

Curriculum Vitae

Name: Karyn Ann Esser, Ph.D.

Address: University of Florida
Department of Physiology and Aging
Co-Director for Claude D. Pepper Older Americans Independence Center
Associate Director for Muscle Biology, Institute of Myology
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Degrees:

- 1979 B.S. Math-Biology: Wake Forest University
Winston-Salem, NC
1981 M.Ed. Physical Education: University of Nevada Las Vegas, NV
1990 Ph.D. Kinesiology: The University of Michigan, Ann Arbor, MI

Professional Positions:

- 1990- 1993 Postdoctoral Fellow - Muscle Genetics Unit, Children's Medical Research
Institute, Sydney, N.S.W. Australia.
1993- 1999 Assistant Professor - School of Kinesiology, University of Illinois
at Chicago
1995- 2004 Faculty Affiliate - Department of Physiology and Biophysics,
College of Medicine, UIC
1999- 2004 Associate Professor with tenure- School of Kinesiology, University of
Illinois at Chicago
2002- 2004 Visiting Scholar – Center for Functional Genomics,
Northwestern University
Sabbatical with Dr. Joseph Takahashi: 2002
2004- 2009 Associate Professor – Department of Physiology, University of Kentucky

2007- 2015 Director, Core Facility, Mouse Exercise Training and Phenotyping
College of Medicine

2009 Professor, Department of Physiology, University of Kentucky

2010- 2015 Director, Center for Muscle Biology, University of Kentucky
Center membership: 40 faculty across 4 Colleges.
Reported to Dean of the College of Medicine

2015- Preeminence Term Professor, Department of Physiology and Functional Genomics,

Associate Director for Basic Muscle Biology, Institute of Myology

2022- Co-Director, University of Florida Older Americans Independence Center (OAIC)
Joint Professor, Biology of Aging Division, Institute on Aging
University of Florida

2022- Chair Department of Physiology and Aging
University of Florida

Professional Organizations:

American Physiological Society (APS)
American College of Sports Medicine (ACSM)
American Association for the Advancement of Science (AAAS)
Society for Research on Biological Rhythms (SRBR)

Awards and Honors:

Fellow, American College of Sports Medicine, 1999
President's Lecture, American College of Sports Medicine, May 2005
Wethington Award, University of Kentucky 2005-2015
University Research Professor, University of Kentucky, 2011
Preeminence Term Professor, University of Florida, 2015
Basic Science Faculty Research Award, University of Florida, 2022

Professional Service

Organizer of Circadian Summer School to be held before the SRBR meeting May 2020/2022
Organizing Committee, International Biochemistry of Exercise meeting held in May 2022, Toronto
Working Group: to evaluate the Senator Paul D. Wellstone Muscular Dystrophy Research Centers
Program. Multiple Institutes: NIAMS, NICHD, NINDS, NHLBI. 7/2018-12/2018
External Advisory Council, National Space Biomedical Research Institute: 10/2013-2016
External Advisory Board member for the Indiana Center for Musculoskeletal Health 2017- present
Executive Committee for NIH, Molecular Transducers of Physical Activity in Humans 2016- present
External Advisory Panel, Michigan Integrative Musculoskeletal Health P30 Core Center (MiMHC),
University of Michigan, 10/2016- present
External Advisory Board: Baylor University, Department of Physiology 2016- present
NIH:NIAMS Board of Scientific Counselors: 7/2015-2019
Editorial Board member, *Physiological Reviews*: 4/1/2018- present

Review Panels:

NIH:DP2 Editorial Board, NIH Director's New Innovator Award Program, 2023
NIH:NIA: P01 review April 2020
NIH:DP2 Editorial Review Panel, March 2017
NIH:NIDDK: P01 review September 1, 2016
NIH: SMEP study section 07/2016- 06/2020
NIAMS P50 CORT reviews: April 2016
NCI:P01 Review February 2016
NIAMS P30 grant review: November 2015
NCI:P01 Review September 2014

Swiss National Science Foundation, December 2012
 MRC Peer Review, December 2012
 American Heart Association, Study section 2006 -
 Panel member for external review of the Nordic Sports Sciences: 5/2011
 NIAMS AMS committee, standing member 10/2008-10/2012
 NSF Panel March 2012
 NIH SEP May 2008/Dec 2013/July 2014
 Italian Muscular Dystrophy Association: 3/2008
 Wellcome Trust Grant Reviews 4/2007, 4/2008, 4/2013
 NIH MOSS Special Emphasis panel: grant review 10/2007
 Pfizer Senior Research Fellow reviewer 9/2007
 American Physiological Society, Awards Committee: 1/2007-12/2009
 NIAMS P30 grant review; 12/2005
 National Health and Medical Research: Australia; 5/2005
 NIH Skeletal Muscle Biology and Exercise Physiology (SMEP) study section
 11/2003-6/2006:
Chair, 03/2005-06/2006
 NIH/Skeletal Muscle Biology study section 11/2001-6/2003
 NIH/RAP: member of study section 6/2000-6/2001
 ACSM Chair of Research Review Committee, 6/2002-5/2004
 NASA Life Sciences: Muscle Biology/Cell and Molecular Biology sections,
 1997-2002
 NASA NSBRI review committee: muscle biology 7/2000
 USDA grant review 5/2000
 NIAMS/NIH: Study section for K and R award applications 10/1999
 NIA: Site visit review committee: 3/1997
 NIH: Physiology Study Section: SEP 1996-1999

Workshops:

NHLBI workshop: Elucidating the Role of Circadian Biology and Meal Timing in
 Cardiometabolic Virtual Workshop, May 2-3, 2023
 NIA workshop: Understanding Heterogeneity of Responses to, and Optimizing Clinical
 Efficacy of, Exercise Training in Older Adults: Workshop, April 2022
 NIA/DAB meeting on the Rodent Care and Use for Aging Research, December 2019
 NIA Workshop on Myosteatorsis, September 2018
 ASBMR Workshop on Muscle Biology, September 2017
 NIA Workshop on Advances and Gaps in Musculoskeletal Biology,
 September 2, 2016
 NIH Biomarker Workshop: NHLBI, NIA, and Sleep Research Society.
 April 27-28, 2015
 NHLBI workshop; Circadian Clock at the Interface of Lung Health and Disease
 April 28-29th, 2014
 NIH RFI: Mechanisms by which physical activity improves health.
 Invited contributor; 01/17/2014
 NIAMS Scientific Retreat: Circadian rhythms and skeletal muscle, May 2013
 NIAMS Roundtable Discussion: Anabolic Therapies and the Musculoskeletal System,
 2013
 Musculoskeletal Global Therapeutic Expert Forum: Merck Pharmaceuticals, 5/8/2009.

