

Katherine Heimburger Ingram, Ph.D.

Postdoctoral Fellow

University of Alabama at Birmingham

School of Public Health

Department of Biostatistics

Section on Statistical Genetics

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EDUCATION

University of Alabama at Birmingham, October 2009 – present

Post-Doctoral Fellow in the Department of Biostatistics, Section on Statistical Genetics, and supported by UAB's Nutrition and Obesity Research Center T32. Current projects: Design issues in obesity clinical trials—a meta-analysis; body fat distribution and insulin resistance studies; and a novel method for assessing body composition. Additional training received in grant writing, writing and reviewing manuscripts, and biostatistics. Mentors: David B. Allison, Olivia T. Affuso

Georgia State University, Atlanta, degree awarded December 2009

Ph.D. Kinesiology; Major concentration: Exercise Physiology; Minor: Nutrition. Research included mechanisms linking obesity and diabetes, specifically intramyocellular lipids and oxidative stress within skeletal muscle tissue; exercise intervention in obesity and diabetes; anthropometric assessment techniques. *Recipient of Gatorade Sport Science Institute student research grant.*

Dissertation: Lipid peroxidation, intramyocellular lipids, and glucose uptake in insulin-resistant and diabetic adults.

Mentors: LJ Brandon, C Ingalls, J Rupp, and M Penumetcha, Georgia State University.
WT Garvey, University of Alabama, Birmingham.

University of Nevada, Las Vegas, Nevada, degree awarded December 1998

Master of Science in Exercise Physiology. Coursework included research methods, muscle and cardiovascular physiology, biochemistry, exercise testing and prescription. Thesis: A comparison of resting metabolic rates among cardiovascularly-trained, resistance-trained, and sedentary men. *Financial grant awarded.* Mentors: LA Golding, J Young, R Tandy

Tulane University, New Orleans, LA, degree awarded May 1993

Bachelor of Science in Sport Management with a minor in Exercise Science.

PROFESSIONAL AFFILIATIONS

Alabama Obesity Initiative, member 2010 - present

American College of Sports Medicine, member 1992- present

American Society for Nutritional Sciences, member 2005 – present

NAASO, The Obesity Society, member 2006 – present

American Diabetes Association, member 2007 – present

American Physiological Society, member 2007 – present

SCHOLASTIC AWARDS/ RECOGNITION

UAB Postdoctoral Research Day, 2nd Place award, February 2011
UAB Office of Postdoctoral Education Career Development Award Recipient, January 2011
Global Obesity Summit “Hot Topics” and Travel Award Recipient, November 2010
National Scholars Honor Society, 2008 - 2009
Golden Key International Honour Society, 2007-2009
Student Research Award, Gatorade Sport Science Institute, 2007
Who's Who in America's Colleges and Universities Award, 2008, 2009, 1992, 1993
National Dean's List, 1996
Dean's List, Tulane University, New Orleans, Louisiana 1992 - 1993
Dean's List, Trinity University, San Antonio, Texas, 1990-1991

PUBLICATIONS AND PUBLISHED ABSTRACTS

- KH Ingram, R Makowsky, G Hunter, B Gower. Change in insulin sensitivity with weight gain is determined by fatness better than by fitness. *Med Sci Sports Exerc* (abstract in press: 43 (5 Suppl), 2011)
- KH Ingram, C Lara-Castro, BA Gower, R Makowsky, DB Allison, BR Newcomer, AJ Munoz, TM Beasley, J Clunk Lawrence, R Lopez-Ben, D Rigsby, WT Garvey. Intramyocellular lipid, insulin resistance, and adiposity: Differential relationships in European Americans and African Americans. *Obesity* (manuscript in press).
- KH Ingram, LJ Brandon, CP Ingalls, JC Rupp, M Penumetcha, WT Garvey. Skeletal muscle HNE is related to insulin resistance in sedentary individuals. *FASEB J.*; 24 (Suppl), 2010.
- Ingram, Katherine Heimburger. Skeletal muscle lipid peroxidation and its relationships with intramyocellular lipids and insulin sensitivity in obese subjects. *Kinesiology Dissertations*. Paper 6, 2009. http://digitalarchive.gsu.edu/kin_health_diss/6
- K Heimburger, C Lara-Castro, B Newcomer, A Shiflett, D Rigsby, WT Garvey. Racial differences in intramyocellular lipids and their relationships to metabolic traits. *Obesity*; 15 (9 Suppl), 2007.
- KD Heimburger and LJ Brandon. Is BMI a good predictor of fatness? *Med Sci Sports Exerc*; 39 (5 Suppl), 2007
- LJ Brandon and K Heimburger. Comparison of the relationship of BMI, percent fat and skinfolds with blood pressure. *Med Sci Sports Exerc*; 39 (5 Suppl) S374-S375, 2007.
- JC Rupp, MS Green, BT Corona, KD Heimburger, PR Pullen, AS Everest. Physiological predictors of 10 kilometer running performance. *Med Sci Sports Exerc*; 39 (5 Suppl), 2007.

