

# Molly S. Bray, PhD

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## Education

BS in Kinesiology, 1989, University of Houston

MEd in Exercise Physiology, 1991, University of Houston, "Caltrac Validity for Estimating Energy Expenditure with Children," Advisor: Dr. James Morrow, Jr.

PhD in Human and Molecular Genetics, 1998, University of Texas Graduate School of Biomedical Sciences, "Candidate Genes for Obesity in Mexican Americans from Starr County, Texas," Advisor: Dr. Craig Hanis

Postdoctoral Fellow, 1998-2000, University of Texas Institute of Molecular Medicine, 1998-1999, Advisor: Dr. Eric Boerwinkle

## Academic Appointments

1989-1993 Editorial Assistant, *Research Quarterly for Exercise and Sport*, University of Houston, Houston, TX

1990-1993 Teaching Fellow, University of Houston, Houston, TX

1993-1998 Graduate Research Assistant, Univ of Texas Grad School of Biomed Sci, Houston, TX

1993-1994 Instructor, Rice University, Houston, TX

1998-1999 Postdoctoral Fellow, Institute of Molecular Medicine, Univ of Tex-Houston HSC, Houston, TX

1999-2000 Research Scientist, Institute of Molecular Medicine, Univ of Tex-Houston HSC, Houston, TX

2000-2004 Assistant Professor, School of Public Health, Univ of Texas-Houston HSC, Houston, TX

2001-2005 Adjunct Professor, U.T. Grad School of Biomed Sci, Univ of Tex-Houston HSC, Houston, TX

2001-2013 Adjunct Professor, University of Houston, Houston, TX

2004-2009 Associate Professor, Baylor College of Medicine, Houston, TX

2009-2013 Professor, University of Alabama at Birmingham, Birmingham, AL

2009-2013 Director, Heflin Center for Genomic Science Genomics Core Laboratory, University of Alabama at Birmingham, Birmingham, AL

2013-2016 Adjunct Professor, University of Alabama at Birmingham, Birmingham, AL

2013-present Professor and Susan T. Jastrow Human Ecology Chair for Excellence in Nutritional Sciences, University of Texas at Austin, Austin, TX

2014-present Chair, Department of Nutritional Sciences, University of Texas at Austin, Austin, TX

## Honors or Awards

Schissler Foundation Fellowship - September 1996 to August 1997

Graduate Achievement Award - Department of Health and Human Performance, University of Houston - 1992

## Research Support

### Active

R01DK119836 (Bray) 9/1/19-11/30/24  
NIH/NIDDK

“Using Metabolomics to Define the Behavioral Phenomics of Energy Balance and Exercise Response”

This proposal is designed to identify the metabolic factors that influence nutrient intake and energy balance in a cohort of young adults undergoing aerobic exercise training.

### Pending

R21 ES034193 (Bray) 2/1/24-3/31/26  
NIH/NIDDK

“The Role of Timed Exercise in the Transcriptional Regulation of the Circadian Clock”

This proposal is designed to identify the factors that influence metabolism and energy balance, including absorption and microbial abundance in an animal model of timed macronutrient intake.

### Completed

R01DK062148-07 (Bray) 6/1/10-5/31/16  
NIH/NIDDK

“Training Interventions and Genetics of Exercise Response”

This study is designed to investigate potential genetic factors that influence an individual’s response to a 20-week aerobic exercise intervention.

Federal IPA (Bray) 5/15/12-5/14/16  
NIH/NCI

“Intergovernmental Personnel Act”

Under this contract, Dr. Bray provides expertise in the areas of obesity, metabolism, genomics, gene-environmental interaction, and nutrition in order to assist in formulating initiatives for the NCI in these areas.

R21DK104985 (Bray) 10/01/2104 – 9/30/2016  
NIH/NIDDK

This grant will examine the role of epigenetic marks in determining exercise adherence and exercise response outcomes.

UM1DK072493 (Inge) 4/01/05-03/31/13  
NIH/NIDDK

“Teen Longitudinal Assessment of Bariatric Surgery (Teen LABS)”

P30CA013148 (Bray-Microarray Core) 4/01/11-3/31/2013  
NIH/NCI

“Comprehensive Cancer Center Core Support Grant”

P30DK056336 (Bray-Genomics Core) 6/01/2000-5/31/2013  
NIH/NIDDK

“UAB Nutrition Obesity Research Center”

R01HL074259-08 (Young) 4/1/08-3/31/13

NIH/NHLBI  
 "Role of the Molecular Circadian Clock within the Heart"

6250-51000-046 (M. Bray) 10/1/05-9/30/09  
 USDA/ARS  
 "Childhood Obesity: Regulation of Energy Balance and Body Composition"

R01 (P. Bray, no relation) 4/1/07-3/31/12  
 NIH/NHLBI  
 "Mapping loci for platelet reactivity"

R01EY018571-01 (Chen) 12/01/07-11/30/11  
 NIH-NIE  
 "Genetics of Early Onset Retinal Diseases"

R01DK062148 (M. Bray) 8/01/03-7/31/08  
 NIH/NIDDK  
 "Genetic Factors in Physical Activity and Obesity"

Kraft Foods (M. Bray) 8/1/07-9/31/08  
 "The Development of Morning and Evening Foods"

R01HL074377-01 (North) 7/1/03-6/30/06  
 NIH/NHLBI  
 "Gene-by-smoking interaction and risk of atherosclerosis"

UR6/CCU617218-01 (M. Bray) 9/30/99-9/29/03  
 Centers for Disease Control  
 "Gene-Environment Interaction in Cardiovascular Disease"

QXI30353 (Zeldin) 9/1/03-8/31/04  
 NIH/NIEHS  
 "Role of Cytochrome P450-Derived Eicosanoids in Endothelial Dysfunction and Cardiovascular Disease"

R01HL073366-01 (M. Bray) 7/1/03-6/30/04  
 NIH/NHLBI  
 "Gene-environment Interaction in Complex Disease"

### **National Scientific Participation**

#### Editorial and Advisory Boards

Cell Metabolism – Advisory Board	2020 – present
Nutrition and Diabetes – Associate Editor	2021 – 2023
University of Colorado Nutrition Obesity Research Center – Advisory Board	2020 - present
The Obesity Society Scientific Advisory Board	2021 – present