NIH/NIAMS Roundtable of opportunities and needs in muscle biology and disease: 12/16/2008
 NIH/NHLBI Working Group on Circadian Timing in Peripheral Tissues 09/2007
 NIH/NIAMS Extramural Roundtable: Genomic and Genetic Resources, 01/2001
 NIH NIAMS Long-range Planning Meeting: Muscle Biology and Muscle Diseases Research; 7/99
 NIA workshop: Biology of Aging: Skeletal Muscle 12/1996

Guest Editor	PNAS: 2021
Editorial Board	Physiological Reviews: 2018-
Associate Editor	Exercise and Sport Sciences Reviews: 2016-2020
Editorial Board	Journal of Neuromuscular Diseases: 02/2014-
Associate Editor	American Journal of Physiology: Cell Physiology 2011-2014
Associate Editor	Journal of Applied Physiology: 2006-2011
Editorial Board:	Journal of Applied Physiology: 1999-2005
Associate Editor:	Exercise and Sport Sciences Reviews: 1999-2004

Manuscript review: *Science, Nature, Nature Communications, Cell Metabolism, Journal of Clinical Investigation, PNAS, Nature Cell Biology, Science Signaling, Journal of Cell Biology, Journal of Physiology, London, FASEB Journal, eLife, Nucleic Acids Research, Physiological Genomics, Molecular and Cellular Biology, Journal of Biological Chemistry, American Journal of Physiology: Cell, AJP: Regulatory, Journal of Applied Physiology, Endocrinology, Journal of Gerontology: Biological Sciences, Aging Cell*

Administrative Experience

Chair, Department of Physiology and Aging, University of Florida, 2022-

The Department has 25 full time faculty and 8 staff. Our NIH funded research productivity has significantly increased over the last 2 years as the faculty have increased collaborations. Half of the faculty are involved in clinical research and the other half are basic and translational scientists. We have an active educational program for graduate students, medical students and dental students. We also maintain an online presence with a Master's degree program in Physiology and Pharmacology.

Co-Director for University of Florida Older Americans Independence Center (OAIC): 2022-

In the last year, I have taken over from Dr. Marco Pahor to oversee the management and research mission of the UF Pepper Center. I have been joined by Dr. Todd Manini as MPIs of the Pepper Center. We also run pilot programs, the research scholars programs and support new interactions on the UF campus in aging research.

Associate Director for Basic Muscle Biology, Institute of Myology: 2015-2022

In this role, I mentored faculty with research grants, I facilitate new technology development within the Institute (e.g. expanding our use of Super-resolution Microscopy for imaging), help with the seminar series and biannual international muscle meeting and I support the P30 and other Center grants from the Institute.

Director, Center for Muscle Biology, University of Kentucky 2010-2015

In this role I managed a budget for pilot grant support, staff support for muscle biopsy repository and yearly meeting support. The Center had about 40 faculty as active members, we held a weekly seminar series and our yearly retreat would bring up to 100-150 attendees that included 3-4 invited outside speakers. As Director, the Center submitted P30 Core Center grants (unfunded) 2 times over my 5 years of leadership. I submitted a STTR grant (funded) to support technology development for muscle image analysis. While the original agreement for the Center included the recovery of indirect costs money for Center support, the College of Medicine never approved this so we were never able establish a consistent funding model and we were not able to recruit new faculty.

Teaching Experience

University of Illinois, Chicago: School of Kinesiology: 1993-2004

Anatomy and Physiology: 2nd year undergraduates
Physiology of Exercise: 3rd year undergraduates
Ventilatory and Cardiovascular Limits to Maximum Exercise: Graduate Seminar
Exercise Genomics: Ph.D. course
Graduate Student Journal Club

University of Illinois, Chicago: College of Medicine, College of Nursing

Biochemical and Physiological Regulation of Muscle Contraction
Drs. M. and K. Barany organizers
Cellular Physiology
Dr. B. Russell, organizer
Exercise Biology and Application to Healthcare: lecture first 1st medical students
Interdisciplinary Seminar in Cardiovascular and Muscle Research
Dr. D. Schwartz organizer

University of Kentucky: 2004-2015

DSP 130: Discovery Seminar Series: Class for first semester freshman: fall 2005: Physiology of Healthy Living: taught with Dr. D. Richardson.
Physiology 412G: fall 2005-present: 4 lectures/semester
IBS 604: Cellular signaling, spring 2006,2007 2-3 lectures:
PGY 630 Muscle Physiology spring 2006: spring 2009: Fall 2012 Advanced muscle physiology
ABT 201 Scientific Method Biotechnology: fall 2007, fall 2008: fall 2009; 1 lecture
BCH/BIO/MI 615 (Molecular Biology): spring 2013-2015, Molecular clock transcriptional Mechanisms

University of Florida: 2015-

GMS 6471: Fundamentals of Physiology and Functional Genomics: Circadian physiology: 2 lectures
BMS J397: Skeletal Muscle in Aging & Disease: Circadian rhythms and aging: 1 lecture
PET 4905c/GMS 7593: Fundamentals of Skeletal Muscle: 2 lectures
BCH4905: Science for Life: 1 lecture

University Committees:

University of Florida

Space Committee, Animal Care Services	2022-
College of Medicine, Faculty Compensation	2022-2023
College of Medicine, Space Committee	2022
Research Integrity Committee	2019-2021
Director, Circadian and Sleep Physiology Core	2018-
Chair Faculty Search Committee, Physiology	2018-2019
Faculty Search Committee, APK	2017-2018
Faculty Search Committee, Physiology	2017-2018
McKnight Brain Institute Research and Education Committee	2017-2018

University of Kentucky

Faculty representative, UK Research Foundation Board	2013-2015
One of two faculty representatives	
Primary faculty advisor for COM Exercise & Medicine Interest Group	12/2014- 8/2015
Intellectual Property Review Committee	07/2014-07/2015
UKRF Board of Directors: faculty member	07/2013-07/2015
MD-Ph.D. candidate interviews	2011-2015
PI Council, reports to VP Research, Dr. J. Tracey	11/2009- 2010
Promotion and Tenure Committee: College of Medicine	07/2006- 8/2011
Graduate Advisory Committee, Department of Physiology	04/2007-6/2014
Physiology Research Committee	07/2010-present
Admissions Committee, MD-PhD program	08/2010-07/2012
Kentucky Young Scientist Summer Research Program, Director for Physiology	02/2007-2008

University of Illinois

Member of IACUC Small Animal Care Committee: 7/1995-6/1999	
Co-chair 1996-1999	
Member of the Teaching Documentation Group in College of Associate Health Professions: 1996-97	
Teaching Evaluation Committee School of Kinesiology, 1996	
Kinesiology Graduate Committee: 9/1993 - 2004	
Kinesiology member of Graduate Education Committee in Physiology and Biophysics: 2/1994-9/1998	
Member of search committee for Assistant Professor 1995:	
Dr. K. McCormick hired	
Member of search committee for Director of Kinesiology 1995:	
Dr. L. Oscai appointed	
Member of search committee for Assistant Professor 1998:	
Faculty Advisory Committee, Kinesiology: 1994-2004	

Exercise Physiology Program Undergraduate Director: 1995-2004

Post Doctoral Associates

Eric Blough, Ph.D. 1997-1998. Currently Dean and Professor of Pharmaceutical Science at Marshall University

Jori Leszczynski, D.V.M., 2000-2002. Director for the Office of Laboratory Animal Resources; Assistant Vice Chancellor for Animal Resources, University of Colorado Anschutz Medical Campus

Thomas McLoughlin, Ph.D. 2001-2003 Currently Associate Professor in Kinesiology at University of Toledo

Shann Kim, Ph.D. 1999-2003, Currently Assoc Dir, Allergy, Dermatology & Immunology at Regeneron Pharmaceuticals, Inc.

