

CURRICULUM VITAE

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
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CURRENT POSITIONS

Professor: Florida State University, Department of Nutrition, Food and Exercise Sciences, College of Human Ecology. Tallahassee, FL. (2017-present)

Associate Dean of Research and Graduate Studies: Florida State University, College of Human Ecology.

Fractional Professorship, University of KwaZulu-Natal, Department of Biokinetics, Exercise and Leisure Science, School of Health Science, Durban, S. Africa. (2013-present)

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

EDUCATION

INSTITUTION AND LOCATION	DEGREE	YEAR		FIELD OF STUDY	SUPERVISOR
		CONFERRED			
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	John Holloszy, MD/ Wendy Kohrt, PhD

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.

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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

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)

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-)

East Carolina University 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)

CONSULTING

Reuters Insight

The Round Table Group

USARIEM

Leroy T. Walker International Human Performance Center

JOURNAL EDITORIAL BOARD

The Open Nitric Oxide Journal

JOURNAL REVIEWER

American Journal of Clinical Nutrition

American Journals of Physiology

Applied Physiology, Nutrition and Metabolism

British Journal of Nutrition

Canadian Journal of Applied Physiology

Cellular Physiology and Biochemistry

Clinical Endocrinology

Diabetes, Diabetologia

Free Radical Biology and Medicine

Hormone and Metabolic Research

International Journal of Obesity

International Journal of Sports Medicine

International Journal of Sport Nutrition and Exercise Metabolism

IUMBM Life

Journal of Applied Physiology

Journal of Clinical Endocrinology and Metabolism

Journal of Lipid Research

Journal of Nutritional Biochemistry

Journal of Nutrition and Exercise Metabolism

Journal of Physiology

Journal of the American Geriatrics Society

Medicine and Science in Sports and Exercise

Metabolism

Nutrition

Nutrition Research

Obesity Research

Pediatric Research

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Pfluegers Archive
Respiratory Research
Sports Medicine

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-present.
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

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.

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

PROFESSIONAL SOCIETIES

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

GRANTS

	Funded grants as P.I. or Co-P.I.	Direct	F&A	Total
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; R. Hickner, P.I.			
1994	2) Swedish Ministry of Health (Socialstyrelsen) 414.0 Skeletal muscle blood flow during intermittent isometric exercise. 7/1/93-6/31/94; R. Hickner, P.I.			
1995	3) Swedish Ministry of Health (Socialstyrelsen) 414.9 Skeletal muscle blood flow during intermittent isometric exercise. 7/1/94-6/31/95; R. Hickner, P.I.			
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. R. Hickner, P.I.	\$28,600		\$28,600
	Funded grants as P.I. or Co-P.I. (continued)	Direct	F&A	Total
	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. R. Hickner, P.I.	\$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. R. Hickner, P.I.	\$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. R. Hickner, P.I.	\$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. R. Hickner, Co-P.I.	\$9,000		\$9,000
	9) Pitt County Health Education Foundation. Determinants of obesity in children. 08/01/98-08/01/99. R. Hickner, Co-P.I.	\$3,500		\$3,500
1999	10) North Carolina Institute of Nutrition. Fat mobilization in African American women. 07/01/99-06/30/00. R. Hickner, Co-P.I.	\$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. R. Hickner, Co-P.I.	\$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. R. Hickner, Co-P.I.	\$8,500		\$8,500

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	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. R. Hickner, P.I. (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. R. Hickner, P.I.	\$80,000	\$8,000	\$88,000
	15) DuPont, Inc. Thermal regulation in CoolMax® and Thermostat® products. 07/01/99-06/30/00. R. Hickner, Co-P.I.	\$71,069	\$28,072	\$99,141
2000	16) National Institutes of Health. R15 AG18407 \$139,500 Estrogen, muscle blood flow and eNOS post-menopause. 07/01/00-06/31/02; R. Hickner, P.I. Funded grants as P.I. or Co-P.I. (continued)	\$100,000	\$39,500	
	17) North Carolina Institute of Nutrition. Decreased fat oxidation in dietary-induced obesity. 07/01/00-06/30/01. R. Hickner, Co-P.I.	Direct \$10,000	F&A	Total \$10,000
	18) North Carolina Institute of Nutrition. UCP-3 gene expression in transgenic mice. 07/01/00-06/30/01. R. Hickner, Co-P.I.	\$5,000		\$5,000
	19) East Carolina University Research Grant. Hormone replacement therapy improves nitric oxide-induced vasodilatation; 03/01/00-07/01/00. R. Hickner, P.I.	\$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. R. Hickner, P.I.	\$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. R. Hickner, Co-P.I.	\$9,000		\$9,000
	22) National Institutes of Health. Exercise, muscle nutritive blood flow and eNOS in aging. R21 AG 19209-02; 08/01/02-07/31/05. R. Hickner, P.I.	\$300,000	\$118,500	\$418,500
2003	23) Experimental and Applied Sciences. Post-doctoral training grant. 08/01/03-07/31/06. R. Hickner, P.I. Active	\$129,000		\$129,000
2004	24) Under Armour Apparel. Thermoregulation in Under Armour Apparel. 03/01/04-6/28/05. R. Hickner, P.I.	\$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. R. Hickner, P.I.	\$23,376		\$23,376

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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. R. Hickner, P.I.	\$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. R. Hickner, P.I.	\$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. R. Hickner, P.I.	\$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 Hickner: P.I.	\$300,000	\$148,000	\$435,597
	Approximate total funding as P.I.	\$2,520,309	\$915,068	\$3,422,974

Funded grants as Co-investigator, Consultant or Mentor

		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). R. Hickner, Co-investigator	\$50,000		\$50,000
1998	2) National Institutes of Health RO1 DK52999-01, PC-I in insulin-resistant humans; 07/01/98-06/30/02; (Goldfine/Houmard subcontract). R. Hickner, Co-Investigator	\$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). R. Hickner, Co-Investigator.	\$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). R. Hickner, Consultant	\$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). R. Hickner, Co-Investigator.	\$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). R. Hickner, Co-investigator.	\$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). R. Hickner, Co-investigator.	\$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). R. Hickner, Co-Investigator.	\$875,000	\$371,875	\$1,246,875

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

	9) American Diabetes Association. Association of impairments in lipolysis and obesity in African American women. 07/01/00-06/30/03; (H. Barakat). R. Hickner, Co-Investigator.	\$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). R. Hickner, Co-Investigator.	\$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. R. Hickner, Co-Investigator	\$110,000		\$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, R. Hickner, Co-Investigator			
2002	13) NIH K01 AG19630. Estrogen, Insulin and Regional Lipolysis in Older Women;" (R.E. VanPelt). 04/01/02-03/31/07. R. Hickner, Co-Sponsor	Direct \$538,775	F&A \$228,979.38	Total \$767,754.38
	14) National Institutes of Health. Glial cell glycogen and stress-induced depression. R21:012/01/02-11/30/04. (R. Bonsall). R. Hickner, Consultant.	\$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). R. Hickner, Consultant.	\$79,703		\$113,577
2003	16) National Institutes of Health. Age, VEGF, and skeletal muscle capillarization in humans. R15:04/01/03-3/31/05. (T. Gavin). R. Hickner, Co-investigator.	\$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. R. Hickner, Consultant.	\$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). R. Hickner, Collaborator.	\$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). R. Hickner, Co-investigator	\$80,000		\$80,000
2006	20) NIH/NIDDK (1R01 DK075880-01) Impaired Acyl-CoA Synthetase-muscle lipid oxidation in African American Women 09/01/06-08/31/10 (R. Cortright). R. Hickner, Co-investigator	\$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.) R. Hickner, Co-investigator Dates of Entire Project:	\$906,999	\$722,055	\$274,944
2011	21) 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., R. Hickner faculty mentor)	\$5000		\$5000

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

	22) 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. LaFavor P.I., R. Hickner faculty mentor)	\$5000		\$5000
2012	23) 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., R. Hickner faculty mentor)	\$5000		\$5000
	24) NIH/NIDDK (5RO1 DK074825-05) Linking Mitochondrial Bioenergetics to Muscle Insulin Sensitivity 02/01/13-01/31/14. Neuffer: P.I. R. Hickner, Co-investigator	\$159,681	\$115,631	\$275,312
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., R. Hickner, Co-investigator	\$47,708		\$160,069
2016	26) NIH/NIDDK (RO1) Strategies and functional outcomes of enhancing <i>in vivo</i> production of soluble rage isoforms (J. Haus, P.I.) R. Hickner, Consultant	\$2,365,312	\$1,354,855	\$3,720,167
Approximate total as Co-I or consultant		\$13,581,484	\$5,985,546	\$18,212,920

Pending Grant Applications	Direct	F&A	Total
NIH/NHLBI (R15) Effect of Exercise Training on Sympathetic Reactivity and Microvascular Function: Association to Social Context in African American and Caucasian Women, R. Hickner, P.I.	\$300,000	135,000	\$435,000
NIH/NIDDK (RO1) Peroxisomal-Mitochondrial Interactions in Skeletal Muscle and Obesity. (R. Cortright P.I.) R. Hickner, Co-investigator	\$1,000,000	\$470,725	\$1,470,725
NIH/NIDDK (RO1) Remission of Diabetes and Restoration of Metabolic Flexibility after Gastric Bypass. (J. Houmard P.I.) R. Hickner, Co-investigator	\$2,457,799	\$1,167,455	\$3,631,761
NIH/DHHS (R21) Evaluation of the East Carolina Cardiovascular Fatigability Scale (P. Crane, P.I.) R. Hickner, Co-investigator	\$270,865	\$128,570	\$399,535
ACSM (Doctoral Student Award application) Exercise Training Effects on Subcutaneous Adipose Tissue (J. White, P.I.) R. Hickner, Mentor	\$5,000		\$5,000

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. 21st Annual Nutrition Seminar. South Dakota State University, March, 2004
- The use of microdialysis for the monitoring of metabolism and blood flow in peripheral tissues. 21st 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.
- 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.

EXTERNAL INVITED LECTURES (continued)

- 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 21st, 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 24th, 2011.
Childhood obesity: Is sport, science, or physical activity the answer? KASPERD International Sport Science Congress. Daegu, S. Korea. August, 25th. 2011.
- 2011 Application of microdialysis in studies of exercise and health. Korean Society of Exercise Physiology. Daegu, S. Korea. August, 26th. 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 5th, 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 30th, 2014.
Adipose tissue, metabolic disease and exercise. Karolinska Institute, June 11th, 2014.
Estradiol, body fat distribution and insulin sensitivity in women: Am I confused? University of Copenhagen. June 13th, 2014.
Application of Microdialysis in studies of Exercise. Sports Science Institute, Capetown, S. Africa, July, 18th, 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.

