

Stephen Decker

MS, CEP

Curriculum Vitae

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📍 Dalton, Massachusetts
☎ (713) 452-9516
✉ stdecker@umass.edu
🐦 @decker_st
🌐 stdecker
in deckerst

Academic Training

Exp. Feb 2022	Doctor of Philosophy, Kinesiology University of Massachusetts Amherst <ul style="list-style-type: none">➤ Primary Mentor: Gwenaél Layec, Ph.D. [PubMed]➤ Dissertation Project: The Role of Sirtuins in Cigarette Smoke-Induced Skeletal Muscle Dysfunction	Amherst, Massachusetts
Jul 2017-Aug 2018	Doctor of Philosophy, Nutrition and Integrative Physiology University of Utah <ul style="list-style-type: none">➤ Primary Mentor: Gwenaél Layec, Ph.D.➤ Transferred to University of Massachusetts Amherst	Salt Lake City, Utah
May 2016-Jul 2017	Research Clinical Exercise Physiologist Baylor College of Medicine <ul style="list-style-type: none">➤ Primary Supervisor: Dennis T Villareal, MD [PubMed]	Houston, Texas
Aug 2016	Master of Science, Kinesiology Stephen F. Austin State University <ul style="list-style-type: none">➤ Primary Mentor: James Rowe, Ph.D.➤ Thesis Project: Effects of High-Intensity Interval Training on Postprandial Lipemia and Glycemia	Nacogdoches, Texas
May 2014	Bachelor of Science, Kinesiology Stephen F. Austin State University <ul style="list-style-type: none">➤ Graduated with Honors, Cum Laude	Nacogdoches, Texas

Publications

Peer-Reviewed

- Li, X, Conlin, CC, **Decker, ST**, Hu, N, Mueller, M, Khor, L, Hanrahan, C, Layec, G, Lee, VS, Zhang, JL (2019), Sampling Arterial Input Function (AIF) from Peripheral Arteries: Comparison of a Temporospatial-feature Based Method Against Conventional Manual Method, *Magnetic Resonance Imaging*, [PubMed]

In Development

- **Decker, ST**, Kwon, OS, Zhao, J, Hoidal, JR, Hueckstadt, T, Sanders, KA, Layec, G (Under Revision in the *American Journal of Physiology Endocrinology & Metabolism*), Skeletal muscle Mitochondrial Adaptations Induced by Long-term Cigarette Smoke Exposure
- **Decker, ST**, Kwon, OS, Zhao, J, Hoidal, JR, Hueckstadt, T, Sanders, KA, Layec, G (In Preparation), The Receptor for Advanced Glycation End Products (RAGE) Mediates Cigarette Smoke-Induced Skeletal Muscle Adaptations in C57BL/6 Mice
- Matias, AA, Thurston, T, **Decker, ST**, Hart, CH, Zhao, J, Le Fur, Y, Jeong, EK, Trinity, JD, Kwon, OS, Layec, G (In Preparation), Central and Peripheral Cardiovascular (CV) Response to Submaximal Plantar Flexion Exercise in Chronic Obstructive Pulmonary Disease (COPD)
- Matias, AA, **Decker, ST**, Nagarajan, R, Le Fur, Y, Layec, G (In Preparation), Phosphorus Magnetic Resonance Spectroscopy (³¹P-MRS) of Alkaline Inorganic Phosphate (Pi) in Young, Sedentary Adults: A Reproducibility Study

Selected Posters & Abstracts

- **Decker, ST**, et al. (2020), Oxidative Stress Induced By Long-Term Cigarette Smoke Exposure Does Not Alter Mitochondrial Respiration in Skeletal Muscle of C57BL/6 Mice, *Keystone Symposium: New Insights into the Biology of Exercise* (Keystone, CO)
- **Decker, ST**, et al. (2019), Knockout of the Receptor for Advanced Glycation End Products (RAGE) Increases Skeletal Muscle Mitochondria Content and Alters Mitochondrial Function, *Muscle Biology Conference* (Gainesville, FL)
- Layec, G, Conlin, C, Dong, J, **Decker, ST**, et al. (2018), Assessment of Perfusion-metabolism matching in exercising muscle from dynamic contrast-enhanced MRI and T2 mapping, *International Society for Magnetic Resonance in Medicine* (Paris, FR)