Mark Fedele, Ph.D. 2000-2003 Currently Director US Medical Affairs Strategy & Operations - Hematology at Bristol Myers Squibb

James Higginson, Ph.D, 4/2004-10/2005; Currently Director, Global Clinical Safety & Pharmacovigilance at GlaxoSmithKline, United Kingdom

Mitsunori Miyazaki, Ph.D. 4/2006-4/2011; Awarded American Heart Association postdoctoral fellowship 5/2008-5/2010: Awarded Japan Society for Promotion of Science postdoctoral fellowship, 04/2010-03/31/2011: Currently Associate Professor Department of Integrative Physiology, Hiroshima University, Japan

Bradley Baumgarner, Ph.D. Postdoctoral Associate 8/2010-07/2011, Currently an Associate Professor in Biology at University South Carolina, Upstate.

Ratchakrit Srikuea, Ph.D. Postdoctoral Associate 08/2010-7/2012, Currently an Associate Professor in Physiology at Mahidol University, 08/01/2012

Thomas Chaillou, Ph.D. Postdoctoral Associate 04/2012-04/2014, Currently a Senior Lecturer at Orebro University in Sweden.

Denise Kemler, Ph.D. Postdoctoral Associate: 03/2017-05/2020 Currently Research Associate at Evotec Gottingen.

Miguel Gutierrez-Monreal, Ph.D. Postdoctoral Associate: 04/2018-06/2022; Currently Biological Scientist at UF

Christopher Wolff, Ph.D. Postdoctoral Associate: 09/2018-05/2022. Now an Associate Clinical Trial Manager at Medpace

Stuart Hesketh, Ph.D. Postdoctoral Associate: 03/2020 – 09/2021. Currently Senior Lecturer, University of Central Lancashire, England

Ryan Martin, Ph.D. Postdoctoral Associate: Received Ph.D. from University of Toledo, Started at UF 05/2021

Mark Viggars, Ph.D. Postdoctoral Associate: Received Ph.D. from John Moores University, Liverpool, England. Started at UF 10/2021

Casey Sexton, Ph.D. Postdoctoral Associate: Received Ph.D. from Auburn University, Started 8/2022

Frank Kiyamba, Ph.D. Postdoctoral Associate: Received Ph.D. from Oklahoma State Univ., started 1/2023

Ph.D. students

Keith Baar, Ph.D. defended 3/2000: Currently Professor with tenure, University of California, Davis
Awarded University Fellowship 8/1995 and 8/1996
Awarded National Graduate Research Award, ACSM

Gustavo Nader, Ph.D. defended 3/2003: Currently Associate Professor with tenure at Penn State University. Awarded National Graduate Research Award, ACSM

Troy Hornberger, Ph.D defended 11/2003: currently Professor with tenure at the University of Wisconsin, Madison: Awarded NASA graduate student fellowship
Awarded APS graduate student award: Awarded American Federation for Aging (AFAR) award

Dustin Armstrong, Ph.D student defended dissertation, 7/2005. Postdoctoral fellowship at Novartis, Boston MA. Founder of Valerion Therapeutics (started as 4s3 Biosciences), currently Vice President of Research.

Jessica Andrews, Ph.D student at UIC defended 8/2006:
Currently working with Cadence Health in Chicago, Illinois, 11/2012

Gretchen Wolff, 2006-2012 University of Kentucky, defended her dissertation 03.2012; Postdoctoral research at the University of Miami. Currently a visiting scientist at the German Cancer Research Center (DKFZ--Deutsches Krebsforschungszentrum) in Heidelberg, Germany.

Mellani Lefta, 2008-2012 University of Kentucky, defended dissertation 06/2012; Awarded AHA predoctoral fellowship, Currently on staff in Pediatrics at Virginia

Brian Hodge, Ph.D. University of Kentucky student, passed qualification exam 09/2013: Defended dissertation 10/2015. Currently scientist at Fountain Therapeutics

Brianna Harfmann, Ph.D. University of Kentucky student, passed qualification exam 08/2013. Defended dissertation 10/2015. Currently an Assistant Professor on tenure tract at Alma College 9/2017.

Lance Riley, Ph.D. University of Florida student, passed qualification exam 10/2015 and defended his dissertation 04/30/2019. Funded NIH: F31 05/2017: Currently scientist at Foresight Diagnostics.

Collin Douglas – University of Florida pre-doctoral student; joined lab in 2018. Passed qualification exams, defending summer 2023.

Bryan Alava – University of Florida pre-doctoral student: started fall 2020

Silvana Sidhom - University of Florida pre-doctoral student: started fall 2020

Spencer Procopio – University of Florida pre-doctoral student: started fall 2022

Ph.D. Student Committees

Elnaz Ebrahimi, PhD student UF, advisor Dr. Andrew Bryant

Eduardo Rijos, PhD student UF, advisor Dr. Laura Ranum

Jake Boles, PhD student UF, advisor Dr. Malu Tansey

Nathaniel Steinert, Ph.D. student University of Wisconsin, advisor Dr. Troy Hornberger, graduate 2022

Zachary Krumm, M.D./Ph.D. student UF, advisor Dr. Todd Golde, graduated 2022

Sarah Skinner, Ph.D. student UF, Advisor Dr. Russ Hepple, graduated 2022

Keril Poukalov, Ph.D. student UF, Advisor Dr. Eric Wang, graduated 2022

Chandler Calloway, PhD student UF, Advisor Dr. Andrew Judge, graduated 2022

Mia Kelly, Ph.D. student UF, Advisor Dr. Gordon Mitchell

Ray Spradlin, PhD student UF, Advisor Dr. Elisabeth Barton, graduated 05/2020

Mengchen Li, Ph.D. student, UF, Advisor Dr. Keller-Wood, graduated 2020

Lance Denes, Ph.D. student UF, Advisor Dr. Eric Wang, graduated 2019

Rachel Nosacka, Ph.D. student UF, Advisor Dr. Andrew Judge, graduated 2019

Hunter Futch, M.D./Ph.D. student UF, Advisor Dr. Todd Golde, Graduated 05/2019

Parvathy Thampi, Ph.D. student UK - Veterinary Sciences, advisor Dr. J MacLeod. Graduated 12/2016

