompson, L.V.** Article review: Landmark research. *Gerinotes* 2(2): 16-17, 1995.
15. **Thompson, L.V.** Improvement over maintenance. *PT Magazine of Physical Therapy* 3(5): 54, 1995

Chapters in Books

1. Chen, C-N., Perazza, L.R., **Thompson, L.V.** and Snow L.M. Muscle Structure and Function. Orthopaedic Physical Therapy Secrets. Eds. Jeff Placzek and David Boyce. Hanley & Belfus, Inc.; Philadelphia. PA, 2006. 2Nd edition. 3rd edition 2014. 4th edition chapter submitted December 2022.
2. **Thompson, L.V**. Age-related decline in actomyosin structure and function. Sarcopenia- Age-related muscle wasting and weakness (Mechanisms and Treatments) Eds. Gordon S. Lynch, Springer Science, 2011.
3. Warner, H.R., Sierra F, and **Thompson L.V.** Brocklehurst's Textbook of Geriatric Medicine and Gerontology, 7th edition. Eds. Howard Fillit, Kenneth Rockwood, Kenneth Woodhouse, Saunders 2010.
4. **Thompson, L.V**. Physiological changes accompanying the aging process. Sports Home Study Course, APTA Eds. James Matteson, 2006.

5. **Thompson, L.V.,** Physiological changes and adaptation to exercise in the older adult, in Geriatric Physical Therapy, 2nd Edition. Eds by Andrew Guccione. Mosby, St. Louis, MO, 1999.
6. **Thompson, L.V.,** Iatogenesis in the Elderly (Chapter 60), in Geriatric Rehabilitation Manual, eds by Timothy Kauffmann Churchill Livingstone, (Harcourt Brace & Company) New York, Edinburgh, London, Philadelphia, San Francisco, 1999.
7. **Thompson, L.V**., Documentation instructions for students. *Topics in Geriatric Rehab*, 13(1):1-13; 1997.
8. Fitts, R.H., Balog, E.M. & **Thompson, L.V.** Fatigue-induced alterations in contractile function: The role of excitation-contraction coupling. Muscle Fatigue: Biochemical and Physiological Aspects. G. Atlan,L. Beliveau, P. Bouissou (eds.), Masson, Paris, pp.40-48, 1991.

Presentations

Invited Oral Presentations - International

1. "Neuromuscular health matters." The 15th International Symposium on Neurobiology and Neuroendocrinology of Aging, Bregenz, Austria, July 2022
2. "Living My Dream- Skeletal Muscle Health Matters", the Denham Harman Research Award Lecture at the American Aging Association, 50th year. San Antonio, TX, May 18, 2022. * Keynote.
3. "The Role of Protein Structure Function in Health and Exercise", 2nd International Forum of Sport Medicine and Health Science, Chengdu, China, June 12-14, 2019. Keynote*
4. "Physical Therapy: Move Toward a Physical Therapist Career", College of Health Science, Chengdu Sports University, June 12, 2019.
5. "Opportunities to tease out the causes of frailty – Preclinical assessment tools", The Boston Claude Pepper Older Americans Independence Center, BWH, Boston, MA, April 5, 2019.
6. "Predicting onset, prevalence, and mortality in male and female mice using the mouse frailty phenotype", ICFSR, Miami Beach, FL, February 22, 2019.
7. "The Role of Protein Structure and Function in Health and Exercise", Korean Society of Exercise Physiology, Seoul, South Korea, October 2018. Keynote*
8. "Maintaining Cellular Homeostasis in Skeletal Muscle", Gordon Research Conference, Biology of Aging, Les Diablerets, Switzerland, July 2017
9. "The Power of Animal Models to Discover the Biology of Aging", International Association of Gerontology and Geriatrics (IAGG), San Francisco, CA, July 2017
10. "What do I want to be when I grow up and how do I get there?" Gordon Research Conference/Seminar, Les Diablerets, Switzerland, April 2013
11. "Preventing Frailty: Understanding the Etiology and Developing Interventions" Chang Gung University, Tao-Yuan, Taiwan, July 2012, Keynote*
12. "Preventing Frailty: Understanding the Etiology and Developing Interventions" Healthy Aging Research Center, Department of Sports Sciences, Taipei Physical Education College, July 2012
13. "Aging and Inactivity: Strategies for Reversal (Therapeutic Exercise)" Prevention and Intervention: from Molecular Biology to Clinical Perspectives Conference, Martin-Luther-University, Halle-Wittenberg, Germany, September 2011
14. "Oxidative stress and muscle dysfunction" University of Konstanz, Konstanz, Germany, July 2008
15. "Mechanisms underlying skeletal muscle dysfunction with age" Ninth International Symposium on Neurobiology and Neuroendocrinology of Aging, Bregenz, Austria, July 2008
16. "Age-related muscle dysfunction: the role of protein modifications" 6th Northern Lights Summer Conference- Biology of Aging-New Answers to Old Questions, Canadian Federation of Biological Societies, Winnipeg, MB, June 2008
17. "Age-related muscle weakness: strategies for reversal." Tissue Ageing from Molecular Biology to Clinical Perspectives Conference, Martin-Luther-University, Halle-Wittenberg, Germany, October 2007
18. "Skeletal muscle weakness with aging" University of Konstance, Konstance, Germany, July 2006
19. "Molecular and cellular adaptation of human single skeletal muscle fibers: chronic post-stroke phase", Keynote lecture at COBRAF, Sao Paolo, Brazil, October 2005

20. "Why grandma is weak?" COBRAF lecture series, Sao Paolo, Brazil, October 2005
21. "Mechanisms of skeletal muscle atrophy" COBRAF lecture series, Sao Paolo, Brazil, October 2005
22. "Basic research to bedside treatment: factors contributing to skeletal muscle force" COBRAF lecture series, Sao Paolo, Brazil, October 2005
23. "The falling-apart of skeletal muscle" Department of Rehabilitation, Sao Carlos University, Sao Carlos, Brazil, September 2005