ACADEMIC PRESENTATIONS

- KH Ingram. Skeletal muscle HNE is elevated in type 2 diabetic patients. UAB Postdoctoral Research Day oral presentation. February 2011.
- K Heimburger Ingram, R Makowsky, G Hunter, B Gower. Change in insulin sensitivity with weight gain is determined by fatness better than by fitness. Selected for “Hot Topics” oral presentation, Global Obesity Summit, November 2010. *Recipient of Travel Award.*
- K Heimburger Ingram, LJ Brandon, CP Ingalls, M Penumetcha, J Rupp, WT Garvey. Skeletal muscle lipid peroxidation and its relationship with intramyocellular lipids and insulin sensitivity. Poster presentation at Experimental Biology, May 2010.
- K Heimburger, C Lara-Castro, B Newcomer, A Shiflett, D Rigsby, WT Garvey. Racial differences in intramyocellular lipids and their relationships to metabolic traits. Poster presentation at 2007 annual meeting Obesity Society.
- KD Heimburger and LJ Brandon. Is BMI a good predictor of fatness? Poster presentation at 2007 National ACSM annual meeting.
- LJ Brandon and K Heimburger. Comparison of the relationship of BMI, percent fat and skinfolds with blood pressure. Poster presentation at 2007 National ACSM annual meeting.
- JC Rupp, MS Green, BT Corona, KD Heimburger, PR Pullen, AS Everest. Physiological predictors of 10 kilometer running performance. Poster presentation at 2007 National ACSM annual meeting.
- K Heimburger, K Manning, J Owen, and LJ Brandon. Comparison of body composition estimated from DXA and skinfolds with BMI. Oral presentation at 2007 ACSM annual meeting, Southeast chapter.
- K Heimburger and V Scales. A ten-week team challenge improves fitness scores in a corporate setting. Poster presentation at 2006 ACSM annual meeting, Southeast chapter.

PROJECTS UNDERWAY

- K Heimburger Ingram, D Moellering, H Hill, C Lara-Castro, B Newcomer, C Ingalls, M Penumetcha, J Rupp, LJ Brandon, WT Garvey. Skeletal muscle lipid peroxidation is elevated in Type 2 diabetic patients. *Manuscript in preparation.*
- K Heimburger Ingram, PB Higgins, W Granger, J Alvarez, J Fernandez, BA Gower. Meal-derived indices of insulin sensitivity and secretion are useful for assessing metabolic risk in children. *Manuscript in preparation.*
- K Heimburger Ingram, R Makowsky, G Hunter, B Gower. Relationships among IAAT, SAAT, VO₂max, insulin sensitivity, and ethnicity in obesity-prone women after weight loss and two years of regain. *In preparation.*
- K Heimburger Ingram, K Kaiser, O Thomas Affuso, T Cox, H Robertson, DB Allison. Design issues in obesity randomized controlled trials: A meta-analysis. *In preparation, collecting and analyzing data.*

PROFESSIONAL EXPERIENCE

INSTRUCTOR

Samford University, Birmingham, Alabama

Department of Exercise Science and Sports Medicine, Fall semester 2008

Taught “Concepts of Health and Wellness”

TEACHING/ RESEARCH ASSISTANT

Georgia State University, Department of Kinesiology and Health, June 2004 – October 2009