Tianfei Hou, Ph.D. student UK in Nutritional Sciences, advisor is Dr. Guo Zheng

Cassie Binkley Friday, UK Ph.D. student in Physiology, advisor Dr. Brandon Fornwalt, MS degree 2014

Erin Wolf Horrell, MD PhD student UK in Physiology, advisor Dr. John D’Orazio, graduated 2016

Jenny Lutshumba, Ph.D. student UK in Physiology, advisor Dr. Ming Gong

Premi Shekar Haynes, Ph.D. student UK in Physiology, advisor Dr. Kenneth Campbell, graduated 2014

Maggie Murphy, Ph.D. UK student in GCNS, advisor Dr. Bernie Henig, graduated 2014
 Daniel Bartos, Ph.D. student in UK Physiology, advisor Dr. Brian Delisle, graduated 2013
 Lindsay Carter, Ph.D. student in UK GCNS, advisor Dr. Kevin Pearson, graduated 2013
 Chris Waters, Ph.D. student in UK Rehab Sciences, advisor Dr. Tim Butterfield, graduated 2013
 Cetewayo Rashid, Ph.D. student in UK GCNS, advisor Dr. Kevin Pearson, graduated 2013
 Heather Buechel, Ph.D. student UK Pharmacology, Advisor Dr. Eric Blalock, graduated 2013
 Fanmuyi Yang, Ph.D. student UK Physiology, Advisor Dr. Susan Smyth, graduated 2012
 Ashley Wagner, Ph.D. student in UK Animal Sciences, Advisor Dr. Kristine Urschel, graduate 2011
 William Lester, Ph.D. student UK Physiology, Advisor Dr. Jon Satin
 Krasimira Aleksa Rozenova, UK Ph.D. student Physiology, Advisor Dr. Nikolova Karakashian
 Gayle Josephs; IBS student UK Physiology, Awarded MS degree; Advisor Dr. Francisco Andrade
 Melissa Smith, PhD student UK Physiology, graduated 8/2008; Advisor Dr. Michael Reid, Advisor
 Melissa A. Senetar, Biochemistry, UKY, Advisor, Dr. Richard McCann: defended 2005
 Barbara Murphy, Ph.D, College of Agriculture, UKY External Examiner, defended 2007

External Examiner, International

External Examiner	Stuart Hesketh, Liverpool John Moores University <i>Dynamic proteome profiling of skeletal muscle adaptation</i> , December 2019
External Examiner	Jan Hansen, University of Maastricht, <i>The role of the biological clock in human metabolic health</i> . August, 2017
External Examiner	Chrysovalantou (Chrisa) Eleni Xirouchaki, The University of Melbourne, <i>The role of muscle glycogen synthase in glucose metabolism and exercise capacity</i> . July 2016
External Examiner	Chittipong Tipbunjong, Mahidol University Bangkok Thailand, November 2015
External Examiner	Patricio Sepulveda - <i>Development of Novel Interventions to Enhance Muscle Function</i> , Deakin University, Fall 2012
External Examiner	Ulla Ramer Mikkelsen, University of Copenhagen Fall, 2010
External Examiner	Ratchakrit Srikuea, Mahidol University, Bangkok, Thailand, April 2010
External Examiner	Karen Martins, University of Alberta, Canada Fall 2009
External Examiner:	Robert Southgate RMIT University, Australia; Thesis entitled <i>Role of FoxO proteins in skeletal muscle</i> . Advisor, Dr. Mark Febbraio
External Examiner:	Ph.D. thesis from the University of Queensland <i>Changes in Muscle Structure and Function with Resistance Training</i> . 1995

MS Students UIC:

Michelle Hinsch: M.S. degree 2000: Received MD in 2004, Currently an Assistant Professor in Internal Medicine, Northwestern University
 Josh Lang: M.S. degree 1999: Received MD 2005, currently an Assistant Professor in Medical Oncology at the University of Wisconsin, Madison

Brigid Dineen: M.S. degree 1998: Currently Executive Director - Research Strategy;
Arizona State University
Bryce Bederka: M.S. degree 1997: Received MD in 2003, completed Orthopedic
Residency; currently in private practice in Portland Oregon
Avital Tidhar: M.S. degree 1996: received PhD in Molecular Biology in 2000 from the Faculty of
Agriculture - Rehovot. Currently on faculty at Israel Institute for Biological Research

MS students University of Kentucky

T.J. Dube, finished Medical Sciences degree 2006, Currently, Manager, Performance Measurement at
Health Collaborative
Brigham Barber, finished Medical Sciences degree 1/2007, Currently, Account Manager at Chemtura

MS students University of Florida

Eduardo Rijos, 2019. currently a PhD student at UF.

Undergraduate Students: University of Florida

Emilia DeJesus, awarded Emerging Scholar award 1/2017
Robert Mijares, awarded APS summer research fellowship 5/2017. Current Medical School at George
Washington University
Nina Sharifi, 3rd year UG: working on muscle and immune cell histology in circadian mutants, 2019
Anisha Saripalli, 2nd year UG: working on circadian rhythms and aging, 2019

Undergraduate Students: University of Kentucky

Peter Wulff; Biology major Presented poster at Posters on the Capital in Frankfurt KY 2/2006 and the
National Conference on Undergraduate Research 4/2006: Recipient of Univ of Kentucky
Undergraduate Summer Research Grant 2006: Currently a dentist.
Clifford Harpole; Biology major, Univ. Kentucky graduated 2008:
Esser, KA, C. Harpole, A. Diamond, G. Prins. Physical Activity Reduces Prostate
Carcinogenesis in a Transgenic Model. Currently PhD student in Biology at UKY
Daniel Bartos: Biology major, graduated 2008, received his Ph.D in Physiology at UK. Currently a
Medical Science Liaison at Myriad Neuroscience.
Bilal Aslam: Agricultural Biotech student, University of Kentucky, Medical Student, Currently Internal
Medicine at the University of Kentucky hospital.
Shawn Stasko: KYSS summer student, graduated with a PhD from Univ. Kentucky
Jessica Houtz: Agricultural Biotech student, University of Kentucky recipient of Beckman Scholarship
4/2009-5/2010; currently, received her Ph.D. from Johns Hopkins University 09/2016. Currently
a postdoctoral fellow at Scripps Institute, Jupiter FL.
Alexander Christie: student in the lab (2012-2014), supported by NIH supplement for diversity.
Currently a radiologist in Ashland, KY

Undergraduate Students: UIC

Ryan Mateja. Kinesiology UIC: Received his Ph.D. from Loyola University, Chicago.

Hornberger, T.A., R.D. Mateja, E.R. Chin, J.L. Andrews and K.A. Esser. Aging does not alter the mechanosensitivity of the p38, p70^{S6k} and JNK2 signaling pathways in skeletal muscle. *J Appl Physiol*. 98(4):1562-6 2005.