Invited Oral Presentations - National

1. "Evaluation of Muscle Function: The Benefits", Center for Skeletal Research, Summer Lecture Series, MGH and Harvard University, Boston, MA, June 2022.
2. "Frailty- Impact of Translational Science", University of Kentucky, September 2021
3. Research Funding Symposium Part 2: Perspectives on Research Mentoring, Combined Sections Meeting, APTA, February 2021
4. Research Funding Symposium Part 2: Perspectives from Funded PT Researchers, Combined Sections Meeting, APTA, February 2019
5. Treating Gait Asymmetry after Stroke: Basic and Clinical Research Insights, Combined Sections Meeting, APTA, February 2019
6. "Fighting Frailty – One Protein at a Time", Boston Medical, Department of Neuroscience, Boston, MA, January 2019
7. Biology of Aging: Exercise & Musculoskeletal Factors "Preclinical Models of Inactivity and Bedrest to Investigate Muscle Atrophy" GSA, Boston, MA November 2018
8. "Reversing Frailty: Exercise is the Panacea", 2018 Barshop Symposium, San Antonio, TX, October 2018
9. "Fighting Sarcopenia – One Protein at a Time", Tufts University, March 2018
10. "Frailty: A call to action for physical therapists and scientists" Combined Sections Meeting, APTA, New Orleans, LA, February 2018.
11. "Fighting Sarcopenia and Frailty – One Protein at a Time", University of Massachusetts-Amherst, December 2017
12. "Fighting Sarcopenia and Frailty – One Protein at a Time", Colorado State University, Fort Collins, CO, September 2017
13. "Frailty and Sarcopenia" – The Role of Protein Quantity and Quality", University of Wisconsin, Madison, WI, April 2017
14. "Muscle Dysfunction and Frailty – The Role of Protein Quantity and Quality", Cleveland Clinic, Cleveland, OH, January 2017
15. "Impact of Voluntary Exercise on Frailty in Old Mice", APS Intersociety Meeting: The Integrative Biology of Exercise VII, Phoenix, AZ, November 2016
16. "Muscle Dysfunction and Frailty – The Role of Protein Quantity and Quality", American Aging Association Annual Meeting, Seattle, WA, June 2016
17. "Fighting Frailty", Inaugural Address for Research on Healthy Aging, School of Kinesiology, University of Minnesota, Minneapolis, MN May 2016
18. "Fighting Frailty: One Protein at a Time", Boston University, Boston, MA, April 2016.
19. "Frailty and Sarcopenia: Of Mice and Men", School of Gerontology, USC, Los Angeles, CA, January 2016
20. "Frailty: Of Mice and Men", Robert and Arlene Kogod Center on Aging, Mayo Clinic, Rochester, MN, January 2016
21. "Frailty", American Aging Association Annual Meeting, Long Beach, CA, May 2015
22. "Reversing Frailty: Exercise is the Panacea", OMRF, Oklahoma City, OK, April 2015
23. "Reversing Frailty: Exercise is the Panacea", Department of Rehabilitation Medicine, Emory University and the School of Applied Physiology, Georgia Institute of Technology, Atlanta, GA, April 2015

24. “Exercise Mitigates Frailty: Mouse Model”, International Conference on Frailty & Sarcopenia Research, Boston, MA, April 2015
25. “The Role of Protein Damage in Age-related Muscle Weakness”, Gerontological Society of America Annual Conference, Washington, DC, November 2014
26. “Reversing Frailty: Exercise is the Panacea” Department of Physical Therapy, University of West Virginia, Morgantown, WV, October 2014
27. “Reversing Frailty in Old Muscle: Exercise is the Panacea”, Department of Physical Therapy, Marquette University, Milwaukee, WI, April 2014
28. “Reversing Frailty in Old Muscle: Exercise is the Panacea” Stem Cell Institute Seminar Series, University of Minnesota, Minneapolis, MN March 2014
29. Age-related muscle contractility– Protein damage and expression, Advances in Skeletal Muscle Biology in Health and Disease Conference, University of Florida, Gainesville, FL, March 2014
30. “Reversing Frailty in Old Muscle: Exercise is the Panacea” Division of Surgical and Biomedical Sciences, Davis Heart and Lung Research Institute, The Ohio State University, Columbus, OH, November 2013
31. “Preventing Frailty: Understanding the Etiology and Developing Interventions” Department of Pharmacology and Neuroscience Seminar Series, University of North Texas Health Science Center at Forth Worth, Forth Worth, TX April 2013
32. “Unfolding the Mystery of Age-related Muscle Dysfunction” University of Minnesota, Minneapolis, MN May 2012
33. “Preventing Frailty: Understanding the Etiology and Developing Interventions” Center on Aging, Tulane University School of Medicine, New Orleans, LS, February 2012
34. “Muscle Aging: The Role of Dysfunctional Proteins” Department of Physiology & Biophysics Seminar Series, University of Vermont- Medical School, Burlington, VT, March 2011
35. “Aging and Inactivity: Strategies for Reversal” Gerontological Society of America Annual Conference, New Orleans, LA *Talk highlighted in USAToday, November 2010
36. “Dysfunctional proteins: aging and inactivity” International Symposium on Exercise Therapy Conference, Mayo Foundation, Rochester, MN October 2010
37. “Muscle Aging: The role of dysfunctional proteins” IBP Seminar Series, University of Minnesota March 2010
38. “Protein carbonyls, oxidative stress and sarcopenia” San Francisco Aging Muscle Symposium 2010, San Francisco, CA, September 2010
39. “Muscle Aging: The role of dysfunctional proteins” Institute on Aging Seminar Series, University of Florida, Gainesville, FL, February 2010
40. “Aging and Muscle” Nathan Shock Center Seminar Series University of Washington, Seattle, WA, April 2009
41. “Muscle Dysfunction: aging, inactivity, disease” Rehabilitation Science Seminar Series, Mayo Foundation Rochester, MN March 2009
42. “The role of protein modifications in skeletal muscle dysfunction” Department of Physiology Seminar Series, University of Colorado Boulder, CO, November 2008
43. “Oxidative Stress and Muscle Dysfunction with Aging” Annual Meeting of the American Aging Association, Boulder, CO, May 2008
44. “Aging and Muscle” Muscle Center External Review, University of Minnesota, Minneapolis, MN May 2008
45. “Post-translational Protein Modifications in Aging Skeletal Muscle: Implications for Function” Department of Pharmacology and Neuroscience Seminar Series, University of North Texas Health Science Center at Forth Worth, Forth Worth, TX, February 2008
46. “Muscle Dysfunction: aging, inactivity, disease” Scientists in Aging Research Seminar Series, University of Minnesota, Minneapolis, MN February 2008

