

# Curriculum Vitae

## Darren Thomas Beck, Ph.D.

Citizenship: United States of America

### Contact Information

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### Education

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|-----------|---------------------|---|
| 2011-2013 | Postdoctoral Fellow | Malcom Randall VA Medical Center, Gainesville, FL.<br>Geriatric Research Education and Clinical Center (GRECC)<br>(Applied Physiology / Pharmacology) |
| 2010      | Ph.D.               | University of Florida, Gainesville, FL.<br>Department of Applied Physiology and Kinesiology<br>(Applied Physiology)                                   |
| 2002      | B.S.                | University of Delaware, Newark, DE.<br>Department of Kinesiology and Applied Physiology<br>(Exercise Physiology)                                      |

### Professional Experience

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| 2022-Present | <u>Chair of Cell Biology and Physiology</u> : Via College of Osteopathic Medicine, Auburn, AL.   |
| 2018-Present | <u>Associate Professor</u> : Via College of Osteopathic Medicine, Auburn, AL.<br>Department of Cell Biology and Physiology                                   |
| 2015-2018    | <u>Assistant Professor</u> : Via College of Osteopathic Medicine, Auburn, AL.<br>Department of Cell Biology and Physiology                                   |
| 2015-Present | <u>Graduate Faculty</u> : Graduate School / School of Kinesiology, Auburn University, Auburn, AL.  |
| 2015-Present | <u>Associate Director</u> : Molecular and Applied Sciences Laboratory, School of Kinesiology,<br>Auburn University, Auburn, AL.                              |
| 2015-Present | <u>Research Scientist</u> : Cardiovascular and Integrative Physiology Laboratory, School of<br>Kinesiology, Via College of Osteopathic Medicine, Auburn, AL. |
| 2018-Present | <u>Research Scientist</u> : Molecular and Applied Physiology Laboratory, Pharmacy Research<br>Building, Auburn University, Auburn, AL.                       |
| 2013-2015    | <u>Assistant Professor</u> : Department of Kinesiology, University of Rhode Island, Kingston, RI.  |
| 2013-2015    | <u>Director</u> : Cardiovascular Diagnostic Learning Collaborative, Department of Kinesiology,<br>University of Rhode Island, Kingston, RI.                  |
| 2013-2015    | <u>Graduate Faculty</u> : University of Rhode Island, Kingston, RI.  |

- 2011-2013 Postdoctoral Fellow: Malcom Randall VA Medical Center, Geriatric Research Education and Clinical Center (GRECC), Gainesville, FL.
- 2011-2013 Research Assistant Professor: University of Florida, Department of Orthopaedics and Rehabilitation, Orthopaedics and Sports Medicine Institute (OSMI), Gainesville, FL.
- ~~2012~~ Postdoctoral Instructor: University of Florida, Department of Applied Physiology and Kinesiology, College of Health and Human Performance, Gainesville, FL.
- 2005-2010 Predoctoral Fellow: University of Florida, Department of Applied Physiology and Kinesiology, College of Health and Human Performance, Gainesville, FL.
- 2006-2007 Adjunct Faculty: University of Florida, Department of Applied Physiology and Kinesiology, College of Health and Human Performance, Gainesville, FL.

### **Clinical Experience**

- 2001 Exercise Physiologist: Cardiac Rehabilitation, Preventive Medicine and Rehabilitation Institute (PMRI) Christiana Care Health System, Wilmington, DE.
- 2000-2001 Cardiac Stress Technician: Cardiac Diagnostic Center, Cardiology Consultants P.A., Wilmington, DE.
- ~~2000~~ Exercise Physiologist: Pulmonary Functions Laboratory and Pulmonary Rehabilitation Christiana Care Health System, Christiana Hospital(3q0.00000912 0 612 7p3a







35. Borst SE, Yarrow JF, Conover CF, Nseyo U, Meuleman JR, Lipinska J, Braith RW, **Beck DT**, Martin JS, Morrow M, Roessner S, Beggs LA, McCoy SC, Canady

48. Martin JS, **Beck DT**, Gurovich AN, Braith RW. The acute effects of smokeless tobacco on central aortic blood pressure and wave reflection characteristics. *Experimental Biology and Medicine*. 235(10): 1263-1268, 2010. PMID: 20719817
49. Adkisson EJ, Casey DP, **Beck DT**, Gurovich AN, Martin JS, Braith RW. Central, peripheral and resistance arterial reactivity: fluctuates during the phases of the menstrual cycle. *Experimental Biology and Medicine*. 235(1): 111-118, 2010. PMID: 20404025
50. Gurovich AN, **Beck DT**, Braith RW. Aortic pulse wave analysis is not a surrogate for central arterial pulse wave velocity. *Experimental Biology and Medicine*. 234(11):1339-44, 2009. PMID: 19657066
51. Braith RW, **Beck DT**. Resistance exercise: training and adaptation and developing a safe exercise prescription. *Heart Failure Review*. 13:69-79, 2008. PMID: 17932746
52. Casey DP, **Beck DT**, Bram0 g0 G( )JTJETQq0.00000912 0 612 792 reW\*BT/F1 12 TtF G3/F2 12 Tf8 56612 7







