NEIL M. JOHANNSEN, Ph.D.

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EDUCATION	
2002 – 2007	Ph.D. in Health & Human Performance, Specialty Area: Biologic Basis of Physical Activity Iowa State University, Ames, IA Dissertation: Mild preexercise hyperhydration with electrolyte-containing beverages: effect on thirst, water intake, and physiologic function.
1994 - 1998	B.S. in Chemistry , Department of Chemistry and Biochemistry, South Dakota State University, Brookings, SD
EXPERIENCE	
08/17 – present	Associate Professor , School of Kinesiology, Louisiana State University, Baton Rouge, LA
	Research Interests: The study of acute and chronic physical activity and exercise training effects on chronic disease and special populations.
	The study of hydration, thermoregulation, cardiovascular and metabolic function, and nutrition in relation to health and performance in athletes.
08/17 – present	Associate Professor (Adjunct), Scientific Director of Exercise Testing and Intervention, Pennington Biomedical Research Center, Baton Rouge, LA
08/12 – 08/17	Assistant Professor , School of Kinesiology, Louisiana State University, Baton Rouge, LA
08/12 – 08/17	Assistant Professor (Adjunct), Director of Exercise Testing and Intervention, Pennington Biomedical Research Center, Baton Rouge, LA
02/11 – 8/12	Instructor (Faculty), Preventive Medicine Department, Pennington Biomedical Research Center, Baton Rouge, LA
07/07 – 02/11	Post-Doctoral Researcher, Preventive Medicine Department, Pennington Biomedical Research Center, Baton Rouge, LA
01/02 – 5/07	Graduate Assistant, Iowa State University, Ames, IA Major Professor: Rick L. Sharp, Ph.D. Committee Members: Douglas S. King, Ph.D. Ann L. Smiley-Oyen, Ph.D. Donald C. Beitz, Ph.D. Walter H. Hsu, Ph.D., D.V.M.
07/99 – 12/01	Research Coordinator for Bonny Specker, Ph.D., Director and Chair of the Ethel Austin Martin Program in Human Nutrition, South Dakota State University

PROFESSIONAL AFFILIATIONS

American Heart Association (AHA)
Life Course in Aging Center
ACLS Certification
American Physiologic Society (APS)
BLS for Health Care Providers Instructor
BLS Certification
American College of Sports Medicine (ACSM)

HONORS and AWARDS

,	State University.
2015	Tiger Athletic Foundation Undergraduate Teaching Award, LSU
2014	Louisiana State University Alumni Association Rising Faculty Award
2014	College of Human Sciences and Education, Early Career Award, LSU
2013 - 2014	Robert and Patricia Hines Endowed Professor, School of Kinesiology, Louisiana State University – competitive, project-specific award
2011	Exercise is Medicine™: What is the proper dose to improve nutrition? (ACSM Exchange Lecture) National Athletic Trainers Association, New Orleans, LA, June 21, 2011.
2010	Participant in the Physical Activity and Public Health Courses. Postgraduate Course on Research Directions and Strategies. CDC & University of South Carolina Prevention Research Center.
2003	Future Faculty Fellowship Award; Iowa State University Awarded for demonstrating outstanding scholarship and promise for becoming a faculty member in higher education
1994 - 1998	Track and Field Scholarship; South Dakota State University

2014 - present Robert and Patricia Hines Endowed Professor, School of Kinesiology, Louisiana

GRANTS and CONTRACTS

Active

2021-2022	The Coca-Cola Co. Effect of beverage consumption on net fluid balance and beverage absorption during post-exercise rehydration. Louisiana State University, Baton Rouge, LA. (Principle Investigator) \$98,027
2021-2022	MyHy, LLC. The effects of a commercial electrolyte supplement prior to simulated firefighting exercise on urine and sweat electrolyte concentration and performance. Louisiana State University, Baton Rouge, LA. (Principle Investigator) \$1500
2019-2021	Department of Defense (USARIEM). A randomized, double-blind, placebo controlled trial of testosterone undecanoate for optimizing physical and cognitive performance during military operations (OPSII). Pennington Biomedical Research Center, Baton Rouge, LA. (Co-Investigator ; PI Jennifer Rood) \$3,500,000