47. "Altered skeletal muscle protein structure, function, and post translational modification with aging", Age-Related Muscle Atrophy: Causes and Mechanisms Conference, San Antonio Nathan Shock Center Conference on Aging, Bandera, TX, October 2007
48. "Cellular aging of skeletal muscle: plasticity vs. altered function" Department of Physiology Seminar Series, Emory University, Atlanta, GA, September 2007
49. "Skeletal muscle weakness: which proteins are the culprits?" Aging Training Grant Seminar Series, University of Wisconsin, Madison, WI, March 2007
50. "Muscle and the supercentenarian" Supercentenarian Research Foundation, Los Angeles, CA, February 2007
51. "Muscle aging and rehabilitation implications" Biology Department, The College of St. Catherine, St. Paul, MN February 2007
52. "Age-related muscle weakness: strategies for reversal" University of Maryland, Baltimore, MD, December 2006
53. "The role of myosin and actin in skeletal muscle weakness" Gerontological Society of America Annual Conference, Dallas, TX, November 2006
54. "The falling apart of skeletal muscle" Department of Applied Physiology Seminar Series, Georgia Tech, Atlanta, GA, April 2006
55. "Satellite cell proliferation in skeletal muscle following stroke" Frontiers of Stem Cell Research, U of MN –Karolinska Institute Symposium, Minneapolis, MN October 2004
56. "Altered protein structure and function induced by oxidation" American College of Sports Medicine Annual Conference, Indianapolis, IN June 2004
57. "Why does your grandmother get weak?" Department of Physiology, University of Minnesota, Minneapolis, MN December 2003
58. "Mechanisms underlying skeletal muscle weakness with age" Department of Physical Therapy Seminar Series, University of Oklahoma Health Science Center, Oklahoma City, OK, April 2003
59. "Molecular mechanisms of the decline in muscle strength with age & inactivity" Department of Physical Therapy Seminar Series. University of Kansas, Kansas City, KS, October 2002
60. "Muscles in March" Department of PM&R University of Minnesota, Minneapolis, MN March 2001
61. "Research abstracting" Combined Sections Meeting, San Antonio, TX, February 2001
62. "Skeletal muscle adaptations" American Physical Therapy Association Annual Conference, Indianapolis, IN, June 2000
63. "Molecular mechanisms of aging" Department of Exercise Science Seminar Series, University of Illinois – Chicago, Chicago, IL, May 2000
64. "Skeletal muscle adaptations with aging" Department of Exercise Physiology/Rehabilitation Seminar Series, Washington University, St. Louis, MO, December 1999
65. "Skeletal muscle adaptations with aging" Spaulding Rehab. Hospital & Harvard University, Boston, MA, September 1999
66. "Molecular Mechanisms of Aging" American College of Sports Medicine Annual Conference, Seattle, WA, June 1999
67. "The Physiology of the Aging Process and New Theories on Exercise Training for the Elderly", Minnesota Chapter, American Physical Therapy Association, Minneapolis, MN April 1999
68. "Activity for the fragile aged: therapeutic considerations" American College of Sports Medicine, Northland Chapter, St. Cloud, MN April 1998
69. "Addressing exercise myths" 7th Summer Institute in Geriatrics, Minneapolis, MN June 1997
70. "Effects of bedrest & treatment strategies" 2nd Annual Geriatric Seminar, Minneapolis, MN April 1997
71. "Age, inactivity and exercise" Minnesota Chapter, American Physical Therapy Association, St. Cloud, MN October 1996
72. "Strength and mobility, functional assessment" 1st Annual Geriatric Seminar, Minneapolis, MN March 1996
73. "Muscle adaptation: changes with inactivity and with therapeutic exercise in older adults" American Physical Therapy Association, Combined Sections Meeting, Atlanta, GA, February 1996

74. "Relating clinical problems to cellular processes" College of St. Catherine, St. Paul, MN May 1994
75. "Aging muscle: characteristics and training" Minnesota Chapter, American Physical Therapy Association, Brooklyn Center, MN April 1994

Invited Oral Presentations - Local

1. "Why is Grandma Weak?", Geriatric Interdisciplinary Grand Rounds, BIDMC, Boston, MA, February 2, 2021.
2. "Frailty: Science and Practice", Redding Neighbors Network, Boston, MA, September 15, 2020.
3. "Opportunities to tease out the causes of frailty – Preclinical assessment tools", The Boston Claude Pepper Older Americans Independence Center, BWH, Boston, MA, April 5, 2019.
4. "The Biology of Sarcopenia and Frailty", Research on Tap – Challenges and Opportunities for an Aging Society: New Directions in Medicine, Health Care, and Social Policy, Boston University, Boston, MA, February 27, 2018.