- Instructor for undergraduate labs in the Department of Kinesiology and Health
- Guest lecturer for Exercise Physiology courses in Department of Kinesiology and Health
- Assistant for metabolic, performance, and anthropometric research

Department of Kinesiology and Health, University of Nevada- Las Vegas, August 1994– May 1996

- Instructor for undergraduate classes in the Department of Kinesiology
- Assistant for cross-sectional and longitudinal research on fitness and aging

WELLNESS/ FITNESS COORDINATOR

Atlanta Federal Fitness Center, August 2000 – September 2004

- Recipient of Excellent Achievement Award for outstanding member support
- Supervised, directed, and mentored staff and interns
- Educated and counseled members about individual lifestyle and fitness
- Provided educational lectures on weight loss, ergonomics, smoking cessation, stress management, basic nutrition, exercise program design, and more to members
- Designed incentive programs to enhance motivation and utilization of the fitness center
- Prepared monthly budget reports, staff schedules, and newsletters
- Developed marketing strategies to increase membership

EXERCISE PHYSIOLOGIST

Canyon Ranch Spa Club, Las Vegas, Nevada, May 1999 – August 2000

- Provided individualized program design and lifestyle counseling for clientele
- Designed and co-authored Canyon Ranch brochures and fitness evaluation programs
- Created and administered fitness assessment batteries for Canyon Ranch clientele
- Trained and mentored fitness staff in evaluating exercise needs of clientele
- Provided daily lectures on wellness topics for Canyon Ranch guests and employees
- Provided individual and group personal training for Canyon Ranch clientele

EXERCISE PHYSIOLOGIST

Health and Wellness Center, Nellis Air Force Base, July 1997 – August 2000

- Provided counseling, training, and exercise prescriptions for healthy and diseased individuals
- Assessed fitness status of Air Force personnel, dependents, and retirees
- Provided wellness lectures on fitness, weight-loss, and nutrition for Air Force personnel

COMMUNITY EDUCATION

LECTURER

Emory University, Evening at Emory Continuing Education Courses, Atlanta, Georgia
“Designing the Best Exercise Program” one-day course, 2002
“Maximizing Your Metabolism” one-day course, 2003

GROUP EXERCISE LEADER

YMCA Mountain Brook, Birmingham, Alabama, 2008 – 2009
Health and Wellness Center, Nellis Air Force Base, Nevada, 1998–2000
Launched and led “PACE: People with Arthritis Can Exercise” program
Canyon Ranch Spa Club, Las Vegas, Nevada, 1999 – 2000
The Health Connection, Columbia, Missouri, 1993 – 1994
Led fitness classes for individuals with arthritis and osteoporosis
Boone Hospital Cardiac Rehabilitation Center, Columbia, Missouri, summers 1990–1994
Led fitness classes for cardiac rehab patients

COMMUNITY INVOLVEMENT

Intown Community Church, Atlanta, Georgia, International Missions, Summer 2006
Shelter for battered women in Cuzco, Peru
Junior League of Atlanta, Georgia, Public Affairs Committee, 2001-2004
State legislation concerning the welfare of women and children in Georgia
Habitat for Humanity, Atlanta Chapter, Summer 2001
Housing for needy families in a low-income area in Atlanta
American Heart Association, Green Valley / Henderson Division, 1994-1997
Secretary/ Treasurer, Board of Directors
Community educational events and fundraisers
Camp Hickory Hill, Columbia, Missouri, Summer 1994
Summer camp for educating children with diabetes, Volunteer

WELLNESS/ FITNESS TRAINING AND CERTIFICATIONS

American College of Sports Medicine, Health / Fitness Instructor, 1992
American Council on Exercise, Group Exercise Instructor, 1990
CPR, AED, and Emergency Care, American Heart Association, 1990
Indoor Cycling: Star Trac Precision Cycling, May 2001; Cycle Reebok, 1998
Arthritis Foundation, People with Arthritis Can Exercise (PACE), 1998
Perinatal Exercise, Moms in Motion, Sara’s City Workout, in progress
Pilates Matwork Fundamentals, Sara’s City Workout, 2001
Yoga, YogaFit, 2000

REFERENCES AVAILABLE UPON REQUEST