

**ROBERT C HICKNER**

**PLACE OF BIRTH** Ann Arbor, MI  
**DATE OF BIRTH** 1-31-62  
**LANGUAGES** English, Swedish, Spanish

**CURRENT ADDRESS**

Office: Florida State University  
408N Sandels Building  
Tallahassee, FL 32306  
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Tallahassee, FL 32311  
(252) 414-9311

**CURRENT POSITIONS**

Linda Grizzard Owens Professor: Department of Nutrition and Integrative Physiology, College of Health and Human Sciences. Florida State University, Tallahassee, FL (2018-present)

Adjunct Professor: Department of Kinesiology, East Carolina University, (2017-present)

Honorary Professor: College of Health Sciences. University of KwaZulu-Natal, South Africa (2019-present)

Adjunct Professor: Faculty of Health, University of Canberra, Australia (2021-present)

**EDUCATION**

<b>INSTITUTION AND LOCATION</b>	<b>DEGREE</b>	<b>YEAR CONFERRED</b>	<b>FIELD OF STUDY</b>	<b>SUPERVISOR</b>
Indiana University, Bloomington, IN	B.S.	1985	Biology	-----
Ball State University, Muncie, IN	M.S.	1988	Biology/Ex. Phys.	Dave Costill, PhD/ Craig Horswill
Karolinska, Inst., Stockholm, Sweden	Ph.D.	1994	Physiology	Jan Henriksson, MD
Washington University, St. Louis, MO School of Medicine	Post-doc	1997	Applied Physiology	Wendy Kohrt, PhD / John Holloszy, MD

**PAST EMPLOYMENT**

1986-1988 Research Assistant; The Human Performance Laboratory, Ball State University, Muncie, IN  
1986-1988 Biology Teaching Assistant; Ball State University, Muncie, IN  
1988-1990 Research Technician; Applied Physiology Section, Department of Internal Medicine, Washington University School of Medicine, St. Louis, MO  
1991-1993 Teaching Assistant; College of Physical Education, Stockholm, Sweden  
1994-1995 Instructor: Washington University School of Physical Therapy. St. Louis, MO  
1994-1997 Postdoctoral Research Fellow; Washington University School of Medicine, Section of Applied Physiology, Division of Geriatrics, Department of Internal Medicine. St. Louis, MO  
1997-2003 Assistant Professor; East Carolina University, Human Performance Laboratory, Department of Exercise and Sport Science, School of Health and Human Performance  
Joint Appointment; East Carolina University, Department of Physiology, School of Medicine  
Consultant; Leroy T. Walker International Human Performance Center  
2003-2007 Associate Professor; East Carolina University, Human Performance Laboratory, Department of Exercise and Sport Science, College of Health and Human Performance  
Joint Appointment; East Carolina University, Department of Physiology, School of Medicine  
2007-2016 Professor, East Carolina University, Human Performance Laboratory, Department of Kinesiology, College of Health and Human Performance  
2017-2018 Professor: Department of Nutrition, Food and Exercise Sciences, College of Human Sciences. Florida State University  
2007-2016 Joint Appointments:  
East Carolina University, Department of Physiology, Brody School of Medicine (1997-2016)  
East Carolina University Center for Health Disparities (2012-2016)  
Adjunct Appointments:  
East Carolina University, Department of Internal Medicine, Brody School of Medicine

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East Carolina University, Department of Nutrition Sciences (2010-2016)

Fellow: East Carolina Diabetes and Obesity Institute (2013-2016)

Director: PhD Program in Bioenergetics and Exercise Science. East Carolina University (2009-2016)

Co-Director of Research: Center for Health Disparities. East Carolina University (2012-2016)

2013-2018 Fractional Professor, University of KwaZulu-Natal, Department of Biokinetics, Exercise and Leisure Science, School of Health Science, Durban, S. Africa

2017 Florida State University: Interim Chair: Department of Retail, Merchandising, and Product Development. College of Human Sciences.

2017-2019 Associate Dean for Research and Graduate Studies: College of Human Sciences. Florida State University.

**HONORS**

Graduate Fellowship, Ball State University (1987-1988)

Doctoral Fellowship, Karolinska Institute (1991-1994)

International Life Sciences Institute selection as one of top 15 young investigators in Europe to attend conference on Nutrition and Sport (1993)

Fellow, American College of Sports Medicine (2000-present)

East Carolina School of Health and Human Performance Researcher of the Year Award (2001 and 2012)

East Carolina University Five-Year Research Award (2004)

**SCIENTIFIC ADVISORY BOARDS**

North Carolina Institute of Nutrition (1998- 2001)

Experimental and Applied Sciences (2000-2005)

ACSM Science Integration and Leadership Committee (2019-2022)

**CONSULTING**

Reuters Insight

The Round Table Group

USARIEM

Leroy T. Walker International Human Performance Center

**JOURNAL REVIEWER**

Aids and Behavior

American Journal of Clinical Nutrition

Applied Physiology, Nutrition and Metabolism

Canadian Journal of Applied Physiology

Clinical Endocrinology

Free Radical Biology and Medicine

Hormone and Metabolic Research

International Journal of Sport Nutrition and Exercise Metabolism

Journal of Applied Physiology

Journal of Clinical Endocrinology and Metabolism

Journal of Nutrition and Exercise Metabolism

Journal of Science and Medicine

Journal of the American Geriatrics Society

Medicine and Science in Sports and Exercise

Nutrition, Metabolism, and Cardiovascular Disease

Prostaglandins, Leukotrienes & Essential Fatty Acids

Pfluegers Archive

Redox Biology

Scientific Reports

American Journals of Physiology

British Journal of Nutrition

Cellular Physiology and Biochemistry

Diabetes

Diabetologia

International Journal of Obesity

International Journal of Sports Medicine

IUMB Life

Journal of Nutritional Biochemistry

Journal of Lipid Research

Journal of Physiology

Metabolism

Nutrition

Nutrition Research

Obesity Research

Pediatric Research

PLOS ONE

Respiratory Research

Sports Medicine

**Editor** Nutrients Journal. Dietary Supplements and vascular function Special Issue. 2019.

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### **EXTERNAL RESEARCH GRANT AND PROGRAM REVIEWS**

North Carolina Institute of Nutrition, 1998-2002

NIH/NIAMS SCOR reviewer, 2002

NIH/Pepper Center Research Devel. Project review for Univ. TX Medical Branch in Galveston, TX. 2003

NHMRC of Australia Project Grant reviewer, April 2004

Gatorade Research Grant program reviewer, March, 2006

NIH NIDDK ZDK1-GRB8-01 study section reviewer, July, 2006

AIBS site visit program review of the Military Nutrition Division of USARIEM at Natick, MA, Nov., 2006

ACSM Research Grant program reviewer, annually March, 2006-2022 (Co-chair 2019-2022)

Medical Research Council (MRC/NHLSRT) of South Africa, Developmental grants, August, 2007

NHMRC of Australia Career Development Award reviewer, Feb., 2008

Medical Research Council of South Africa, Investigator Rating, June, 2008

ACSM Kaatsu Research Grants Program reviewer, December, 2009

Academy of Finland Grants Program reviewer, April, 2010

NHMRC of Australia Grants Program reviewer 2010

Medical Research Council (MRC/NHLSRT) of South Africa, Developmental grants, May, 2010

Medical Research Council (MRC/NHLSRT) of South Africa, Developmental grants, September, 2010

NIH MRS Study Section reviewer June, 2011

NIH MRS Study Section reviewer October, 2011

NIH/NIDDK Nutrition and Obesity Research Center reviewer, March, 2012

ACSM Kaatsu Research Grants Program reviewer, April, 2012

NIH/NIDDK Diabetes Research Center reviewer, June, 2012

NIH MOSS Study Section reviewer, October, 2012

NIH R15 RPHB Integrated Review Group, December, 2013

American Heart Association's Vasc Endo Bio3 Peer Review Study Group March, 2015

NIH/EMNR Mol. Cell. Endo. Study Section Reviewer, October, 2015

Medical Research Council of South Africa. Grant reviewer. December, 2016

Dunhill Medical Trust. England. Grant reviewer. April, 2017

NIH R15 ZRG1-RPHB-R-80 Study Section. February, 2018

ACSM Research Grant program Co-Chair, 2018-present

NIH K23 ZHL1-CSR-M-03 Study Section. July, 2019

NIH R15 ZRH1-VH-N-80 Study Section. July, 2019

NHLBI Standing Member Conflict Special Emphasis Panel. K23, K24, K99. March, 2020

NHLBI Standing Member Conflict Special Emphasis Panel. K23, K24, K99. July, 2020

NHLBI Standing Member Conflict Special Emphasis Panel. K23, K24, K99. November, 2020

University of Florida CTSA. KL2. February, 2020 and 2021

University of Florida CTSA Pilot grants. June, 2021

NIH SBIR-STTR study section, July 2021

European Science Foundation for Research Foundation Flanders, June, 2021 and 2021

NIH NHLBI K-award reviewer April, 2022

NIH HSDO study section reviewer, October, 2022

### **EXTERNAL REVIEW OF DOCTORAL DISSERTATIONS**

2002: J.N. Department of Biochemistry, University of Tasmania Medical School, Hobart, Australia.

2004: A.C. Department of Biochemistry, University of Tasmania Medical School, Hobart, Australia.

2007: T.J.S. Department of Physiology, Monash University, Melbourne, Australia.

2008: K.L. Department of Physiology, Monash University, Melbourne, Australia.

2016: D.L. Department of Human Biology. University of Capetown, S. Africa

### **EXTERNAL REVIEW OF TENURE/PROMOTION OR RATING**

University of Colorado Health Sciences 2007

Colorado State University, 2011

University of Maryland, 2011

University of KwaZulu-Natal, 2012

Colorado State University, 2014

University of Capetown, 2015

University of Maryland, 2015

University of Oklahoma, 2015 (mid-stage progress toward tenure and promotion)

University of South Carolina, 2017

University of South Carolina, 2018

Arizona State University, 2018

Florida Atlantic University, 2019

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Rutgers University, 2020  
 University of the Witwatersrand, South Africa, 2020  
 University of Miami, 2021  
 University of Houston, 2021  
 University of Texas El Paso, 2022

**PROFESSIONAL SOCIETIES**

American Diabetes Association (1995-2015)  
 National American College of Sports Medicine (1987-present)  
 Southeast American College of Sports Medicine (1997-present)  
 North American Association for the Study of Obesity (2000-2016)  
 American Physiological Society (2003-present)  
 American Heart Association (2003-2014)  
 American Society of Nutrition (2019-present)