25. Haun CT, Mumford PW, Hyde PN, Fairman CM, Kephart WC, **Beck DT**, Moon JR, Roberts MD, Kendall KL, Young KC. -  
restricted high protein diet on changes in body composition and clinical safety markers. *J International Society of Sports Nutrition*, 2016.
26. Lee DC, Harrison T, Ball M, Richardson H, **Beck DT**, Anz A, Goodlett M. Range of motion in the interphalangeal joints of collegiate football players. 31<sup>st</sup> *Clinical Conference of the American Osteopathic Association of Sports Medicine (AOASM)*, Tempe, AZ. 2016.
27. **Beck DT**, Dalbo VJ, Mobley CB, Ballmann C, Kephart WC, Fox CD, Santucci VA, Conover CF, Beggs LA, Balaez A, Hoerr FJ, Yarrow JF, Borst SE, Roberts MD. Myostatin Protein and Muscle Fiber Cross-Sectional Area are Associated with Increased Muscle Satellite Cell Number in 10 Month Old Fisher 344 Rats Treated with Testosterone and Trenbolone Enanthate. *FASEB J.* 30:1014.7, 2016.

38. Beggs LA, Ye F, **Beck DT**, Otzel DM, Conover CF, Balaez A, Miller JR, Yarrow JF, Borst SE. Testosterone prevents bone loss in skeletally-mature male rats subsequent to spinal cord injury. *Med. Sci. Sports Exer.* 46(5S):441, 2014.
39. Martin JS, **Beck DT**, Braith RW, FACSM. Resistance arterial function following enhanced external counterpulsation therapy in persons with abnormal glucose tolerance. *Med. Sci. Sports Exer.* 46(5S):659, 2014.
40. Otzel DM, Conover CF, Beggs LA, **Beck DT**, Balaez A, Combs SM, Miller JR, Ye F, Aguirre JI, Neuville KG, Williams AA, Conrad BP, Gregory CM, Wronski TJ, Bose PK, Borst SE, Yarrow JF. Testosterone dose-dependently prevents bone and muscle loss in rodents following spinal cord injury. *Med. Sci. Sports Exer.* 46(5S):440, 2014.
41. Borst SE, Yarrow JF, Conover CF, Nseyo U, Meuleman JR, Lipinska JA, Braith RW, **Beck DT**, Martin JS, Morrow M, Roessner S, Beggs LA, McCoy SC, Cannady DF, Shuster JJ. Musculoskeletal and prostate effects of combined testosterone and finasteride administration in older hypogonadal men. *Med. Sci. Sports Exer.* 46(5S):439-440, 2014.
42. Yarrow JF, Beggs LA, Conover CF, Meuleman JR, **Beck DT**, Morrow M, Borst SE. Testosterone stimulates red cell production independent of dihydrotestosterone. *Med. Sci. Sports Exer.* 46(5S):402, 2014.
43. Ye F, McCoy SC, Ross HH, Bernardo JA, Beharry AW, Senf SM, Judge AR, **Beck DT**, Conover CF, Cannady DF, Smith BK, Yarrow JF, Borst SE. Transcriptional regulation of myotrophic actions by testosterone and trenbolone on androgen responsive muscle. *Med. Sci. Sports Exer.* 46(5S):440, 2014.
44. **Beck DT**, Yarrow JF, Beggs LA, Otzel DM, Gregory CM, Wronski TJ,

51. **Beck DT**, Martin JS, Casey DP, Braith RW, FACSM. Exercise training reduces peripheral pulse wave velocity in young prehypertensives. *Med. Sci. Sports Exer.* 44(5):S1;410, 2012.
52. Braith RW, FACSM, Casey DP, Conti CR, Nichols WW, Choi CY, Khuddus MA, **Beck DT**. Enhanced external counter pulsation improves endothelial function in patients with left ventricular dysfunction. *Med. Sci. Sports Exer.* 44(5):S1;165. 2012.
53. Martin JS, **Beck DT**, Aranda JM, Braith RW, FACSM. Enhanced External Counterpulsation Improves Peripheral Artery Function, Redox Balance, and Insulin Resistance in Patients with Abnormal Glucose Tolerance. *Med. Sci. Sports Exer.* 44(5):S1;116-117, 2012.
54. Martin JS, **Beck DT**, Aranda JM, Braith RW. Enhanced external counterpulsation increases GLUT-4