TEACHING AND CURRICULUM DEVELOPMENT

Teaching Experience:

Boston University, Boston, MA, Physical Therapy Faculty, 2016 - present
Boston University, Boston, MA, Rehabilitation Sciences Faculty, 2016 - present
Boston University, Boston, MA, Human Physiology, 2019 - present
University of Minnesota, Minneapolis, MN, Guest Faculty (content lecture) for Dental School, Kinesiology, Public Health, Biochemistry, 2002 – 2015
University of Minnesota, Minneapolis, MN, Center on Aging, 1995 – 2003
University of Minnesota, Minneapolis, MN, Rehabilitation Sciences Faculty, 1997 – 2016
University of Minnesota, Minneapolis, MN, Physical Therapy Faculty, 1993 – 2016
Marquette University, Milwaukee, WI, Teaching assistant, 1986 – 1988

Course/Lecture List

Undergraduate level courses taught at Boston University

1. Introduction to the Health and Rehabilitation Professions, SAR-HP151, 2cr, [2 sections] Fall 2019, Spring 2020, Fall 2020, Spring 2021, Spring 2022, Spring 2023
2. Human Physiology Directed Study and Research, SAR-HS901, varied credit, Spring 2021, Fall 2021, Spring 2022, Fall 2022, Spring 2023
3. Human Physiology Honors Thesis, varied credit, (Christopher Bougher) Fall 2021, Spring 2022

Graduate level courses taught at Boston University

1. Emerging Topics (Translational Rehabilitation Research), SAR-RS870, 2cr, Spring 2022
2. Human Physiology Directed Study and Research, SAR-HS901, varied credit, Spring 2019, Fall 2019, Spring 2021, Fall 2021, Spring 2022
3. DPT Practicum 682 (Elizabeth Wu, Spring 2021)
4. DPT Practicum 782 (Elizabeth Wu, Fall 2021)
5. Emerging Topics (Healthy Aging), SAR-RS870, 2cr, Spring 2020
6. Doctoral Seminar in Rehabilitation Sciences, SAR-RS890, 2cr, Fall 2017, Fall 2018, Fall 2019

Guest lectures in undergraduate and graduate level courses taught at Boston University

1. Sargent undergraduate course SAR-HP252, Health and Disability Across the Lifespan, "Aging well in 2022 or Aging well in 2023", Fall 2022, Spring 2023.
2. Doctorate in Physical Therapy, PT520/AT520, Functional Anatomy, Summer 2018, 2019, 2020, 2021, 2022

3. Doctorate in Physical Therapy, HP531, Clinical Medicine, "Genomics for Rehabilitation", Fall 2018, 2019, 2020, 2021, 2022
4. Doctorate in Physical Therapy, PT760, Special Topics, "Frailty: Bench to Bedside to Community", Fall 2021, 2022
5. Doctoral Seminar in Rehabilitation Sciences, SAR-RS890, Spring 2017

Graduate level courses taught at the University of Minnesota

1. Training Grant Courses:
   - Seminal Milestones in the Biology of Aging, GERO 5100, 1 credit, Fall 2008, 2010, 2012, 2014
   - Hot Topics in the Biology of Aging, GERO 5101, 1 credit, Spring 2009, 2011, 2013, 2015
   - Application of Proteomics to Aging, GERO 8021, 1 credit, Fall 2009, 2011, 2011, 2015
   - Fostering a Career in Aging Research: GERO 8022, 1 credit, Spring 2010, 2012, 2014, 2016
2. Grant Writing: RSC 8206, 2 credits, Fall semester 2012
3. Scientific Foundations I: Theory of Exercise; PT6281, 3 credits, Fall 1993 – 2016
4. Current Literature Seminar: PT8131, 1 credit, Fall semesters 2002 – 2015
5. Research Seminar: PT8132, 1 credit, Spring semesters 2003 – 2016
6. Research Problems: PT8193, 2 credits, Fall, Spring and Summer semesters, 2003 – 2017
7. Problems in Rehabilitation Science: RSC8185, 3 credits, 2003 – as needed
8. Independent Study in Rehabilitation Science: RSC 5294, 1-3 credits, 2003 – as needed
9. Special Topics in Rehabilitation Science: RSC8170, 3 credits, 2003 – as needed
10. Doctoral Pre-Thesis Credits: RSC 8666, 2 credits, 2007, 2010, 2012, 2013, 2014
11. Biology of Aging: GERO 5110, 3 credits, Spring semesters 1995 – 2000
12. Age, Exercise and Rehabilitation: PMED 5814, 2 credits, Fall semester, 1994 - 2006

Guest lectures in graduate level courses taught at the University of Minnesota

1. Muscle Contraction: Bioc/Phsl/BMEN 5444, Spring semesters 2000 – 2015
2. Dental Lectures to Orthodontic Residents: Spring semesters 2000 – 2013
3. Biology of Aging: Spring semesters 2000 – 2015

ADVISING AND MENTORING

Boston University DPT Academic Advising

1. Academic Year 2022 – 2023: 29 students
2. Academic Year 2021 – 2022: 25 students
3. Academic Year 2020 – 2021: 29 students
4. Academic Year 2019 – 2020: 30 students
5. Academic Year 2018 – 2019: 17 students
6. Academic Year 2017 – 2018: 4 students

Undergraduate Students Activities in Research Laboratory and Honor's Thesis

1. Parth H. Shah – 2023- present
2. Ava Camarero – 2023 - present
3. Christopher Bougher – 2021 – 2022, Sargent Senior Thesis
4. Deborah Malekan – 2021 – 2022, Undergraduate Research Opportunity Program Fellow
5. Sean Chen 2021 – 2022
6. Oksana Chubrikova 2019 – 2021, Undergraduate Research Opportunity Program Fellow
7. Shannon Gallup 2019 – 2021, Undergraduate Research Opportunity Program Fellow
8. Baysa Pearlmutter, 2017 – 2019, Undergraduate Research Opportunity Program Fellow
9. Julimar Avila, 2017 – 2019, Directed Research
10. Rachel Borgstad, 2012 - 2013, Physiology Honors Student, Undergraduate Research Opportunity Fellow
11. Vivek Chittineni, 2011 - 2013, Directed Research, Undergraduate Research Opportunity Fellow (URM)