**GRANTS**

	<b>Funded grants as P.I. or Co-P.I.</b>	<b>Direct</b>	<b>F&amp;A</b>	<b>Total</b>
1992	1) Karolinska Institute Research Fund (KI-Fond) 140-4 The use of microdialysis to monitor local blood flow in human skeletal muscle during dynamic exercise. 7/01/91-6/31/92; <b>R. Hickner, P.I.</b>			
1994	2) Swedish Ministry of Health (Socialstyrelsen) 414.0 Skeletal muscle blood flow during intermittent isometric exercise. 7/1/93-6/31/94; <b>R. Hickner, P.I.</b>			
1995	3) Swedish Ministry of Health (Socialstyrelsen) 414.9 Skeletal muscle blood flow during intermittent isometric exercise. 7/1/94-6/31/95; <b>R. Hickner, P.I.</b>			
1996	4) National Institutes of Health F32 DK09542-01 Inhibition of Lipolysis by Insulin in Abdominal Obesity; Individual National Research Service Award; 8/1/96-7/31/97. <b>R. Hickner, P.I.</b>	\$28,600		\$28,600
	5) Claude Pepper Older Americans Independent Center Pilot/Feasibility Grant; Regulation of lipid metabolism during exercise in elderly humans. 9/1/96-8/31/97. <b>R. Hickner, P.I.</b>	\$25,000		\$25,000
1998	6) Experimental and Applied Sciences. The effect of 28 days of creatine and/or HMB ingestion on body composition, muscle soreness, and oxygen cost of exercise in runners. 01/01/98-12/31/98. <b>R. Hickner, P.I.</b>	\$26,783	\$10,579	\$37,362
	7) East Carolina University Research Grant. NO-dependent regulation of muscle blood flow in aging. 03/01/98-07/01/98. <b>R. Hickner, P.I.</b>	\$16,000		\$16,000
	8) North Carolina Institute of Nutrition. The effects of creatine ingestion on body composition and endurance performance in cyclists. 06/01/98-06/30/99. <b>R. Hickner, Co-P.I.</b>	\$9,000		\$9,000
	9) Pitt County Health Education Foundation. Determinants of obesity in children. 08/01/98-08/01/99. <b>R. Hickner, Co-P.I.</b>	\$3,500		\$3,500
	<b>Funded grants as P.I. or Co-P.I. (continued)</b>	<b>Direct</b>	<b>F&amp;A</b>	<b>Total</b>

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1999

	10) North Carolina Institute of Nutrition. Fat mobilization in African American women. 07/01/99-06/30/00. <b>R. Hickner, Co-P.I.</b>	\$8,500		\$8,500
	11) North Carolina Institute of Nutrition. The effect of energy restriction and refeeding on human UCP-2 and UCP-3 gene expression. 07/01/99-06/30/00. <b>R. Hickner, Co-P.I.</b>	\$8,500		\$8,500
	12) North Carolina Institute of Nutrition. The effects of energy restriction on metabolic and autonomic abnormalities associated with hypertension and diabetes. 07/01/99-06/30/00. <b>R. Hickner, Co-P.I.</b>	\$8,500		\$8,500
	13) New York Chiropractic College. The effect of chiropractic treatment on the biochemical profile of myofascial trigger points: A clinical microdialysis study. 07/01/99-06/30/00. <b>R. Hickner, P.I.</b> (Subcontract on \$100,000 grant to New York Chiropractic College (V. Sciotti, P.I.) from The Foundation for Chiropractic Education and Research).	\$5,600		\$5,600
	14) American Heart Association. The influence of nitric oxide and exercise on muscle blood flow in aging. 07/01/99 06/30/01. <b>R. Hickner, P.I.</b>	\$80,000	\$8,000	\$88,000
	15) DuPont, Inc. Thermal regulation in CoolMax® and Thermostat® products. 07/01/99-06/30/00. <b>R. Hickner, Co-P.I.</b>	\$71,069	\$28,072	\$99,141
2000	16) National Institutes of Health. R15 AG18407 Estrogen, muscle blood flow and eNOS post-menopause. 07/01/00-06/31/02; <b>R. Hickner, P.I.</b>	\$100,000	\$39,500	\$139,500
	17) North Carolina Institute of Nutrition. Decreased fat oxidation in dietary-induced obesity. 07/01/00-06/30/01. <b>R. Hickner, Co-P.I.</b>	\$10,000		\$10,000
	18) North Carolina Institute of Nutrition. UCP-3 gene expression in transgenic mice. 07/01/00-06/30/01. <b>R. Hickner, Co-P.I.</b>	\$5,000		\$5,000
	19) East Carolina University Research Grant. Hormone replacement therapy improves nitric oxide-induced vasodilatation; 03/01/00-07/01/00. <b>R. Hickner, P.I.</b>	\$18,015		\$18,015
2001	20) Experimental and Applied Sciences. The Effect of L-citrulline Ingestion on Maximal Aerobic Capacity/Treadmill Time to Exhaustion. 11/15/01-12/31/02. <b>R. Hickner, P.I.</b>	\$44,522	\$18,922	\$63,444
2002	21) North Carolina Institute of Nutrition. Relationship between salivary cortisol and regional lipolysis in obese children. 07/01/02-/6/30/03. <b>R. Hickner, Co-P.I.</b>	\$9,000		\$9,000

<b>Funded grants as P.I. or Co-P.I. (continued)</b>		Direct	F&A	Total
	22) National Institutes of Health. Exercise, muscle nutritive blood flow and eNOS in aging. R21 AG 19209-02; 08/01/02-07/31/05. <b>R. Hickner, P.I.</b>	\$300,000	\$118,500	\$418,500
2003	23) Experimental and Applied Sciences. Post-doctoral training grant. 08/01/03-07/31/06. <b>R. Hickner, P.I. Active</b>	\$129,000		\$129,000
2004	24) Under Armour Apparel. Thermoregulation in Under Armour Apparel. 03/01/04-6/28/05. <b>R. Hickner, P.I.</b>	\$29,941	\$12,725	\$42,666
2005	25) East Carolina University Research Development Grant. Suppression of lipolysis by nitric oxide in overweight children. 5/1/2005-6/15/2006. <b>R. Hickner, P.I.</b>	\$23,376		\$23,376
2006	26) National Institutes of Health. R15. Ethnic differences in the regulation of lipolysis by nitric oxide and adenosine. 1R15DK074401-01. 04/01/06-03/31/08. <b>R. Hickner, P.I.</b>	\$150,000	\$63,750	\$213,750
	27) National Institutes of Health. Reduction of CVD risk in children through physical activity. 1R01DK071081-01: 05/01/06-04/31/11. <b>R. Hickner, P.I.</b>	\$1,098,860	\$467,020	\$1,565,870
2011	28) East Carolina University Diabetes and Obesity Institute NADPH oxidase and endothelial dysfunction in obesity 10/2811-10/27/13. <b>R. Hickner, P.I.</b>	\$11,543		\$11,543
2013	29) National Institutes of Health/NHLBI NADPH oxidase and microvascular dysfunction in obesity 1R15HL113854-01A1 01/15/13-01/14/16 <b>Hickner: P.I.</b>	\$300,000	\$148,000	\$435,597
2018	30) National Institutes of Health/NHLBI NADPH Oxidase Activity and Muscle Microvascular Endothelial Function in Obesity (Renewal) 2R15HL113854-01A1 08/01/18-07/31/21 <b>R. Hickner, P.I.</b>	\$300,000	135,000	\$435,000
2019	31) The Alliance for Potato Research & Education Effects of White Potato Consumption on Measures of Cardiometabolic Health in Individuals with Type 2 Diabetes Mellitus 08/01/2019-07/31/2021. (N. Akhavan/ <b>R. Hickner, Co-P.I.</b> )	\$159,091	\$15,909	\$175,000
2021	32) NIH/NIDDK (RO1 DK125728) Resistance training modulation of fat metabolism in obese postmenopausal women ( <b>R. Hickner, P.I.</b> , M. Ormsbee, M-P.I.).	\$2,142,293	\$1,110,542	\$3,252,835
<b>Approximate total funding as P.I.</b>		<b>\$4,960,150</b>	<b>\$2,176,519</b>	<b>\$7,274,256</b>

<b>Funded grants as Co-investigator, Consultant or Mentor</b>		Direct	F&A	Total
1994	1) Washington University Diabetes and Research Training Center Pilot/Feasibility Grant 5-P60DK20579; Inhibition of Lipolysis by Insulin in Abdominal Obesity; 12/1/94-11/31/96. (W. Kohrt). <b>R. Hickner, Co-investigator</b>	\$50,000		\$50,000

**Funded grants as co-investigator, consultant or Mentor (continued)**

		Direct	F&A	Total
1998	2) National Institutes of Health RO1 DK52999-01, PC-I in insulin-resistant humans; 07/01/98-06/30/02; (Goldfine/Houmard subcontract). <b>R. Hickner, Co-Investigator</b>	\$294,284	\$120,656	\$414,940
	3) National Institutes of Health, Peripheral effects of exercise on cardiovascular health. RO-1-HL/AR 57354, 07/01/98-06/31/03. (W. Kraus/Houmard subcontract). <b>R. Hickner, Co-Investigator.</b>	\$1,012,090	\$417,993	\$1,430,083
1999	4) National Institutes of Health. Modulation of visceral fat by estrogens after menopause. RO1; 12/01/99-11/30/04 (W. Kohrt). <b>R. Hickner, Consultant</b>	\$1,058,295	\$443,425	\$1,501,720
	5) Gatorade, Inc. Assessment of cognitive changes associated with dehydration in athletes; 07/01/99-12/31/99; (J. Garry). <b>R. Hickner, Co-Investigator.</b>	\$19,500		\$19,500
	6) East Carolina University School of Medicine. Assessment of cognitive changes associated with dehydration in athletes. 07/01/99-10/31/99. (J. Garry). <b>R. Hickner, Co-investigator.</b>	\$8,064		\$8,064
2000	7) East Carolina University School of Medicine. Fuel partitioning and obesity in African American women. 05/01/00-04/30/01. (H. Barakat). <b>R. Hickner, Co-investigator.</b>	\$28,500		\$28,500
	8) National Institutes of Health, Lipid metabolism in obesity, weight loss, and exercise. RO1; 07/01/00-06/30/05. (J. Houmard). <b>R. Hickner, Co-Investigator.</b>	\$875,000	\$371,875	\$1,246,875
	9) American Diabetes Association. Association of impairments in lipolysis and obesity in African American women. 07/01/00-06/30/03; (H. Barakat). <b>R. Hickner, Co-Investigator.</b>	\$300,000	\$45,000	\$345,000
	10) American Diabetes Association. Fuel partitioning after weight loss. 07/01/00-06/30/03; \$99,368/yr. (G.L. Dohm). <b>R. Hickner, Co-Investigator.</b>	\$298,104	\$44,716	\$342,820
	11) Corporation for National Community and Men Services, Learn and Serve America. East Carolina-Tillery partnership for service learning (Glascoff). 10/01/00-09/01/01. <b>R. Hickner, Co-Investigator</b>	\$110,000	46,750	\$156,750
	12) Smith-Kline, BRL 49653C/134, Use of rosiglitazone in overweight African American and Caucasians, with and without Acanthosis Nigricans." 11/01/00-10/30/03, <b>R. Hickner, Co-Investigator</b>			
2002	13) NIH K01 AG19630. Estrogen, Insulin and Regional Lipolysis in Older Women;" (R.E. VanPelt). 04/01/02-03/31/07. <b>R. Hickner, Co-Sponsor</b>	\$538,775	\$228,979.38	\$767,754.38
	14) National Institutes of Health. Glial cell glycogen and stress-induced depression. R21:012/01/02-11/30/04. (R. Bonsall). <b>R. Hickner, Consultant.</b>	\$200,000	\$85,000	\$285,000
	15) Consortial Center for Chiropractic Research. Trigger Point Metabolic and Microcirculatory Imbalances. 09/02/02-09/01/03. (V. Sciotti). <b>R. Hickner, Consultant.</b>	\$79,703	33,874	\$113,577

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Funded grants as co-investigator, consultant or Mentor (continued)