#### Journal reviewer

American Journal of Epidemiology  
 Arteriosclerosis, Thrombosis, and Vascular Biology  
 Circulation  
 Human Molecular Genetics  
 Human Mutation

JAMA  
Journal of Applied Physiology  
Nature Pharmacogenomics  
Physiological Genomics  
Genetics in Medicine  
Diabetes  
Obesity Research  
Pediatric Nephrology  
Pediatrics  
Human Genomics  
Cardiology  
Journal of Clinical Endocrinology and Metabolism  
Metabolism  
Journal of Clinical Investigation  
International Journal of Obesity  
Journal of Clinical Nutrition  
Biomed Central Genetics  
British Journal of Nutrition  
Nutrition and Diabetes  
Cell Metabolism

#### Review panels/Committees

AHA Western Consortium Review Panel Study Section, 2002-2006  
NIH Study Section Geriatrics and Rehabilitative Medicine (*ad hoc*), April 2004  
NIH Special Review Panel, The Insulin Resistance Atherosclerosis Study (IRAS),  
Competing Renewal, July 2004.  
NIH Study Section, Genetics of Health and Disease (*ad hoc*), April 2006  
NIH Study Section - Neurological, Aging and Musculoskeletal Epidemiology Study  
Section (*ad hoc*), June 2008  
NIH Study Section - Neurological, Aging and Musculoskeletal Epidemiology Study  
Section (*ad hoc*), Feb 2009  
Framingham Heart Study DNA Committee, July 2008 - present  
NIH Study Section - Genetics of Human Disease (*ad hoc*) – June 2009  
NIH Challenge Grant Review - June 2009  
NIH Study Section – Clinical and Integrative Diabetes and Obesity (*ad hoc*) – October  
2009  
NIH Study Section – Behavioral Genetics and Epidemiology (*ad hoc*) – June 2010  
NIH Study Section – Clinical and Integrative Diabetes and Obesity (*ad hoc*) – February  
2011  
ARS/USDA National Program Panel 107 – June 2014  
NIH Genes, Behavior, and Response to Weight Loss Interventions Workshop, Co-Chair,  
May 2014 – Jan 2016  
NIH Study Section – Genetics of Human Disease (regular member) – Sept 2010 to June  
2017  
NIH/NIDDK Clinical Obesity Research Panel –Jan 2016 – Sept 2019  
Accumulating Data to Optimally Predict Obesity Treatment (ADOPT) Core Measures  
Working Group – May 2016 – Sept 2017  
NIH Study Section – NIDDK NRSA Fellowships Review Panel – Feb 2018 – present  
NIH Special Emphasis Panel – Precision Nutrition – July 2021  
NIH Special Emphasis Panel – Metabolic Phenotyping Consortium – July 2022  
NIH Special Emphasis Panel – Molecular Transducers of Physical Activity – July 2023

## Professional Societies

The Obesity Society  
American Society of Human Genetics  
American College of Sports Medicine  
American Society of Nutrition

## Invited Lectures and Presentations

DNA 2000, Boston, MA “SNP Genotyping by MALDI-TOF Mass Spectrometry”	June, 2000
48 <sup>th</sup> Ann Conf on Mass Spectrometry and Allied Topics, Long Beach, CA “High throughput genotyping with MALDI-TOF Mass Spectrometry”	July, 2000
3 <sup>rd</sup> Natl Conference on Genetics and Public Health, Ann Arbor, MI “Genetic Factors in Obesity: Public Health Impact and Implications”	Sept, 2000
2 <sup>nd</sup> Natl Conference on Sex and Gene Expression, Greensboro, NC “Interaction of Genotype and Environment in Complex Disease”	March, 2001
Experimental Biology 2001, Orlando, FL “The Role of Genetics in Exercise Physiology”	April, 2001
V Congreso Argentino de Obesidad, Buenos Aires, Argentina “Genetics, Nutrition and Obesity”	June, 2001
V Congreso Argentino de Obesidad, Buenos Aires, Argentina “Genetic Mechanisms in Response to Functional Foods”	June, 2001
Texas Southern University Seminar Series, Houston, TX “Analyzing DNA Sequence Variation Using Mass Spectrometry”	November, 2001
Centers for Disease Control Genomics Summit, Atlanta, GA “The Genetics of Human Obesity”	January, 2002
University of North Carolina Molecular Genetics Seminar Series “Whole Genome Approaches to Disease Gene Identification”	February, 2002
Centers for Disease Control and Prevention, Atlanta, GA “Obesity in Adults and Children: How Important Are Genes?”	May, 2002
Sequenom Genomics Seminar, San Diego, CA “Optimizing the Sequenom System for High Throughput”	May, 2002
ATKL Symposium, Vienna, Austria “Genetic predictors of performance and exercise response: The role of exercise”	December, 2002
Centers for Disease Control and Prevention, Atlanta, GA “Genetics of Response to Obesity Treatments”	September, 2003
University of Texas Pediatric Grand Rounds, Houston, TX “The Role of Genetic Variation in Obesity and Treatment”	January, 2004

National Birth Defect Prevention Symposium, Atlanta, GA "Genotyping Technologies for the New Millenium"	April, 2004
Center for Research on Environmental Disease Symposium, Austin, TX "The Role of Exercise in Human Cancers"	May, 2004
Mars Nutrition and Research Council Meeting, Houston, TX "The Role of Genetic Variation in Metabolic Syndrome"	January 2005
NIDDK Digestive Diseases Center, Houston, TX "The Role of Genetic Variation in Obesity and Response to Treatment"	January, 2005
Illumina, Inc. Scientific Symposium, San Diego, CA "Mining the Genome for Human Obesity Genes"	February, 2005
28th Annual Pediatric Postgraduate Symposium, Houston, TX "Mining the Human Genome for Obesity Genes"	March, 2006
Experimental Biology 2006, San Francisco, CA "Genetic and Dietary Influences on Obesity"	April, 2006
CDC International Congress on Physical Activity, Atlanta, GA "Genetic Considerations for Physical Activity and Public Health"	April, 2006
Illumina Seminar Series, Houston, TX "Genetic Discovery in Obesity using the Illumina BeadStation"	June, 2006
Illumina, Inc. Scientific Symposium, San Diego, CA "Using the Illumina Gene Expression Platform to Identify Genes Directly Regulated by the Intrinsic Circadian Clock within the Cardiomyocyte"	March, 2007
American Diabetes Association, Chicago, IL "Genetics of Exercise-Induced Changes in Body Composition - Implications for the Prevention of Cardiovascular and Other Diseases"	July, 2007
Gene-Nutrition and Gene-Physical Activity Interactions in the Etiology of Obesity, Special NCI Workshop, Bethesda, MD "Implications of Gene-Behavior Interactions: Prevention and Intervention in Obesity"	September 2007
NHLBI Workshop on Circadian-Coupled Cellular Function and Disease in Heart, Lung, and Blood Issues, Bethesda, MD "Genetic Links between Circadian Rhythms and Obesity"	September 2007
The Obesity Society (North American Association for the Study of Obesity), New Orleans, LA "The Interaction between Exercise and Genes in the Development of Obesity"	October 2007
60th Annual Symposium on Cancer Research, Houston, TX "Genes, Obesity, and Cancer"	October 2007
American Heart Association Scientific Sessions 2007 "The Genetics of Obesity", Orlando, FL	November 2007
Gastroenterology Scientific Seminar Cincinnati Children's Hospital Medical Center, Cincinnati, OH "New Approaches to Gene Discovery in Obesity"	January 2008