2019-2024 NIH R01; 1R01HL146462-01, Molecular Basis of Exercise-Induced Changes in HDL Function, University of South Carolina, Columbia, SC (**Co-Investigator**; PI –

Mark Sarzynski) \$1,974,963 (LSU \$33,412)

2018-2022 NIH R21, NIDDK, Resistance Exercise and Low-Intensity Physical Activity Breaks

in Sedentary Time to Improve Skeletal Muscle and Cardiometabolic Health in Older Adults – REALPA Breaks Pilot Study, Louisiana State University, Baton Rouge, LA

(Co-Investigator; PI – Brian Irving) \$419,000

2017-2022 NIH U01; Molecular Transducers of Physical Activity-Adult Clinical Centers.

Pennington Biomedical Research Center, Baton Rouge, LA. (Co-Investigator; PI

- Eric Ravussin) \$6,700,000

2019-2021 Joe W. and Dorothy Dorsett Brown Foundation, Immune Markers and Function

During Periods of Caloric Deficit and Extended Physical Activity – OPS Ancillary, Pennington Biomedical Research Foundation, Baton Rouge, LA. (**Co-Primary**

Investigator, PI – Jennifer Rood, Guil 1 Tf [.2(n) -Sp2 (i)-0.2 (n) f [(Jo) -0.2 (l) -0m.2

2019-2020

Nutrition Obesity Research Center Pilot Program (NORC, #P30DK072476), Validity and reliability of the Activity Preference Assessment: A Shape Up Kids Ancillary.

2016	Medtronic, Zephyr Performance Systems, Annapolis MD. Physiological Assessments of Athletes Utilizing the Bioharness™. (Principal Investigator) \$5500
2015-2016	Dean's Circle Grant, College of Human Sciences and Education, Louisiana State University. Influence of gender and race on cardiovascular and metabolic risk factors. (Principal Investigator) \$2,964.63
2009-2015	NIH (NIA) U01 AG022376; Lifestyle Interventions and Independence for Elders – The LIFE Study. Subcontract with University of Florida. (Postdoctoral Researcher , PI: Marco Pahor, Site PI: Timothy Church) \$3,518,357
2014	Southeastern Conference (SEC) Visiting Faculty Travel Grant Program, Planned trip to Mississippi State University, Starkville, MS. (Principal Investigator) \$1000
2013-2014	Robert and Patricia Hines Endowed Professorship, School of Kinesiology, Louisiana State University. Maximal fat burning exerci.2 (b) -0t2 -0f.2 () -0.2 (

2008 Obesity Society; Metabolic flexibility to lipid during moderate-intensity exercise in

humans (FLEX) (Co-investigator; PI: Jose Galgani). \$30,000

2004 Graduate and Professional Student Senate; Iowa State University, Effects of

hydration status on cognitive and balance function in older adults (Co-Principal

Investigator). \$500

2003 Gatorade Sports Sciences Institute; Effect of beverage temperature and

National Science Foundation Major Research Instrumentation Program (MRI). Developing a Testbed of Integrated Built Environment and Human inter-Actions in Virtual Environments (iBEHAVE). (Co-Investigator, PI: Robert Kooima).
 National Science Foundation Cyber-Physical Systems (CPS). Predictive Modeling of Human-Building Interaction Using an Immersive Virtual Environment. (Co-Principal Investigator, PI: Robert Kooima).
 American Heart Association Center for Understanding Racial Disparities in Obesity, Physical Activity, and Cardiovascular Disease Risk – Center Grant. Racial Differences in Children's Adiposity and Cardiovascular Health Responses to a Physical Activity Intervention. (Collaborator, PI: Robert Newton)