		Direct	F&A	Total
2003	16) National Institutes of Health. Age, VEGF, and skeletal muscle capillarization in humans. R15:04/01/03-3/31/05. (T. Gavin). <b>R. Hickner, Co-investigator.</b>	\$150,000	\$63,750	\$213,750
	17) Experimental and Applied Sciences. Nitric oxide and satellite cells in aged skeletal muscle (S. Gordon): 01/01/03-12/31/04. <b>R. Hickner, Consultant.</b>	\$59,551	\$23,523	\$83,074
	18) National Institutes of Health. 1 R21 DK065183 01. Dysregulated muscle lipid metabolism in African Americans. R21; 07/01/03-06/30/05. (R. Cortright). <b>R. Hickner, Collaborator.</b>	\$200,000	\$85,000	\$285,000
2005	19) East Carolina University Brody Brothers Foundation Endowment Fund. Metabolomics Core Facility at Brody School of Medicine. 10/06/05-10/05/06 (R. Tanenberg). <b>R. Hickner, Co-investigator</b>	\$80,000		\$80,000
2006	20) NIH/NIDDK (1RO1 DK075880-01) Impaired Acyl-CoA Synthetase-muscle lipid oxidation in African American Women 09/01/06-08/31/10 (R. Cortright). <b>R. Hickner, Co-investigator</b>	\$740,000	314,500	\$1,054,500
2009	21) NIH/NIDDK (5R01DK074825-05) Linking mitochondrial bioenergetics to muscle insulin sensitivity 02/01/09-01/31/14 (P.D. Neuffer, P.I.) <b>R. Hickner, Co-investigator</b> Dates of Entire Project:	\$906,999	\$722,055	\$1,629,054
2011	22) American College of Sports Medicine Role of Subcutaneous Adipose Tissue Estradiol in Regional Lipolysis in Premenopausal Women 06/01/11-05/30/12 (K. Gavin P.I., <b>R. Hickner faculty mentor</b> )	\$5000		\$5000
	23) American College of Sports Medicine Role of NADPH Oxidase Activity on Muscle Microvascular Endothelial Function in Human Obesity 06/01/11-05/30/12 (J. La Favor P.I., <b>R. Hickner faculty mentor</b> )	\$5000		\$5000
2012	24) American College of Sports Medicine Role of Skeletal muscle released myokines in human fat lipolysis 06/01/12-05/30/13 (J. Pierce P.I., <b>R. Hickner faculty mentor</b> )	\$5000		\$5000
2014	25) National Res. Foundation of South Africa (91560) Endothelial function and cardiovascular health in ageing with exercise training. 03/31/14 to 03/30/17. A. McKune, P.I., <b>R. Hickner, Co-investigator</b>	\$47,708		\$160,069
2016	26) ACSM (Doctoral Student Award application) Exercise Training Effects on Subcutaneous Adipose Tissue (J. White, P.I.) <b>R. Hickner, Mentor</b>	\$5,000		\$5,000
	27) NIH/NIDDK (RO1) Strategies and functional outcomes of enhancing <i>in vivo</i> production of soluble rage isoforms 0701/16-06/30/21(J. Haus, P.I.) <b>R. Hickner, Consultant</b>	\$2,365,312	\$1,354,855	\$3,720,167
2018	28) South African National Research Foundation Thuthuka grant (TTK170407226233) Tailored Exercise Prescribed as Medicine (TEPAM) for Type 2 Diabetes Mellitus 02/01/18-01/31/21 (T. Sookan, P.I.) <b>R. Hickner, Mentor</b>	\$98,381		\$98,381



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**Funded grants as co-investigator, consultant or Mentor (continued)**

		Direct	F&A	Total
	29) PB Leiner/Tessenderlo The impact of a nutritional supplement on joint pain and fat-free mass in lifelong athletes 6/19/18-03/31/20 (M. Ormsbee, P.I.) <b>R. Hickner, Co-I.</b>	\$242,503	\$36,375	\$278,878
2019	30) NIH/NIDDK (R01 DK120296-01A1) Metabolic inflexibility is related to elevated muscle anaerobic glycolysis 08/01/2019-07/31/2024. (J. Houmard/ <b>R. Hickner, Consultant</b> )	\$2,457,799	\$1,167,455	\$3,631,761
	31) NIH/University of Florida CTSA (FSU sub-award) Transforming and Translating Discovery to Improve Health *07/02/2019-07/01/2024 (J. Joyce P.I.) <b>R. Hickner, Co-investigator</b>	\$2,256,331	\$1,218,419	\$3,474,750
2020	32) Almond Board of California The Effects of Almond Consumption on Functional Performance, Aerobic Capacity, and Physical Activity in Overweight and Obese Active Older Adults. 08/01/2020-07/31/2022 (B. Arjmandi) <b>R Hickner, Co-I</b>	\$271,492	\$27,149	\$298,641
	33) American Physiological Society Investigation of NADPH Oxidase as a link between vascular and metabolic dysfunction 08/15/2020-08/14/2021 (C. Meza) <b>R. Hickner, Mentor</b>	\$28,300	\$0	\$28,300
	34) ACSM (Doctoral Student Award application) Impact of Creatine Supplementation on Vascular Endothelial Function, Blood Flow and Functional 06/01/2020-05/31/2021 (H. Clarke, P.I.) <b>R. Hickner, Mentor</b>	\$5,000		\$5,000
2021	35) NIH 1R01MD015074 - 01A1 Health for Hearts United Collaborative 07/01/2021-06/30/2026 (P. Ralston, P.I.) <b>R. Hickner, Co-investigator</b>	\$1,758,895	\$949,803	\$2,708,698
	36) NIHRO1 Effects of daily low oxygen exposure on weight status, body composition, and metabolic health 07/01/2021-06/30/2026 (C. Berryman, P.I.) <b>R. Hickner, Co-investigator.</b>	\$1,759,349	\$949,995	2,664,344
	NIH/NHLBI (F31 Diversity) Investigation of NADPH oxidase as a link between vascular and metabolic dysfunction 09/01/2021-08/31/2022 (C. Meza, P.I.) <b>R. Hickner, Mentor</b>	\$84,045	\$0	\$84,045
2022	NIH 1R21AT011778-01 Pathophysiology of active and latent myofacial trigger points 05/01/2022-04/30/2024 (Moraska, P.I.) <b>R. Hickner, Co-investigator</b>	\$250,000	135,000	\$385,000
<b>Approximate total as Co-I, consultant or mentor</b>		<b>\$18,653,980</b>	<b>\$8,886,147</b>	<b>\$27,613,995</b>
<b>Pending Grant Applications</b>		<b>Direct</b>	<b>F&amp;A</b>	<b>Total</b>
<b>As P.I.</b>				
	NIH/NIA (RO1 1AG071757-01) Creatine supplementation for vascular and functional health in older adults. ( <b>R. Hickner, P.I.</b> ). Submitted June, 2020. Not scored.	\$2,448,955	\$1,292,125	\$3,741,080
<b>As Co-I or Consultant</b>				
	NIH (RO1) Counting steps to rural heart health (L. Abbott) <b>R. Hickner, Co-investigator</b>	\$1,188,882	\$641,996	\$1,830,879
	NIH (RO1) Determining the sex-dependent factors governing a novel driver of cardiometabolic disease (M. Parvatiyar, P.I.) <b>R. Hickner, Co-investigator</b>	\$1,377,500	\$730,065	\$2,107,565

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NIH \$962,207 \$519,591 \$1,481,798  
REDD1 as a novel regulator of skeletal muscle health and function  
(B. Gordon, P.I.) **R. Hickner, Co-investigator**

Florida Health (James and Esther King) \$681,512 \$68,151 \$749,663  
Determining how tobacco use and obesity exacerbates a novel cardiovascular risk factor  
(M. Parvatiyar, P.I.) **R. Hickner, Co-investigator**

NIH (U54) \$17,400,000  
Fostering Institutional Resources for Science Transformation: Florida First Health- science  
Brigade (FLORIDA-FIRST BRIGADE) **R. Hickner, Co-investigator**

**EXTERNAL INVITED LECTURES**

- 1996 The use of microdialysis to measure local skeletal muscle blood flow. In: "Local tissue metabolism - The application of the microdialysis method." Clinical Physiology, Bispebjerg Hospital, Copenhagen Denmark. September, 1996.
- 1997 The role of nitric oxide in the regulation of skeletal muscle blood flow during exercise. Diabetes Research Seminar Series. Washington University School of Medicine. St. Louis, MO. January, 1997
- 1998 Suppression of lipolysis by insulin: Effects of exercise training and obesity. Copenhagen Muscle Research Center, Lipid Interest Group, Copenhagen, Denmark, June, 1998.
- Suppression of whole-body and regional lipolysis by insulin. Karolinska Institute Physical Activity Research Center, Karolinska Institute, Stockholm Sweden, June, 1998.
- 1999 Uses of microdialysis for studies of metabolism and blood flow in skeletal muscle. New York Chiropractic College, June, 1999.
- 2000 Suppression of whole-body and regional lipolysis by insulin. Grand Rounds, Department of Endocrinology and Metabolism, School of Medicine, University of Baltimore, March, 2000.
- 2000 The role of nitric oxide in skeletal muscle nutritive blood flow and metabolism: Effects of aging and endurance training. Department of Nutritional Sciences. University of Missouri-Columbia, March, 2000.
- Effects of exercise on the suppression of lipolysis by insulin. Department of Nutritional Sciences. University of Missouri-Columbia, October, 2000.
- The role of lipolysis in obesity. Obesity and Nutrition Center. University of Pittsburgh, December, 2000.
- Regulation of adipose tissue metabolism in vivo. Endocrine Research Center. University of Pittsburgh, December, 2000.
- 2001 Adipose tissue metabolism. Experimental and Applied Sciences. Golden, Colorado. July, 2001.
- 2002 Microdialysis in skeletal muscle: The role of nitric oxide in skeletal muscle nutritive blood flow and metabolism. The Carolyn Frye-Halloran Symposium: Microdialysis catheters in brain tumors. Massachusetts General Hospital, Boston, MA., March, 2002.
- The role of nitric oxide in skeletal muscle nutritive blood flow and metabolism: Effects of aging and endurance training. Experimental and Applied Sciences. Golden, Colorado. 2002.
- 2003 Investigating the pathogenesis of Fibromyalgia: Are muscle blood flow and metabolism altered? New York Chiropractic College, November, 2003.
- 2004 Physical activity in the prevention and treatment of Type II diabetes. 21<sup>st</sup> Annual Nutrition Seminar. South Dakota State University, March, 2004