NIDDK Clinical Obesity Research Panel (CORP), Bethesda, MD "Genes and Physical Activity in the Development of Obesity"	February 2008
Obesity Seminar Series, University of Alabama at Birmingham, AL "New Approaches to Gene Discovery in Obesity"	May 2008
American Dietetic Association, Chicago, IL "Interaction between Exercise and Genes in the Development of Obesity"	Oct 2008
The Obesity Society, Phoenix, AZ "Genetic Predictors of Exercise Adherence"	Oct 2008
Pennington Biomedical Research Center, Baton Rouge, LA "Unraveling the Complexity of Human Obesity"	Dec 2008
USC Childhood Obesity Research Center Symposium, Los Angeles, CA "Genetic Factors in Physical Activity: Is Exercise Genetic?"	Apr 2009
2009 Pennington Scientific Symposium, Baton Rouge, LA "Genetic Variation in Circadian Genes: Relation to Obesity and Adipocyte Biology"	Apr 2009
University of Texas Health Science Center Educator Conference, Austin, TX "The Genetics of Obesity and Response to Treatment"	June 2009
Midwest Student Biomedical Research Forum, University of Nebraska, Omaha, NB 2010 "Circadian Rhythms, Genes and the Underpinnings of Obesity"	Feb 2010
University of Illinois at Urbana-Champaign, Nutritional Sciences Seminar "The Genetics of Obesity and Response to Treatment"	March 2010
University of Texas MD Anderson Pediatric Cancer Symposium, Houston, TX "The Genetic Basis of Obesity in Childhood"	April 2010
Texas Lyceum Great Debate Series: Beyond Health Care Reform, Houston, TX 2010 "The Role of Legislation in Weight Control"	April 2010
The Biologists Workshop: Obesity: The Gene-Environment Interaction and its Implications, Edinburgh, UK "Genes for Physical Activity"	May 2010
Hudson Alpha Genetics Retreat, Huntsville, AL "The Role of Genes in Physical Activity"	September 2010
The Obesity Society 60 <sup>th</sup> Anniversary of the NIDDK Symposium, San Diego, CA 2010 "What Drives Us to be Physically Active? The Role of Genes"	October 2010
UAB Comprehensive Cancer Center, Birmingham, AL "Gene-Physical Activity Interaction in Cancer Risk"	January 2011
Vanderbilt University Genetics Seminar Series, Nashville, TN "How Genes Drive Us to be Physically Active"	February 2011
Experimental Biology 2011, Washington, DC "The Role of Cell-Specific Clocks in Metabolism and Disease"	April 2011
American Dietetic Association Food Nutrition Conference, San Deigo, CA 2011 "Genes, Environment, and Chronic Disease: What is the Relationship?"	September 2011
Southeast Lipid Research Conference, Pine Mountain, GA "Clocks and Adipose Function"	October 2011

Illinois Transdisciplinary Prevention Program Conference, Champaign, IL October 2011  
 "Obesity: A Multidisciplinary Approach for a Complex Disease"

Cleveland Clinic Obesity Summit, Cleveland, OH October 2011  
 "Genes, the Environment, and Exercise Response and Adherence"

Centers for Disease Control and Prevention, Atlanta, GA November 2011  
 "How Genes and Environments Influence Health Behaviors: Complex Problems  
 Require Creative Solutions"

UAB Comprehensive Cancer Center Seminar Series March 2012  
 "Genomic Alterations Associated with Obesity and Exercise"

UAB Nutrition Obesity Research Center Seminar Series April 2012  
 "Genomics Resources for Gene Discovery in Obesity"

International Society of Behavioral Nutrition and Physical Activity Annual Meeting May  
 2012  
 "The Influence of Genes and Environments on Health Behaviors"

Dell Pediatric Research Institute Seminar Series, Austin, TX May 2012  
 "Obesity: A Multidisciplinary Approach for a Complex Disease"

Florida Dietetic Association Annual Meeting, Orlando, FL July 2012  
 "How Genes and Environments Influence Health Behaviors: Complex Problems  
 Require Multidisciplinary Approaches"

FASEB Summer Conference, Snowmass, CO August 2012  
 "Genetic Factors in Physical Activity and Health Behaviors"

American Heart Association, Los Angeles, CA November 2012  
 "Genetics of Circadian Rhythms and Obesity"

UAB Epigenetics Symposium, Birmingham, AL December 2012  
 "DNA Methylation and Chronic Exercise Training"

Southeast Chapter of the American College of Sports Medicine February 2013  
 "The Genetic Underpinnings of Health Behaviors"

University of Kentucky Seminar Series, Lexington, KY March 2013  
 "How Genes and Environments Interact to Influence Health Behaviors"

University of Texas Nutrition Institute, Austin, TX June 2013  
 "The Genetics of Sticking with Diet and Exercise Goals"

NIH/NCI Workshop: Genes, Behaviors & Response to Weight Loss Interventions May  
 2014  
 "The Genetics of Physical Activity and Exercise Adherence"