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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.

PUBLICATIONS

Peer-Reviewed Journal Publications (total of 101)

- 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* 143:355-356, 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.
- 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 133-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.

Peer-Reviewed Journal Publications (continued)

- 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.
- 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.

Peer-Reviewed Journal Publications (continued)

- 31) Barakat, H., **R.C. Hickner**, J. Privette, J. Bower, E. Hao, V. Udupi, 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. McIver, 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.
- 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.

Peer-Reviewed Journal Publications (continued)

- 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 3rd. 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.
- 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.
- 60) Woolridge, A.A., C.N. Fortner, B.Lontay, T.Akimoto, R. L. Nepl, C. Facemire, M. B. Datto, A. Kwon, E. McCook, P. Li, S. Wang, R.J. Thresher, S.E. Miller, J-C. Perriard, Timothy P. Gavin, **R.C. Hickner**, T. M. Coffman, A. V. Somlyo, Z. Yan and T.AJ. Haystead. Deletion of the PKA/PKG target SMTNL1 promotes an exercise-adapted phenotype in vascular smooth muscle. *J. Biol. Chem.* Apr 25;283(17):11850-9. Epub. Feb 29. 2008
- 61) Jones, T.E., M.R. McCammon, J. Basilio, P. Brophy, and **R.C. Hickner**. Altered levels of PYY and resistin with long-term exercise training in overweight adolescents. *Obesity.* Jun;17(6):1189-95. Epub Feb 26. 2009.\

Peer-Reviewed Journal Publications (continued)

- 62) Bajpeyi, S., C.J. Tanner, C.A. Slentz, B.D. Duscha, J.S. McCartney, **Robert C. Hickner**, W.E. Kraus and J.A. Houmard. The effect of exercise intensity and volume on the persistence of insulin sensitivity during training cessation. *J Appl. Physiol.* Apr;106(4):1079-85. Epub Feb 5. 2009.
- 63) Ormsbee, M., M.D. Choi, J. Medlin, G. Geyer, L. Trantham, G.I. Dubis, and **R.C. Hickner** Regulation of fat metabolism during resistance exercise in sedentary lean and obese men. *J. Appl. Physiol.* May;106(5):1529-37. Epub Mar 5. 2009.
- 64) Widegren U., **R.C. Hickner**, L. Jorfeldt*, and J. Henriksson. Muscle blood flow response to mental stress and adrenaline infusion in man: Microdialysis Ethanol Technique compared to ¹³³Xe Clearance and Venous occlusion plethysmography. *Clin. Physiol. Funct. Imaging.* 2010 Jan 26. [Epub ahead of print] PMID: 20113316.
- 65) Bikman B.T., D. Zheng, M.A. Reed, **R.C. Hickner**, J.A. Houmard, and G.L. Dohm. Lipid-induced insulin resistance is prevented in lean and obese myotubes by AICAR treatment. *Am J Physiol Regul Integr Comp Physiol.* Jun;298(6):R1692-9. Epub 2010 Apr 14.
- 66) Durham W.J., S.L. Casperson, E.L. Dillon, M. A. Keske, D. Paddon-Jones, A.P. Sanford, **R.C. Hickner**, J.J. Grady and M. Sheffield-Moore. Age-related anabolic resistance after endurance type exercise in healthy humans. *FASEB J.* Oct;24(10):4117-27. Epub 2010 Jun 14.
- 67) **Hickner, R.C.**, D. Dyck, J. Sklar, H. Hatley, and P. Byrd. Effect of 28 days of creatine ingestion on muscle metabolism and performance of a simulated cycling road race. *J Int Soc Sports Nutr.* 2010 Jul 7;7(1):26. [Epub ahead of print].
- 68) Lontay, B., K. Bodoor, D.H. Weitzel, D. Loiselle, C. Fortner, S. Lengyel, D. Zheng, J. Devente, **R. Hickner** and T.A. Haystead. Smoothelin Like 1 protein regulates myosin phosphatase targeting subunit 1 expression during sexual development and pregnancy. *J. Biol. Chem.* 2010 Sep 17;285(38):29357-66. Epub 2010 Jul 15.
- 69) Howe H., Heidal K., Choi, M.D., Kraus, R., Boyle, K. and **R.C. Hickner**. Subcutaneous abdominal adipose tissue lipolysis in response to high-fat or well-balanced diets. *Metabolism.* 2011 Jul;60(7):976-81. Epub 2010 Oct 30.
- 70) Kane, D.A., C.T. Lin, E.J. Anderson, H.B. Kwak, J.H. Cox, P.M. Brophy, **R.C. Hickner**, P.D. Neuffer and R.N. Cortright. Progesterone Increases Skeletal Muscle Mitochondrial H₂O₂ Emission in Women. *Am. J. Physiol.-Endocrinol Metab.* 2011 Mar;300(3):E528-35. Epub 2010 Dec 28.
- 71) **Hickner, R.C.**, G. Kemeny, P.D. Clark, V.B. Galvin, K.L. McIver, C.A. Evans, M. Carper and J.P. Garry. In-vivo nitric oxide suppression of lipolysis in subcutaneous abdominal adipose tissue is greater in obese than lean women. *Obesity* 2012 Jun;20(6):1174-8. doi: 10.1038/oby.2011.91. Epub 2011 Apr 14
- 72) Aidar, F.J., R.J. de Oliveira, A.J. Silva, D.G. de Matos, A.L. Carneiro, N. Garrido, **R.C Hickner** and V.M. Reis. The influence of the level of physical activity and human development in the quality of life in survivors of stroke. *Health Qual Life Outcomes.* 2011 Oct 13;9:89.
- 73) Gavin, T.P., J. Van Meter, P. Brophy, G. Dubis, K. Potts and **R.C. Hickner**. Comparison of a field based test to estimate functional threshold power and power output at lactate threshold. *Journal of Strength and Cond. Res.* 2012 Feb;26(2):416-21.
- 74) Kraus, R.M., J.A. Houmard, W.E. Kraus, C.J. Tanner, M.D. Choi and **R.C. Hickner**. Obesity, insulin resistance, and skeletal muscle nitric oxide synthase. *J Appl Physiol.* Sep;113(5):758-65 2012 Jul 12. [Epub ahead of print]
- 75) Battaglia, G, D. Zheng, **R.C. Hickner**, and J. Houmard. "Effect of exercise training on metabolic flexibility in response to a high fat diet in obese individuals" *Am J Physiol Endocrinol Metab.* 2012 Oct 9. [Epub ahead of print]
- 76) Aidar, F.J., R.J. de Oliveira, A.J. Silva, D.G. de Matos, M.L.M. Filho, **R.C. Hickner** and V.M. Reis. The influence of resistance exercise training on the levels of anxiety in ischemic stroke. *Stroke Research and Treatment.* 2012:298375. doi: 10.1155/2012/298375. Epub 2012 Nov 11.

Peer-Reviewed Journal Publications (continued)

- 77) Filho, M.L.M., B.M. Rodrigues, F.J. Aidar, G. Rezende de Oliveira Venturini, D. Gama de Matos, M. Gisele dos Santos, **R.C. Hickner** and J.R. Perrout de Lima. Effects of 16 weeks of exercise on metabolic parameters, blood pressure, body mass index and functional activity in elderly women. *Internl. SportMed. J.* 14(2), 2013.
- 78) Gama de Matos, D., F.J. Aidar, M.L.M. Filho, R. da Silva Salguiero, J. C. de Oliveira, I.P. Klain, **R.C Hickner** and E.H.M. Dantas. Analysis of hemodynamic responses to resistance exercise performed with different intensities and recovery intervals. *Health.* 2013. 5(2):159-165.
- 79) Gama de Matos, D., E.H.M Dantas, F.J. Aidar, A.C. Silva, B.M. Rodrigues, I. Klain, **R.C Hickner** A.L. Carneiro, M.L.M Filho. Relationship between maturity levels and neuromuscular capacity among youth soccer players and individuals not practicing soccer. *Health.* 2013. 5(1):30-34. DOI: [10.4236/health.2013.51005](https://doi.org/10.4236/health.2013.51005)
- 80) Moraska, A., **R.C. Hickner** and W.M. Kohrt. Changes in blood flow and cellular metabolism at a myofascial trigger point with trigger point release (ischemic compression): a proof-of-principle pilot study. *Arch Phys Med Rehabil.* Arch Phys Med Rehabil. 2013 Jan;94(1):196-200. doi: 10.1016/j.apmr.2012.08.216. Epub 2012 Sep 11.
- 81) La Favor, J.D., E.J. Anderson, **R.C. Hickner**, and C.J. Wingard. Erectile dysfunction precedes coronary artery endothelial dysfunction in rats fed a high-fat, high-sucrose, western pattern diet. *J. Sex Med.* 2013 Mar;10(3):694-703. doi: 10.1111/jsm.12001. Epub 2012 Nov 21.
- 82) Gavin, K.M., E.E. Cooper, and **R.C. Hickner**. Estrogen receptor protein content is different in abdominal than gluteal subcutaneous adipose tissue of overweight-to-obese premenopausal women. *Metabolism.* 2013 Aug;62(8):1180-8. doi: 10.1016/j.metabol.2013.02.010. Epub 2013 Apr 1.
- 83) Gavin, K.M., E.E. Cooper, D.K. Raymer, **R.C. Hickner**. Estradiol effects on subcutaneous adipose tissue lipolysis in premenopausal women are adipose tissue depot specific and treatment dependent. *Am J Physiol Endocrinol Metab.* Am J Physiol Endocrinol Metab. 2013 Jun 1;304(11):E1167-74. doi: 10.1152/ajpendo.00023.2013. Epub 2013 Mar 26.
- 84) Fisher-Wellman, K.H, T. A. Mattox, K. Thayne, L.A. Katunga, J. D. La Favor, P.D. Neuffer, **R.C. Hickner**, C.J. Wingard, and E.J. Anderson. Novel role for thioredoxin reductase-2 in mitochondrial redox adaptations to obesogenic diet and exercise in heart and skeletal muscle. *J. Physiol.* J Physiol. J Physiol. 2013 Jul 15;591(Pt 14):3471-86. doi: 10.1113/jphysiol.2013.254193. Epub 2013 Apr 22.
- 85) La Favor, J.D., E.J. Anderson, J.T. Dawkins, **R.C. Hickner**, and C.J. Wingard. Exercise prevents western-diet associated erectile dysfunction and coronary artery endothelial dysfunction: response to acute apocynin and sepiapterin treatment. *Am J Physiol Regul Integr Comp Physiol.* 2013 Aug;305(4):R423-34. doi: 10.1152/ajpregu.00049.2013. Epub 2013 Jun 12
- 86) Henes, S.T., D.M. Cummings, **R.C Hickner**, J.A. Houmard, K.M. Kolasa, S. Lazorick, and D.N. Collier. Comparison of predictive equations and measured resting energy expenditure among obese youth attending a pediatric healthy weight clinic: One size does not fit all. *Nutr Clin Pract.* 2013 Oct;28(5):617-24. doi: 10.1177/0884533613497237. Epub 2013 Aug 6. PMID 23921297
- 87) J.D. La Favor, E.J. Anderson, and **R.C. Hickner**. Novel method for detection of reactive oxygen species *in vivo* in human skeletal muscle. *Physiol Res.* 2014 Jul 16;63(3):387-92. Epub 2014 Feb 24. PMID: 24564604.
- 88) Carneiro, A.I.G., R. Jaco de Oliveira. M., D. Gama de Matos, F.J. Aidar, M.L. Mazini Filho, **R. C. Hickner**, and V.M. Reis. Physiological response to fluid intake with and without carbohydrate during indoor cycling. *Gazzetta Medica Italiana Archivio per le Scienze Mediche* 2014 May;173(5):291-8. https://www.researchgate.net/publication/262731938_Physiological_response_to_fluid_intake_with_and_without_carbohydrate_during_indoor_cycling_classes
- 89) Klain, I.P., L. Cid, D.G. Matos, J.C. Leitão, R.C. Hickner, and J. Moutão. Motivational climate, goal orientation and exercise adherence in fitness centers and personal training contexts. *Motriz. J. Phys. Ed.* 2014 20(3):249-256. http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1980-65742014000300249&lng=en&tlng=en