12. Bri Jones, 2011- 2012, Undergraduate Research Opportunity Fellow, College of Liberal Arts Honor's thesis
13. Rachel Vasseur, 2011, Undergraduate Research Opportunity Fellow
14. Justin Fu, 2010 –2011, Directed Research, Undergraduate Research Opportunity Fellow
15. Brandon Wreizel, 2009 – 2010, Directed Research
16. Mark Swift, 2009 – 2010, Directed Research, Undergraduate Research Opportunity Fellow
17. Kelsey Mosser, 2008 – 2010, Directed Research, Undergraduate Research Opportunity Fellow
18. Kiara Brancel, 2008 – 2010, Directed Research, Undergraduate Research Opportunity Fellow
19. Dan Larson, 2006 – 2007, College of Liberal Arts Honor's thesis
20. Eric Lindquist, 2004, Directed Research
21. Thang Vo, 2003 – 2006, Directed Research
22. Rebecca Bernard, 2003 – 2004, College of Liberal Arts Honor's thesis
23. Cynthia Frazan, 2003 – 2004, Directed Research
24. Laura Whatley, 2003, College of Liberal Arts Honor's thesis
25. Mandy Keller, 2002, Directed Research
26. Sunhan Kim, 2002, Directed Research
27. Dawn Zwakman, 2000 – 2001, Directed Research
28. Amy Nelson, 1997, Undergraduate Research Opportunity Fellow
29. Andrea Zimmerman, 1997 – 2000, Undergraduate Research Opportunity Fellow, College of Liberal Arts Honor's thesis
30. Jenny Mazone, 1998 – 1999, Directed Research
31. Susan Toyli, 1998, College of Biological Sciences Honor's thesis
32. Nancy Luger, 1998, Undergraduate Research Opportunity Fellow
33. Beth Ojala, 1997, College of Biological Sciences Honor's thesis
34. Holly Bardwell, 1996, Undergraduate Research Opportunity Fellow
35. Jason Schwengler, 1995, Undergraduate Research Opportunity Fellow

Graduate Student Activities

Master's Student Advisees

1. Amanda Pinheiro, MS in Human Physiology Fall 2018 – Spring 2020
2. Selena Zhong, 2011, The role of therapeutic exercise during bed rest, Current position: Physician
3. Pooja Arora, 2007, The role of therapeutic exercise during bed rest, Current position: Physical Therapist
4. Kerri Petro, 2004, Stroke-induced skeletal muscle plasticity, Current position: Physical Therapist
5. Manesi Volpe, 2001, Skeletal muscle adaptation with disease, Current position: Physician
6. Scott Johnson, 1997, Disuse and skeletal muscle, Current position: Physical Therapist
7. Jon Groskreutz, 1998, Enzymatic changes in muscle with disuse and aging, Current position: Physical Therapist
8. Mike Sandmann, 1997, Benefits of therapeutic exercise during bed rest, Current position: Physical Therapist
9. Jackie Harry, 1997, Fibromyalgia, Current position: Physical Therapist

Master Thesis Committee Membership

1. Scott Brown, 2011, Kinesiology
2. Vanessa Schlinger DeBruin, 2010, Integrative Biology/Physiology
3. Jill Wosnek, 2005, Kinesiology
4. Angie Turner, 2003, Kinesiology
5. Khairunnisa A. Dhamani, 2001, Nursing
6. Ruth Rinker, 2000, Kinesiology
7. Jeremy Riedesel, 1999, Engineering
8. Ryan P. Lahm, 1999, Engineering
9. Heidi Chelesnik, 1999, Nursing

10. Maria C. Wolff, 1999, Nursing
11. Meenal Pathak, 1998, Biomedical Engineering
12. Robert Paterson, 1998, Nursing
13. Rebecca Seay, 1997, Advanced Master in PT
14. Mark Richards, 1997, Advanced Master in PT
15. David Chou, 1997, Mechanical Engineering
16. Rian Podein, 1997, Physiology
17. Jon Falkenburg, 1997, Physiology
18. Beth Pugh, 1996, Advanced Master in PT
19. Kevin Schaller, 1995, Nursing

Doctoral Students Advised/Dissertations Directed

1. Amber Normann, 2021 – present, BU Human Physiology
2. Haiming Liu, 2016, Understanding the Mechanisms of Muscle Atrophy, Current position: Post-doctoral fellow, University of Washington – Seattle and VA
3. Ted Graber, 2015, Investigation of Sarcopenia in a Murine Model: Symptoms of Age-Related Neuromuscular Decline and Resistance Training Intervention, Current position: Assistant Professor, ECU
4. Danielle Templeton, 2010, Oxidative stress in cardiac tissue, Current position: Clinical Trials Manager & Administrative Director of Exercise Laboratory, Icahn School of Medicine at Mount Sinai
5. Chiao-nan Chen, 2009, Oxidative stress and muscle disuse, *Recipient of the prestigious University of Minnesota Doctoral Dissertation Award and of a Marzolf Graduate Student Fellowship, Current position: Associate Professor, Yang-Ming University, Taipei, Taiwan
6. LeAnn Snow, 2004, Skeletal muscle adaptation with disease, PhD mentor with R. Serfass, Current position: Assistant Professor, University of Minnesota
7. Otto Sanchez, 2004, Skeletal muscle dysfunction with disease, *Recipient of Muscle Center Graduate Student Award, Current position: Research Assistant Professor University of Minnesota
8. Reid Nelson, 2002, Age-related changes in metabolic enzymes, Current position: Associate Professor, Concordia University