6. *Habitual Exercise and Vascular Aging: Never too late to start?* Gainesville Senior Recreation Center, Department of Aging and Geriatric Research, University of Florida Institute on Aging, Gainesville, FL, 2013



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| 2018-2021 | Presidential Awards for Interdisciplinary Research (PAIR)<br><i>Extra-</i><br>PI: A Kaddoumi, PhD<br>Role: Co-Investigator<br>Co-Is: TS Denney, PhD, G Deshpande, PhD, R Beyers, PhD,<br>JL Robinson, PhD, A Kirby, PhD, N Merner, PhD.   | \$300,000 |
| 2018-2021 | Presidential Awards for Interdisciplinary Research (PAIR)<br><i>Development of the AU-NASH (Auburn University-Non-Alcoholic Steatohepatitis) Research Program</i><br>PI: Rajesh H Amin, PhD<br>Role: Co-Investigator<br>Co-Is: RD Arnold, PhD, TS Denney, PhD, Adil Bahir, PhD, MD Roberts, PhD,<br>JD McCullough, PhD. | \$300,000 |
| 2016      | FutureCeuticals<br><i>Neurophysiological effects of whole coffee fruit concentrate in older adults with mild cognitive impairment: A fMRI Investigation</i><br>Role: Principal Investigator<br>Co-PIs: JL Robinson. PhD<br>Collaborators: TS Denney, PhD, N Salibi, PhD   | \$94,257  |
| 2016      | American Diabetes Association<br><i>The antiglycemic effects of a lower pressure external pneumatic compression device on type II diabetics: a molecular and applied investigation</i><br>Role: Co-Investigator<br>PI: JS Martin, PhD<br>Co-I: MD Roberts, PhD  | \$566,003 |
| 2016      | University of Tampa and Human Longevity<br><i>Effects of a subchronic ketogenic diet on skeletal muscle anabolic and catabolic signaling and adipose tissue signaling</i><br>Role: Co-PI<br>PI: MD Roberts, PhD<br>Co-PIs: KC Young, PhD, JS Martin, PhD  | \$105,000 |
| 2016      | University of Tampa and Human Longevity<br><i>Effects of aging and nutrition on systemic stem cell content and physiological systems</i><br>Role: Co-PI<br>PI: MD Roberts, PhD<br>Co-PIs: KC Young, PhD, JS Martin, PhD   | \$246,000 |
| 2016      | NormaTec<br><i>Comparative effects of NormaTec and an alternate device in the treatment of lymphedema</i><br>Role: Co-Investigator<br>PI: JS Martin, PhD<br>Co-I: A   |           |





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| 2020 | VCOM/College of Veterinary Medicine<br>(One Health Grant)<br><i>Exploration of the combined effect of oncolytic virus and CAR T cell therapy in osteosarcoma</i><br>Co-PIs: JD McCullough, PhD, P Agarwal, PhD<br>Co-Is: DT Beck, PhD, BF Smith, VMD, PhD   | \$50,000  |
| 2019 | VCOM Research Eureka Accelerator Program (REAP)<br><i>Reduced frataxin levels increase mitochondrial iron dyshomeostasis exacerbating ischemia reperfusion injury in diabetic heart mouse model</i><br>Co-PIs: DT Beck, PhD, R Amin, PhD  | \$50,000  |
| 2018 | National Dairy Council<br><i>The effects of exosome-enriched versus exosome-depleted milk protein on prostate cancer prognosis in rodents</i><br>PI: JD McCullough, PhD<br>Role: Co-Investigator<br>CO-Is: MD Roberts, PhD, J Zempleni, PhD   | \$191,480 |
| 2017 | United States Special Operations Command (USSOCOM)<br><i>Use of Heart Rate Variability to Predict Readiness and Improve Training and Performance in Special Operations Forces (SOF) Operators</i><br>Co-PIs: JM Sefton, PhD, MD Roberts, PhD, A Gupta, PhD, JL Robinson, PhD<br>Role: Co-Principal Investigator | \$699,570 |
| 2017 | National Science Foundation<br><i>Research Traineeship (NRT) Innovations in Graduate Education (IGE)</i><br><i>Understanding the Brain (UtB): Enhancing graduate neuroscience education</i><br>PI: JL Robinson, PhD<br>Role: Co-Investigator  | \$490,926 |
| 2017 | Department of Defense Congressional Dire12 TTJETQq0.00000912 0 612 792 reW*nBT/F2 12 Tf1 0 0  |           |