Peer-Reviewed Journal Publications (continued)

- 90) La Favor JD, R.M. Kraus, J.A. Carrithers, S.L. Roseno, T.P. Gavin, and **R.C. Hickner**. Sex differences with aging in nutritive skeletal muscle blood flow: Impact of exercise training, nitric oxide and alpha-adrenergic mediated mechanisms. *Am J Physiol Heart Circ Physiol*. 2014 Aug 15;307(4):H524-32.
- 91) Ryan, T.E, P.M. Brophy, C-T Lin, **R.C. Hickner**, and P.D. Neufer. Assessment of in vivo skeletal muscle mitochondrial respiratory capacity in humans by near infrared spectroscopy: a comparison with in situ measurements. *J. Physiol. Am J Physiol Heart Circ Physiol*. 2014 Aug 15;307(4):H524-32.
- 92) Gavin TP, R.M. Kraus, J.A. Carrithers, J.P. Garry, and **R.C. Hickner**. Aging and the skeletal muscle angiogenic response to exercise in women. *J Gerontol A Biol Sci Med Sci*. 2014 Sep 2. pii: glu138. [Epub ahead of print] PMID: 25182597.
- 93) DuBose, K.D., **R. C. Hickner**, P. Brophy and A. McKune. The relationship between physical activity & the Metabolic Syndrome score in children. *Pediatric Ex. Sci. Aug;27(3):364-71*. doi: 10.1123/pes.2014-0134. Epub 2015 Apr 22.
- 94) Pierce, J. R., J. M. Maples and **R.C. Hickner**. IL-15 concentrations in skeletal muscle and subcutaneous adipose tissue in lean and obese humans: local effects of IL-15 on adipose tissue lipolysis. *Am. J. Physiol.-Endo. and Metab.* Jun 15;308(12):E1131-9. doi: 10.1152/ajpendo.00575.2014. Epub 2015 Apr 28.
- 95) Myers, K.B., T.N. Goad, J.J. Cox, **R.C. Hickner**, A.E. Ivanescu, M. Wheeler, R.N. Cortright. Dietary Omega-3 Intakes in Southern African American and Caucasian Women. *J. Nutrition and Health Sci.* 2015 (2):2, May 21.
- 96) Lontay B, K. Bodoor A, Sipos D.H. Weitzel, D., Loiselle, R. Safi, D, Zheng, J. Devente, **R. C. Hickner**, D.P. McDonnell, T. Ribar and T.A. Haystead TA. Pregnancy and Smoothelin-like Protein 1 (SMTNL1) Deletion Promote the Switching of Skeletal Muscle to a Glycolytic Phenotype in Human and Mice. *J Biol Chem*. 2015 Jul 17;290(29):17985-98. doi: 10.1074/jbc.M115.658120. Epub 2015 Jun 5
- Peer-Reviewed Journal Publications (continued)**
- 97) Davies SW, K.L. Leonard, R.K. Falls Jr, R.P. Mageau, J.T. Eford, J.P. Hollowell W.E.Trainor 2nd, H.A. Kanaan, **R.C. Hickner**, R.G. Sawyer, N.R. Poulin, B.H. Waibel and E.A.Toschlog. Lung protective ventilation (ARDSNet) versus airway pressure release ventilation: ventilatory management in a combined model of acute lung and brain injury. *J Trauma Acute Care Surg*. 2015 Feb;78(2):240-9; discussion 249-51. doi: 10.1097/TA.0000000000000518. Erratum in: *J Trauma Acute Care Surg*. 2015 Apr;78(4):892.
- 98) Moreira, O.C., L.L. Faraci, D. Gama de Matos, M.L.M. Filho, S. Fernandes da Silva, B.M. Rodrigues, **R.C. Hickner**, C.E. Patrocínio de Oliveira. Cardiovascular responses to unilateral, bilateral and alternating limb resistance exercise performed using different body segments *J. Strength Cond. Res.* 2015 Sep 12. [Epub ahead of print]
- 99) Kreipke, V.C., B.R. Allman, A.W. Kinsey, A. Terracciano, R.J. Mofatt, **R.C. Hickner** and M.J. Ormsbee. The impact of multi-ingredient performance supplementation on muscular strength, body composition and anabolic hormones in resistance trained young men. *J. Strength Cond. Res.* 2015. 29(12):3453–3465.
- 100) Aidar, F.J., R. Jacó de Oliveira, A.J. Silva, D. Gama de Matos, A.L. Carneiro, **R.C. Hickner** and V.M. Reis. A randomized trial investigating the influence of strength training on quality of life in ischemic stroke. *Topics in Stroke Rehabilitation*. Top Stroke Rehabil. 2016 Apr;23(2):84-9. doi: 10.1080/10749357.2015.1110307. Epub 2016 Jan 29.
- 101) Moreira, O.C., C.E. Patrocínio de Oliveira, D. Gama de Matos, **R.C. Hickner**, R.A. Rodrigues de Oliveira, F.J. Aidar, M.A. Rodríguez-Gázquez. Prevalence of coronary heart disease risk factors in physical education students. *Motriz. J. Phys. Ed.* 2015, 21(4):415-420.
- 102) Kinsey, A.W., S.R. Cappadona, L.B. Pantone, B.R. Allman, R.J. Contreras, R.C. Hickner, and M.J. Ormsbee. The Effect of casein protein prior to sleep on fat metabolism in obese men. *Nutrients*. 2016. July 27;8(8).
- 103) La Favor, J.D., G. Dubis, H. Yan, J.D. White, E.J. Anderson, and **R.C. Hickner**. Microvascular endothelial dysfunction in sedentary, obese humans is mediated by NADPH Oxidase; influence of exercise training. *Circulation. Arterioscler Thromb. Vasc. Biol.* 2016. Dec;36(12):2412-2420.

Invited Reviews, Book Chapters, and Other Publications

- 1) **Hickner, R. C.** The influence of dietary modification during short-term weight loss on high-intensity exercise. Masters Thesis. Ball State University, Muncie, IN., 1-82, 1988.
- 2) Henriksson J., **R.C. Hickner**, H. Rosdahl, T. Fuchi, Y. Oshida, and L. Jorfeldt. Current trends in microdialysis, with focus on the in vivo study of skeletal muscle glucose metabolism. *Med Sport Sci* ed. M. Hebbelink, R.J. Shephard. vol 37. *Proceedings from the 8th International Biochemistry of Exercise Conference: Integration of Medical and Sport Sciences*. Ed. Y Sato, J. Poortmans, I Hashimoto, Y Oshida. 262-272, 1992.
- 3) Henriksson J. and **R.C. Hickner**. Skeletal muscle adaptation to endurance training. In: Intermittent High Intensity Exercise. Ed. D.A.D. Macleod, J. Graham, C.R. Madeley, R.J. Maughan, R.W. Nutton J.C.M. Sharp, C. Williams. *Proceedings from the Sports Medicine Congress*. London: E & FN Spoon, 5-25, 1993.
- 4) Henriksson J. and **R.C. Hickner**. Training-induced adaptations in skeletal muscle. In: Harries M., Mitcheli L.J., Stanish W.D., and Williams C. Ed. *The Oxford Textbook of Sports Medicine*. Oxford: Oxford University Press, New York, first edition, 27-45, 1994. Second edition 2002.
- 5) **Hickner, R.C.** Microdialysis in skeletal muscle: development and application of the microdialysis ethanol technique. Doctoral dissertation from the Karolinska Institute, Stockholm, Sweden. Repro Print AB, Stockholm, 1-66. 1995.
- 6) Sciotti, V.M., V.L. Mittak, M. Finn, L. DiMarco, and **R.C. Hickner**. The biochemical profile of myofascial trigger points. *Proceedings from the Association of Chiropractic Colleges' Sixth Annual Conference*. J. of Chiropractic Ed., 13(1):41-42, 1999.
- 7) Sciotti, V.M., V.L. Mittak, M. Finn, L. DiMarco, and **R.C. Hickner**. Interstitial fluid lactate and local blood flow in trapezius muscle trigger points. *Proceedings from the Association of Chiropractic Colleges' Seventh Annual Conference*. J. of Chiropractic Ed., 14(1):19-20, 2000.
- 8) **Hickner, R.C.** Applications of microdialysis in studies of exercise. *Exercise and Sports Science Reviews*. 28(3):117-122, 2000.
- 9) Sciotti, V.M. and **R.C. Hickner**. Investigating the energy crisis theory of myofascial trigger points: A clinical microdialysis study. *Proceedings from the Association of Chiropractic Colleges' Eighth Annual Conference*. Journal of Chiropractic Education. 15(2):62, 2001.
- 10) Pender, J.R., W.J. Pories, K.G. MacDonald, W.H. Chapman, **R.C. Hickner**, H.A. Barakat. Racial variations in fat metabolism may affect the success of diets and bariatric surgery. Proceedings from the American Society of Bariatric Surgery, 2006.
- 11) **Hickner, R.C.** Integrating physiology and sport performance. *Proceedings from the International Sport Science Symposium: Contributions of sports science to sport performance*. Korea National Sport University, p. 147-157. May 30th, 2007.
- 12) **Hickner, R.C.** Childhood obesity: Is sport, science, or physical activity the answer? Proceedings from the KASPERD International Sport Science Congress. Daegu, S. Korea. p. 17-19, August, 2011.
- 13) **Hickner R.C.** Take flight to reduce cardiovascular disease risk in youth. *Exerc Sport Sci Rev*. 2014 Sep 2. [Epub ahead of print] No abstract available. PMID:

Articles submitted for review

McCammon, M.R., M.J. Schorner, D.T. Terracciano, E.A. Johnson, C.J. Tanner, and **R.C. Hickner**. The PreCor EF546 Elliptical Trainer over predicts energy expenditure. *Med. Sci Sports and Exerc*.