William Roach: Kinesiology UIC BS 1996: received his Ph.D. in Physiology from Washington University, St. Louis.

Active Grant Support

NIH 1R01AR079220-01 (Esser, PI) 03/2021-03/2026

NIH

Circadian Clock and Muscle Health

The overall objective of this grant is to pursue the fundamental understanding of the role of the muscle circadian clock in regulating a daily program of gene expression and how clock disruption leads to significant muscle weakness and diminished systemic health.

1R01AR079220 – 01S1 (Esser, PI) 09/2021-03/2026

Circadian clock and muscle health: supplement for diverse students

1U01AG055137-01 (Esser, PI) 12/01/2016-12/30/2023

NIH

UF PASS: Regulation of exercise transducers

Part of the consortium: Molecular Transducers of Physical Activity Preclinical Study Sites.

1U01AG055137-01S1 (Esser, PI) 07/01/2017-06/30/2018

NIH/NIA

Supplement to support MoTrPAC pilot studies

Opportunity Fund supplement (Esser, PI) 08/2020-08/2021

U01AG055137-05S1. (Esser, PI) 04/05/2021-12/30/2022

Muscle weakness and neurogeneration; exercise as a therapeutic approach

U01AG055137-05S2 (Esser, PI) 05/2021-12/30/2022

UF PASS: Regulation of exercise transducers: supplement for diverse students

NIH R01 HL153042-01 (Esser and Delisle, MPI: Esser reporting PI) 09/01/2020-09/2024

NIH

Circadian clock regulation of myocardial ion channel expression and function

NIH R01AG059416-01 (Cummings PI: Esser co-I) 6/2018-6/2023

NIH

Study of muscle, mobility, and aging (SOMMA)

This is a large human multicenter cohort study of mobility, muscle strength and metabolism and molecular indices of aging. My lab is supporting the RNAseq aspects of this study.

AGR00023600 (Esser, PI) 1/2022 – 12/2023

Stanford University: Wu Tsai Health Alliance

Molecular mechanisms linking contraction type to muscular adaptations and injury

Major Goals: The first goal of this project is to define the molecular pathways that underlie strength and endurance exercise adaptations. The second goal will be to identify contraction specific sites of muscle injury and inflammation

P30 AG028740. (Esser, MPI)

4/2022-3/2027

NIH

Claude D. Pepper Older Americans Independence Center (OAIC)

The mission of the University of Florida Older Americans Independence Center (OAIC) is twofold: 1) to optimize older persons' physical performance and mobility through interdisciplinary approaches; and 2) to train new investigators in aging and disability research while developing their leadership qualities. Our goal is to enhance late-life health and independence, with a special focus on mobility.

Completed Grant Support:

1R01HL141343-01A1 (Delisle, PI: Esser, co-I)

03/2019-03/2023

NIH

Transcriptional Regulation of KCNH2

NIH R01 NS102624 (Heldermon: Esser, co-I years 4-5)

7/2017-6/2022

NIH

Optimizing AAV Vectors for Central Nervous System transduction

My lab is providing mouse circadian and activity monitoring for phenotyping

NIH R01 AR072328 (Martin, PI: Esser, co-I)

7/2017-6/2021

NIH

The effect of intermittent hemidiaphragm simulation during surgery on mitochondrial function, single fiber contractile force and catabolic pathways in humans.

My lab is providing support for analysis of anabolic pathways and analysis of muscle proteins.

NIH 1R01AR066082 (Esser, PI)

08/20/2014-07/30/2019:

NIH/NIAMS

Molecular clock and skeletal muscle weakness

This project looks at the impact of cell specific molecular clock disruption on skeletal muscle phenotype and function.

1R01AR066082S1 (Esser, PI)

09/2018-09/2019:

NIAMS/NIA

No Cost Extension

Administrative supplement to study the changes in the brain related to Alzheimers disease in our mouse model of muscle clock disruption

NIH R21 AR071046 (Davuluri, PI, Esser, co-I)

7/2017-6/2019

NIH

Hyperammonemia reduces skeletal muscle protein synthesis via Beta-catenin-cMyc mediated impaired ribosomal biogenesis.

I am providing support for in vitro experiments with c-myc and changes in muscle protein synthesis

NIH R21 AR069266-01A1 (PI: Hughes: Esser co-I)

08/01/2016-07/30/2018

NIH/NIAMS

A comprehensive atlas of transcriptome diversity in mouse skeletal muscle

This project is performing RNAseq on a broad and diverse set of muscles from mice as well as soleus and EDL muscles of the rat. A web based site will be developed to provide a resource for public use.

R42AR064596-03 (Yang, PI: Esser co-owner CytoInformatics, LLC)

9/2016-8/2018

NIH/NIA

Development of An Integrated High Throughput Imaging and Image Analysis Platform for Muscle

This is a Phase II STTR grant to support the commercial development of a hardware and software platform for image analysis of muscle. I was the PI of the Phase I award; 1R41AR06459.

I am co-founder but have no effort on this grant.

NIH R01AR061939 (Esser and McCarthy, MPI)

07/01/2012-06/30/2017

NIH/NIAMS

Beta-Catenin regulation of skeletal muscle hypertrophy

The goal of this work is to test the role of Beta-catenin and its downstream target c-myc on ribosomal biogenesis, protein synthesis and muscle hypertrophy.

NIH R01AR061939S1 (Esser and McCarthy, MPI)

07/01/2013-09/30/2014

NIH/NIAMS

Beta-Catenin regulation of skeletal muscle hypertrophy

Supplement to support diversity student: Mr. Alexander Christie

NIH 1R41AR064596 (Esser, PI: with CytoInformatics, LLC)

7/15/2013-6/30/2015

NIH

Intelligent and Automatic Image Segmentation Software for High Throughput Analysis

Received matching funds from the state of Kentucky Business office

NIH R01 AR057868 (Clemens, PI: K. Esser co-I)

7/2010 – 6/2015

NIH/NIAMS

The Growth Hormone/IGF-1 Axis in Skeletal Muscle

ARMGO Pharmaceuticals (Esser, PI)

08/01/2013 – 07/01/2015

Pre-clinical testing of therapies for mdx mice

Contract support to the Center for Muscle Biology to provide functional testing of mice.

Appalachian Translational Research Network Pilot Grant (Clasey-Esser, co-PIs) 07/2014-07/2016

CCTS/ATRN

Circadian Rhythm Parameters and Metabolic Syndrome Associated Factors in Young Children

Study association of circadian rhythms with metabolic risk factors in 9-10 year old children in Clay County, KY. Also includes STEM outreach component for the children.