American College of Sports Medicine Annual Meeting, Orlando, FL May 2014  
 "The Intergomics of Overweight and Obesity"

University of Texas Nutrition Institute, Austin, TX June 2014  
 "How Genes Influence Health Behavior"

Huffines Institute for Sports Medicine and Human Performance September 2014  
 "The Genetic Underpinnings of Health Behaviors"

American Heart Association, Chicago, IL November 2014  
 "The Genetics of Physical Activity and Exercise Adherence"

Virginia Commonwealth University Health and Physical Activity Lectures March 2015  
 "The Genetic Underpinnings of Physical Activity Behavior and Response"

University of Connecticut Center for Health, Intervention, and Prevention April 2015  
 “Genetic and Non-genetic Underpinnings of Energy Balance”

NIH/NIDDK Workshop: Behavioral and Psychological Phenotyping of Physical Activity  
 and Sedentary Behavior December 2015  
 “Genetic and Biological Determinants of Exercise Adherence & Physical Activity”

American Society of Nutrition, Pre-conference Workshop May 2016  
 “Using Genomic Information to Guide Weight Management: From Universal to  
 Precision Treatment”

Brenham Rotary Club May 2016  
 “Using Genomic Information to Guide Weight Management: From Universal to  
 Precision Treatment”

UT Waggoner Center for Alcohol and Addiction Research September 2016  
 “Genes, Timing, and Energy Balance”

29th Annual Doris Drees Speaker, University of Dayton September 2016  
 “Genes, Timing, and Energy Balance”

Department of Epidemiology & Biostatistics Seminar, Michigan State Univ October 2016  
 “The role of genes, diet, and physical activity in successful weight loss”

Lakeway Men’s Breakfast Club October 2016  
 “Using Genomic Information to Guide Weight Management”

The Obesity Society November 2016  
 “Genes, diet, physical activity: How does it all come together for successful weight  
 loss?”

American Academy of Health Behaviors March 2017  
 “Can Genomic Information Guide Precision Treatment of Weight Management?”

International Roundtable on the Genetic Regulation of Physical Activity March 2017  
 “Exercise Adherence and Genetics”

University of Texas Pop-Up Institute on Big Data May 2017  
 “The Molecular Basis of Health Behaviors”

University of Texas School of Nursing February 2018  
 “Genes, Diets, and Exercise: How they Interact to Influence Energy Balance and  
 Obesity”

University of Texas Dell Pediatric Research Institute Research Symposium March 2018  
 “Genes, Diets, and Exercise: How they Interact to Influence Energy Balance and  
 Obesity”

Texas Chapter of the American College of Sports Medicine March 2018  
 “Can We Use Genetic Information to Personalize Exercise Prescription?”

Cell Symposia: Exercise Metabolism May 2019  
 “A Multi-Omic View of Exercise Response”

Texas Science Festival Mar 2021  
 “Genes, Food, and Diet”

Metabolism Day Conference – University of Copenhagen/Karolinska Institute Mar 2021  
 “The “Omics” of Exercise Response”

American College of Sports Medicine May 2021  
 “How Do Genes Influence Exercise Adherence and Response?”

UT Tower Fellows “The Genetics of Exercise Adherence and Response”	September 2021
Dell Pediatric Research Institute Seminar Series “Timing is Everything: How Clocks, Diet, and Exercise Influence Health”	February 2022
Polymathic Scholars Seminar Series “Timing is Everything: How Clocks, Diet, and Exercise Influence Health”	April 2022
Genetic and Biological factors regulating Physical Activity Consortium “Circadian Rhythms in Diete and Exercise”	April 2022
Johns Hopkins Medicine Continuing Education Series “Timing is Everything: How Clocks, Diet, and Exercise Influence Health”	May 2022
OLLI Nutrition Education Series “Energy Balance and Weight Loss: Genes or Jeans?”	May 2022
NIH Office of Nutrition Research “Texas Network of Obesity Research”	May 2022
OLLI Nutrition Education Series Nutrition and the Gut Microbiome: Feeding Your Microbial Guardians	May 2023

## Publications

### *Full papers published in refereed journals*

1. **Bray MS**, Morrow Jr. JR, Pivarnik JM, Bricker JT (1992) Caltrac validity for estimating energy expenditure with children. *Ped Exerc Sci* 4:166-179.
2. **Bray MS**, Wong WW, Morrow Jr. JR, Butte NF, Pivarnik JM (1994) Caltrac versus calorimeter determination of 24-hour energy expenditure in female children and adolescents. *Med Sci Sports Exerc* 26: 1524-1530.
3. Pivarnik JM, **Bray MS**, Hergenroeder AC, Hill RB, Wong WW (1995) Ethnicity affects aerobic fitness in US adolescent girls. *Med Sci Sports Exerc* 27: 1635-1638.
4. Hariharan R, **Bray MS**, Ganim R, Doenst T, Goodwin GW, Taegtmeyer H (1995) Fundamental limitations of [<sup>18</sup>F] 2-deoxy-2-fluoro-D-glucose for assessing myocardial glucose uptake. *Circulation* 91: 2435-2444.
5. **Bray MS**, Boerwinkle E, Hanis CL (1996) OB gene not linked to human obesity in Mexican American affected sib pairs from Starr County, Texas. *Hum Genet* 98: 590-595.
6. **Bray MS**, Boerwinkle E, Hanis CL (1999) Linkage analysis of candidate obesity genes among the Mexican American population of Starr County, Texas. *Genet Epidemiol* 16: 397-411.
7. Doenst T, Richwine RT, **Bray MS**, Goodwin GW, Frazier OH, Taegtmeyer H (1999) Insulin improves functional and metabolic recovery of reperfused working rat heart. *Ann Thorac Surg* 67:1682-1688.
8. **Bray MS** (2000) Genomics, Genes, and Environmental Interaction: The Role of Exercise. *J Appl Physiol* 88:788-792.
9. **Bray MS**, Boerwinkle E (2000) The Role of  $\beta$ 2-Adrenergic Receptor Variation in Human Hypertension *Curr Hyperten Rpts* 2:39-43.