Choi, M.D., E.A. Sauers, R.M. Kraus, M.J. Ormsbee, and **R.C. Hickner**. Exercise Training Decreases Femoral, but not Abdominal, Adipose Tissue iNOS Protein Content and suppression of lipolysis in Obese Women. *Metab*.

Articles submitted for review (continued)

Sheffield-Moore, M., S.L.Casperson, E.L. Dillon, M. Ahmad, **R.C. Hickner**, W.J. Durham and M.A. Keske. Microvascular flow methodologies are better suited to detect age-related differences in muscle blood flow than common macrovascular techniques. *J. Gerontology*

Kraus, R.M., J.A. Houmard, W.E. Kraus, and **R.C. Hickner**. The Cessation of Exercise Training Reduces Insulin Sensitivity, but does not alter iNOS Protein.

Kwak, H.B., T.L. Woodlief, T.D. Green, J.H. Cox, **R.C. Hickner**, P. D. Neufer, and R.N. Cortright. Overexpression of Long Chain Acyl-CoA Synthetase 5 Increases Fatty Acid Oxidation and free radical formation while attenuating insulin signaling in primary human skeletal myotubes. *FEBS Letters*. In Review.

Huang, T-Y, D. Zheng, J. Houmard, J. Brault, **R. Hickner** and R. Cortright. Overexpression of PGC-1 α increases peroxisomal activity and mitochondrial fatty acid oxidation in human primary myotubes. *AJP Endo*.

Sauers, E., W. Knox, Z. Zabarsky, R. Kristeller, and **R.C. Hickner**. The Effects of Exercise Training Status on perilipin and Lipolytic Proteins in Lean and Obese Young Men. *Metabolism*.

Dias, M.R., D. De Matos, M.M. Filho, A. Carneiro, **R.C. Hickner**, D. Cardozo, H. Alves, L. Reis, F. Aidar. Comparison of repetition number between uni- and multi-joint exercises with one and two-minute rest intervals. *Gazz Med Ital - Arch Sci Med*.

Milner, M.P., **R.C. Hickner**, and M. Bier. Scaling Relations of Speed, Acceleration, and Strength in Collegiate American Football Players. *J. Strength and Cond. Res*.

Vasconcelos de Oliveira, M., D. Gama de Matos, F.J. Aidar, J.T. Pereira Rego¹, M.A. Spina, **R. C. Hickner**, and P.M. Silva Dantas. Electromyographic analysis of the bench press exercise in Paralympic Athletes. *Motriz*.

DuBose, K.D., H. Yan, P. Brophy, BR Schmitt, J. Mazzawi, J. Cox, E. Cooper, and C.J. Tanner, and **R.C. Hickner**. Effects of a 16-week Physical Activity Program on Body Composition and Aerobic Capacity Are Greater in African American than Caucasian Prepubescent Children. Submitted to *Appl. Physiol. Nutr, Metab*. In Review.

Yan, H., J.R. Pierce, K.B. Myers, K.D. DuBose, B.S. Dubis, C. D. Tanner, and **R.C. Hickner**. The effect of acute exercise and exercise training on adipose tissue postprandial lipolysis and blood flow in lean and obese children

Abstracts Published:

1. Horswill, C.A., **R.C. Hickner**, J.R. Scott, D. Gould, and D.L. Costill. Weight loss, dietary carbohydrate, and intensive physical performance. *Med. Sci. Sports Exerc.* 21(2):S32, 1989.
2. Kirwan, J.P., W.M. Kohrt, D.M. Wojta, B.V. Weitop, M.A. Staten, A.A. Ehsani, **R.C. Hickner**, and J.O. Holloszy. Effect of 7 days of exercise training on insulin action in non-insulin-dependent diabetics. *Med. Sci. Sports Exerc.* 22(2):S40, 1990.
3. **Hickner, R.C.**, C.A. Horswill, J.M. Welker, J.R. Scott, and D.L. Costill. Test development for the study of weight loss in wrestlers. *Med. Sci. Sports Exerc.* 22(2):S128, 1990.
4. Henriksson, J., H. Rosdahl, T. Fuchi, **R.C. Hickner**, and U. Ungerstedt. Microdialysis for in-vivo studies of skeletal muscle glucose metabolism. *Current Separation.* 10(3):106, 1991.
5. Kirwan, J.P., **R.C. Hickner**, K.E. Yarasheski, B.V. Wiethop, W.M. Kohrt, and J.O. Holloszy. Eccentric exercise causes transient insulin resistance in young subjects. *Med. Sci. Sports Exerc.*, 23(2):S110, 1991.
6. **Hickner, R.C.**, H. Rosdahl, I. Borg, U. Ungerstedt, L. Jorfeldt, and J. Henriksson. The use of microdialysis to monitor local skeletal muscle blood flow. *Med. Sci. Sports Exerc.* 24(5):S85, 1992.
7. **Hickner, R.C.**, H. Rosdahl, I. Borg, U. Ungerstedt, L. Jorfeldt, and J. Henriksson. The use of microdialysis to monitor local skeletal muscle blood flow in the rat. *Acta Physiol. Scand.* 146(Suppl. 608):193, 1992.

Abstracts (continued)

8. Kirwan, J.P., W.M. Kohrt, **R.C. Hickner**, K.E. Yarasheski, B.V. Wiethop, and J.O. Holloszy. The effects of eccentric exercise on insulin mediated whole body glucose disposal. *Med. Sci. Sports Exerc.*, 25(5):S100, 1993.
9. **Hickner, R.C.** Weight loss and carbohydrate intake affects performance of high intensity exercise. *Intl. J. Sports Med.* 14(5):294, 1993.
10. **Hickner, R.C.**, H. Rosdahl, I. Borg, U. Ungerstedt, L. Jorfeldt, and J. Henriksson. A novel method of monitoring local blood flow in human skeletal muscle during exercise. *Med. Sci. Sports Exerc.* 25(5):S84, 1993.
11. **Hickner, R.C.**, U. Ungerstedt, and J. Henriksson. Regulation of skeletal muscle blood flow during acute administration of insulin. Presented at the 9th International Biochemistry of Exercise Conference, Aberdeen, Scotland, 1994.
12. **Hickner, R.C.**, U. Ekelund, S. Mellander, U. Ungerstedt, and J. Henriksson. Comparison of the Microdialysis Ethanol Technique to direct measurement of skeletal muscle blood flow. *Med. Sci. Sports Exerc.*, 26(5):S150, 1994.
13. **Hickner, R.C.**, D. MacLean, J. Bangsbo, B. Saltin, and W.M. Kohrt. The Microdialysis Ethanol Technique for measurement of nutritive skeletal muscle blood flow during dynamic exercise. *Med. Sci. Sports Exerc.*, 28(5):S131, 1996.
14. Racette, S.B., E.P. Weiss, K.A. Obert, **R.C. Hickner**, W.M. Kohrt, and J.O. Holloszy. Diabetes, Prevention of NIDDM in centrally obese African Americans. *Diabetes*, 1997.
15. **Hickner, R.C.**, J.S. Fisher, P.A. Hansen, S.B. Racette, C.M. Mier, M.J. Turner, and J.O. Holloszy. Muscle glycogen accumulation in trained and untrained individuals. *The FASEB Journal*, 11(3):A214, 1997.
16. **Hickner, R.C.**, J.S. Fisher, A.A. Ehsani, and W.M. Kohrt. The role of nitric oxide in active hyperemia, *Med. Sci. Sports Exerc.*, Vol. 29(5):S149, 1997.
17. Greiwe, J.S., **R.C. Hickner** and J.O. Holloszy. Catecholamine response to exercise at the same relative intensity before and after training. *Med. Sci. Sports Exerc.*, 30(5):S273, 1998.
18. **Hickner, R.C.**, S.B. Racette, E.F. Binder, J.S. Fisher, and W.M. Kohrt. Whole-body and regional suppression of lipolysis by insulin: effect of training status and obesity in women. *Med. Sci. Sports Exerc.*, 30(5):S211, 1998.
19. Boudreau, S.R., J.T. Baker, R.C. Nolan, C.J. Tanner, M.R. McCammon, **R.C. Hickner**, and J.A. Houmard. Impact of intense swim training on plasma leptin concentration in men and women. *North Carolina Institute of Nutrition Symposium*. 1998.
20. Koves, T.R. and **R.C. Hickner**. Monitoring nitric oxide-induced changes in skeletal muscle nutritive flow using microdialysis. *Med. Sci. Sports Exerc.*31(5):S333, 1999.
21. Mehta, P.M., P.L. Byrd, P. DeVita, J.A. Houmard, and **R.C. Hickner**. Increased body fat to lean mass ratio results in larger decrements in quadriceps strength following downhill running. *Med. Sci. Sports Exerc.*31(5):S371, 1999.
22. Byrd, P. L, P.M. Mehta, P. DeVita, D. Dyck, and **R.C. Hickner**. Changes in muscle soreness and strength following downhill running: effects of creatine, HMB, and Betagen supplementation. *Med. Sci. Sports Exerc.*31(5):S263, 1999.
23. Brunson, M.A. M. McCammon, K. O'brien, **R.C. Hickner**, M. Hickey, G. Israel and J.A. Houmard. A comparison of heart disease risk factors for African American and Caucasian males matched by age, weight, and height. *Med. Sci. Sports Exerc.*31(5):S238, 1999.
24. J.S. Greiwe, **R.C. Hickner**, P.A. Hansen, S.B. Racette, M.M. Chen, and J.O. Holloszy. Effects of endurance exercise training on muscle glycogen accumulation in humans. *Med. Sci. Sports Exerc.*31(5):S54, 1999.