3P01AG039355-S2 (Bonewald, PI: Esser co-I)

subcontract with Dr. Bonewald

NIH/NIA

Skeletal muscle and bone interactions

Revision application for funding to Dr. Bonewald's P01 (Osteocyte Regulation of Bone/muscle with age)

5P20GM103527-07 (Cassis, PI and Esser, Co-I)

9/8/08-7/31/18

COBRE

Center of research in Obesity and Cardiovascular Disease

I served as a mentor to junior faculty on this grant

NIH R01 AR055246-01 (Esser, PI)

4/2008-3/2013

NIH/NIAMS

Circadian rhythms in skeletal muscle

The goal of this work is to determine whether innervation is a time cue for synchronization of the muscle clock and to determine the function of the core circadian genes, *Bmal1* and *Clock* in skeletal muscle function.

NIH R01AR055246-02S2

6/2009-8/2010

Circadian rhythms in skeletal muscle: supplement to support Jessica Houtz, an undergraduate student, underserved minority.

NIH R01AR055246-03S1 (Esser, PI)

5/2010-10/2010

NIH/NIAMS

Circadian rhythms in skeletal muscle: ARRA supplement to support a middle school science teacher, Stephen Hunt, for a summer research experience

NIH R01AR45617-11 (Esser, PI)

2/1999 -2/2012

NIH/NIAMS

Intracellular signaling during skeletal muscle hypertrophy.

The overall goal of this research is to use *in vitro* and *in vivo* models of skeletal muscle growth to identify the necessary upstream regulators and downstream effectors of mTOR signaling during skeletal muscle growth.

R01AR045617-08S1

10/2009-8/2012

NIH/NIAMS

ARRA Competitive Supplement for parent grant

NIH R01AR045617-09S2

08/2010-02/2012

NIH/NIAMS

Intracellular signaling during skeletal muscle hypertrophy

Supplement for research re-entry for Dr. Ok-Kyong Park-Sarge

Merck Sharp & Dohme Corporation (Esser, PI)

02/2011-12/2012

Defining the effects of aging on molecular growth transcriptome in mouse skeletal muscle

NIH R01DA027569 (Toborek PI, Esser co-I)

9/2009-11/2011

NIH/NIDA

Exercise as a novel strategy to target methamphetamine-induced cerebrovascular toxicity

This project looks at mechanisms by which running protects the blood brain barrier to methamphetamine

NIH R01CA133257-01A1 (Toborek PI, Esser co-I)

07/2010-11/2011

NIH/NCI

Exercise-mediated protection against brain metastases.

NIH RC1ES018636 (Esser and Andrade, co-PIs)

10/2009-9/2011

NIH/NIEHS: ARRA Challenge Grant

Clock genes, environmental challenges and cardiopulmonary disease

This project examines tissue specific disruption of Bmal1 [in skeletal, smooth or cardiac muscle] on tissue function and the sensitivity of systemic indices to light challenges.

NIH RC2AG036594 (Cummings PI; Esser, co-I, multiple co-I)

10/2009-10/2010

NIH/NIA

Study of Energy and Aging

This project is to obtain pilot data for a large multicenter R01 to look at skeletal muscle in aging humans.

Markey Cancer Center: University of Kentucky Molecular determinants of cancer prevention with physical activity, K. Esser, PI; 11/2007-07/2009

Pfizer, Inc, Eli Lilly Research. Karyn Esser, PI. Educational grant to support the meeting: Adult Skeletal Muscle Symposium: Mass, Function and Mobility Oct 30-31, 2008

Pepper Center, University of Texas Medical Branch. K. Esser co-investigator: Dr. Blake Rasmussen, PI. MicroRNA expression profiling of aged vs. adult human skeletal muscle, 12/2007-12/2008.

NIH AR43349-09 (Esser, PI) Neural and mechanical regulation of slow myosin. 8/1/95-7/31/05.

Supplement for NIH RO1 AR43349: funded 10/03-7/05:

NIH R21 AR50717-01: (Esser, PI) Circadian rhythm genes in skeletal muscle: role of Bmal1, 10/03-10/05

NASA (Esser, PI) Regulation of myosin mRNA expression following spaceflight and recovery.
Funding Period: 9/95-8/96:

Faculty member of Training Grant: Cellular Signaling: NIH HL-07692

Dr. John Solaro PI: Dept. of Physiology and Biophysics, UIC

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Invited Speaker and/or Meeting Organizer

1994

Invited to Colorado State University; Dept of Biochemistry and Molecular Biology; 4/1994

Invited to Medical College of Wisconsin 5/1994

Asked to Chair Free Communication Session: National ACSM: 6/1994

Invited to: Gordon Conference on Gravitational Effects 7/1994

Invited to Northwestern University; Rehabilitative Medicine 12/1994

1995

Tutorial - American College of Sports Medicine 6/1995

Invited to speak at Midwest regional ACSM 10/1995

1996

Asked to Chair symposium: ACSM 6/1996

Invited speaker to Am. Physiology Society meeting: Integrative Biology of Exercise 10/1996

Invited speaker to John Pierce Foundation, New Haven, CT 12/1996.

Invited to participate in NIA workshop: Biology of Aging: Skeletal Muscle 12/1996

1997

Invited to present research at Univ. of Wisconsin, Madison 4/1997

Invited speaker to Alma College, Depts of Biochemistry and Exercise Science. 11/1997

1998

Invited speaker to Williams College, Department of Biology “1960s Scholar”. 3/1998

1999

Invited to speak at Regeneron Pharmaceuticals, 2/1999

2000

Presented at two different symposia at ACSM 6/2000

Invited speaker to SPS/APS meeting in Stockholm Sweden 8/2000

Invited speaker to the Integrative Biology Meetings (FASEB) 9/ 2000.

2001

Invited speaker UIC PHYB seminar series 2/2001

Invited speaker to Experimental Biology meetings in 3/2001

Invited to speak at Bristol Myers Squibb, Princeton NJ 1/2001

Invited to speak at University of West Virginia, 3/2001

Invited to speak at University of Maryland Muscle Biology Program 6/2001

Chairing session at the Satellite Cell FASEB conference in Tucson 7/2001

Invited to speak at Exercise, Muscle and Metabolism in Melbourne Australia 8/2001

Invited to speak at Canadian Society of Exercise Physiology in Montreal 10/2001

Invited to speak at University of Wisconsin, Madison 10/2001

Invited to speak at Skeletal Muscle Plasticity in Orthopaedics at the Association of Bone and Joint Surgeons Workshop: 11/2001

2002

Invited to speak at Mechanotransduction meeting: NIH NIAMS, 2002

Visiting Professor to the Kinesiology Department at the University of Florida 1/2002

Mahidol University in Bangkok Thailand, 5/2003

2003

Satellite Cell FASEB conference in Tucson 7/2003

International Biochemistry of Exercise, Maastricht Netherlands 7/2003

Cell and Structural Biology Department, University of Illinois, Champaign Urbana 12/2003

2004

Third International Conf: Comparative Physiology and Biochemistry, Ithala, South Africa, 8/2004.