**EXTERNAL INVITED LECTURES (continued)**

- The use of microdialysis for the monitoring of metabolism and blood flow in peripheral tissues. 21<sup>st</sup> Annual Nutrition Seminar. South Dakota State University, March, 2004
- Adipose tissue metabolism and exercise. Seminar series: Exercise in the management and prevention of metabolic disease. Karolinska Institute, Stockholm, Sweden, May, 2004.
- Is NOS-dependent muscle nutritive blood flow affected by exercise training in aged humans? Plant & Hannan Department of Physiology & Howard Florey Institute Seminar Series. University of Melbourne. August, 2004
- Microdialysis and nutritive muscle blood flow in humans. Freycinet Conference on Diabetes and Exercise: Impact of Muscle Blood Flow. Tasmania, Australia, August, 2004.
- 2004 Does physical activity alter post-prandial lipolysis in children. Pediatric obesity Center. Children's Hospital of Pittsburgh, Department of Pediatrics, University of Pittsburgh. November, 2004.
- Can you say NO to obesity? Department of Health and Kinesiology, Texas A&M University. November, 2004.
- 2005 Nitric oxide and the Metabolic Syndrome across the lifespan. Department of Kinesiology, University of Texas, April, 2005.
- 2006 Monitoring of metabolism and blood flow in peripheral tissues. USARIEM, Natick, MA. April 21<sup>st</sup>, 2006.
- 2007 Integrating physiology and sport performance. Korean National Sport University, Seoul, South Korea, May, 2007.
- 2008 NO suppression of lipolysis in obesity. Virginia Tech, February, 2008.
- 2009 Adipose Tissue Metabolism and Exercise. Karolinska Institute, Stockholm, Sweden, 2009.
- 2011 Enhancement of exercise performance. Korean National Sport Univ. Seoul, S. Korea. August 24<sup>th</sup>, 2011.
- Childhood obesity: Is sport, science, or physical activity the answer? KAHPERD International Sport Science Congress. Daegu, S. Korea. August, 25<sup>th</sup>. 2011.
- 2011 Application of microdialysis in studies of exercise and health. Korean Society of Exercise Physiology. Daegu, S. Korea. August, 26<sup>th</sup>. 2011.
- 2012 Use of microdialysis for the study of metabolism and blood flow in peripheral tissues. Korean National Sport Univ. Seoul, S. Korea., January 18th, 2012.
- 2013 Fat metabolism and muscle blood flow as monitored with microdialysis. University of Kwazulu-Natal. April 5<sup>th</sup>, 2013
- Use of Microdialysis for the study of metabolism and blood flow in peripheral tissues. Florida State University. Tallahassee, Florida. Sept. 2013.
- Metabolic Monitoring in Adipose Tissue and Potential Applications to Studies of Sleep Disordered Breathing. Thomas Jefferson. Pulmonary Medicine Grand Rounds. Nov. 19th, 2013.
- 2014 Lipolysis and blood flow in peripheral tissues: Exercise and Obesity. University of Kwazulu-Natal, February, 2014.
- Use of microdialysis in exercise paradigms. American College of Sports Medicine Symposium (Chair and presenter). National ACSM, Orlando, FL. May 30<sup>th</sup>, 2014.
- Adipose tissue, metabolic disease and exercise. Karolinska Institute, June 11<sup>th</sup>, 2014.
- Estradiol, body fat distribution and insulin sensitivity in women: Am I confused? University of Copenhagen. June 13<sup>th</sup>, 2014.

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**EXTERNAL INVITED LECTURES (continued)**

- Application of Microdialysis in studies of Exercise. Sports Science Institute, Capetown, S. Africa, July, 18<sup>th</sup>, 2014.
- 2015 Application of Microdialysis to studies of metabolism and blood flow. University of KwaZulu-Natal. Durban, S. Africa. March, 2015.
- Microvascular blood flow, lipolysis and ROS in obesity. University of Alabama, Birmingham. October, 2015.
- 2016 Exercise and cardiometabolic disease risk reduction. University of KwaZulu-Natal. Durban, S. Africa. March, 2016.
- Integrating physiology and sport performance. University of KwaZulu-Natal. Durban, S. Africa. March, 2016.
- Recent research findings. Florida State University. March, 2016.
- Adaptations to exercise training with aging and disease. University of KwaZulu-Natal. Durban, S. Africa. July, 2016.
- 2017 Use of microdialysis to investigate metabolic and circulatory abnormalities in obesity. University of Illinois-Chicago. February, 2017.
- Molecular regulation of metabolic states. University of KwaZulu-Natal. Durban, S. Africa. March, 2017.
- Integrating Sport Performance and Physiology. University of W. Bohemia. Pilsen, Czech Republic. November, 2017.
- 2018 Use of microdialysis for monitoring of local blood flow and metabolism in peripheral tissues. Exercise and Metabolism Research Center. Zhejiang Normal University. Zhejiang, China. May, 2018.
- 2019 Use of microdialysis in peripheral tissues to study cardiometabolic health across the lifespan. ACNC, Little Rock, AR. April, 2019.
- Collagen: Potential health and performance benefits in sports. Vitafoods conference. Geneva, Switzerland May 8<sup>th</sup>, 2019.
- Grant Writing Tips for Young Investigators Applying for ACSM Foundation Grants. ACSM Conference, Orlando, FL. May, 31<sup>st</sup>, 2019.

**PUBLICATIONS**

**Peer-Reviewed Journal Publications (total of 122 )**

- 1) Horswill, C.A., **R.C. Hickner**, J.R. Scott, and D. Gould. Weight loss, dietary carbohydrate modification and high intensity physical performance. *Med Sci Sports and Exer* 22(4):470-476, 1990.
- 2) Houmard, J.A., D.L. Costill, J.B. Mitchell, S.H. Park, and **R.C. Hickner**, J.N. Roemmich. Reduced training maintains performance in distance runners. *Int J Sports Med* 11(1):46-52, 1990.
- 3) Robergs, R.A., D.D. Pascoe, D.L. Costill, W.J. Fink, J. Chawalbinska-Moneta, J.A. Davis, and **R.C. Hickner**. Effects of warm-up on muscle glycogenolysis during intense exercise. *Med Sci Sports and Exerc* 23(1):37-43, 1991.
- 4) **Hickner, R.C.**, H. Rosdahl, I. Borg, U. Ungerstedt, L. Jorfeldt, and J. Henriksson. Ethanol may be used with the microdialysis technique to monitor blood flow changes in skeletal muscle: dialysate glucose concentration is blood flow dependent. *Acta Physiol Scand* 143:355356, 1991.
- 5) **Hickner, R.C.**, C.A. Horswill, J.M. Welker, J. Scott, J.N. Roemmich, and D.L. Costill. Test development for the study of physical performance in wrestlers following weight loss. *Int J Sports Med* 12(6):557-562, 1991.
- 6) Kirwan, J.P., **R. C. Hickner**, K. Yarasheski, B. Weitop, W. Kohrt, and J. O. Holloszy. Eccentric exercise leads to muscle soreness and transient insulin resistance in healthy young subjects. *J Appl Physiol* 72(6):2197-2202, 1992.

**Peer-Reviewed Journal Publications (continued)**

- 7) **Hickner, R.C.**, H. Rosdahl, I. Borg, U. Ungerstedt, L. Jorfeldt, and J. Henriksson. The ethanol technique of monitoring blood flow changes in rat skeletal muscle: implications for microdialysis. *Acta Physiol Scand* 146(1): 87-97, 1992.
- 8) Fuchi, T., H. Rosdahl, **R.C. Hickner**, U. Ungerstedt, and J. Henriksson. Microdialysis of rat skeletal muscle and adipose tissue: dynamics of the interstitial glucose pool. *Acta Physiol Scand* 150:249-260, 1994.
- 9) **Hickner, R.C.**, D. Bone, U. Ungerstedt., L. Jorfeldt, and J. Henriksson. Muscle blood flow during intermittent exercise: comparison of the microdialysis ethanol technique and <sup>133</sup>Xe Clearance. *Clin Sci* 86:15-25, 1994.
- 10) **Hickner, R.C.** U. Ungerstedt, and J. Henriksson. Regulation of skeletal muscle blood flow during acute insulin-induced hypoglycemia in the rat. *Diabetes* 43:1340-1344, 1994.
- 11) Wallgren, F., G. Amberg, **R.C. Hickner**, U. Ekelund, L. Jorfeldt, and J. Henriksson. A mathematical model for measuring blood flow in skeletal muscle with the microdialysis ethanol technique. *J Appl Physiol* 79(2):648-659, 1995.
- 12) **Hickner, R.C.**, U. Ekelund, S. Mellander, U. Ungerstedt, and J. Henriksson. Muscle blood flow in cats: comparison of microdialysis ethanol technique to direct measurement. *J Appl Physiol* 79(2):638-647, 1995.
- 13) Nakatani, A., D.H. Han, P.A. Hansen, L.A. Nolte, H.H. Host, **R.C. Hickner**, and J.O. Holloszy. Effect of endurance training on muscle glycogen supercompensation in rats. *J Appl Physiol*. 82(2):711-715, 1997.
- 14) **Hickner, R.C.**, J.S. Fisher, A.A. Ehsani, W.M. Kohrt, Role of nitric oxide in skeletal muscle blood flow at rest and during dynamic exercise in humans. *Am. J. Physiol*. 273(42):H405-H410, 1997.
- 15) Landt, M., G.M. Lawson, J.M. Helgeson, V.G. Davila-Roman, J.H. Ladenson, A.S. Jaffe, and **R.C. Hickner**. Prolonged exercise decreases serum leptin concentrations. *Metabolism* 46(10): 1109-1112, 1997.
- 16) **Hickner, R.C.**, S.B. Racette, C. M. Mier, M.J. Turner, P. A. Hansen, J.S. Fisher, and J.O. Holloszy. Muscle glycogen accumulation after endurance exercise in trained and sedentary individuals. *J. Appl. Physiol*. 83(3):897-903, 1997.
- 17) **Hickner, R.C.**, J.S. Fisher, and W.M. Kohrt. Regional differences in interstitial glycerol concentration in subcutaneous adipose tissue of women. *Am. J. Physiol*. 273(36): E1033-E1038, 1997.
- 18) Sial, S., A. Coggan, **R.C. Hickner**, and S. Klein. Effect of training on fat and carbohydrate metabolism during exercise in elderly subjects. *Am. J. Physiol*. 274(37): E785-E790, 1998.
- 19) Greiwe, J.S., **R.C. Hickner**, S.D. Shah, P.E. Cryer, and J.O. Holloszy. Norepinephrine response to exercise at the same relative intensity before and after endurance exercise training. *J. Appl. Physiol*. 86:531-535, 1999.
- 20) Greiwe, J.S., **R.C. Hickner**, P. Hansen, S. Racette, M.M. Chen and J.O. Holloszy Effects of endurance exercise training on muscle glycogen accumulation in humans. *J. Appl. Physiol*. 87:222-227, 1999.
- 21) Fisher, J.S., **R.C. Hickner**, S.B. Racette, E.F. Binder, M. Landt, W.M. Kohrt. Leptin response to insulin in humans is related to the lipolytic state of abdominal subcutaneous fat. *J. Clin. Endo. Metab*. 84(10):3726-3731, 1999.
- 22) **Hickner, R.C.**, S.B. Racette, E.F. Binder, J.S. Fisher and W.M. Kohrt. Suppression of whole-body and regional lipolysis by insulin: Effects of obesity and exercise. *J. Clin. Endo. Metab*. 84(11)3886-3895, 1999.
- 23) J. A. Houmard, M.L. Weidner, T.R. Koves, **R.C. Hickner**, and R. Cortright. Association between muscle fiber composition and blood pressure response to exercise in men. *Am. J. Hyper*. 13(6)586-592, 2000.