10. Li R, Boerwinkle E, Olshan AF, Chambless LE, Pankow JS, Tyroler HA, **Bray M**, Pittman GS, Bell DA, Heiss G (2000) Glutathione S-transferase genotype as a susceptibility factor in smoking-related coronary heart disease. *Atherosclerosis* 149:451-62.
11. **Bray MS**, Boerwinkle E, Hanis CL (2000) Sequence variation within the neuropeptide Y gene and association with body fat patterning in Mexican Americans. *Obesity Research*, 8:219-226.
12. **Bray MS**, Li L, Turner ST, Kardia SLR, Boerwinkle E (2000) Association and Linkage Analysis of the  $\alpha$ -Adducin Gene and Blood Pressure. *Am J Hyperten.* 13:699-703.
13. **Bray MS**, Krushkal J, Li L, Ferrell R, Sing CF, Turner ST, Boerwinkle E (2000) Positional genomic analysis identifies  $\beta$ 2 adrenergic receptor as susceptibility locus to human hypertension. *Circulation* 101:2877-2882.
14. **Bray MS**, Boerwinkle E, Doris P (2001) High-throughput multiplex SNP genotyping with MALDI-TOF mass spectrometry: Practice, problems and promise. *Hum Mut.* 17:296-304.
15. Li R, Folsom AR, Sharrett AR, Couper D, **Bray MS**, Tyroler HA (2001) Interaction of the glutathione S-transferase genes and cigarette smoking in risk of lower extremity arterial disease: the Atherosclerosis Risk in Communities (ARIC) study. *Atherosclerosis* 154:729-738.
16. **Bray MS** (2002) Molecular and Genetic Basis of Obesity. *Sem Plastic Surg.* 16:187-194.
17. Wu X, Cooper R, Borecki I, Hanis C, **Bray M**, Lewis CE, Zhu X, Kan D, Luke A, Curb D (2002) A combined analysis of genome wide linkage scans for BMI from the NHLBI Family Blood Pressure Program. *Am J Hum Genet.* 70:1247-1256.
18. Morrison AC, Ballantyne CM, **Bray MS**, Chambless LE, Sharrett AR, Boerwinkle E (2002) LPL polymorphism predicts stroke risk in men. *Genet Epidemiol.* 22: 233-242.
19. Morrison AC, **Bray MS**, Folsom AR, Boerwinkle E (2002) ADD1 460W allele associated with cardiovascular disease in hypertensive individuals. *Hyperten* 39:1053-1057.
20. Little J, Bradley L, **Bray MS**, Clyne M, Dorman J, Ellsworth DL, Hanson J, Khoury M, Lau J, O'Brien TR, Rothman N, Stroup D, Taioli E, Thomas D, Vainio H, Wacholder S, Weinberg C. (2002) Reporting, appraising, and integrating data on genotype prevalence and gene-disease associations. *Am J Epidemiol.* 2002 Aug 15;156(4):300-10.
21. Kao WHL, Coresh J, Shuldiner AR, Boerwinkle E, **Bray MS**, Brancati FL (2003) Pro12Ala of the peroxisome proliferator activated receptor- $\gamma$ 2 gene is associated with lower serum insulin levels in non-obese African Americans: The Atherosclerosis Risk in Communities (ARIC) Study. *Diabetes* 52(6):1568-72.
22. Olshan AF, Li R, Pankow JS, **Bray M**, Tyroler HA, Chambless LE, Boerwinkle E, Pittman GS, Bell DA. (2003) Risk of atherosclerosis: interaction of smoking and glutathione S-transferase genes. *Epidemiology.* 4:321-7
23. Miller EA, Pankow JS, Millikan RC, **Bray MS**, Ballantyne CM, Bell DA, Heiss G, Li R. (2003) Glutathione-S-transferase genotypes, smoking, and their association with markers of inflammation, hemostasis, and endothelial function: the atherosclerosis risk in communities (ARIC) study. *Atherosclerosis.* 171:265-72.
24. **Bray MS**, Doris PA (2004) Genotyping by mass spectrometry. *Genet Eng* 25:1-14.
25. Heck AL, Barroso CS, Callie ME, **Bray MS** (2004) Gene-nutrition interaction in human performance and exercise response. *Nutrition.* 20:598-602.

26. Stavinoha MA, RaySpellicy JW, Hart-Sailors ML, Mersmann HJ, **Bray MS**, Young ME (2004) Diurnal Variations in the Responsiveness of Cardiac and Skeletal Muscle to Fatty Acids. *Am J Physiol Endocrinol Metab.* 287:E878-887.
27. Stavinoha MA, RaySpellicy JW, Essop MF, Graveleau C, Abel ED, Hart-Sailors ML, Mersmann HJ, **Bray MS**, Young ME (2004) Evidence for Mitochondrial Thioesterase 1 as a Peroxisome Proliferator-Activated Receptor- $\alpha$  Regulated Gene in Cardiac and Skeletal Muscle. *Am J Physiol Endocrinol Metab* 287:E888-895.
28. Blair CK, Folsom AR, Knopman DS, **Bray MS**, Mosley TH, Boerwinkle E, Atherosclerosis Risk in Communities (ARIC) Study Investigators. (2005) APOE genotype and cognitive decline in a middle-aged cohort. *Neurology* 64:268-276.
29. Heck AL, **Bray MS**, Scott A, Blanton SH, Hecht JT (2005) Variation in CASP10 gene is associated with ITEV. *J Ped Orthoped* 25:598-602.
30. Fornage M, Jacobs DR, Steffes MW, Gross MD, **Bray MS**, Schreiner PJ. (2005) Inverse effects of the PPARgamma2 Pro12Ala polymorphism on measures of adiposity over 15 years in African Americans and whites. The CARDIA study. *Metabolism.* 2005 Jul;54(7):910-7.
31. Hsu CC, Kao WH, Coresh J, Pankow JS, Marsh-Manzi J, Boerwinkle E, **Bray MS**. (2005) Apolipoprotein E and progression of chronic kidney disease. *JAMA.* 293:2892-9.
32. Fornage M, Lee CR, Doris PA, **Bray MS**, Heiss G, Zeldin DC, Boerwinkle E. (2005) The Soluble Epoxide Hydrolase Gene Harbors Sequence Variation Associated with Susceptibility to and Protection from Incident Ischemic Stroke. *Hum Mol Genet.* 14(19):2829-37
33. Sturgeon JD, Folsom AR, **Bray MS**, Boerwinkle E, Ballantyne CM; Atherosclerosis Risk in Communities Study Investigators. (2005) Apolipoprotein E genotype and incident ischemic stroke: the Atherosclerosis Risk in Communities Study. *Stroke.* 36:2484-2486.
34. Wolfarth B, **Bray MS**, Hagberg JM, Perusse L, Rauramaa R, Rivera MA, Roth SM, Rankinen T, Bouchard C. (2005) The human gene map for performance and health-related fitness phenotypes: the 2004 update. *Med Sci Sports Exerc.* 37:881-903.
35. Durgan DJ, Hotze MA, Tomlin TM, Egbejimi OA, Graveleau C, Abel ED, Shaw CA, **Bray MS**, Hardin PE, Young ME. (2005) The Intrinsic Circadian Clock With the Cardiomyocyte. *Am J Physiol Heart Circ Physiol.* 289(4):H1530-41
36. Wong TY, Shankar A, Klein R, **Bray MS**, Couper DJ, Klein BE, Sharrett AR, Folsom AR. (2006) Apolipoprotein E Gene and Early Age-Related Maculopathy The Atherosclerosis Risk in Communities Study. *Ophthalmology.* 113(2):255-9.
37. Hsu CC, **Bray MS**, Kao WH, Pankow JS, Boerwinkle E, Coresh J. (2006) Genetic Variation of the Renin-Angiotensin System and Chronic Kidney Disease Progression in Black Individuals in the Atherosclerosis Risk in Communities Study. *J Am Soc Nephrol.* 17:504-12
38. Zeng D, Lin DY, Avery CL, North KE, **Bray MS**. (2006) Efficient semiparametric estimation of haplotype-disease associations in case-cohort and nested case-control studies. *Biostatistics.* 7(3):486-502
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### **Full papers in review or preparation**