Integrative Biology of Exercise Meetings (FASEB) Austin, Texas, 10/2004

2005

President’s Lecture: American College of Sports Medicine; 5/2005 Nashville, TN

University of Kentucky, Department of Kinesiology and Health Promotion, 12/2005

2006

University of Michigan, Department of Kinesiology, 2/2006

University of Illinois, Chicago. Department of Physiology 2/2006

XIII International Congress on Metabolism and Nutrition in Renal Disease. Yucatan Mexico, 2/2006

University of Kentucky, Department of Pharmacology 3/2006

Muscle Plasticity Symposium co-organizer with Martin Schneider: American Physiological Society for Experimental Biology 2006 meeting.

Frontiers in Myogenesis Meeting Calloway Gardens GA, 4/2006:

Musculoskeletal Drug Hunting Team, Eli Lilly, Indianapolis IN 10/2006

2007

University of Kentucky, Department of Surgery 1/16/2007

Bob Wade Memorial Lecture Series, Department of Biochemistry and Muscle Biology Program, University of Maryland, March 2007

Organizer for Adult Skeletal Muscle Biology symposium, Indianapolis Indiana, 6/21/2007

Graduate Center for Nutritional Sciences; University of Kentucky 10/17/2007

Department of Biomedical Engineering; University of Kentucky 11/2007

2008

Marshall University, Cell Differentiation and Development Center January 2008

Invited Lecture, Department of Neurophysiology, Uppsala University, Uppsala Sweden 3/2008

Molecular Mechanisms Modulating Skeletal Muscle Mass & Function, Banbury Center, Cold Spring Harbor, April 2008

Organizer for Adult Skeletal Muscle Biology symposium, Lexington KY 10/2008

Invited Session Chair: International Sun Valley Workshop on Skeletal Biology, August 3-6 2008

Integrative Biology of Exercise Meeting (FASEB conference) 9/2008

2009

Elected Organizer for Frontiers in Myogenesis Meeting to be held 5/2009.

Pennington Scientific Symposium; Circadian Biology and Sleep: Missing Links in Obesity and Metabolism? April 26-29, 2009, Pennington Biomedical Research Center.

Global Musculoskeletal Experts Forum, Merck & Co., Inc, May 8-9, 2009, Jersey City, NJ

Plenary Lecture: Workshop on Multi-Scale Muscle Mechanics, Woods Hole, Massachusetts, September 18-21, 2009

San Francisco Aging Muscle Symposium, Circadian Rhythms in Skeletal Muscle, San Francisco October 8-9, 2009

2010

Integrative Physiology of Exercise, in Miami Florida, September 22-25, 2010

Organize a session on Skeletal muscle signaling in response to exercise

Invited lecture: Department of Physiology, Mahidol University, 04/07/2010

Invited lecture: American College of Sports Medicine, 06/04/2010

Invited lecture: Copenhagen Muscle Research Institute, 09/2010

San Francisco Aging Muscle Symposium, Skeletal Muscle Biology tutorial, San Francisco September 30, 2010

Invited lecture: Department of Physiology, University of Alabama, Birmingham, 11/2010

2011

Invited lecture: Department of Neurobiology, Morehouse School of Medicine, 01/21/2011

Invited lecture: Department of Physiology, Vanderbilt University 01/26/2010

Invited lecture: Department of Physiology, University of Arizona, 04/15/2011

Invited lecture: Department of Orthopedics, Johns Hopkins University, 11/17/2011

Invited lecture: Department of Physiology, Wayne State University, 12/07/2011

2012

Invited lecture: Society for Research in Biological Rhythms, Sandestin Florida 05/2012

Organizer for Muscle Bone Interaction meeting: Kansas City, Kansas, 07/2012

Invited lecture: Loyola of Chicago Department of Physiology, 08/2012

Invited lecture: Journée Jean-Claude Dreyfus lecture series, this year dedicated to skeletal muscle homeostasis, September 7th, 2012, Paris France

Invited lecture: Department of Kinesiology, University of Kentucky, December 2012

2013

Invited lecture: Department of Pathology, Cleveland Clinic, 02/2013

Invited lecture: Georgia Institute of Technology; Applied Physiology 02/2013

Invited lecture: Orthopaedic Surgery and Physiology departments, University of Michigan, March, 2013

Symposium organizer and lecture: Circadian rhythms and exercise; ACSM Indianapolis, 06/2013

Invited lecture: School of Kinesiology, University of Michigan, 10/2013

Meeting Organizer and lecture: ASBMR: Cutting Edge Discoveries in Muscle Health and Disease: 10/2013

Invited lecture: EMBO Workshop - Molecular Mechanisms of muscle growth and wasting in health and disease; Ascona, Switzerland, September 2013

Invited lecture: Department of Pharmacology, University of Pennsylvania. 09/30/2013

Organizer and speaker for Muscle Day at the ASBMR National Meeting, 10/03/2013

2014

Invited lecture: Growth and Wasting in Heart and Skeletal Muscle. Keystone, January 2014

Invited lecture: Department of Biology, University of Missouri, St. Louis 02/2014

Invited lecture: Advances in skeletal muscle health and disease; Gainesville, FL 03/2014

Invited lecture: University of Texas Medical School, Houston, 03/2014

Invited lecture: Musculoskeletal Sex Differences Throughout the Lifespan Research Symposium, American Academy of Orthopedic Surgeons: 07/2014

Invited lecture: International Sun Valley Workshop on Skeletal Biology, 08/2014

Invited lecture: Circadian rhythms and skeletal muscle, Texas A&M University 09/2014

Organizer and Keynote speaker at Integrative Physiology of Exercise; 09/2014

Invited lecture: Circadian rhythms and skeletal muscle, University of Cincinnati, Physiology: 11/2014

Invited lecture: Circadian rhythms, exercise and health, Alma College, 11/2014

2015

Invited lecture: Southeast regional ACSM meeting, Jacksonville Florida 02/2015

Invited lecture: Kansas State University 03/2015

Invited lecture: Clock genes, muscle and metabolism, Gordon Research Conference, Muscle: Excitation/Contraction Coupling; 5/2015

Invited lecture: Bone and Muscle symposium, University of Missouri, Kansas City; 5/2015

Invited lecture: EMBO Workshop - Molecular Mechanisms of muscle growth and wasting in health and disease; Ascona, Switzerland, September 2015

Invited lecture: Circadian rhythms and aging. Gerontological Society of America Annual Meeting, November 2015

Invited lecture: Circadian rhythms and skeletal muscle. 8th Congress of FAOPS (FAOPS 2015 Congress), Bangkok, Thailand: 11/2015

Invited lecture: Australian Physiological Society Meeting, Hobart, Tasmania 12/2015

2016

Invited lecture: Advances in skeletal muscle health and disease; Gainesville, FL 01/2016

Invited lecture: Circadian rhythms and skeletal muscle: Department of Molecular Physiology and Biophysics, Baylor College of Medicine, February 2016

Invited lecture: Circadian rhythms and skeletal muscle. Padua Muscle Days, Terme Euganee (PD), Italy, April 2016

Invited speaker: Alcohol and molecular clock disruption in skeletal muscle. Research Society on Alcoholism, June 25-29th, New Orleans

Invited speaker: Center for Chronobiology Inaugural Symposium September 2016, Cincinnati Children's Hospital.