Abstracts (continued)

25. **Hickner, R. C.**, S. B. Racette, E. F. Binder, J. S. Fisher, and W. M Kohrt. Effects of exercise training on the suppression of whole-body and regional lipolysis by insulin. *Med. Sci. Sports Exerc.*31(5):S53, 1999.
26. Koves T.R.and **R.C. Hickner**. Monitoring the effects of vasoactive compounds on skeletal muscle nutritive flow using microdialysis. *Southeast ACSM*, Feb., 1999.
27. Byrd, P.L., P.M. Mehta, and **R.C. Hickner**. Effects of repeated bouts of downhill running on blood lactate response and O₂ cost of running. *Southeast ACSM*, Feb., 1999.
28. Baker, J.T., M.T. Mahar, M.A. Brunson, J.A. Houmard, and **R.C. Hickner**. Relationship between aerobic capacity and fasting plasma glucose as an indicator of type 2 diabetes. *Southeast ACSM*, Feb., 1999.
29. Mehta, P.M., P.L. Byrd, P. DeVita, and **R.C. Hickner**. Relationship between body composition and decrements in quadriceps strength following downhill running. *Southeast ACSM*, Feb., 1999.
30. Nolan, R.C., J.T. Baker, S.R. Boudreau, C.J. Tanner, **R.C. Hickner**, M.R. McCammon, and J.A. Houmard. Effects of intense swim training on plasma leptin concentration in male and female athletes. *Southeast ACSM*, Feb., 1999.
31. Fisher, J.S., **R.C. Hickner**, S.B. Racette, E.F. Binder, W.M. Kohrt. Leptin response to insulin in humans related to the lipolytic state of abdominal subcutaneous fat. *The FASEB J.* 13(4):S370, 1999.
32. Sciotti, V., V.L. Mittak, M. Finn, L. DiMarco, and **R.C. Hickner**. The biochemical profile of myofascial trigger points: a clinical microdialysis study, *New York Chiropractic College Symposium*, Feb., 1999.
33. Sciotti, V., V.L. Mittak, M. Finn, L. DiMarco, and **R.C. Hickner**. The biochemical profile of myofascial trigger points: a clinical microdialysis study, *Clinical Conference for Chiropractic Research*, March., 1999.
34. **Hickner, R.C.** In-vivo comparison of three microdialysis probe types used in the monitoring of interstitial glycerol, glucose and lactate. *Proceedings of the Nutrition Society of The Netherlands*, 58(4): 174A, Nov. 1999.
35. MacDonald, K., **R.C. Hickner**, J. Houmard, L. Dohm, A. Hyatt, C. Tanner, W. Chapman, and W. Pories. Effect of gastric bypass and gastric banding surgery on insulin action. *Proceedings from the 13th International Symposium on Obesity Surgery*, September, 1999.
36. Moreland, M.R., M.R. McCammon, N.W Pollock, **R.C. Hickner**, D.K. Shaw, and G.S. Poehlman. Efficacy of a low-intensity exercise program in improving glycemic control in a rural, high-risk community. *Proceedings of the North Carolina Institute of Nutrition Conference*, October, 1999.
37. **Hickner, R.C.** and P. Byrd. The effects of creatine ingestion on body composition and endurance performance in cyclists. *Proceedings of the North Carolina Institute of Nutrition Conference*, October, 1999.
38. MacDonald, K.G., **R.C. Hickner**, J.A. Houmard, G.L. Dohm, A. Hyatt, C. Tanner, Chapman, and W. Pories. Effect of gastric bypass and gastric banding surgery on insulin action. *Obesity Surgery*.9(4): 334. 1999.
39. **Hickner, R.C.** The monitoring of skeletal muscle nutritive blood flow and metabolism using microdialysis. Tutorial presentation at the 2000 Southeast American College of Sports Medicine.
40. McCammon, M.R., M.R Moreland, **R.C. Hickner**, D.K. Shaw, G.S. Phoehlman, and N.W. Pollock. The effects of a moderate-intensity exercise program on improving coronary artery disease risk factors in previously sedentary African Americans. *Southeast American College of Sports Medicine*, 2000.
41. Pollock, N.W., M.R McCammon, **R.C. Hickner**, and D.K. Shaw. Inability of low-intensity exercise to improve glycemic control in a rural, high-risk community. *Med. Sci. Sports Exerc.*32(5):S217, 2000.
42. Byrd, P., H. Hatley, and **R.C. Hickner**. Effect of 28 days of creatine supplementation on performance of a simulated cycling road race. *Med. Sci. Sports Exerc.* suppl. 2000.

Abstracts (continued)

43. Nolan, R.C., **R.C. Hickner**, A.J. Vidal-Puig, D. Zheng, B.B. Lowell, and R.N. Cortright. Human skeletal muscle uncoupling protein-3 mRNA levels are elevated in response to acute exercise. *Med. Sci. Sports Exerc.* suppl. 2000.
44. **Hickner, R.C.**, J. Privette, K. McIver, and H. Barakat. Fat oxidation during exercise in African American and Caucasian women. *Obesity Research*, 8(Suppl. 1):36S, 2000.
45. **Hickner, R.C.**, J. Privette, K. McIver, and H. Barakat. Whole-body fat oxidation during exercise in African American and Caucasian women. *Proceedings of the North Carolina Institute of Nutrition*, Oct.13, p. 13, 2000.
46. Privette, J.D., **R.C. Hickner**, W. Pories, K. MacDonald, P. Cunningham, G.L. Dohm, and H.A. Barakat. Ethnic differences in palmitate oxidation by muscle homogenates of obese women. *Proceedings of the North Carolina Institute of Nutrition*, Oct. 13, p. 29, 2000.
47. Fannon, W.R.Jr, R.C. Noland, T.R. Koves, J.M. Bennett, **R.C. Hickner**, and R.N. Cortright. Reduced insulin action and elevated fatty acid oxidation in obese-hypertensive rats. *Proceedings of the North Carolina Institute of Nutrition*, Oct. 13, p. 17, 2000.
48. Greenway, S., R.C. Noland, **R.C. Hickner**, and R.N. Cortright. Whole-body fat oxidation during exercise in African American and Caucasian women. *Proceedings of the North Carolina Institute of Nutrition*, Oct. 13, p. 18, 2000.
49. Sciotti, V.M., M.F. Mittak,, J. Burke, V.L. Mittak, L. Ford, E. Santipadri, C. Bruckner, and **R.C. Hickner**. Role of nitric oxide in the microcirculatory and metabolic profile of latent myofascial trigger points. Association of Chiropractic Colleges Educational Conference, March, 2001.
50. **Hickner, R.C.**, K. McIver, K. Harrison, and M. Hostetler. Skeletal muscle eNOS and nutritive blood flow in pre- and post-menopausal women. *Med. Sci. Sports. Exerc.* S290: 33(5), 2001. Proceedings of the National American College of Sports Medicine Conference.
51. **Hickner, R.C.**, K. McIver, K. Harrison, G. Kemeny. Skeletal muscle eNOS is higher in endurance-trained than sedentary premenopausal females. *FASEB.* A1109:15(5), 2001. Proceedings of the Nat. Exper. Biol. Conference.
52. Carpenter, A.D., T.R. Koves, **R.C. Hickner**, and R.N. Cortright. Fatty acid oxidation rates after high sucrose feeding and exercise training in rat red and white skeletal muscle. *Proceedings from the North Carolina Institute of Nutrition*, Friday, October 12th, p. 28, 2001.
53. Fannon, WR, Noland RC, Koves TR, Bennett JM, **Hickner RC**, Cortright RN. Reduced insulin action and elevated fatty acid oxidation in obese-hypertensive rats. *FASEB JOURNAL* 15 (4): A77-A77 Part 1 MAR 7 2001.
54. Kemeny, G., V. Galvin, H. Barakat, J. Privette, and **R.C. Hickner**. Differential expression of eNOS protein in adipose tissue of obese and non-obese humans. Proceedings of the Southeast American College of Sports Medicine Conference. P41, page 31. February, 2002.
55. McIver, K. Kemeny, and **R.C. Hickner**. The role of nitric oxide in blood flow differences between Fibromyalgia patients and healthy individuals. Proceedings of the Southeast American College of Sports Medicine Conference. P24, page 28. February, 2002.
56. Cortright RN, Becker-Greenway S, Noland RC, **Hickner RC**, Vidal-Puig AJ, Gallagher ML. Energy-restriction increases skeletal muscle UCP-3 gene expression in males but not females. *FASEB JOURNAL* 16 (4): A32-A32 Part 1 MAR 20 2002
57. Kemeny G, VB Galvin, EH , H. Barakat, **R.C. Hickner**. Higher eNOS gene expression and protein content in subcutaneous fat from obese African American than obese Caucasian women. *FASEB JOURNAL* 16 (4): A399-A399 Part 1 MAR 20 2002.

Abstracts (continued)