**Peer-Reviewed Journal Publications (continued)**

- 24) **Hickner, R.C.**, S.B. Racette, E.F. Binder, J.S. Fisher, and W.M. Kohrt. Effects of 10 days of endurance exercise training on the suppression of whole body and regional lipolysis by insulin. *J Clin Endo. Metab.* 85(4):1498-504, 2000.
- 25) Kim, Jong-Yeon, **R.C. Hickner**, R.L. Cortright, G.L. Dohm, and J.A. Houmard. Lipid oxidation is reduced in obese human skeletal muscle. *Am. J. Physiol.* 279: E1039-E1044, 2000.
- 26) Nolan, R.C. Baker, J.T., Boudreau, S.R., Kobe, R.W., Tanner, C.J., **Hickner, R.C.**, McCammon, M.R., and J.A. Houmard. Effect of intense training on plasma leptin in male and female swimmers. *Med. Sci. Sports Exerc.* 33(2):227-231, 2001.
- 27) **Hickner R.C.**, M.A. Brunson, M. McCammon, M.T. Mahar, J. Garry, J.A. Houmard. Diabetic groups as defined by the ADA and NDDG criteria have a similar aerobic capacity, blood pressure, and body composition. *Diabetologia.* 44(1):26-32, 2001.
- 28) **Hickner, R.C.**, P.M. Mehta, D. Dyck, P. DeVita, J.A. Houmard, T. Koves, and P.L. Byrd. Relationship between fat:fat-free mass ratio and decrements in leg strength following downhill running. *J. Appl. Physiol.* 90(4):1334-1341, 2001.
- 29) **Hickner, R.C.**, J. Privette, K. Mclver, and H. Barakat. Fatty acid oxidation in African American and Caucasian women during physical activity. *J. Appl. Physiol.* 90:2319-2324, 2001.
- 30) Jong-Yeon, K., **R.C. Hickner**, G.L. Dohm, and J.A. Houmard. Long- and medium-chain fatty acid oxidation is increased in exercise-trained human skeletal muscle. *Metabolism.* 51(4):460-464. 2002.
- 31) Barakat, H., **R.C. Hickner**, J. Privette, J. Bower, E. Hao, V. Udipi, A. Green, W. Pories and K. Macdonald. Differences in the lipolytic function of adipose tissue preparations from African American and Caucasian women. *Metabolism.* 51(11):1514-8, 2002.
- 32) Noland, R.C., **R.C. Hickner**, A. Vidal-Puig, M. Jimenez-Linan, D. Zheng, G.L. Dohm, and R.N. Cortright. Acute endurance exercise increases skeletal muscle uncoupling protein-3 gene expression in untrained but not trained humans. *Metabolism.* 52(2):152-158, 2003.
- 33) **Hickner, R.C.**, G. Kemeny, K. Mclver, K. Harrison and M. Hostetler. Lower skeletal muscle nutritive blood flow in older women is related to eNOS protein content. *J. Gerontol. Biol. Sci.* 58A(1) 20-25. 2003.
- 34) Privette, J.D., **R.C. Hickner**, K.G. MacDonald, W.J. Pories, and H. A. Barakat. Fatty acid oxidation by skeletal muscle homogenates from morbidly obese Black and White American women. *Metabolism.* Jun;52(6):735-738. 2003.
- 35) McConnaughey, M.M., K.A. Sheets, J. Davis, J. Privette, E. Hao, **R.C. Hickner**, B. Christian and H. Barakat. Differences in lipolysis stimulation and beta-adrenergic receptor densities in omental tissue from obese African American and Caucasian women. *Metabolism.* Feb;53(2): 247-251, 2004.
- 36) Gavin, T.P., C.B. Robinson, R.C. Yeager, J.A. England, L. Wiley-Nifong, and **R.C. Hickner**. Angiogenic growth factor response to acute systemic exercise in human skeletal muscle. *J. Appl. Physiol.* 96(1): 3-10, 2004.
- 37) Trappe, T.A., R.H. Williams, J.A. Carrithers, U. Raue, B. Esmarck, M. Kjaer and **R.C. Hickner**. Influence of age and resistance exercise on skeletal muscle proteolysis: a microdialysis approach. *J. Physiol.* 554(3):803-813, 2004.
- 38) Benjamin, R., F. Hochberg, E. Fox, J. Collins, P. Bungay, R. Pelletier, **R. C. Hickner**, W. Elmquist, C. Stewart, P. Vespa, J.C. Goodman, U. Ungerstedt, W. Zamboni, J. Gallo, M. Colvin, J. de Groot, I. Cavus, S. Grossman. Microdialysis in brain tumors: From concept to application. *Neuro-Oncology.* 6(1), 65-74, 2004.
- 39) Hershberger, A.M., M. McCammon, J.P. Garry, M.T. Mahar, and **R.C. Hickner**. Responses of lipolysis and salivary cortisol to feeding and physical activity in lean and obese children. *J. Clin. Endo. Metab.* 89(9):1401-1407, 2004.

**Peer-Reviewed Journal Publications (continued)**

- 40) Thyfault, J.P., R.M. Kraus, **R.C. Hickner**, A.W. Howell, R.R. Wolfe, and G.L. Dohm. Impaired plasma fatty acid oxidation in extremely obese women. *Am J Physiol Endocrinol Metab.* 287(6):E1076-81, 2004.
- 41) Gavin, T.P., H.W. Stallings III, K. A. Zwetsloot, L.M. Westerkamp, N.A. Ryan, R.A. Moore, W.E. Pofahl and **R.C. Hickner**. Lower capillary density but no difference in VEGF expression in obese vs. lean young skeletal muscle in humans. *J Appl Physiol.* 98(1):315-21, 2005. Epub ahead of print, Aug, 2004.
- 42) Racette, S.B., E.P. Weiss, **R.C. Hickner**, and J.O. Holloszy. Modest weight loss improves insulin action in obese African Americans. *Metabolism.* Jul;54(7):960-965. 2005.
- 43) Galvin, V.B., H. Barakat, G. Kemeny, K. MacDonald, W. Pories and **R.C. Hickner**. ENOS protein content in subcutaneous and omental adipose tissue in lean and obese African American and Caucasian women. *Metabolism.* Oct;54(10):1368-1373, 2005.
- 44) Croley, A.N., K.A. Zwetsloot, L.M. Westerkamp, N.A. Ryan, A.M. Pendergrast, **R.C. Hickner**, W.E. Pofahl and T. Gavin. Lower capillarization, VEGF protein and VEGF mRNA response to acute exercise in the vastus lateralis of aged versus young women. *J. Appl. Physiol.* Nov. 99:1872-1879, 2005. [Epub ahead of print July 2005].
- 45) Vice, E., J.D. Privette, P. MacLean, **R.C. Hickner**, and H.A. Barakat. Ketone body metabolism in obese and lean African American and Caucasian women. *Metabolism.* Nov;54(11):1542-5, 2005.
- 46) Davis, J., **R.C. Hickner**, R. Tannenber, H. Barakat. PYY levels after a fat load in Black and White women. *Obesity Res.* Dec:13(12), 2005.
- 47) Ryan, N.A., K.A. Zwetsloot, L.M. Westerkamp, **R.C. Hickner**, W.E. Pofahl and T.P. Gavin. Lower skeletal muscle capillarization and VEGF expression in aged versus young men. *J. Appl. Physiol.* Jan.:100(1):178-185. 2006. Sep 15; [Epub ahead of print, 2005].
- 48) McIver, K, C. Evans, R.M. Kraus, L. Ispas, and **R.C. Hickner**. NO-mediated alterations in nutritive blood flow and metabolism in Fibromyalgia. *Pain.* Jan:120(1-2):161-169, 2006. Epub ahead of print Dec. 2005.
- 49) **Hickner, R.C.**, G. Kemeny, H.W 3<sup>rd</sup>. Stallings, S.M. Manning and K.L. McIver. Relationship between body composition and skeletal muscle eNOS. *Int. J. Obesity.* Feb;30(2) 308–312. 2006. [Epub ahead of print Oct. 11; <http://www.nature.com/doi/10.1038/sj.ijo.0803134>, 2005].
- 50) Trappe, T.A., U. Raue, R.H. Williams, J.A. Carrithers, and **R.C. Hickner**. Effects of age and resistance exercise on skeletal muscle interstitial prostaglandin F(2alpha). *Prostaglandins, Leukotrienes & Essential Fatty Acids.* Mar;74(3):175-181. 2006. Epub 2006 Mar 7.
- 51) **Hickner, R.C.**, C.J. Tanner, C. A. Evans, P.D. Clark, A. Haddock, C. Fortune, H. Geddis, W. Waugh, and M. McCammon. L-citrulline reduces time to exhaustion and insulin response to a graded exercise test. *Med. Sci. Sports Exerc.* Apr;38(4):660-6., 2006.
- 52) Cortright, R.N. K.M. Sandhoff, J.L. Basilio, J.R. Berggren, **R.C. Hickner**, M.W. Hulver, G.L. Dohm and J.A. Houmard. Skeletal muscle fat oxidation is increased in African-American women and white women after 10 days of endurance exercise training. *Obesity.* 14(7):1201-1210, July, 2006.
- 53) Van Pelt, R.E., W.S Gozansky, **R.C. Hickner**, R.S. Schwartz, and W.M. Kohrt. Acute modulation of adipose tissue lipolysis by intravenous estrogens. *Obesity.* Dec;14(12):2163-72. 2006.
- 54) Focht, B.C., D.J. Knapp, T.P. Gavin, T.D. Raedeke, and **R.C. Hickner**. Affective and Self efficacy responses to acute aerobic exercise in sedentary older and younger adults. *J. Aging and Phys. Activity.* April;15(2):123-138, 2007.
- 55) Ormsbee, M.J., J.P. Thyfault, E.A. Johnson, R.M. Kraus, M.D. Choi, and **R.C. Hickner**. Metabolic effects of acute resistance exercise in trained men. *J. Appl. Physiol.* May;102(5):1767-72. Epub. Jan 18, 2007.

**Peer-Reviewed Journal Publications (continued)**

- 56) Gavin, T.P. Drew, J.L., Kubik, C.J. Pofahl, W.E and **R.C. Hickner**. Acute resistance exercise increases skeletal muscle angiogenic growth factor expression. *Acta Physiol. (oxf)*. 2007 Oct;19(2):139-146. Epub 2007 Jun 12.
- 57) Gordon, S.E., C.M. Westerkamp, K.J. Savage, **R.C. Hickner**, S.C. George, C.A. Fick, and K.M. McCormick. Basal, but not overload-induced, myonuclear addition is attenuated by Ng-nitro-L-arginine methyl ester (L-NAME) administration. *Can. J. Physiol Pharmacol.* Jun;85(6):646-651. 2007.
- 58) Gavin, T.P, R. S. Ruster, J.A. Carrithers, K.A. Zwetsloot, R.M. Kraus, C.A. Evans, D.J. Knapp, J.L. Drew, J.S. McCartney, J.P. Garry and **R.C. Hickner**. No difference in the skeletal muscle angiogenic response to aerobic exercise training between young and aged men. *J. Physiol.* Nov 15;585(Pt 1):231-9. Epub 2007 Sep 20.
- 59) Aull, J.L., D.A. Rowe, **R.C. Hickner** B. Malinauskas, M.T. Mahar. Energy expenditure of obese, overweight, and normal weight females during lifestyle physical activities. *International Journal of Pediatric Obesity.* Jan 11: 3(3), 177-185, 2008.
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### Invited Reviews, Book Chapters, and Other Publications

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**COURSES TAUGHT (EAST CAROLINA UNIVERSITY: ECU)**

**Graduate:**

PT 6200 Exercise Physiology (1/3 course: Fall 1996)  
EXSS 6209 Exercise Testing and Prescription in Special Populations (Spring 1997-2000).  
PHYS 6702 Integrated Organ System Physiology (2-4 lectures per Fall course, 1998-)  
PHYS 6740 Physiology research rotation (Fall, 1998)  
EXSS 6500 EXSS Graduate Independent Study (Spring 2000, Spring 2001, Fall 2001, 2004-2009, 2011)  
EXSS/NUHM 5001 Graduate/undergraduate Nutrition of Exercise (Spring, 2002-2007)  
EXSS/NUHM 7002 Graduate Nutrition of Exercise (Spring 2008-present)  
EXSS 6210 Techniques and Theory of Bioenergetics (Fall semester, 2000-2016)  
EXSS 7335 Graduate Seminar in EXSS  
EXSS 8330 Graduate research rotation  
EXSS 8333 Graduate advanced topics  
EXSS 9000 Dissertation