Invited speaker: Carl Gisolfi Seminar, University of Iowa. Circadian rhythms and muscle clocks; time of exercise matters, October 6, 2016

Invited speaker: Institute of Molecular Biophysics, Florida State University, October 2016

Invited speaker: Circadian Rhythms, Physical Activity and Skeletal Muscle: Implications for Inflammatory Disorders. American College of Rheumatology; Washington DC, November 2016

2017

Muscle Program Visitor and Retreat Speaker: University of Maryland, April 2017

Invited speaker: Center for Exercise Medicine Distinguished Lecture Series, UAB April 2017

Invited speaker: Experimental Biology, April 2017

Invited speaker: ACSM, May 2017

Invited speaker and workshop organizer: ASBMR, September 2017

Invited speaker: Reset Therapeutics, San Francisco, September 2017

Invited speaker: University of Minnesota, November 2017

Invited Symposim: Symposium on the Biological Clock, Maastricht University, November 2017

2018

Invited speaker: Volusia County Medical Society, Daytona Florida January 2018

Grand Rounds: UF Rheumatology, January 2018

Invited speaker: University of Virginia, February 2018

Invited speaker: Society for Research on Biological Rhythms (SRBR), Amelia Island, May 2018

Invited speaker: Integrative Physiology of Exercise Meeting, San Diego September 2018

Invited speaker: Sex Differences in Metabolism Across the Lifespan, Denver September 2018

Invited speaker: International Biochemistry of Exercise meeting, Beijing, China October 2018

2019

Invited speaker: Keystone meeting Mitochondrial Biology in Heart and Skeletal Muscle/ Mitochondria in Aging and Age-Related Disease., January 2019

Invited speaker: Florida State University. February 2019

Invited speaker: University of Arizona, March 2019

Plenary Lecture: Alcohol and End Organ Diseases Gordon Research Conference, March 2019
 Grand Rounds, Pathology, UF. March 2019
 Hans Fisher Lectureship: Department of Nutrition, Rutgers University, April 2019
 Invited speaker: Muscle Clocks and Diabetes symposium: Amsterdam, May 2019
 Organizer and Chair ACSM World Congress on “Exercise, Circadian Rhythms and Sleep”, May 2019
 Invited speaker: FASEB SRC glucose metabolism: Rancho Mirage, June 2019
 Plenary Speaker: European College of Sports Sciences: Prague, July 2019
 Organizing Committee: Muscle-Bone Interactions, IUPUI, August 2019
 Invited speaker: ASBMR September 2019
 Invited speaker: Copenhagen Bioscience Conference 18 - Metabolism in Action: Copenhagen, October 2019
 Future Physiology 2019, the Physiological Societies young researcher conference. Translating Cellular Mechanisms into Lifelong Health Strategies. Liverpool, December 2019

2020

Invited speaker: Department of Cell Biology and Anatomy, Augusta University 01/2020
 Invited speaker: Nathan Shock Center, University of Alabama, Birmingham 02/19/2020
 Invited to give the Lewis Lecture, University of Georgia, March 2020 (cancelled)
 Invited speaker: Moving Beyond Isolated Systems, University of Louisville, April 2020 (moved to 2021)
 Keynote lecture: Department of Physiology retreat, Baylor College of Medicine, May 2020 (cancelled)
 Invited speaker: Stem Cell Institute, University of Minnesota, May 2020 (moved to fall 2020)
 Invited speaker: Advances in Musculoskeletal Regeneration, Penn Institute for Regenerative Medicine, University of Pennsylvania, May 2020 (to be moved to 2021)
 Invited speaker: Muscle Health Research Centre, York University, October 2020 (virtual)
 Invited speaker: University of Utah, Seminars in Metabolism, October 2020 (virtual)

2021

Invited speaker: Stem Cell Institute, University of Minnesota, April 2021 (virtual)
 Invited speaker: Muscle Science Talks Seminar, May 2021
 Invited speaker: Advances in Musculoskeletal Regeneration, Penn Institute for Regenerative Medicine, University of Pennsylvania, May 2021 (virtual)
 Invited speaker: Department of Physiology and Biophysics, University of Vermont, May 2021 (virtual)
 Invited speaker: American Diabetes Association, June 2021 (virtual)
 Invited speaker: Medical Pharmacology and Physiology, University of Missouri, October 2021
 Invited speaker: Whitney Marine Biological Labs, October 2021
 Invited speaker: Obesity Society, Annual Meeting, November 2021. (virtual)

2022

Invited speaker: SEACSM meeting, February 2022
 Invited speaker: Chronobiology & Sleep Institute at the University of Pennsylvania, March 2022.
 Invited speaker: International Biochemistry of Exercise, Toronto, May 2022
 Invited speaker: Michigan Physiological Society, May 2022
 Invited speaker: Clarkson lecture, American College of Sports Medicine, San Diego, May 2022
 Invited speaker: New Directions of Muscle Disease, Ft. Lauderdale, June 2022
 Keynote speaker: Munich Muscle meeting, June 2022

Invited speaker: Spinal Cord Injury symposium, Louisville, KY July 2022
Invited speaker: FASEB molecular metabolism, Nova Scotia, August 2022
Invited speaker: Musculoskeletal aging; Atlanta, August 2022
Invited speaker: International Conference on Muscle Wasting, Ascona Switzerland, Sept 2022
Invited Speaker: University of Arkansas, Exercise Science Research Center, October 2022
Invited speaker: Sports Medicine of Australia, Gold Coast Queensland, November, 2022

2023

Invited speaker: Whitney Laboratory for Marine Bioscience: February 2023
Invited speaker: Sleep Research Society, February 2023
Invited speaker: Health and Physical Activity Lecture Series, Virginia Commonwealth University, April 2023
Invited speaker: Colorado State University and University of Colorado, April 2023
Invited speaker: Univ. Colorado, Boulder, 2023
Invited speaker: Michael Miller Memorial Seminar Speaker, UAB, May 2023
Invited speaker: Gordon Conference on Myogenesis, Il Ciocco June 2023
Invited speaker: World Muscle Society, Charleston SC, October 2023
Invited speaker: Circadian Rhythms in Sleep, Physiology & Medicine, Chongqing, China October 2023
Invited speaker: Gerontological Society Meeting, November 2023
Invited speaker: Molecular and Physiological Aspects of Type 2 Diabetes and Obesity, Karolinska Institute, November 2023

2024

Organizer and speaker: Signals and Mechanisms Underlying the Benefits of Exercise, Keystone Meeting January 2024
Invited speaker: EMBO “Skeletal Muscle Development, Metabolism, and Repair during Homeostasis and Disease” meeting. Sicily, May 2024