- 31. Swift DL, **Johannsen NM**, Lavie CJ, Earnest CP, and Church TS. The role of exercise and physical activity in weight loss and maintenance. *Prog Cardiovasc Dis.* 2014 Jan-Feb;56(4):441-7.
- 32. Lavie CJ, **Johannsen NM**, Swift DL, Senechal M, Earnest CP, Church TS, Hutber A, Sallis R, Blair SN. Exercise is Medicine the importance of physical activity, exercise training, and cardiorespiratory fitness and obesity in the prevention and treatment of type 2 diabetes. *US Endocrinology*. 2013 Winter;9(2):95-99.
- 33. Earnest CP, **Johannsen NM**, Swift DL, Gillison FB, Mikus CR, Lucia A, Kramer K, Lavie CJ, Church TS. Aerobic and Strength Training in Concomitant Metabolic Syndrome and Type 2 Diabetes. *Med Sci Sports Exerc*. 2014 Jul;46(7):1293-301.
- 34. Myers CA, Johnson WD, Earnest CP, Rood JC, Tudor-Locke C, **Johannsen NM**, Cocreham S, Harris M, Church TS, and Martin CK. Examination of mechanisms (E-MECHANIC) of exercise-induced weight compensation: study protocol for a randomized controlled trial. *Trials*. 2014 Jun;15(1):212.
- 35. Lavie CJ, Johannsen NM, Swift DL, Senechal M, Earnest CP, Church TS, Hutber A, Sallis R,

- 47. Allerton TD, Earnest CP, **Johannsen NM.** The metabolic and mechanical effects of laddermill graded exercise testing. *J Strength Cond Res* 2018 Jan; 32(1): 195-200.
- 48. Young AJ, Marriott BP, Champagne CM, Hawes MR, Montain SR, **Johannsen NM**, Berry K, Hibbeln JR. Blood fatty acid changes in healthy young Americans in response to a 10-week diet that increased n-3 and reduced n-6 fatty acid composition: a randomized controlled trial. *Br J Nutr*

training regimen for normal weight diabetics: Rationale and Design. *Contemp Clin Trials* 2019 Mar;78:101-106.

- 62. Ross R, Goodpaster BH, Kock LG, Sarzynski MA, Kohrt WM, **Johansen NM**, Skinner JS, Castro A, Irving BA, Noland RC, Sparks LM, Spielmann G, Day AG, Pitsch W, Hopkins WG, Bouchard C. Precision exercise medicine: understanding exercise response variability. *Br J Sports Med* 2019: Mar 12 Epub.
- 63. Perez-Luco C, Diaz-Castro, Jorquera C, Tronsoco R, Zbinden-Foncea H, Johannsen NM,

- 74. Sanford JA, Nogiec CD, Lindholm ME, et al (**Johannsen NM**). Molecular Transducers of Physical Activity Consortium (MoTrPAC): Mapping the Dynamic Responses to Exercise. *Cell*. 2020;181(7):1464-1474.
- 75. Fearnbach SN, Johannsen NM, Myers CA, Apolzan JW, Johnson WD, Earnest CP, Rood JC,

Kurmensky CA, Wang H, **Johannsen NM**, Marucci J, Mullenix S, Irving BA, Sharp RL, Harrell B, Spielmann G. Correlations Between Serum Biomarkers Of Stress And Subjective Measures Of Well-being In Collegiate Swimmers. *Med Sci Sports Exerc*; *May 2018.*

Allerton TD, Irving BA, Spielmann G, Primeaux S, Nelson AG, Landin D, **Johannsen NM**. Components of Metabolic Flexibility Improved 48 hours After High Intensity Interval Exercise. *Med Sci Sports Exerc*; *May 2018.*

Lemoine NP, Owens ME, Wang H, Marucci J, Mullenix S, Calvert D, Nelson AG, Castle RR, Irving BA, Spielmann G, Rood JC, Church TS, Harrell B, **Johannsen NM**. Differential Sweat And Urine Electrolyte Reponses In Collegiate Football Players With Sickle Cell Trait. *Med Sci Sports Exerc*; *May 2018*.