**Undergraduate:**

EXSS 4805/3805 Undergraduate Physiology of Exercise (Fall or Spring and/or Summer, 1997-2011)  
EXSS 4992 Undergraduate Internship (Fall 2000, 2001, 2004-2016)  
EXSS 4502 Undergraduate Independent study students (numerous 1998-2016)

**Summer Study Abroad Classes:**

Australia: Exercise in the Management and Prevention of Metabolic Disease. June 21<sup>st</sup>-July 5<sup>th</sup>, 2015. Melbourne, Australia. (Graduate)

Motivation and Performance from the Physically Inactive to Elite Athletes: The Australian Perspective. May 14<sup>th</sup>-May 28<sup>th</sup>, 2018. Canberra, Australia. (Undergraduate and Graduate)

Exercise and motivation from inactive to athlete populations: Physiological and psychological considerations  
May 15<sup>th</sup>-27<sup>th</sup>, 2019. Australia and New Zealand (undergraduate)

Ecuador: Service-Learning in Bahia, Ecuador. June 28<sup>th</sup>-July 30<sup>th</sup>, 2012, June 27<sup>th</sup>-July 29<sup>th</sup>, 2013, June 26<sup>th</sup>-July 29<sup>th</sup>, 2014, and May 15<sup>th</sup>-June 7<sup>th</sup>, 2016. (Undergraduate and Graduate)

S. Africa: Exercise Instruction, Testing and Training. July 6<sup>th</sup>-July 20<sup>th</sup>, 2014. June 21<sup>st</sup>-July 5<sup>th</sup>, 2015, July 10<sup>th</sup>-July 24<sup>th</sup>, 2016, and July 14<sup>th</sup>-July 31<sup>st</sup>, 2017. Durban, S. Africa. (Undergraduate)

Sweden: Exercise in the Prevention of Metabolic Disease. May 22, 2009 – June 5, 2009 and June 6<sup>th</sup>-June 21<sup>st</sup>, 2014. Stockholm, Sweden. (Graduate)

**High School Summer Ventures and Honors Medicine Program students (ECU):**

Chris Jones 2003

Hannah Shephard 2004 Special Topics in Nutrition

Brennan Eberle 2004

Stefanie Martina 2005, Elizabeth Blayney 2006, Osagie Obanor 2006

(undergraduate honors students and EXSS 4991 research students also annually 2007-2016)

**COURSES TAUGHT (FSU)**

HUN8935 Special Topics in Nutrition: Nutrition and Exercise 2020

**Undergraduate student projects (FSU):**

Stephanie Gipson 2017-2018

Sydney Nicole Miller (external student) 2017-2018

**MASTERS STUDENT COMMITTEES**

**Masters Student Thesis Primary Mentor (ECU)**

1. Priscilla Byrd                      Committee Chair                      Graduate Thesis                      Completed, 1999  
"The effects of creatine supplementation on exercise performance of trained cyclists"
2. Maryellen Hostetler              Committee Chair                      Graduate Thesis                      Completed, 2000  
" The effect of 3 weeks of hormone replacement therapy on nitric-oxide induced vasodilatation and nutritive blood flow in skeletal muscle of postmenopausal women"
3. Kerry McIver                      Committee Chair                      Graduate Thesis                      Completed, Summer, 2002  
"Muscle eNOS and nitric-oxide-induced vasodilatation in fibromyalgia patients"
4. Kevin Harrison                      Committee Chair                      Graduate Thesis                      In Progress  
"Nitric-oxide-induced vasodilatation in trained and untrained older individuals"
5. Vaughna Galvin                      Committee Chair                      Graduate Thesis                      Completed, Fall, 2002  
"Nitric oxide suppression of lipolysis in African American and Caucasian women"
6. Angela Hershberger              Committee Chair                      Graduate Thesis                      Completed, April, 2003  
"Relationship between salivary cortisol and regional lipolysis in children"
7. Chris Evans                      Committee Chair                      Graduate Thesis                      Completed, December, 2004  
"Effect of seven days of exercise training on NOS-dependent nutritive exchange in older men"
8. Emily Johnson                      Committee Chair                      Graduate Thesis                      Completed, May, 2006  
"Effects of exercise training on NO-regulated lipolysis in overweight women."
9. Harold Howe                      Committee Chair                      Graduate Thesis                      Completed, Summer, 2007  
"Regulation of lipolysis by nutrient intake"
10. Juliet Anderson                      Committee Chair                      Graduate Thesis                      Completed, Spring 2008  
The effects of a prototype bio-protective natural supplement on antioxidant status and cardiovascular disease risk markers in aerobically trained males
11. Justin Medlin                      Committee Chair                      Graduate Thesis                      In progress  
Changes in plasma catecholamine concentrations over a 16-week structured exercise program in 8-12 year old children
- 12 Tykeeta Summers              Committee Chair                      Graduate Thesis                      In progress  
Changes in dietary habits over a 16-week structured exercise program in 8-12 year old children
13. Lauren Tranthum                      Committee Chair                      Graduate Thesis                      Completed, Spring 2008  
The effects of dietary supplement substance #39 on aerobic capacity and ventilatory threshold in trained males
14. Gabe Dubis                      Committee Chair                      Graduate Thesis                      Completed, Spring 2008  
Effects of exercise training on salivary cortisol concentrations in prepubescent children.
15. Gabriel Geyer                      Committee Chair                      Graduate Thesis                      Completed Summer, 2010  
Obese Children Have a Lower Lipolytic Response to an Acute Bout of Exercise When Compared to Lean
16. Kathryn Wilson.                      Committee Co-Chair                      Graduate Thesis                      Completed Summer, 2010  
Associations of Physical Activity Level with Self-Perceptions and Quality of Life Among Sedentary Youth, and the Effects of Exercise on Self-Esteem and Quality of Life According to BMI Status

**Masters Student Thesis Primary Mentor (ECU: continued)**

- |  |                 |                 |                           |
|--|-----------------|-----------------|---------------------------|
| 17. Cody Squibb  | Committee Chair | Graduate Thesis | Completed, Summer 2011    |
| The effects of a 16 week physical activity program on bone mineral density in lean and obese prepubescent children ages 8-11.            |                 |                 |                           |
| 18. Dustin Raymer  | Committee Chair | Graduate Thesis | Completed, Spring, 2012   |
| Regulation of lipolysis by beta-adrenergic activation and exercise in obese African  |                 |                 |                           |
| 19. Anna Kate Bires  | Committee Chair | Graduate Thesis | Completed, Summer, 2013   |
| Training and endothelial function in upper and lower limbs   |                 |                 |                           |
| 20. Josh Vick  | Committee Chair | Graduate Thesis | Completed, December, 2013 |
| The effect of 16 weeks of physical activity on CRP in 8-11 yr old children   |                 |                 |                           |
| 21. Elizabeth Cooper   | Committee Chair | Graduate Thesis | Completed, Fall, 2016     |
| Aromatase protein expression in gluteal and abdominal subcutaneous adipose tissue in premenopausal Caucasian and African American women. |                 |                 |                           |
| 22. Mark Whaley  | Committee Chair | Graduate Thesis | Defended, Fall, 2016      |
| The effects of exercise training on the blood glucose response to meals in children  |                 |                 |                           |

**Masters Student Thesis Primary Mentor (FSU)**

- |                      |                 |                 |                        |
|----------------------|-----------------|-----------------|------------------------|
| 23. Stephanie Gipson | Committee Chair | Graduate Thesis | Completed Summer, 2020 |
|----------------------|-----------------|-----------------|------------------------|

**Graduate Project Mentor (ECU)**

- |   |                 |                  |                        |
|---|-----------------|------------------|------------------------|
| 1. Melissa Sugg   | Committee Chair | Graduate Project | Completed, Spring 2008 |
| Changes in physical activity over a 16-week structured exercise program in 8-12 year old children   |                 |                  |                        |
| 2. Mallory Clark  | Committee Chair | Graduate Project | Completed, Summer 2011 |
| The relationship between body composition and activity level in children and their parents  |                 |                  |                        |
| 3. Jordan Goose   | Committee Chair | Graduate Project | Completed, Fall, 2016  |
| The effect of exercise training on circulating proinflammatory cytokines (IL-6 and IL-8) in obese African American and Caucasian Children |                 |                  |                        |

**Master's Thesis Committee member (ECU):**

- |  |                  |                 |                 |
|--|------------------|-----------------|-----------------|
| 1. Chuck Tanner  | Committee Member | Graduate Thesis | Complete, 1999  |
| "The effect of training on phosphotidyl-inositol-kinase in middle-aged men   |                  |                 |                 |
| 2. Leslie Miller   | Committee Member | Graduate Thesis | Completed, 1999 |
| "A comparison of body composition levels, dietary practices, blood profiles, and activity levels of individuals with multiple sclerosis to age and sex matched controls without multiple sclerosis |                  |                 |                 |
| 3. David Tunnel  | Committee Member | Graduate Thesis | Completed, 1999 |
| "Effects of high- and low-intensity resistance exercise on mobility in the aged"   |                  |                 |                 |
| 4. Georgeanne Williams   | Committee Member | Graduate Thesis | Completed, 1999 |
| "Physical activity, body composition, and aerobic capacity of obese and nonobese children and their mothers"   |                  |                 |                 |
| 5. Rob Noland  | Committee Member | Graduate Thesis | Completed, 2000 |
| "Regulation of uncoupling protein gene expression by endurance exercise in human skeletal muscle: implications for human bioenergetics and thermogenesis."   |                  |                 |                 |
| 6. Mike Moreland   | Committee Member | Graduate Thesis | Completed, 2000 |
| "The effects of low-to-moderate intensity exercise on glycemic control"  |                  |                 |                 |
| 7. Jill Moody  | Committee Member | Graduate Thesis | Completed, 2000 |
| "Stairway locomotion in individuals with knee osteoarthritis"  |                  |                 |                 |