1. Shabrish V, Gutierrez DG, Neely AS, Balderrama J, Coleman MC, Lashinger LM, **Bray MS** (In preparation) Acute exposure to rotating shift work alters activity patterns, core clock, and molecular gene expression in mice. *Cell Metab*.
2. Shabrish V, Gutierrez DG, Neely AS, Balderrama J, Coleman MC, Lashinger LM, **Bray MS** (In preparation) Effects of timed feeding and timed exercise on behavioral and physiological changes associated with chronic exposure to rotating shift work. *Int J Obes*

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### **Books and book chapters**

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- Bray MS**. (2003) "Genetic and Environmental Factors in Cardiovascular Disease" in Human Genome Epidemiology, MJ Khoury, J Little, and W Burke, eds. Oxford University Press, New York, New York.
- Sailors MH & **Bray MS** (2011) "The Interaction between Genetic Variation and Exercise/Physical Activity in the Determination of Body Composition and Obesity Status" In Molecular and Translational Medicine Series Exercise Genomics, LS Pescatello & SM Roth, eds. Humana Press, New York, NY.
- Bray MS**, Fulton JE, Kalupahana NS & Lightfoot TJ (2011) "Genetic Epidemiology, Physical Activity and Inactivity" In Genetic and Molecular Aspects of Sports Performance, Bouchard C and Hoffman E, eds. Wiley-Blackwell, Oxford, UK.
- Kalupahana NS, Moustaid-Moussa N., Kim JH, Voy BH, Bassett D, **Bray MS** and Lightfoot JT (2011) "The Regulation of Physical Activity by Genetic Mechanisms: Is there a Drive to be Active?" In Genetic and Molecular Aspects of Sports Performance, Bouchard C and Hoffman E, eds. Wiley-Blackwell, Oxford, UK.
- Bray MS** (2018) "The Translation of Genetic Regulation of Activity to Everyday Life" in Routledge Handbook of Exercise and Sport Systems Genetics, Lightfoot JT, Hubal M, Roth SR, eds. Taylor & Francis, Oxford, UK.

### **Abstracts for presentation**

- Lee CY, Sailors MH, Jackson AS, Ellis KJ, Bush JA, Turpin I, Miller FM, Callie MS, **Bray MS** (2005) Body Image And Correlation With Body Composition And Attrition Rate In The Tiger Study *Med Sci Sports Exerc* 37:S173.
- Bray MS**, Ellis, KJ, Bush JA, Turpin I, Callie MS, Miller FM, & Jackson AS. (2005) Race and ethnic effect of estimating DXA percent fat from BMI: The TIGER Study *Med Sci Sports Exerc* 37:S303.
- Jackson AS, Ellis, KJ, Bush JA, Turpin I, Callie MS, Miller FM, & **Bray MS**. (2005) Cross-validation and calibration of Jackson-Pollock equations with DXA: The TIGER Study. *Med Sci Sports Exerc* 37:S302.