- Conlin, C, Dong, J, **Decker ST**, et al, 2018, Reproducibility of calf-muscle perfusion measurements from dynamic contrast-enhanced MRI, *International Society for Magnetic Resonance in Medicine (Paris, FR)*
- **Decker, ST**, et al. 2018, Effects of Tetrahydrobiopterin on Limb Blood Flow and Muscle Metabolism in Patients with COPD, *American College of Sports Medicine Annual Meeting (Minneapolis, MN)*
- **Decker, ST**, Rowe, J, 2017 Effects of Acute Exercise on Postprandial Lipemia and Postprandial Glycemia, *Texas American College of Sports Medicine Regional Conference (Waco, TX)*

Oral Presentations

Nov 2019	The Physiological Role of Sirtuins: A Target for Aging or More Hype? UMass Amherst Department of Kinesiology
May 2019	Effects of Tetrahydrobiopterin on Limb Blood Flow and Muscle Metabolism in Patients with COPD International Society for Magnetic Resonance in Medicine - Montreal, Quebec

Funding

Mar 2020	Research Travel Award Recipient UMass Amherst Department of Kinesiology	Awarded \$500
Jun 2019	Predoctoral Fellowship American Heart Association	Not Funded
May 2019	Trainee Stipend Award Recipient International Society for Magnetic Resonance in Medicine	Awarded \$200 & Conference Registration
Mar 2016	Student Research Development Award Recipient Texas American College of Sports Medicine	Awarded \$500

Honors & Awards

Feb 2017	Student Research Poster Finalist - Masters Category Texas American College of Sports Medicine
Feb 2014	SFASU Undergraduate Research Conference Top Scholar Stephen F. Austin State University School of Honors

Teaching Experience

* Denotes Graduate-level Class

Instructor of Record

Fall 2015 & Spring 2016	KIN 100 - Physical Fitness Concepts and Activities Stephen F. Austin State University
Spring 2015	KIN 120 - Foundations of Kinesiology Stephen F. Austin State University
Fall 2014	KIN 200 - Fitness Activities for Life Stephen F. Austin State University

Teaching Assistant

Spring 2021	KIN 470 - Exercise Physiology University of Massachusetts Amherst
Fall 2020	KIN 270 - Anatomy & Physiology I University of Massachusetts Amherst
Fall 2019	*KIN 570 - Advanced Exercise Physiology University of Massachusetts Amherst
Fall 2018 & Spring 2019	KIN 110 - Human Performance and Nutrition University of Massachusetts Amherst

Fall 2015 & Spring 2016 **KIN 417 - Analysis of Movement Lab**
Stephen F. Austin State University

Professional Development and Training

Jun 2019	Oroboros Instruments Schröcken, Austria	
	➤ Oroboros O2k-Workshop on High-Resolution Respirometry (HRR)	
Ongoing	A Guide for the Analysis of High-Resolution Respirometry Data Using R Amherst, Massachusetts	Creator
	➤ In Development - Version 2 Available on GitHub	
Current	American College of Sports Medicine Indianapolis, Indiana	Member
	➤ Certified Clinical Exercise Physiologist	
	➤ Certified Exercise Physiologist	
Current	American Physiological Society Rockville, Maryland	Member
	➤ Primary Section: Endocrinology & Metabolism	
Current	International Society for Magnetic Resonance in Medicine Rockville, Maryland	Member
	➤ Primary Section: MR Spectroscopy	

Undergraduate Mentoring

* Denotes students who worked on undergraduate honors thesis projects

2018-Present	*Jyotika Vallurupalli Undergraduate Honors Thesis: TBD	
	➤ Trained the assessment of vascular function using Doppler Ultrasound and continuous non-invasive arterial pressure	
2019-Present	John Madden	
	➤ Trained how to collect skeletal muscle mitochondrial respiration data using the Oxygraph O2K	
2018-2020	*Sebastien Rauch Validity and Specificity of Tetramethylrhodamine, Methyl Ester (TMRM) Dye in Mice Gastrocnemius Muscle Fiber Bundles for Assessing Mitochondrial Membrane Potential	
	➤ Trained how to collect skeletal muscle mitochondrial respiration data using the Oxygraph O2K & assessment of vascular function using Doppler Ultrasound	
2018-2020	Todd Maniscalchi	
	➤ Trained how to collect skeletal muscle mitochondrial respiration data using the Oxygraph O2K & assessment of vascular function using Doppler Ultrasound	
2018-2020	Joseph Howard	
	➤ Trained how to collect skeletal muscle mitochondrial respiration data using the Oxygraph O2K	
2020	Mia Calderone	
	➤ Trained how to collect skeletal muscle mitochondrial respiration data using the Oxygraph O2K	