Doctoral Thesis Committee Membership

1. Ana Roto, 2019 - 2022, BU Rehabilitation Sciences
2. Yuhei Uda, 2019 - 2022, BU Molecular and Cell Biology
3. Tara Mader, 2017, Rehabilitation Sciences
4. Brittany Collins, 2017, Rehabilitation Sciences
5. Alice Kane, 2015, The University of Sydney: Geriatric Pharmacology
6. Laura Stone, 2014, Neuroscience
7. Greg Wolken, 2013, Chemistry
8. Scott Brown, 2013, Kinesiology
9. Jarrod Call, 2011, Rehabilitation Science
10. Melissa Thomas, 2010, University of Calgary: Exercise Physiology
11. Xin Xu, 2010, Chemistry
12. Stacy Hussong, 2010, Biochemistry
13. Sarah Greising, 2010, Rehabilitation Science
14. Jonathan Reynolds, 2008, Rehabilitation Sciences
15. Juen Feng, 2008, Biomedical Engineering
16. Paul Grimsrud, 2008, Biochemistry
17. Maneesh Shrivastav, 2007, Bioengineering
18. Jingback Hong, 2007, Biomedical Engineering
19. Cort Cieminski, 2006, Rehabilitation Science

20. Amy Moran, 2006, Kinesiology
21. Wendy Smith, 2004, Biochemistry
22. John Borstad, 2004, Rehabilitation Science
23. Katherine Fuller, 2003, Chemistry
24. Jack Grinband, 2002, Neuroscience
25. Diane Eschliman, 2002, Biophysical Sciences & Medical Physics
26. Shuping Chen, 2000, Kinesiology
27. Tom Nesser, 2000, Kinesiology
28. Jon Falkenberg, 2000, Physiology
29. Mic Dancisak, 2000, Kinesiology
30. Yingjie Chen, 1999, Kinesiology
31. Steve Gaskill, 1998, Kinesiology
32. Milena Higgins, 1996, Physics

Student Research Lab Volunteers

1. Elizabeth Wu, 2020 – 2021
2. David Thompson, 2010
3. Jay Wright, 2009 – 2010
4. Ben Huebsch, 2009
5. Eric Lindquist, 2004

Mentored Physician Scientist Fellow

1. Danny Roh, 2020 – present, Senescence and wound healing, Role: GEMSTARR K03 award co-mentor, Assistant Professor, Boston University
2. LeAnn Snow, 2006 – 2011, Skeletal muscle dysfunction post stroke, Role: K08 award co-mentor, Current position: Assistant Professor, University of Minnesota

Post-doctoral Fellows

1. Lais Perazza, 2021 – present, Onset of frailty and interventions
2. Brendon Erk, 2021 – present, K25 consultant, Case Western University
3. Dongmin Kwak, 2015 – 2020, Mouse frailty models, Current position: Assistant Professor, Hanyang University, South Korea
4. Cory Baumann, 2015 – 2016, Mouse frailty models, Current position: Assistant Professor, Ohio University
5. Lisa Ferguson Stegall, 2011 – 2012, TnC and age-related alterations in calcium sensitivity, Current position: Associate Professor, Hamline University
6. Jong Hee Kim, 2009 – 2013, MLC and age-related slowing of contraction, Current position: Professor and Chair, Hanyang University, South Korea
7. LeAnn Snow, 2004 – 2006, Advanced glycation end products in skeletal muscle, Current position: Assistant Professor, University of Minnesota
8. Dawn Lowe, 2000 – 2004, Age-related changes in skeletal muscle, Role: K01 award co-mentor, Current position: Professor and Director, University of Minnesota

Residents Supervised

Medical Residents and Doctorate of Physical Therapy Students in Research Laboratory

1. Elizabeth Wu, 2020 – 2022, Frailty
2. Orlando Charry, 2001, Muscle adaptation with disuse
3. Jun Herrera, 1999, Benefits of clenbuterol to combat muscle atrophy
4. Francis Pecoraro, 1999 – 2000, Muscle adaptation with disuse

Visiting Scholars Hosted

1. Junchul Shi, 2016, Tohoku University, Senai Japan
2. Marco Pang, 2016, The Hong Kong Ploytechnic University
3. Jong-Hee Kim, 2015, 2017, Hanyang University, South Korea

Research Assistant Professor / Research Assistant

1. Mahdiyeh Mashhadi Manafi, 2022, Boston University, Boston, MA
2. Guoxian Wei, 2018 – 2021, Boston University, Boston, MA

PROFESSIONAL SERVICE

Service To The Discipline/Profession/Interdisciplinary Area(s)

Editorships

1. Sports Medicine and Health Science, Editorial Board, 2019 - present
2. Physical Therapy Journal Editorial Board, 2017 – 2021
3. AGE/ Geroscience, Editorial Board, 2012 – present
4. Journals of Gerontology: Biological Sciences, Deputy Editor, 2006 – 2013; Associate Editor, 2013 - present
5. Experimental Gerontology, Scientific Advisory Board, 2005 – present
6. Brazilian Journal of Physical Therapy, Editorial Board, 2005 – 2011
7. Current Gerontology and Geriatrics Research, Editorial Board, 2007 – 2010
8. Exercise and Sports Sciences Review, Associate Editor-recruit 3 articles/year, 2003 – 2015
9. Orthopedic & PT Clinics of North America, Guest Editor, 2001
10. Topics in Geriatric Rehabilitation, Editorial Board, 1994 – 2000
11. Issues in Aging/Gerinotes, Editorial Board, 1994 – 2000

Manuscript Reviewer

- Archives of Physical Medicine & Rehab
- Journal of Applied Physiology
- American Journal of Physiology
- Journals of Gerontology
- Aging Cell
- Mechanisms of Aging and Development

Review panels for external funding agencies

NIH Study Sections (Grant Proposal Reviews)