**Master's Thesis Committee member (ECU: continued)**

- |   |                  |                 |                            |
|---|------------------|-----------------|----------------------------|
| 8. Jonathan Privette  | Committee Member | Graduate Thesis | Completed, 2000            |
| "Fat oxidation in African American and Caucasian premenopausal women"   |                  |                 |                            |
| 9. Stefanie Keen  | Committee Member | Graduate Thesis | Completed Fall 2006        |
| "The effect of seven days of endurance training on insulin receptor tyrosine kinase activity and PC-1 content in obese subjects." |                  |                 |                            |
| 10. Lindsay Buckalew  | Committee Member | Graduate Thesis | Completed, 2001            |
| "Effects of different training regimens on insulin action."   |                  |                 |                            |
| 11. Stacey Beam   | Committee Member | Graduate Thesis | Completed, 2001            |
| "Neuromuscular responses to 10 weeks of movement and resistance exercise training in knee osteoarthritis."                        |                  |                 |                            |
| 12. Jason Berggren  | Committee Member | Graduate Thesis | Completed, 2001            |
| "Insulin-stimulated glucose transport in human skeletal muscle cell culture: endurance-trained versus sedentary"                  |                  |                 |                            |
| 13. Christopher Robinson  | Committee Member | Graduate Thesis | Completed, Spring 2002     |
| "Vascular endothelial growth factor gene expression following acute exercise."  |                  |                 |                            |
| 14. Ester Vice  | Committee Member | Graduate Thesis | Completed, March 2002      |
| "Ketone body metabolism in African American and Caucasian women."   |                  |                 |                            |
| 15. Raymond Kraus   | Committee Member | Graduate Thesis | Completed Fall, 2002       |
| "Serum vascular endothelial growth factor response to exercise in highly trained and sedentary males."                            |                  |                 |                            |
| 16. Ellis Jensen  | Committee Member | Graduate Thesis | Completed, July, 2002      |
| "Calcineurin regulation of GLUT4 transcription."  |                  |                 |                            |
| 17. Rob Gray  | Committee Member | Graduate Thesis | Completed, June, 2002      |
| "The effect of weight loss on intramuscular lipid content and muscle fiber type distribution in the morbidly obese."              |                  |                 |                            |
| 18. Todd Brown  | Committee Member | Graduate Thesis | Completed, October, 2003   |
| "Effects of long duration eccentric or concentric contractions on neuromuscular function in young males."                         |                  |                 |                            |
| 19. Jenny Lemoine   | Committee Member | Graduate Thesis | Completed, May, 2004       |
| "Skeletal muscle bradykinin B2 receptor response to acute resistance exercise in young men."                                      |                  |                 |                            |
| 20. Sarah George  | Committee Member | Graduate Thesis | Completed, May, 2004       |
| "The effect of L-NAME administration on angiogenesis in overloaded, hypertrophying rat skeletal muscle"                           |                  |                 |                            |
| 21. Andrea Madic  | Committee Member | Graduate Thesis | Completed, May, 2004       |
| "Effect of age on skeletal muscle VEGF expression in females."  |                  |                 |                            |
| 22. Nick Ryan   | Committee Member | Graduate Thesis | Completed, September, 2006 |
| "Lower skeletal muscle capillarization and VEGF expression in aged versus young men."   |                  |                 |                            |
| 23. Tre Stallings   | Committee Member | Graduate Thesis | Completed, December, 2004. |
| "VEGF response to exercise in obesity."   |                  |                 |                            |
| 24. Jennifer Aull   | Committee Member | Graduate Thesis | Completed, January, 2005   |
| "Energy Expenditure of 8- to 11-year-old girls during free-living physical activities."   |                  |                 |                            |
| 25. Deborah Knapp   | Committee Member | Graduate Thesis | Completed, June, 2005      |
| "Affective responses to submaximal exercise in the young and old."  |                  |                 |                            |
| 26. Rebecca Ruster  | Committee Member | Graduate Thesis | Completed, July, 2005      |
| "Effect of age on skeletal muscle interstitial VEGF protein."   |                  |                 |                            |

**Master's Thesis Committee member (ECU: continued)**

- |   |                  |                 |                          |
|---|------------------|-----------------|--------------------------|
| 27. Melanie Sweazy  | Committee member | Graduate Thesis | Completed December, 2005 |
| "The effects of 10 days of endurance exercise training on gene expression regulating skeletal muscle fatty acid oxidation in obese African American vs Caucasian women."  |                  |                 |                          |
| 28. Courtney File   | Committee Member | Graduate Thesis | Completed, Spring, 2007  |
| "Lipolytic differences in African American and Caucasian women."  |                  |                 |                          |
| 29. Melissa Reed  | Committee Member | Graduate Thesis | Completed, Summer, 2006  |
| The effects of 10 days of endurance exercise training on whole body fat oxidation in lean and obese women   |                  |                 |                          |
| 30. Jasper Evans  | Committee Member | Graduate Thesis | Completed, Fall, 2006    |
| Mitochondrial proteins associated with substrate metabolism in rats artificially selected for endurance exercise capacity.  |                  |                 |                          |
| 31. Patrick Rider   | Committee Member | Graduate Thesis | Completed Spring, 2007   |
| The effect of muscular strength on the development of mechanical plasticity in older adults   |                  |                 |                          |
| 32. John Canham   | Committee Member | Graduate Thesis | Completed Spring 2007    |
| Effect of 5-day high-fat diet on regulation of lipid metabolism in lean and obese individuals   |                  |                 |                          |
| 33. Erin Bushey   | Committee Member | Graduate Thesis | Completed Summer 2008    |
| Muscles generate more energy in ascending gaits than they dissipate in descending gaits   |                  |                 |                          |
| 34. Brad Harper   | Committee Member | Graduate Thesis | Completed Summer 2008    |
| 5'-AMP activated protein kinase and eukaryotic elongation factor 2 response to resistance exercise in young Versus Old Men  |                  |                 |                          |
| 35. Adria Finch   | Committee Member | Graduate Thesis | Completed Spring, 2010   |
| The effect of aging on antagonist muscle coactivation and metabolic energy consumption  |                  |                 |                          |
| 36. Cortney Herring   | Committee Member | Graduate Thesis | Completed Spring, 2010   |
| A comparison of lean and obese gait characteristics of children and adults during level walking   |                  |                 |                          |
| 37. Jennifer Macesich   | Committee Member | Graduate Thesis | Completed Summer, 2010   |
| Skeletal muscle eukaryotic elongation factor 2 (eEF2) response to acute resistance exercise in young and old men and women: Relationship to muscle glycogen content and 5'-AMP-Activated Protein Kinase (AMPK) Activity |                  |                 |                          |
| 38. Roccio Ellis  | Committee Member | Graduate Thesis | Completed Summer, 2012   |
| The role of ACSL1 ( Long-chain Acyl-CoA Synthetase) in lipid oxidation in human skeletal muscle primary myotubes.   |                  |                 |                          |
| 39. William Mayo  | Committee Member | Graduate Thesis | Completed Spring, 2013   |
| The effects of statins on mitochondrial function  |                  |                 |                          |
| 40. Greta Stouffer  | Committee Member | Graduate Thesis | Completed Summer, 2013   |
| Effects of moderate aerobic exercise on the attenuation of lean mass during rapid weight loss   |                  |                 |                          |
| 41. Carmen Moyer  | Committee Member | Graduate Thesis | Completed Spring, 2014   |
| Influence of exercise mode on maternal, fetal/neonatal health outcomes: the ENHANCED by mom project   |                  |                 |                          |

**Masters Student Thesis Committee member (FSU)**

- |   |                  |                 |                        |
|---|------------------|-----------------|------------------------|
| 42. Hanna Saylor  | Committee Member | Graduate Thesis | Completed Summer, 2019 |
| Using the acute:chronic workload ratio to predict performance in elite NCAA track and field sprinters         |                  |                 |                        |
| 43. Alexandria Kluger   | Committee Member | Graduate Thesis | Completed Fall, 2020   |
| The effects of an overnight (8h) exposure to normobaric hypoxia on energy intake and appetite: a pilot study. |                  |                 |                        |
| 44. Patrick Burns   | Committee Member | Graduate Thesis | In Progress            |

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45. Susan Cheung                      Committee Member      Graduate Thesis      Completed Fall, 2021  
Associations between essential amino acid intake and functional health outcomes in older adults: a cross-sectional analysis
46. Casey Mackinnon-Greenwalt      Committee Member      Graduate Thesis      Completed Spring, 2022  
Pre-sleep feeding, sleep quality, and markers of recovery in Division I female athletes.
47. Kieran Paterson                      Committee Member                      Graduate Thesis

**DOCTORAL STUDENT COMMITTEES**

**Primary Mentor (ECU)**

1. Ray Kraus                      Committee Chair                      Doctoral Dissertation      Completed, Summer, 2007  
"The Relationship Between Skeletal Muscle Inducible Nitric Oxide Synthase and Whole-Body Insulin Sensitivity in Humans." Current position: Associate Professor, Elmhurst College, Illinois.
2. Michael Ormsbee                      Committee Chair                      Doctoral Dissertation      Completed, Summer, 2008  
"Metabolic Differences in Fat Metabolism during Acute Resistance Exercise in Lean and Obese Men"  
Current position: Associate Professor, Florida State University, Florida
3. Emily Sauers                      Committee Chair                      Doctoral Dissertation      Completed, Summer, 2010  
Exercise Training and Caloric Restriction: Influence on Lipolysis and Associated Proteins.  
Current position: Associate Professor, East Stroudsburg University, Pennsylvania
4. Sarah Henes                      Committee Co-chair                      Doctoral Dissertation      Completed Summer, 2011  
Measured Resting Energy Expenditure Using a Fixed Function Indirect Calorimeter in the Clinical Setting as a Predictor of Success with Weight Change in an Obese Pediatric Population.  
Current position: Assistant Professor, Georgia State University, Georgia.
5. Kathleen Gavin                      Committee Chair                      Doctoral Dissertation      Completed Summer, 2012  
The region-specific influence of estradiol on in-vivo lipolysis in subcutaneous adipose tissue in overweight-to-moderately-obese premenopausal women.  
Current position: Assistant Professor, University of Colorado-Denver, Colorado.
6. Justin La Favor                      Committee Chair                      Doctoral Dissertation      Completed Fall, 2012  
NADPH oxidase as a mechanistic link between erectile dysfunction, peripheral, and coronary endothelial dysfunction in obesity  
Current position: Assistant Professor, Florida State University, Florida (Fall, 2018-)
7. Joe Pierce                      Committee Chair                      Doctoral Dissertation      Completed Summer 2014  
Is IL-15 a novel regulator of lipolysis in-vivo in humans?  
Current position: Research Scientist.
8. Joseph White                      Committee Co-Chair                      Doctoral Dissertation      Completed Fall, 2017  
Exercise Training and its Effects on Subcutaneous Adipose Tissue in Obese Humans  
Current position: Post-doctoral Fellow.

**Primary Mentor (Florida State University (FSU):**

9. Holly Clarke                      Committee Chair                      Doctoral Dissertation      Completed Fall, 2021  
Impact of creatine supplementation on vascular endothelial function, blood flow and functional capacity in older adults.
10. Cesar Meza                      Committee Chair                      In Progress
11. Paul Baker                      Committee Chair                      In Progress

**Doctoral committee member (ECU)**

1. Timothy Koves                      Committee Member      Doctoral Dissertation      Completed, Fall, 2002  
"CPT-1 regulation of fatty acid oxidation in subsarcolemmal and intramyofibrillar mitochondria."
2. Sudip Bajpeyi                      Committee Member      Doctoral Dissertation      Completed, Spring, 2007

"Effect of exercise on intramyocellular lipid content in human skeletal muscle"