4. Jackson AS, Ellis, KJ, Sailors MH, McFarlin BK, Turpin I, & **Bray MS** (2005) The Generalizability of the Jackson-Pollock Skinfold Equations for Black and Hispanic Men and Women: The TIGER Study *Obes Res*
5. **Bray MS**, Ellis, KJ, Sailors MH, McFarlin BK, Turpin I, & Jackson AS (2005) Black, Hispanic and White Differences in the Relation Between BMI and DXA Percent Fat of Men and Women. The TIGER Study *Obes Res*
6. Jackson AS, Ellis KJ, McFarlin BK, Sailors MH, Turpin I, **Bray MS** (2006) Accuracy of BMI to Detect Percent Fat Obesity in Men and Women, Ages 17 to 39 y: The TIGER Study. *Med Sci Sports Exerc* 38:S300.
7. Lee CR, North KE, **Bray MS**, Couper DJ, Heiss G, Zeldin DC. (2006) The G-765C promoter polymorphism in cyclooxygenase-2 (*PTGS2*), aspirin utilization and cardiovascular disease risk: the Atherosclerosis Risk in Communities (ARIC) Study. *Pharmacotherapy*. 26(suppl):e87
8. Lee CR, North KE, **Bray MS**, Couper DJ, Heiss G, Zeldin DC. (2006) Genetic variation in *CYP2J2* and risk of coronary heart disease: the Atherosclerosis Risk in Communities (ARIC) Study. *Circulation*. 114(18):II-490
9. McFarlin BK, Jackson AS, Ellis KJ, Callie ME, Truett L, Turpin I, **Bray MS**. (2006) Cross-validation of lipometer estimates of body composition: the effect of gender and skin color. *Obesity* 14(Suppl):A142
10. Callie ME, Jackson AS, **Bray MS** (2006) Dietary Calcium Intake, Body Size, and Body Composition in the Training Intervention and Genetics of Exercise Response Study. *Obesity* 14(Suppl):A164
11. **Bray MS**, McFarlin BK, Turpin I, Sailors MH, Ellis KJ, Hoelscher DM, Foreyt JP, Jackson AS (2007) The Training Interventions and Genetics of Exercise Response (TIGER) Study: Exercise Intervention in Young Adults. *Med Sci Sports Exerc* 39:S199.
12. Turpin I, **Bray MS**, McFarlin BK, Jackson AS (2007) Percent body fat equations for a diverse population, age 17 to 30: The TIGER Study. *Med Sci Sports Exerc* 39:S34-35.
13. Jackson AS, McFarlin BK, Ellis KJ, **Bray MS** (2007) Accuracy of generalized body composition equations with diverse men and women. *Med Sci Sports Exerc* 39:S35.
14. Sailors MH, Jackson AS, **Bray MS** (2007) The association of circadian clock candidate genes to increased adiposity in the TIGER Study. *Med Sci Sports Exerc* 39:S278.
15. Miller F, Dishman RK, **Bray MS**, McFarlin BK, Jackson AS (2007) Reliability and norms for the 10-item Self Motivation Inventory: The TIGER Study. *Med Sci Sports Exerc* 39:S340.
16. Avery CL, Canos DA, Couper D, Olshan AF, Poole C, **Bray MS**, North KE (2007) XRCC3 variants, tobacco exposure, and incident CHD: The atherosclerosis risk in communities (ARIC) study *Genet Epidemiol* 31: 460-460.
17. Zanutta MM, Jeong WM, Garcia RAP, Chow C-W, Young ME, **Bray MS** (2007) A novel animal model linking adiposity to altered circadian rhythms. *Obesity* 15:Suppl-A26.
18. Monda K, **Bray MS**, Adair L, Asao, K, Kao WHL, Boerwinkle E, Pankow JS, North KE (2007) Metabolic risk profiles created using cluster analysis are differentially associated with physical activity: The ARIC Study (2007) *Obesity* 15:Suppl-A40.
19. Jackson AS, Ellis KJ, Sailors ML, McFarlin BK, Turpin I, Miller F, **Bray MS** (2007) Field method to measure changes in percent body fat of young women: The TIGER Study. *Obesity* 15:Suppl-A73.
20. Miller F, Jackson AS, Sailors ML, McFarlin BK, **Bray MS** (2007) Change in body composition following a 15-week, heart-rate monitored aerobic fitness exercise program: The TIGER Study. *Obesity* 15:Suppl-A101.
21. Sailors ML, Jackson AS, **Bray MS** (2007) Effect of gender and race in body image anxiety in college age students from the TIGER Study. *Obesity* 15:Suppl-A103.
22. **Bray MS**, Tsai JY, Boland B, Kueht M, Egbejimi O, Blasier Z, Kelly R, Zoller J, Young ME (2008) Time of Day: A Vital Determinant in Diet-induced Cardiometabolic Syndrome Development. *Circulation* 118:S444.

23. **Bray MS**, Sailors M, Kueht M, McFarlin B, Jackson A (2008) Genetic Predictors of Exercise Adherence in the Tiger Study. *Obesity* 16:S-48.
24. Sailors M, Rodin A, Jackson A, **Bray MS**. (2008) Obesity, Hypertension and Genetic Variation in the TIGER Study. *Obesity* 16:S317-S318.
25. **Bray, MS**; Shaw, CA; Moore, MWS, et al. (2008) The intrinsic circadian Clock within the cardiomyocyte directly regulates myocardial gene expression, metabolism, and contractile function *Cardiovasc Ther* 22: 143.
26. Pereira RO, Sena S, **Bray MS**, Moura AS, Abel ED (2009) Parental High-Fat Diet Programs Insulin Sensitivity and Susceptibility to Diet-Induced Obesity in the Offspring. *Diabetes* 58: A93-A94.
27. O'Shea, KM; **Bray, MS**; Duda, MK, et al. (2009) Prevention of Left Ventricular Remodeling and Dysfunction in Pressure Overload by Omega-3 Fatty Acid Supplementation is Associated With Alteration in the Cardiac Lipidome, Not Changes in Gene Transcription *Circulation* 120: S892-S893
28. **Bray, MS**; Blasler, ZJ; Boland, BB, et al. (2009) Disruption of the Circadian Clock within the Adipocyte Results in Obesity and Insulin Resistance *Obesity* 17: S48-S48
29. Zeller, MH; Modi, AC; Miller, R, **Bray, MS** et al. (2009) Baseline Psychosocial Status of Adolescents within the Teen Longitudinal Assessment of Bariatric Surgery (Teen-LABS) Consortium *Obesity* 17: S62-S63
30. Inge, TH; Helmrath, MA; **Bray, MS**, et al. (2009) Anthropometric Characteristics and Comorbidities of Extremely Obese Adolescents Enrolled in the Teen Longitudinal Assessment of Bariatric Surgery (Teen-LABS) Study *Obesity* 17: S208-S208
31. Sailors, MI; Jackson, AS; **Bray, MS** (2009) Exercise Intensity Predicts Adherence in the Training Interventions & Genetics of Exercise Response (TIGER) Study
32. **Bray MS** and Young ME (2010) Adipocyte-specific Disruption of the Circadian Clock is Associated with Obesity, Insulin Resistance, and Altered Feeding *Chronobiol Int*
33. Sailors MH, Rodin AS, **Bray MS** (2010) Genetic Variability and the Hypothalamic Control of Energy Balance *Obesity* 18:S191
34. Nagalla S, Shaw C, Kong XG, Ma L, Kondkar AA, **Bray MS**, Leal SM, Jin Y, Dong JF, Bray PF (2010) Platelet Microrna-mRNA Co-Expression Profiles Correlate with Platelet Reactivity. *Blood* 116: 840
35. Jin Y, Covarrubias D, Kondkar AA, Nagalla S, Luna EJ, Bray MS, Shaw C, Leal SM, Bray PF (2010) Genetic Variants In Platelet Supervillin but Not Archvillin Are Associated with PFA-100 Closure Times In African Americans. *Blood* 116 : 1749.
36. **Bray MS** and Fernandez JR (2011) The Genetic Underpinnings of Exercise Adherence *Am J Hum Genet* 182:648W
37. MacDonald MN, Lemaire SA, Guo D, Russell L, Miller CC, Johnson RA, Bekheirna MR, Franco LM, Nguyen M, Pyeritz RE, Bavaria JE, Devereaux R, Maslen C, Holmes KW, Eagle K, Body SC, Seidman C, Seidman JG, Isselbacher EM, **Bray MS**, et al. (2011) FBN1 Susceptibility Loci Associated with thoracic aortic aneurism and aortic disease spectrum. *Am J Hum Genet* 149
38. Yang YK, Chen M, Haynes B, **Bray MS**, Harmon CM (2011) New Melanocortin 4 Receptor (MC4R) Gene Mutations Associated With Adolescent Obesity. *Obesity* 19:S105.
39. Herring MP, O'Connor DP, Jackson AS, Hessong DN, Williams JL, **Bray MS** (2012) Prescribed Exercise Dose and Associated Physiological Outcome Changes in the TIGER Study. *Med Sci Sports Exerc*.
40. Herring MP, Dishman RK, Srivastava U, **Bray MS** (2012) Associations of Sleep Quality and Total Sleep Time With Body Composition and Exercise Responses in the Training Intervention and Genetics of Exercise Response (TIGER) Study. *Obesity*.
41. Hessong DN, Dishman RK, Herring MP, O'Connor DP, Jackson AS, **Bray MS** (2012) Perceived Barriers to Physical Activity and Exercise Tolerance in the TIGER Study. *Obesity*.
42. Jeffreys RM, **Bray MS**, Jenkins T, Oruc V, Douglas A, Inge TH (2012) Physical Activity Monitoring in Morbidly Obese Adolescents from the Teen LABS Study. *Obesity*.