1. FPTR- SRC Reviews, 2017 - present
2. NICHD T32 Review, 2013, 2014, 2015, 2017
3. SMEP Member, 2013 – 2017; Ad hoc Review, 2019
4. NIA Pepper Center Review, 2012, 2013, 2014, 2015, 2016, 2020, 2021
5. NIA T32 Review, 2011, 2012, 2013, 2014, 2015, 2017, 2019, 2020, 2021
6. ASG Ad hoc Review, 2012 – 2013
7. NIA-C Ad hoc, SEPs (SMEP member conflict, R15, NIA P30, R25), 2011– 2020
8. NIA Loan Repayment Program Review, 2009 – present
9. F31 and F32 NRSA Reviews (NIAMS, BCMB), 2009 – present, Chairperson 2014, 2015, 2016
10. R43/RC3 Reviews (MOSS), 2009
11. RC1 Challenge Grant Proposal Mail Review (NIAMS), 2009, GO Application Chairperson (NIA), 2009
12. NIA EUREKA Review, 2009 – 2010

13. MRS Ad hoc Review, 2009 – 2010
14. CMAD-Charter Member (2009 – 2011; Ad hoc 10/2008, 2/2009; Co-chairperson 10/2010, 2/2011)
15. Rehabilitation SBIR (GRM), 2002 – 2003, Rehabilitation Training Grant SEP, Chairperson, 2007, 2008
16. Nathan Shock Center Review (NIA), 2004, 2010, 2020
17. NIA B-Charter Member (2002 – 2006); Ad hoc 2006 – 2018
18. NIA Program Projects/Mentored Scientist Development, 2002 – 2003, 2005 – 2006, 2009, 2011, 2016, 2017, 2019, 2020, 2021

NASA Study Sections (Grant Proposal Reviews)

1. Musculoskeletal Biology Panel, 2012, 2013, 2014, 2016, 2017, 2018, 2019
2. NHS Muscle Biology Panel, 2004

Foundation for Physical Therapy Research

1. Scientific Review Committee, 2017 - present

Ad hoc Grant Proposal Reviews

1. National Medical Research Council, Ministry of Health, Singapore, February 2021
2. MRC (England) Clinical Research Training Fellowship, 2010, 2014
3. Claude S. Pepper Center, University of Maryland, 2007 – 2010
4. Nathan Shock Center, University of Michigan, 2007 – 2008
5. American Federation in Aging Research, 2000 – 2012

Organization of conferences, workshops, panels, symposia

1. Gordon Research Conference – Oxidative Stress and Disease: Redox Biology in Disease and Translational Medicine, Renaissance Tuscany II Ciocco, Italy March 2017, Role: Chair
2. Gordon Research Conference – Oxidative Stress and Disease: The Redox Biology of Age-Related Diseases, Venura, California March 2015, Role: Chair-elect
3. "Aging: Prevention, Reversal and Slowing", American Aging Association Annual Conference- 42nd, Baltimore, MD, 2013, Role: President and Organizer for this meeting
4. Late Breaking Platform Presentation - Submitted Papers, American Aging Association Annual Conference, Fort Worth, TX, 2012, Role: Organizer
5. Late Breaking Platform Presentation - Submitted Papers, American Aging Association Annual Conference, Raleigh, NC, 2011, Role: Organizer
6. Symposium "Muscle and Inflammation", American Aging Association Annual Conference, Portland, OR, 2010, Role: Organizer
7. Late Breaking Platform Presentation - Submitted Papers, American Aging Association Annual Conference, Scottsdale, AZ, 2009, Role: Organizer
8. "Maintenance of Macromolecular Integrity"- Session 9, Gordon Research Conference – Biology of Aging, Ventura, CA, 2006, Role: Co-Vice Chair (Elected by leaders in the field)
9. Mini Symposium - "Altered protein Structure and Function Induced by Oxidation", American College of Sports Medicine Annual Conference, Indianapolis, IN, 2004, Role: Organizer
10. Mini Symposium - "Skeletal Muscle Adaptations", American Physical Therapy Association Annual Conference, Indianapolis, IN, 2000, Role: Organizer
11. Mini Symposium - "Molecular Mechanisms of Aging", American College of Sports Medicine Annual Conference, Seattle, WA, 1999, Role: Organizer
12. Scientific Session - "Bone Metabolism and Aging", American College of Sports Medicine Annual Conference, Orlando, FL, 1998, Role: Chairperson
13. Scientific Session - "Metabolism and Aging", American College of Sports Medicine Annual Conference, Cincinnati, OH, 1996, Role: Chairperson

14. Symposium - "Understanding the Effects of Exercise on Strength and Functional Status of Older Adults: Linking Bench Research to Clinical Practice", Combined Section Meeting (APTA), Atlanta, GA, 1996, Role: Organizer

Committee Memberships

National Leadership Roles

1. Board of Directors, Gerontological Society of America, 2021 – present
2. Membership Chair, Gerontological Society of America, 2014 – 2015
3. President of the American Aging Association 2012 – 2013
4. President- Elect of the American Aging Association 2011 – 2012
5. Treasurer/Secretary Biological Sciences Section, Gerontological Society of America 2011 – 2015
6. REP Committee Biological Sciences Section, Gerontological Society of America, 2010 – 2011
7. Public Policy Committee Biological Sciences Section, Gerontological Society of America 2000 – 2003
8. Education Committee American Aging Association, 2006 – 2011
9. Board of Directors-APTA: Section on Geriatrics, 1996 – 1998
10. Executive Board member, APTA: Section on Geriatrics, 1992 – 1994
11. Public Relations Committee Chairperson, APTA: Section on Geriatrics 1993 – 1995
12. Research Committee Chairperson, APTA: Section on Geriatrics, 1995 – 2000
13. Screening Abstracts Committee, APTA, 1995 – 1997
14. Research Awards Committee, American Physical Therapy Association (APTA), 1994 – 1998