58. Evans, C. A., M. McCammon, C. Tanner, P.D. Clark, A. Haddock, C. Fortune, H. Geddis, and **R. C. Hickner**. Citrulline ingestion reduces maximal treadmill test time-to-exhaustion. Proceedings of the Southeast American College of Sports Medicine Conference. February, 2003.
59. Clark, P.D., G. Kemeny, H. Barakat, C.A. Evans and **R.C. Hickner**. Inhibition of eNOS increases lipolysis in vivo. Proceedings of the Southeast American College of Sports Medicine Conference. February, 2003.
60. Thorpe, A., P. D. Clark, C.A. Evans and **R. C. Hickner**. Carbohydrate and lipolytic metabolic profiles of endurance trained and sedentary individuals during normal daily habitus. Proceedings of the Southeast American College of Sports Medicine Conference. February, 2003.
61. Gavin, T.P., H.W. Stallings, K.A. Zwetsloot, L.M. Westerkamp, W.E. Pofahl, **R.C. Hickner**. VEGF and VEGF receptor expression are not altered in obese skeletal muscle. Proceedings of the National American College of Sports Medicine Conference. *Med. Sci. Sports Exerc. Suppl.* Vol. 36(5) S269, 2004.
62. McCartney, J.S., **R.C. Hickner**, M.R. McCammon. Performance predictors for the Police Officer Physical Ability Test. Proceedings of the National American College of Sports Medicine Conference *Med. Sci. Sports Exerc. Suppl.* Vol. 36(5) S246, 2004.
63. Schorner, M.J., D.T. Terracciano, **R.C. Hickner**, M.R. McCammon. The PreCor EFX546 Elliptical Trainer over predicts energy expenditure. Proceedings of the National American College of Sports Medicine Conference. *Med. Sci. Sports Exerc. Suppl.* Vol. 36(5) S249-S250, 2004.
64. Thyfault, J.P., R.M. Kraus, **R.C. Hickner**, A.W. Howell, R.R. Wolfe, and G.L. Dohm. Impaired Lipid Oxidation in Extremely Obese Women Before and After Weight Loss Resulting From Gastric Bypass Surgery. American Diabetes Association National Conference. *Diabetes* 53:A563, Suppl. 2, June. 2004.
65. Cortright, R.N., K.M. Sandhoff, J.L. Basilio, J.R. Berggren, **R.C. Hickner**, J.A. Houmard. African American women have increased rates of fat oxidation after 10 days of endurance exercise training. Proceedings of the 2004 Integrative Biology of Exercise APS Intersociety Meeting, *The Physiologist.* 47(4): 2004.
- 66 Gavin, T.P., N.A. Ryan, K.A. Zwetsloot, L.M. Westerkamp, W.E. Pofahl, **R.C. Hickner**. Skeletal muscle VEGF protein is lower in aged men. Proceedings of the 2004 Integrative Biology of Exercise APS Intersociety Meeting, *The Physiologist.* 47(4): 2004.
67. Gavin TP, Croley AN, Zwetsloot KA, Westerkamp LM, Ryan NA, Pendergast AM, Pofahl WE, **R.C. Hickner**. Skeletal muscle VEGF expression is lower in aged women. *FASEB J* 18 (4): A344-A344 Suppl. S MAR 23 2004.
68. Westerkamp CM, Fick CA, **Hickner RC**, Hedberg EM, Gordon SE. Satellite cell proliferation with skeletal muscle overload and nitric oxide synthase (NOS) inhibition. *FASEB J.* 18 (4): A361-A361 Suppl. S MAR 23 2004.
69. Benjamin RK, Hochberg FH, Fox E, Bungay PM, Elmquist WF, Stewart CF, Gallo JM, Collins JM, Pelletier RP, de Groot JF, **Hickner RC**, Cavus I, Grossman SA, Colvin OM. Review of microdialysis in brain tumors, from concept to application: First annual Carolyn Frye-Halloran Symposium (vol. pg 65, 2004. *NEURO-ONCOLOGY* 6 (2): 172-172 APR 2004.
70. Ruster, R.S., J.A. Carrithers, **R.C. Hickner**, T.P. Gavin. Effect of age on skeletal muscle interstitial VEGF protein. Proceedings of the 2004 Integrative Biology of Exercise APS Intersociety Meeting, *The Physiologist.* 47(4): 2004.
71. Carrithers, J.A., C.A. Evans, R.M. Kraus, H.M. Carrithers, T.P. Gavin, R.S. Ruster, D.J. Knapp, J.L. Drew, J. Garry, **R.C. Hickner**. Effects of acute aerobic training on nutritive skeletal muscle blood flow with aging. Proceedings of the 2004 Integrative Biology of Exercise APS Intersociety Meeting, *The Physiologist.* 47(4): 2004.
72. **Hickner, R.C.**, C.A. Evans, R.M. Kraus, R.S. Ruster, T.P. Gavin, H.M. Carrithers, D.J. Knapp, R.J. Tanenberg, J.L. Drew, J.A. Carrithers. Effects of L-NMMA administration on exercising nutritive skeletal muscle blood flow before and after 7-days of aerobic training. Proceedings of the 2004 Integrative Biology of Exercise APS Intersociety Meeting, *The Physiologist.* 47(4): 2004.

Abstracts (continued)

73. Carper MJ, J.M. Davis, **R.C. Hickner**, et al. Plasma ghrelin in African American and Caucasian American women in response to a high fat meal. *Diabetes*. 53: A563-A563 Suppl. 2 JUN 2004.
74. Privette JD, R.C. **Hickner RC**, H.A. Barakat. Ketone body metabolism in obese and lean women. *DIABETES* 54: A353-A353 Suppl. 1, 2005.
75. Pender, J.R., H.A. Barakat, K.G. MacDonald, W.H. Chapman, G.L. Dohm, P.S. MacLean, **R.C. Hickner**, and W.J. Pories. Racial variations in fat metabolism may affect the success of diets and bariatric surgery. *American Society of Bariatric Surgery*. San Francisco June 26-July 1, 2005.
76. Casperson, S., E.L. Dillon, **R.C. Hickner**, N. Newberry, K. Lakshman, J.A. Angel, R.J. Urban, A. Sanford, E. Volpi, E. Boersheim and M. Sheffield-Moore. A methodological comparison of nitric oxide-stimulated leg blood flow in healthy elderly. *Proceedings of the Workshop on Investigation of Human Muscle Function in Vivo*. Vanderbilt University, TN, October, 2005.
77. Zwetsloot, K.A., **R.C. Hickner**, R.S. Ruster, J.A. Carrithers, R.M. Kraus, C.A. Evans, D.J. Knapp, J.L. Drew, J.S. McCartney, T.P. Gavin. VEGF mRNA expression in young and aged skeletal muscle with 7 days and 8 weeks of endurance exercise training. *Med. Sci. Sports Exerc.* Vol. 37(5):S389-390, 2005.
78. Kraus, R.M., C.A. Evans, J.A. Carrithers, H.M. Carrithers, R.S. Ruster, D.J. Knapp, J.L. Drew, T.P. Gavin and **R.C. Hickner**. Microvascular exchange response to local norepinephrine administration is increased after 7-days of exercise training in elderly men. *Med. Sci. Sports Exerc.* Vol. 37(5):S62, 2005.
79. Gavin, T.P., N.A. Ryan, K.A. Zwetsloot, L.M. Westerkamp, W.E. Pofahl, and, **R.C. Hickner**. Skeletal muscle VEGF mRNA is lower in aged men. *Med. Sci. Sports Exerc.* Vol. 37(5):S155, 2005.
80. Ruster, R.S., **R.C. Hickner**, J.A. Carrithers, R.M. Kraus, C.A. Evans, D.J. Knapp, J.L. Drew, J.S. McCartney, and T.P. Gavin. Effect of 7 days of exercise training on interstitial VEGF protein in young and aged skeletal muscle. *Med. Sci. Sports Exerc.* Vol. 37(5):S155, 2005.
81. Doty, C.M., C.M. Westerkamp, J.K. LeMoine, R.C. Hickner, D.M. Thomson, L.C. Katwa, and S. E. Gordon. Acute resistance exercise does not increased skeletal muscle fibroblast content in young, untrained men. *Med. Sci. Sports Exerc.* Vol. 37(5):S242, 2005.
82. George, S.C., **R.C. Hickner**, T.P. Gavin, C.M. Westerkamp, L.M. Westerkamp, S.E. Gordon. Effect of L-NAME administration on angiogenesis in overloaded, hypertrophying rat skeletal muscle. *Med. Sci. Sports Exerc. Suppl.* Vol. 37(5) S390, 2005.
83. Zwetsloot, K.A., **R.C. Hickner**, R.S. Ruster, J.A. Carrithers, R.M. Kraus, C.A. Evans, D.J. Knapp, J.L. Drew, J.S. McCartney, T.P. Gavin, VEGF mRNA expression in young and aged skeletal muscle with 7 days and 8 weeks of endurance exercise training. *Proceedings of the National American College of Sports Medicine Conference. Med. Sci. Sports Exerc. Suppl.* Vol. 37(5) S389, 2005.
84. McCartney, J.S., C. Tanner, **R.C. Hickner**, M.R. McCammon. Coronary risk status of police officers compared to age-matched males. *Proceedings of the National American College of Sports Medicine Conference Med. Sci. Sports Exerc. Suppl.* Vol. 38(5) S246, 2006.
85. Jones, T.E., M.R. McCammon, J. Basilio, P. Brophy, and **R.C. Hickner**. Alterations in CVD risk factors and satiety hormones in overweight adolescents with vigorous exercise training. *Proceedings of the National American College of Sports Medicine Conference Med. Sci. Sports Exerc. Suppl.* Vol. 38(5) S246, 2006.
86. **Hickner, R.C.**, G. Kemeny, P.D. Clark, V.B. Galvin, K.L. McIver, C.A. Evans, H.A. Barakat, M. Carper, and J.P. Garry. Nitric oxide suppression of in-vivo lipolysis is greater in obese than lean women. *FASEB J.* 20(5):A832, Part 2, 2006.
87. Focht, B.C., D.J. Knapp, **R.C. Hickner**, T. Gavin, and T.D. Raedeke. Feeling state and self-efficacy responses to acute exercise in sedentary young and older adults. *Society of Behavioral Medicine Annual Meeting*, 2006.

Abstracts (continued)