Wang H, Spielmann G, Irving BA, Marucci J, Mullenix S, Harrell B, Sharp RL, **Johannsen NM**. Changes in Collegiate Swim Anaerobic Performance Between Pre-season and Post-season *Med Sci Sports Exerc*; *May 2018.*

Scott MC, **Johannsen NM**, Swift DL, Earnest CP, Church TS. Bone Mineral Density In Older Adults With T2DM After Exercise Training: Results From Hart-D. *Med Sci Sports Exerc*; *May 2018.*

Early KS, Earnest CP, Lemoine NP, Swift DL, **Johannsen NM**. Heart Rate Variability During Submaximal Exercise And The Impact Of Gender And Race. *Med Sci Sports Exerc*; *May 2018.*

Martin CK, Apolzan JW, Myers CA, Zhang D, Fearnbach SN, Thomas SM, **Johannsen NM**, Church TS. "Identification of factors that limit the ability of exercise to produce the expected amount of weight loss: Can these factors be modified to maximize weight loss from exercise?" Poster presentation, 25th European Congress on Obesity, May 2018, Vienna, Austria.

Harris MN, Fearnbach SN, **Johannsen NM**, Church TS, Martin CK. "Changes in eating behavior and appetite are associated with weight compensation in the E-MECHANIC trial." Oral paper presentation, 39th Annual Meeting and Scientific Sessions of Society of Behavioral Medicine, April 2018, New Orleans, LA.

Johannsen NM, Edwards WB, Church TS, Blair SN, and Earnest CP. Effect of exercise dose on fat oxidation capacity in postmenopausal women. *FASEB Journal 2009*.

Sparks LM, Thompson A, Earnest C, Blair S, Church TS, **Johansen NM**. Sex differences in risk factors for cardiovascular disease and metabolic syndrome. *ADA 2009; 57(S1), A623.*

Johannsen NM, Warnke N, King DS, and Sharp RL. Preexercise beverage composition impact on hydration and performance during exercise under compensable heat stress. *Med. Sci. Sports Exerc.* 2008; 40(5):S85.

Julius BR, Edwards, WB, Meardon SA, **Johannsen NM**, Macaluso F, and Derrick T. Evidence of bone turnover following an acute impact bout. *Med Sci Sports Exerc* 2007; 39(5):S65.

Sullivan ZM, Baier SM, **Johannsen NM**, King DS. Branched-chain amino acids (BCAA) supplementation maintains muscle power following eccentric exercise. *FASEB Journal* 2007

Johannsen NM, Lind E, King DS, and Sharp RL. Effect of beverage temperature and composition on fluid retention after mild dehydration. *Med Sci Sports Exerc* 2006; 38(5):S407.

Macaluso F, **Johannsen NM**, Carlson MC, Senchina DS, Miller M, Sharp T, and Sharp RL. Effect of electrolyte containing beverages on measures of rehydration during rest. *Med Sci Sports Exerc* 2006; 38(5):S407.

Johannsen NM, Lind E. Wang B. King DS, and Sharp RL. Effects of preexercise rehydration beverages on fluid balance and exercise tolerance. *Med Sci Sports Exerc* 2005; 37(5):S347.

Lowe AC, Saeid S,

Exercise modality and type 2 diabetes: clinical and mechanistic results from the HART-D study.

2015 Department of Veterans Affairs, Joint Biomedical Laboratory/Clinical Science Research and Development Services Merit Review Board

DATA SAFETY AND MONITORING BOARDS

2019 – 2021 Fit to Learn: A Digital Intervention to Improve Fundamental Motor Skills in Young Children. (R21HD095035) – Drs Staiano and Webster (Pls)

2016 – 2021 Cardiovascular Benefits of Resistance, Aerobic, and Combined Exercise (R01HL133069) – Dr. DC Lee (PI)

2015 – 2016 Efficacy of Adjunctive Exercise for the Behavioral Treatment of Major Depression (F31MH100773) – Dr. Kristin Szuhany (PI)

GRADUATE STUDENTS

05/2016 Kate Early, Ph.D., Cardiovascular and autonomic nervous system function: impact of

glucose ingestion, hydration status, and exercise in heated environments.