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| 2014 | Faculty Career Enhancement Grant<br>University of Rhode Island Division of Research and Economic Development<br><i>Acute effects of a commercially available limb pneumatic compression device on systemic arterial function</i><br>PI: DT Beck, PhD                                     | \$15,000    |
| 2014 | Federal Research Priorities (State of Rhode Island)<br>University of Rhode Island Division of Research and Economic Development<br><i>Cardiovascular effects of testosterone administration in hypogonadal men</i><br>PI: DT Beck, PhD   | \$1,276,000 |
| 2013 | BLR&D CDA-2 (Grant-11349490) Office of Research Development (ORD)<br><i>Testosterone replacement to improve cardiac function in rat heart failure model</i><br>PI: Darren T. Beck, Ph.D.<br>Co-Investigators: SA Bercelli, MD, PhD, SE Borst, PhD,<br>LF Ferreira, PhD, and CY Choi, MD. | \$977,600   |
| 2008 | American Heart Association Predoctoral Fellowship.<br><i>Effects of resistance training on arterial function in prehypertensives</i><br>PI:  |             |

## Graduate Student Mentor

- 2020 Doctoral Dissertation Committee Member: Chris G. Vann, M.S., School of Kinesiology, Auburn University, Auburn, AL.
- 2019 Doctoral Dissertation Committee Member: Petey W. Mumford, M.S., School of Kinesiology, Auburn University, Auburn, AL.
- 2018 Doctoral Dissertation Committee Member: Jerry E. Murphy, M.S., Department of Psychology, Auburn University, Auburn, AL.
- 2017 Doctoral Dissertation Committee Member: Wesley C. Kephart, M.S., School of Kinesiology, Auburn University, Auburn, AL.
- 2015 Masters Thesis Committe Member: Lisa Vincent-Horta, B.S., Department of Kinesiology, University of Rhode Island, Kingston, RI.
- 2014 Masters Degree Major Advisor: Michael Babatunde, B.S., Department of Kinesiology, University of Rhode Island, Kingston, RI.
- 2014 Masters Thesis Committee Chair: Sean Krueger, B.S., Department of Nutrition and Food Sciences, University of Rhode Island, Kingston, RI.

## Undergraduate Student Mentor

- 2015 Undergraduate Directed Research Study: Jack A. Goldman, Department of Biological Sciences, University of Rhode Island, Kingston, RI.
- 2015 Undergraduate Directed Research Study: Adam J. Rokicki, Department of Kinesiology, University of Rhode Island, Kingston, RI.
- 2014 Undergraduate Directed Research Study: John B. Christy, Department of Kinesiology, University of Rhode Island, Kingston, RI.

## Academic Committee Service

- 2022 Voting Member OMS 1 and OMS 2 Promotion Board
- 2021-present Co-Chair VCOM College Wide Faculty Senate
- 2021-present Committee Member
- 2021-present Committee Member: VCOM Appointment, Promotion and Tenure Committee
- 2021-present Chair: VCOM Faculty Senate.
- 2021-present Committee Member: Diversity Committee VCOM Auburn.
- 2018-present Chair: Professional Ethics and Standards Board, VCOM-Auburn.
- 2019-present Chair: Neuroscience Grand Rounds.
- 2017-present Chair: VCOM Auburn Research Day.

- 2018-present Committee Member: VCOM Research Retreat Planning Committee
- 2018-present Founding Member: Center for Neuroscience Initiative, Harrison School of Pharmacy, Auburn University.
- 2018-present Committee Member: Student Professional Development, VCOM-Auburn.
- 2018-present Boshell Faculty Member: Boshell Diabetes and Metabolic Diseases Research Program, Auburn University.
- 2014-2015 Committee Member: Department of Kinesiology Graduate Program, University of Rhode Island, Kingston, RI.
- 2014-2015 Founding Director: Exercise Science Student Organization, University of Rhode Island, Kingston, RI.
- 2014 Department of Kinesiology Representative: Ad Hoc Gateways to Completion (G2C) Task Force for Chemistry (CHM 103), University of Rhode Island, Kingston, RI.
- 2003-2004 Graduate Student Representative: University of Delaware Faculty Senate, Committee for Student and Faculty Honors, University of Delaware, Newark, DE.
- 2001-2003 Committee Member: Exercise Science Department Steering Committee, Delaware Technical and Community College, Wilmington, DE.

### **Community Service**

- 2021 Local Fundraiser
- 2021 Volunteer: COVID-19 Vaccine Clinic, East Alabama Medical Center, Auburn, AL.
- 2016-Present Volunteer Instructor