88. Sweazey, M.A., File, C.J., **R.C. Hickner**, Neuffer, P.D., Cortright, R.N. Effects of exercise on skeletal muscle expression of genes regulating substrate oxidation in obese African-American and Caucasian women. *Diabetes* 55: A241-A241 Suppl. 1, JUN 2006.
89. Gavin, T. P., J.L. Drew, C.J. Kubik, W.E. Pofahl, and **R.C. Hickner**. The angiogenic response to aerobic exercise training is similar in aged compared to young men. ACSM Conference on Integrative Physiology of Exercise, 2006.
90. Kraus, R.M., R.A. Carrithers, T.P. Gavin, R.S. Ruster, D.J. Knapp, C.A. Evans, J.P. Garry and **R.C. Hickner**. Resting microvascular exchange is increased after 7 days of exercise training in young and older men and women. ACSM Conference on Integrative Physiology of Exercise, September, 2006.
91. Emily A. Johnson, Myung Dong Choi, Raymond M. Kraus, Michael J. Ormsbee, and **Robert C. Hickner**. The Effects of Nitric Oxide on Lipolysis in Obese Women before and After 10 Days of Exercise Training. ACSM conference on Integrative Physiology of Exercise. Poster Session 3:41, September 2006.
92. Casperson, S., E. Dillon, **R.C. Hickner**, N. Newberry, K. Lakshman, M. Mujeeb, J. Angel, R. Urban, D. Chinkes, and M. Sheffield-Moore. Exercise-Stimulated Blood Flow in Older and Younger Men: A Methodological Comparison. *FASEB J.* 21: 904.1. 2007.
93. Choi, M.D., E.A. Johnson, R.M. Kraus, M.J. Ormsbee, and **R.C. Hickner**. Response of Subcutaneous Adipose Tissue Nitric Oxide Synthases to 10 days of Exercise Training. *FASEB J.* 21: 615.23, 2007.
94. Barber-Heidal K.D., K.S. Broughton, B.M. Malinauskas, **R.C. Hickner**, and M.W. Duffrin. Co-morbidities associated with obesity and the role of omega-3 fatty acid intake in free-living healthy weight, overweight and obese college students. *FASEB J.* 21: 538.2, 2007.
95. Gavin, T. P., J.L. Drew, C.J. Kubik, W.E. Pofahl, and **R.C. Hickner**. Acute resistance exercise increases skeletal muscle angiogenic growth factor expression. *FASEB J.* 21: 921.5, 2007.
96. Johnson, E.A, M.J. Ormsbee, M.D. Choi, **R.C. Hickner**. Lipolytic Protein Content in Lean, Obese, and Exercise Trained Men. *FASEB J.* 2008.
97. DuBose, K.D., **Hickner, R.C.**, FACSM, Brophy, P., Westerkamp, L., Finkelstein, J. & M.T. Mahar The Relationship Between Physical Activity Levels & The Metabolic Syndrome Score. *Med Sci Sports Exerc., Suppl.* Vol. 40(5), 2008.
98. DuBose, K.D., **Hickner, R.C.**, FACSM, Brophy, Geyer G., Westerkamp, L., Finkelstein, L. & M.T. Mahar. The Relationship Between Physical Activity Levels & The Metabolic Syndrome In Young Girls. *NASPEM J.*, 2008.
99. MD Choi, JA Carrithers, TP Gavin, RM Kraus, CA Evans, RS Ruster, DJ Knapp, JS McCartney, JP Garry, and **RC Hickner**. Response of prostaglandins and nutritive blood flow to 8 weeks of exercise training in aged human skeletal muscle
100. Barber-Heidal K.D., K.S. Broughton, B.M. Malinauskas, **R.C. Hickner**, and M.W. Duffrin. Relationships among omega-3 fatty acids, anthropometrics and biochemical markers in college students. *FASEB J.*, 2008.
101. Woodlief, T.L., Sweazey, M.A., File, C., **Hickner, R.C.**, Neuffer, P.D., and R.N. Cortright. Effects of exercise on expression of skeletal muscle acyl-CoA synthetase isoform gene expression in obese African-American and Caucasian women. *FASEB journal* 958.8., 2008.
102. Ormsbee, M.J., M.D. Choi, J.K. Medlin, G.G. Geyer, L.H. Trantham, G.S. Dubis and **R.C. Hickner**. Regulation of Fat Metabolism During Resistance Exercise in Sedentary Lean and Obese Men. *Obesity Society*, Oct.3-7th, 2008.

Abstracts (continued)

103. **Hickner, R.C.** P. Brophy, G. Geyer, T. Summers, J. Medlin, G. Dubis. Non-invasive Prediction of Aerobic Capacity in Prepubescent Obese and Lean Children 2nd Congress of the European Academy of Paediatrics. Archives of Disease in Childhood. 93(Suppl. 11): 2008.
104. Kane D.A., J.H. Cox, **R.C. Hickner**, P.D. Neuffer, R.N. Cortright. Ten Days of Exercise Training Increases Fatty Acid-Supported Basal Respiration and Reduces Mitochondrial H₂O₂ Emission in Human Skeletal Muscle. DIABETES 58:A289-A289 (Suppl. 1), JUN 2009
105. Bikman BT, DH Zheng, MA Reed, **R.C. Hickner** et al. Lipid-Induced Insulin Resistance Is Prevented in Lean and Obese Myotubes by AICAR Treatment. DIABETES (58): A347-A348 (Suppl. 1), JUN 2009.
106. Zheng DH, D.L. Kane, T.L. Woodlief, J.H. Cox, **R. C. Hickner**, G.L. Dohm, and R. N. Cortright. Medium Chain Fatty Acid Oxidation Is Carnitine-Dependent and Is Inhibited by Malonyl-CoA in Human Skeletal Muscle DIABETES, (58): A363-A363 (Suppl. 1). JUN 2009.
107. Kane D.A., J.H.Cox, **R.C. Hickner**, R.N. Cortright, P.D. Neuffer. Fractional Mitochondrial H₂O₂ Emission Is Greater during Glycerophosphate-Versus Succinate-Supported Respiration in Human Skeletal Muscle. DIABETES, (58): A391-A391. (Suppl. 1). JUN 2009.
108. Brophy,P., B.R. Schmitt, K. Heidal, L. Westerkamp, and **R.C. Hickner**. Substrate use in obese and lean prepubescent children. Med Sci Sports Exerc., *Suppl.* Vol. 41(5), 2009.
109. Effects of Training Status and Body Composition on Lipolysis and Lipolytic Proteins. E.A. Johnson, M. J. Ormsbee and **R.C. Hickner**. Proceedings of the Obesity Conference. Washington, DC., October, 2009.
110. Schmitt B.R., K.B. Heidal, T.A. Summers, C.J. Tanner, and **R.C. Hickner** Changes in Macronutrient Intake in Prepubescent Children during a 16-week Physical Activity Intervention. Proceedings of the National American College of Sports Medicine Conference *Med. Sci. Sports Exerc. Suppl.*42(5):S577, 2010.
111. D.K. Raymer, M.R. McCammon, J. McCartney, S.King, J. Shoffner, H.J. Strickland, C.J. Tanner and **R.C. Hickner**. A Comparison of Percent Body Fat Determined Using Skinfold and DXA Methods in Healthy Men and Women Proceedings of the National American College of Sports Medicine Conference *Med. Sci. Sports Exerc. Suppl.*42(5):S442, 2010.
112. Gavin, K.M., G.H. Geyer, J.D. LaFavor, **R.C. Hickner**, and M.D. Choi. Adenosine Suppression of *in-vivo* Lipolysis in Obese Premenopausal Women. Proceedings of the National American College of Sports Medicine Conference. *Med. Sci. Sports Exerc. Suppl.*42(5):S5399, 2010.
113. Durham, W., S. Casperson, E.L. Dillon, D. Paddon-Jones, **R.C. Hickner**, Melinda Sheffield-Moore. Response Of Leg Protein Metabolism To Acute Endurance Exercise In Younger And Older Healthy Men. *Med. Sci. Sports Exerc.* Suppl. 42(10):55, 2010.
114. Gordon, S.E., I.H. Tharrington, J.L. Macesich, B.M. Harper, **R.C. Hickner**, K. Heidal, P.A. Farrell, W.E. Pofahl, T.P. Gavin. Muscle Glycogen Content and the FOXO3A Response to Resistance Exercise in Young and Old Subjects. *Med. Sci. Sports Exerc.* 42 (10), 15, 2010.
115. Kwak, H.B., T.L. Woodlief, T.D. Green, J.H. Cox, **R.C. Hickner**, P.D. Neuffer, and R.N. Cortright. Overexpression of Long Chain Acyl-CoA Synthetase 5 Increases Fatty Acid Oxidation, While Altering Insulin Signaling in Primary Human Skeletal Myotubes. *DIABETES* 59, A670-A670, 2010.
116. Pihland, M., **R.C. Hickner** and K. Heidal. Omega-3 fatty acid consumption of lean and obese children ages 8 to 11 living near a coastal community. *FASEB J.* 2010.
117. Kwak H.B., T.L. Woodlief, T. Green, J.H. Cox, **R.C. Hickner**, P.D. Neuffer and R.N. Cortright. Overexpression of long chain acyl-CoA synthetase 5 increases fatty acid oxidation, while altering insulin signaling in primary human skeletal myotubes. *Diabetes* 59: A670, 2010.

Abstracts (continued)

118. **Hickner, R.C.**, G. Geyer, C. Squibb, J. Mazzawi and C. Tanner. Lipolysis and Obesity in Children: Continuous Nitric Oxide Suppression of Lipolysis in Ambulatory Children. Proceedings of the Experimental Biology Conference, 2011.
119. E Sauers, W Knox, Z Zabarsky, R Kristeller, **R Hickner**. Perilipin and Stimulated Lipolysis are Higher in Endurance Trained than Sedentary Lean Men. *MSSE*, 43(5): 811, 2011.
120. Gavin, K.W., W.S. Gozansky, K. Ohkawara, A. Bergouignan, **R.C. Hickner**, and E.L. Melanson. Whole Body Fat Oxidation is not Tightly Coupled to Subcutaneous Abdominal Adipose Lipolytic Rate over 24 Hours. *MSSE* 43 (5), 809, 2011.
121. Casperson, S., W. Durham, E. Dillon, **R. Hickner**, D. Paddon-Jones, M. Sheffield-Moore. Substrate Exchange during Aerobic Exercise and Provision of Amino Acids in Older and Younger Men. *MSSE*. 43 (5), 296, 2011.
122. La Favor, J.D., C.R. Frasier, D.A Brown, **R.C. Hickner**, and C.J.Wingard. Ten Days of Aerobic Exercise Enhances Aortic Endothelium Dependent Relaxation through Depressed NADPH-oxidase Activity. *MSSE*, 43 (5), 734, 2011.
123. Pierce, J.R., R.M. Kraus, J.A. Houmard, W.E. Kraus, C.J. Tanner, M.D. Choi, and **R.C. Hickner**. Multiplex Profiling Demonstrates That Circulating Adipokines Are Related To Insulin Sensitivity But Not BMI. 43 (5), 482, 2011.
124. Heidal, K., **R. Hickner**, M. Piland, K. Clodfelter, B. Schmitt, P. Brophy, C. Tanner, C. Squibb, G. Geyer Omega-3 fatty acid consumption in children ages 8 to 11 in the Southeast. *The FASEB Journal*. 25, 781.16, 2011.
125. Rengfei, S.H.I., J.L. Macesich, B.M. Harper, I.H Tharrington, T.P. Gavin, K. Heidal, **R.C. Hickner**, P.A. Farrell, W.E. Pofahl, and S.E. Gordon. Muscle Glycogen Content and the eEF2 Response to Resistance Exercise in Young and Old Subjects. *The FASEB Journal* 25. Lb548, 2011
126. H.B. Kwak, T.L Woodlief, T.D. Green, J.H. Cox, **R.C. Hickner**, PD. Neufer, R.N. Cortright Overexpression of long chain acyl-CoA synthetase 1 increases fatty acid oxidation in primary human skeletal myotubes. *The FASEB Journal* 25 (1_MeetingAbstracts), 1104.9, 2011.
127. **Hickner, R.C.**, G. Geyer, R.C. Squibb, J. Mazzawi, and C. Tanner. Continuous Nitric Oxide Suppression of Lipolysis in Ambulatory Children *The FASEB Journal* 25, 1062.11, 2011.
128. **Hickner, R.C.** Applications of Microdialysis in Studies of Exercise and Health. Proceedings of the Korean Exercise Physiology Conference. August, 2011.
129. J.R. Pierce, G. Geyer, C. Squibb, **R.C. Hickner**. Lipolytic and glucoregulatory responses to feeding and exercise in obese and lean children. Proceedings of the Southeast American College of Sports Medicine, February, 2012.
130. Raymer, D., K.M. Gavin, M.D. Choi, and **R.C. Hickner**. Regulation of lipolysis by beta-adrenergic activation and exercise in obese African American and Caucasian women. Proceedings of the Southeast American College of Sports Medicine, February, 2012.
131. Gavin, K. and R.C. Hickner. Estradiol and regional lipolysis in premenopausal women. Proceedings of the Southeast American College of Sports Medicine, February, 2012.
132. La Favor, J.D., E.J. Anderson, M.P. Chaaban, **R.C. Hickner**, and C.J. Wingard. Time Course of Development of Erectile Dysfunction and Coronary Artery Endothelial Dysfunction in Response to a Western Diet: Influence of Endothelial Nitric Oxide Synthase Uncoupling. *The FASEB Journal* 26 (1_MeetingAbstracts), 866.13.
133. Anderson, E.J., K.H Fisher-Wellman, T. Mattox, L.A Katunga, K. Thayne, J. La Favor, R.C. Hickner, C.J. Wingard. Differential Adaptations to High-calorie, Western-pattern Diet and Exercise Training in Redox Status and Mitochondria of Heart and Skeletal Muscle. *The FASEB Journal* 26 (1_MeetingAbstracts), lb749, 2012