05/2017 Timothy Allerton, Ph.D., The immediate and extended effect of diet and exercise on

metabolic flexibility.

05/2020 Haoyan Wang, Ph.D.,

Neil M. Johannsen COMMITTEE MEMBERSHIP

College of Human Science and Education Distinguished Dissertation Committee 2015 - 2016	2019 - 2020 2017 - present	Vice Provost and Dean of LSU Graduate School Search Committee Full Member, Graduate Faculty Committee, School of Kinesiology, Louisiana State University
 Tiger Athletic Foundation, Undergraduate Teaching Award Committee 2012 - 2016 Associate Member, Graduate Faculty Committee, School of Kinesiology,	2016 - 2017	College of Human Science and Education Distinguished Dissertation
Louisiana State University 2012 - 2016 Member, Graduate Exercise Physiology Concentration, School of Kinesiology, Louisiana State University 2005 – 2006 Annual Pease Family Scholar Hog Roast Planning Committee Finance Committee: Health and Human Performance Graduate Student Association (HHPGSA) Planning Committee for College Combination of College of Family and Consumer Sciences and College of Education; Development and Foundation Issues 2004 – 2005 Awards Committee; Department of Health and Human Performance Graduate and Professional Student Senate (GPSS); HHPGSA Senator	2015	Tiger Athletic Foundation, Undergraduate Teaching Award Committee
Louisiana State University 2005 – 2006 2004 – 2005 Annual Pease Family Scholar Hog Roast Planning Committee Finance Committee: Health and Human Performance Graduate Student Association (HHPGSA) Planning Committee for College Combination of College of Family and Consumer Sciences and College of Education; Development and Foundation Issues 2004 – 2005 Awards Committee; Department of Health and Human Performance Graduate and Professional Student Senate (GPSS); HHPGSA Senator	2012 - 2016	
2004 – 2005 Finance Committee: Health and Human Performance Graduate Student Association (HHPGSA) 2004 – 2005 Planning Committee for College Combination of College of Family and Consumer Sciences and College of Education; Development and Foundation Issues 2004 – 2005 Awards Committee; Department of Health and Human Performance Graduate and Professional Student Senate (GPSS); HHPGSA Senator	2012 - 2016	
2004 – 2005 Finance Committee: Health and Human Performance Graduate Student Association (HHPGSA) 2004 – 2005 Planning Committee for College Combination of College of Family and Consumer Sciences and College of Education; Development and Foundation Issues 2004 – 2005 Awards Committee; Department of Health and Human Performance Graduate and Professional Student Senate (GPSS); HHPGSA Senator	2005 – 2006	Annual Pease Family Scholar Hog Roast Planning Committee
Consumer Sciences and College of Education; Development and Foundation Issues 2004 – 2005 Awards Committee; Department of Health and Human Performance 2003 – 2005 Graduate and Professional Student Senate (GPSS); HHPGSA Senator	2004 – 2005	Finance Committee: Health and Human Performance Graduate Student
2003 – 2005 Graduate and Professional Student Senate (GPSS); HHPGSA Senator	2004 – 2005	Consumer Sciences and College of Education; Development and Foundation
2003 – 2004 Education Student Advisory Council (ESAC); HHPGSA Representative		
2003 – 2004 Social Committee; HHPGSA		
2003 – 2004 VIESHEA Committee; HHPGSA	2003 – 2004	·
2002 2003 Tracquiror: HHDCCA	2002 – 2003	Treasurer; HHPGGA
2002 2002 Iroquiror: UUDCCA	2002 – 2003	Treasurer; HHPGGA

LOCAL PRESENTATIONS

06/2017