3. Christopher Fick                      Committee Member      Doctoral Dissertation      Completed, Spring, 2007  
"Compatibility of Resistance and Endurance Exercise: The influence of skeletal muscle glycogen and AMPK on protein synthesis, and the implications for aged individuals."
  4. Jason Berggren                      Committee Member      Doctoral Dissertation      Completed, Spring 2007  
Mechanisms of decreased fatty acid oxidation in skeletal muscle of morbidly obese individuals
  5. Donghai Zheng                      Committee Member      Doctoral Dissertation      Completed, Spring 2007  
The role of phosphorylation of Ser<sup>312</sup> on insulin receptor substrate-1 in the development of human skeletal muscle insulin resistance
  6. Tracey Woodlief                      Committee Member      Doctoral Dissertation      Completed Summer, 2011  
Skeletal muscle lipid partitioning in human skeletal muscle cells: Tracing lipids in both the oxidative and synthetic pathways
  7. Ruben Sloan                          Committee Member      Doctoral Dissertation      Completed, Summer 2011  
The Physiological and Pathological Role of Mitochondrial Calcium in the Diabetic Heart
  8. Lance Bollinger                      Committee Member      Doctoral Dissertation      Completed, Fall, 2013.  
Effects of obesity on the transcriptional regulation of protein degradation in skeletal muscle.
  9. Matt Hinkley                          Committee Member      Doctoral Dissertation      Completed Fall, 2015  
Alterations in insulin action and contraction-mediated metabolism in myotubes derived from Roux-en-Y gastric bypass patients.
  10. Jamie Hibbert                      Committee Member      Doctoral Dissertation      Completed Summer, 2016  
Impact of Muscle Material Properties on the Hypertrophic Response of Aged Women to Resistance Exercise
  11. Tai-Yu Huang                      Committee Member      Doctoral Dissertation      Completed Fall, 2016  
Peroxisomal-mitochondrial metabolic interaction in lipid metabolism in human skeletal muscle
  12. Maria Torres                          Committee Member      Doctoral Dissertation      Completed Fall, 2016  
Unravelling the mechanisms of menopause-induced insulin resistance: novel roles for estradiol in skeletal muscle mitochondrial function
  13. Jeremie Ferey                      Committee Member      Doctoral Dissertation      Completed Fall, 2016  
Elucidation on the mechanism of CaMKK $\alpha$  as a pro-growth kinase in mouse skeletal muscle
  14. Erica Bell                              Committee Member      Doctoral Dissertation      Completed Summer, 2019  
Stiffness of intrinsic foot structures in diabetic individuals and the effect of stiffness on plantar pressures during gait.
- Doctoral Committee Member (FSU)**
15. Neda Akhavan                      Committee Member      Doctoral Dissertation      Completed Fall, 2018  
The relationship between protein intake and factors associated with glycemic control and cardiovascular health in individuals with pre- and type 2-diabetes
  16. Stacey Alvarez-Alvarado      Committee Member      Doctoral Dissertation      Completed Summer, 2019  
Workload adaptation dynamics: the integrative role of cognitive-perceptual-affective-motivational variables and exertion tolerance. External committee member for Psychology Department
  17. Kelli George                          Committee Member      Doctoral Dissertation      Completed Fall. 2019  
The short term effect of dried plums in preventing inflammation and improving indices of bone health in osteopenic men
  18. Patrick Saracino                      Committee Member      Doctoral Dissertation      Completed Spring, 2020  
The effects of pre-sleep dairy- or plant-based protein consumption on muscle recovery and metabolism following eccentric exercise in middle-aged men

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|--|---------------------|------------------|-----------------------|------------------------|
| 19.  | Tristan Ragland     | Committee Member | Doctoral Dissertation | Completed Summer, 2021 |
| Endurance and resistance training's effects on adipocyte and muscle quality rehabilitation in an obese population                                    |                     |                  |                       |                        |
| 20.  | Michael Rossetti    | Committee Member | Doctoral Dissertation | Completed Fall, 2021   |
| Investigating the role of androgens in the regulation of limb skeletal muscle mass   |                     |                  |                       |                        |
| 21.  | Elizabeth Foley     | Committee Member | Doctoral Dissertation | Completed Summer, 2020 |
| Alterations in the gut microbiome of osteopenic men after three months of prune consumption  |                     |                  |                       |                        |
| 22.  | Joseph Munoz        | Committee Member | Doctoral Dissertation | Completed Fall, 2020   |
| 6-months of dried plum consumption improves bone health in osteopenic men by modulating serum cytokine profiles to favor an M2 macrophage phenotype. |                     |                  |                       |                        |
| 23.  | Alan Dawson         | Committee Member | Doctoral Dissertation | Completed Fall, 2022   |
| Digestible energy determination in normal weight and overweight females with similar energy requirements.  |                     |                  |                       |                        |
| 24.  | David Barney        | Committee Member | Doctoral Dissertation | Completed Fall, 2022   |
| The effects of a bout of endurance exercise on hepcidin and iron homeostasis.  |                     |                  |                       |                        |
| 25.  | Kirsten Dunlap      | Committee Member | Doctoral Dissertation | Completed Spring, 2023 |
| Investigating the ability of resistance exercise to stimulate anabolism and reverse signals induced by glucocorticoid myopathy.                      |                     |                  |                       |                        |
| 26.  | Shiloah Kviatkovsky | Committee Member | Doctoral Dissertation | Completed spring, 2022 |
| The impact of collagen peptide supplementation on pain, function and markers of bone and connective tissue turnover in active adults.                |                     |                  |                       |                        |
| 27.  | Abigail Tice        | Committee Member | Doctoral Dissertation | Completed Spring, 2023 |
| Investigating the role of scheduled, voluntary exercise in protecting skeletal muscle core clock and health against alcohol-induced disruptions.     |                     |                  |                       |                        |
| 28.  | Mathew Martenson    | Committee Member | Doctoral Dissertation | Completed Fall, 2022   |
| Does daily passive muscle stretching modulate the effects of a home-based exercise program in patients with peripheral artery disease?               |                     |                  |                       |                        |
| 30.  | Lillie Renteria     | Committee Member | Doctoral Dissertation | In Progress            |
| 31.  | Amy Mullins         | Committee Member | Doctoral Dissertation | Completed Spring, 2023 |
| Daily consumption of prune provides cardiovascular benefits in older men.  |                     |                  |                       |                        |
| 32.  | Timothy Griest      | Committee Member | Doctoral Dissertation | In Progress            |

**Post-doctoral Fellows**

1. Michael Carper, Ph.D.. Post-doc. 2003-2004. Currently Associate Professor at Pittsburg State University, Kansas.
2. Jonathan Carrithers, Ph.D. Post-doc. 2003-2004. Currently Senior Director, Clinical at NUVAIRA, St. Paul, Minnesota.
3. Myung Dong Choi, PhD, Post-doc. 2005-2009. Currently Associate Professor at Oakland University, Michigan.
4. Huimin Yan, PhD: Post-doc. 2014-2017 Currently Associate Professor at the University of Massachusetts, Boston.
5. Dohoun Kim, PhD: Post-doc 2019-2020 Currently Assistant Professor at Albany State University, Albany, Georgia.
6. Mostafa Ali, PhD: Post-doc. 2021-present.
7. Holly Clarke, PhD: Post-doc. 2022.

**Service to the Department of EXSS/Kinesiology, College and University at ECU**

1. Colleges of Health and Human Performance, and Human Ecology reorganization committee, 2015.
2. Department of Nutrition Sciences Tenure and Promotion Committee, 2015
3. Department of Social Work Promotion Committee, 2015
4. College of HHP Outstanding Researcher Award Selection Committee 2013-2016.



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5. Bioenergetics and Exercise Science PhD Program Director, 2008-2016
6. ECU Center for Health Disparities Co-Director of Research 2010-2016
7. ECU UMCIRB full member, Fall, 2009-2016
8. Kinesiology/HPL search committee Chair (3 positions) 2012-2013
9. East Carolina Diabetes and Obesity Center Space Planning Committee, 2010-2012
10. Kinesiology search committee member 2011
11. ECU HHP leadership council meetings (substitute) 2008-2010
12. ECU Metabolic Institute Leadership Team meeting (substitute) 2009
13. ECU University-wide strategic planning sub-committee Fall, 2009.
14. ECU Dean of Graduate School search committee-Spring, 2010
15. ECU Health Care and Medical Innovations Working Group for University planning-Spring, 2010
16. Nutrition and Dietetics Tenure and promotion committee 2007-present
17. EXSS tenure and promotion committee, 2004-2009.
18. EXSS Chairperson search committee member. 2007-2008 academic year.
19. Reviewer of ECU internal grants. April/May 2007, 2008, 2009
20. EXSS Personnel Committee Chair. 2005-2006 and 2006-2007 academic years
21. HHP Dean's Quadrennial review committee Chair, Spring, 2007
22. HHP Dean's administrative quadrennial review committee member, Fall 2006-Spring 2007
23. EXSS Chair 4-year review committee Chair Spring, 2007.
24. EXSS Tenure faculty committee Chair. 2005-2007
25. EXSS search committee member for faculty positions. Fall, 2005.
26. HH&P Outstanding Researcher Award Committee Chair, 2005 and 2014.
27. Participated in the Sports Medicine Fellowship Training Program, Spring 2002-Spring 2010.
28. Assisted with educational service to local elementary class visits to the HPL.
29. Developed new courses in Nutrition and Exercise, and Techniques and theory of Bioenergetics.
30. Completed HPL strategic plan annual report, 2003.
31. ECU Health Sciences Diabetes and Obesity Task Force. Spring, 2003
32. EXSS and HH&P retreat committee (2002,2003)
33. North Carolina Institute of Nutrition. Scientific Review Board. Member, 1998-2001. Chair, 2001.
34. University Medical Center Institutional Review Board alternate member. August, 2000-2009
35. EXSS search committee for two Bioenergetics faculty positions (1999-2000)
36. Guest lectured to elementary 5<sup>th</sup> graders (2003), 2nd graders (2000) and 6<sup>th</sup> graders (1998).
37. Search committee for EXSS faculty/ Assistant swimming coach (Spring/Summer, 1999).
38. Walker Center testing of international athletes (1998-2008)
39. Walker World Cup research committee 01-01-00 to 4-31-00
40. HPL Strategic Planning Committee Chair, 03-01-00 to 06-01-00.
41. Ad hoc EXSS Strategic Planning Committee member, 03-15-00 to 06-01-00.
42. HHP Strategic Planning Committee member, 01-01-00 to 06-01-00.

**Service to the Department of Nutrition and Integrative Physiology, College of Health and Human Sciences, and the University at FSU**

1. College of Human Sciences Graduate Student Organization Faculty Liaison 2017-2019
2. University Graduate Enrollment Management Committee member 2017-2019
3. University Council of Associate Deans for Research member 2017-2019
4. Retail, Merchandising and Product Development Promotion and Tenure Committees, 2018-2021.
5. University Human Subjects Committee, Institutional Review Board Member, Summer, 2018-Present
6. College of Human Sciences Curriculum Committee Chair 2017-2019
7. FSU Translational Health Research Steering Committee for UF-FSU CTSA. 2019-present
8. FSU CTSA Executive Committee for UF-FSU CTSA. 2019-present
9. CTSA K-Scholar Internal Advisory Committee member and K-Scholar mentor 2019-present
10. Interim Chair: Department of Retail, Merchandising, and Product Development. College of Human Sciences. 2017.
11. College of Human Sciences search committee member for grants officer 2018
12. College of Human Sciences Speaker for distribution of awards 2018
13. FSU Institutional Review Board member, 2018-present
14. Guest speaker. NIG Grant Writing Retreat. Office of Proposal Development. Sept. 2019.
15. College of Health and Human Sciences Promotion and Tenure Committee Chair. Fall, 2022.
16. Nutrition and Integrative Physiology (NIP) Sports Nutrition Search Committee. Fall 2021-2022.
17. FSU Council on Research and Creativity (CRC). Fall 2021-Fall 2024.
18. FSU College of Medicine Dean Search Committee. Spring 2022-present.
19. FSU Health Research Committee. Fall 2022 to present.
20. FSU Community Engagement Leadership Committee. Spring, 2022-present.

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21. FSU Community Engagement Infrastructure, Facilities and Resources Committee Chair 2023-present.
22. NIP Department Exercise Physiology Search Committee Chair Fall, 2022-Spring, 2023.
23. NIP Department Executive Committee Chair Fall, 2022- Spring, 2023

**Professional Administrative Development**

1. Institute for Academic Leadership Department Chairs Workshop. June, 2017 and October, 2017