Service to Boston University

1. Undergraduate Research Opportunity Program Review Committee, Spring 2021 – present
2. External Review of the Center for Systems Neuroscience, May 2019

Service to Boston University College of Health & Rehabilitation Sciences: Sargent College

1. Undergraduate Programs, 2016 – 2019
2. Professional Programs/IPE Committee, 2016 – 2019
3. PhD Programs, 2016 – 2019
4. Chairs, 2016 – 2019

Service to Boston University College of Health & Rehabilitation Sciences: Department of PT/AT

1. Admissions Committee, 2016 – present
2. Curricular Review, 2021 - present

Service to Boston University College of Health & Rehabilitation Sciences: Rehabilitation Sciences

1. Admissions Committee, 2016 – present

Service to the University/Medical School/Department (University of Minnesota)

University-wide service

1. University Senate: Research Committee Chair; 2015 – 2016
2. 9th Annual Biomedical Sciences Graduate Programs Research Recognition Day Judge, May 2016
3. University Senate: Research Committee Member; 2012 – 2015
4. University of Minnesota CRAD member; 2014 – 2015
5. University of Minnesota Public Engagement Committee, Selected member, 2012 – 2013
6. Allied Health Institute Promotion and Tenure, Selected member, 2011– 2012
7. Vice Provost and Dean of Graduate Education Office, Interdisciplinary Fellowship Review Committee-Selected member, 2012 – 2015
8. College of Education/Kinesiology- Faculty Search Committee, Selected member, 2011– 2012

9. Nominated/Elected member, representing Medical School, Women's Faculty Cabinet, 2010 – 2013
10. Center on Aging, Selection of the Fesler-Lampert Aging Chair, 2009 – 2011
11. Office of the VP of Research, UMII SG – Grant Review, 2009, 2016
12. School of Education – Kinesiology, External Review of the Education/Research Program, 2006
13. College of Pharmacy, Review of the Endowed Chair in Gerontology, 2003
14. Chronic Care Task Force (Policy), Member, 2002
15. University Senate, Alternate Member – elected, 2002
16. Undergraduate Research Opportunity Program, Grant Review, 2000 – 2016
17. School of Education – Kinesiology, Faculty Search Committee member, 2000
18. SAR and Functional Proteomics of Aging T32, Co-Leader, Spring Symposia, 2005 - 2016
19. SAR Seminar Series, Co -Leader, 2000 – 2016
20. ARC – Aging Rodent Colony, Co-Leader, 2003 – 2008
21. SAR, Interdisciplinary Research Grant for the, Co-PI, 2002, 2009, 2010
22. Scientists in Aging Research (SAR), Founding member, Co-Director, 2000 - 2016
23. Radiation Safety IRB, Member, 1999 – 2003
24. MAGEC, Member, 1999 – 2003
25. Policy and Review Assembly Council, Member, 1999 – 2003
26. Health Science Policy and Review Council, Member, 1999 – 2003
27. Center on Aging, Executive Committee member, 1999 – 2003
28. Rehabilitation Sciences Graduate Program, Admission Committee member, 1997 – 2016
29. Paul & Sheila Wellstone Muscular Dystrophy Center- Founding member (1997 – present), Executive Committee (1997 – 2007)
30. Graduate School, Grievance Committee member, 1996 – 1998
31. Center on Aging, Academic Development Committee member, 1996

Medical School Service

1. Medical School Faculty Affairs Advisory Committee, Selected member, 2013 – 2015
2. Deborah E. Powell Center for Women's Health, Scientific Advisory Board and BIRCWH Board, 2012 – 2016
3. Poster Judge for Cardiopoloza Symposium; 2012, 2013, 2014
4. Reader for Physiology Major Paper Course, Pshl 3602W, 2012, 2013, 2014
5. Medical School Faculty Mentoring Committee, Selected member, 2010 – 2015
6. Nominated/Elected member, representing Medical School, Women's Faculty Cabinet, 2010 – 2013
7. Medical School Priority Area-Aging, White Paper Co-organizer, 2001

Department of Physical Medicine and Rehabilitation / Program in Physical Therapy

1. Research Advisor for the Geriatric Residency Program; 2013 – 2016
2. Promotion and Tenure Committee member; 1998 – 2008, 2013 – 2016
3. Promotion and Tenure Committee Chairperson; 2009 – 2013
4. Occupational Therapy Student Progress Committee; 2009
5. Research Safety Officer; 1996 – 2003, 2007 – 2008
6. Ad Hoc member of PM&R Departmental IRB review committee: 2008, 2009
7. CAPTE Review of DPT Education Program; Leader of CC1 and CC2, 2009 – 2010
8. Teaching Assistant Committee; Member, 2007 – 2009
9. Student Progress Committee: Member, 2007
10. Faculty Search Committees: Chairperson, 2006 – 2008
11. Scholarship Committee: Chairperson, 2006 – 2008
12. Faculty Advisor for the PT Class of 2005; 2002 – 2005
13. Faculty Search Committee: Chairperson, 2002

14. Faculty Research Advisor for entry-level Physical Therapy student; 2001 – 2016
15. Development of Entry Level Professional DPT Curricula: Leader basic science curricula, 2000 – 2002
16. CAPTE Review of PT Education (self-study): 1999 – 2000
17. Scholarship Committee: Chairperson, 1998 – 2003
18. Faculty Search Committee: Member, 1998
19. Development of Entry Level MS PT Curricula: Leader of basic science curricula, 1995 – 1997
20. Advanced MS in Physical Therapy Graduate Program: Faculty, 1993 – 1997
21. Admission Committee for Rehabilitation Science Program / Advanced MS, 1993 – 2016
22. Admission Committee for Physical Therapy Program, 1993 – 2016