Abstracts (continued)

134. Henes, S. **R. Hickner**, D. Cummings, J. Houmard, K. Kolasa, S. Lazorick, and D. Collier. Measured vs. Estimated Resting Energy Expenditure in a Clinic Population of Obese Youth. Proceedings of the Experimental Biology Conference, 2012.
135. Cooper, E. E., K.M. Gavin, and **R.C. Hickner**. Aromatase and 17BHS12 Protein Expression in Gluteal and Abdominal Subcutaneous Adipose Tissue in Premenopausal Caucasian and African American Women. *SEACSM*. 2013.
136. Heidal, K., T. Goad, J. Cox, **R.C. Hickner**, and R.N. Cortright. Omega-3 Fatty Acid Intake Patterns in Obese Southern Women. Proceedings of the Experimental Biology Conference, 2013.
137. La Favor, J.D., E.J. Anderson, **R.C. Hickner**. A novel method to detect in vivo oxidant production reveals microvascular endothelial dysfunction linked to NADPH oxidase in obese human skeletal muscle. *The FASEB Journal* 27 (1_MeetingAbstracts), 1202.13, 2013.
138. La Favor, J.D., E.J. Anderson, J.T. Dawkins, **R.C. Hickner**, and C.J. Wingard. Exercise prevents Western-diet associated erectile and coronary artery endothelial dysfunction mediated by NADPH oxidase. *The FASEB Journal* 27 (1_MeetingAbstracts), 712.18, 2013.
139. Pierce, J.R., E.E. Cooper, and **R.C. Hickner**. IL-15 as a Myokine in Human Obesity: A Pilot Study. American College of Sports Medicine, Indianapolis, IN., June, 2013.
140. **Hickner, R.C.**, K. DuBose, P. Brophy, BR Schmitt, J. Mazzawi, J. Cox, and C. Tanner. Effects of a 16-week Physical Activity Program on Aerobic Capacity and Body Composition in African American and Caucasian Prepubescent Children. American College of Sports Medicine, Indianapolis, IN., June, 2013.
141. DuBose, K.D., G. Geyer, C. Squibb, P. Brophy, **R.C. Hickner**. The Effect of a 16-week Physical Activity Intervention on Physical Activity Levels in Children. American College of Sports Medicine, Indianapolis, IN., June, 2013.
142. Perry, C., P. Brophy, B. Cathey, C.T. Lin, D. Kane, C. Smith, D. Lark, C. Kane, T. Gavin, **R. Hickner**, D. Neuffer. Evidence that Insulin Sensitivity Is Regulated Acutely through Redox Biology in Response to a Single High Fat Meal in Humans. *DIABETES* 62, A500-A500, 2013.
143. Huang, T.Y., D. Zheng, B. Muller-Borer, M. Collins, R.C. Noland, K. Funai, **R.C. Hickner**, and R.N. Cortright. Peroxisomal Biogenesis Occurs in Response to Obesity and to a High Lipid Environment in Human Skeletal Muscle. *The FASEB Journal* 28 (1 Supplement), 1159.5. 2014.
144. Jones, T.E., M.M. Pearce, M.A. Reed, C.J. Tanner, J.A Houmard, R.C. Hickner, W.J. Pories, G.L. Dohm. Lactate/pyruvate production and/or utilization are altered by gastric bypass. *Diabetes*, 63: A524, 2014.
145. Ryan, T.E., C-T Lin, P. Brophy, **R.C. Hickner**, K.K. McCully, and P.D. Neuffer. In vivo measurements of mitochondrial respiratory capacity in skeletal muscle. *Metabolic Origins of Disease*, Orlando, FL, July, 2014.
146. Yan, H., K. Myers, G.S. Dubis, J. Pierce, C. Tanner, **R. Hickner**. Responses of lipolysis to a meal after physical activity in lean and obese children. *The FASEB Journal* 29 (1 Supplement), 989.1, 2015.
147. Huang, T.Y., D. Zheng, S. Park, J.A. Houmard, **R.C. Hickner**, and R.N. Cortright. Intramyocellular triacylglycerol is associated with peroxisomal biogenesis in skeletal muscle from lean and obese humans. *The FASEB Journal*, 29 (1 Supplement), LB708, 2015.
148. White, J., G. Dubis, and R. Hickner. The effect of interval training on body composition and visceral adipose tissue. *Med. Sci. Sports and Exerc.* 48(5 Suppl. 1), 542, 2016.
149. Kinsey, A.W., S.R. Cappadona, L.B. Pantoni, R.C. Hickner, M.J. Ormsbee. The influence of nighttime protein intake on overnight lipolysis and next morning fat oxidation. *Med. Sci. Sports and Exerc.* 48(5 Suppl. 1), 4, 2016.

Abstracts (continued)

150. Yan, H., G.S. Dubis, C.J. Tanner, R.C. Hickner. The effect of 16-week aerobic exercise training on circulating adropin in children. Med. Sci. Sports and Exerc. 48(5 Suppl. 1), 920, 2016.

151. TY Huang, D Zheng, JA Houmard, JJ Brault, RC Hickner, RN Cortright. Overexpression of PGC-1alpha increases peroxisomal biogenesis and mitochondrial lipid oxidation in human primary myotubes. The FASEB Journal. 30 (1 supplement), 1246.1-1246.3.

COURSES TAUGHT

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-present)
 - 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-present)
 - EXSS 7335 Graduate Seminar in EXSS
 - EXSS 8330 Graduate research rotation
 - EXSS 8333 Graduate advanced topics
 - EXSS 9000 Dissertation
- Summer Study Abroad Course Director:
- S. Africa (undergraduate), 2014 (2 weeks), 2015 (2 weeks)
 - Ecuador (undergraduate/Graduate), 2012 (4 weeks), 2013 (4 weeks), 2015 (3 weeks)
 - Sweden (PhD level), 2009 (2 weeks), 2014 (2 weeks)
 - Australia (PhD level), 2015 (2 weeks)

Undergraduate:

- EXSS 4805/3805 Undergraduate Physiology of Exercise (Fall or Spring and/or Summer, 1997-present)
- EXSS 4992 Undergraduate Internship (Fall 2000, 2001, 2004-present)
- EXSS 4502 Undergraduate Independent study students (numerous 1998-present)
- Study Abroad in Ecuador. Service-Learning in Bahia, Ecuador. June 28th-July 30th, 2012 and June 27th-July 29th, 2013. S. Africa, July 6th-21st, 2014

High School Summer Ventures and Honors Medicine Program students:

- Chris Jones 2003
- Hannah Shephard 2004
- Brennan Eberle 2004
- Stefanie Martina 2005, Elizabeth Blayney 2006, Osagie Obanor 2006
- (honors students and EXSS 4991 research students also annually 2007-2015)

MASTERS STUDENT COMMITTEES

Primary Mentor

- | | | | |
|---|-----------------|-----------------|-------------------------|
| 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" | | | |

Masters Thesis Primary Mentor (continued)

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			
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			

Graduate Project Mentor:

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 Groose 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

Graduate Thesis Committee member:

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"
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."

Graduate Thesis Committee member (continued)

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."			
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			

Graduate Thesis Committee member (continued)

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|---|------------------|-----------------|------------------------|
| 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 | | | |

DOCTORAL STUDENT COMMITTEES

Primary Mentor

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|---|--------------------|-----------------------|-------------------------|
| 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." | | | |
| 2. Michael Ormsbee | Committee Chair | Doctoral Dissertation | Completed, Summer, 2008 |
| "Metabolic Differences in Fat Metabolism during Acute Resistance Exercise in Lean and Obese Men" | | | |
| 3. Emily Johnson | Committee Chair | Doctoral Dissertation | Completed, Summer, 2010 |
| Exercise Training and Caloric Restriction: Influence on Lipolysis and Associated Proteins | | | |
| 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 | | | |
| 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 | | | |
| 6. Justin LaFavor | Committee Chair | Doctoral Dissertation | Completed Fall, 2012 |
| NADPH oxidase as a mechanistic link between erectile dysfunction, peripheral, and coronary endothelial dysfunction in obesity | | | |
| 7. Joe Pierce | Committee Chair | Doctoral Dissertation | Completed Summer 2014 |
| IL-15 a novel regulator of lipolysis in-vivo in humans? | | | |
| 8. Joseph White | Committee Chair | Doctoral Dissertation | In Progress |

Doctoral committee member

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 Ser³¹² 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 α as a pro-growth kinase in mouse skeletal muscle
14. Erica Bell Committee Member Doctoral Dissertation In Progress

Post-doctoral Fellows

- 1) Michael Carper, Ph.D.. Post-doc. 2003-2004. Currently Research Associate at Washington University School of Medicine, Missouri.
- 2) Jonathan Carrithers, Ph.D. Post-doc. 2003-2004. Currently Clinical Project Scientist at Merck Pharmaceuticals, Minnesota.
- 3) Myung Dong Choi, PhD, Post-doc. 2005-2009. Currently fixed-term Assistant Professor at Syracuse University, New York.
- 4) Huimin Yan: Post-doc. 2014-present

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

- 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-present.
- 5) Bioenergetics and Exercise Science PhD Program Director, 2008-Present
- 6) ECU Center for Health Disparities Co-Director of Research 2010-present
- 7) ECU UMCIRB full member, Fall, 2009-Present
- 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 5th graders (2003), 2nd graders (2000) and 6th 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.