43. Aslibekyan, Stella; Danila, Maria I.; Sha, Jin; et al. (2012) Evidence of Novel Genetic Predictors of Methotrexate Efficacy in Rheumatoid Arthritis. *Arthrit Rheum* 64:S431-432.
44. Herring, Matthew P.; Fernandez, Jose R.; Jackson, Andrew S.; et al. (2013) Variation In The FTO Gene Predicts Exercise Response In The Training Interventions And Genetics Of Exercise Response (TIGER) Study *Med Sci Sports Exerc* 45, Suppl 1: 61
45. Bray, Molly S.; Herring, Matthew P.; O'Connor, Daniel P.; et al. (2013) Alterations in DNA Methylation Associated with Aerobic Exercise Training *Med Sci Sports Exerc* 45, Suppl 1: 62
46. Herring, Matthew P.; Gower, Barbara A.; Shelton, Richard C.; et al. (2014) Associations Of Adiposity, Inflammation, Depression, And Exercise Response In The Tiger Study *Med Sci Sports Exerc* 46, Suppl 1: 563
47. Bray MS, Herring MP, Dishman RK, O'Connor DP, Jackson AS, Vazquez AI (2016) Genome-wide Association for Exercise Tolerance in the TIGER Study. *Med Sci Sports Exerc*
48. Lashinger LM, McKenzie MR, and Bray MS (2017) Dissecting the role of timing and caloric intake in energy balance. *J Nutr*
49. Joo J and Bray MS (2017) The Effect of 15-week Exercise Training on Dietary Preferences among Sedentary Young Adults. *Obesity*
50. Gutierrez DE, Lashinger LM, Bray MS (2017) Effects of time-of-day dependent macronutrient intake on gut microbiota diurnal oscillations. *Obesity*
51. Vazquez AI, Fernandez JR, Bray MS (2018) Genome-wide association analysis of body composition changes following aerobic exercise training *Obesity*
52. Shabrish V, Lashinger L, and Bray MS (2018) Acute effects of rotating shift work paradigm on activity and metabolism *Med Sci Sports Exerc*
53. Neely AE and Bray MS (2019) Racial/ethnic differences in body composition measures and exercise parameters in the TIGER Study *J Nutr*
54. Reymundo A, Vazquez AI, Bray MS (2019) An Omic Integration Method to Understand the Changes Induced by Physical Activity in the Training Interventions and Genetics of Exercise Response (TIGER) Study *Am J Hum Genet*
55. Salmun GS and Bray MS (2019) Mood Response to Aerobic Exercise in the TIGER Study *J Nutr*
56. Shabrish V, Neely AE, Salmun GS, and Bray MS (2019) Altered Eating Patterns Associated with Rotating Shift Work *Obesity*
57. Neely, AE, Bray MS, Jolly CA (2023) Effects of  $\beta$ -Hydroxybutyrate on CD4+ T Cell Polarization and Function *Obesity*
58. Balderrama J and Bray MS (2023) Metabolome Changes Following Regular Exercise Among Sedentary College Students *Obesity*
59. Coleman M, Shabrish V, and Bray MS (2023) Effects of Acute Exposure to Rotating Shift Work on Core Clock Gene Expression in Mouse Hearts *Obesity*

## Teaching Experience

### Didactic course work

KIN 4310 – Measurement and Evaluation of Human Performance – 3 hours  
 KINE 319 – Applied Measurement and Evaluation – 3 hours  
 PEB 1251 – Exercise for Health and Fitness – 2 hours  
 PH 3312 – Molecular and Genetic Basis of Obesity – 3 hours  
 EPI 632/732 – Molecular and Genetic Basis of Obesity – 3 hours  
 HE 222/EPI 222 – Concepts of Health and Fitness – 3 hours  
 GBS 756 – Cardiovascular and Metabolic Diseases Journal Club – 1 hour  
 NTR 306 – Introduction to Nutrition – 3 hour  
 NTR 312 – Fundamentals of Nutrition – 3 hour

NTR 326 – Intermediate Metabolism and Nutrition – 3 hour  
NTR 365 – Sports Nutrition – 3 hour  
NTR 380K – Experimental Design and Statistics – 3 hour and online  
NTR 390.13 – Nutrigenomics – 3 hour and online  
NTR 365 – Nutritional Biochemistry (Plan II) – 3 hour

### **Non-didactic teaching**

Resident training  
None

Clinical fellow training  
Mark McOmber, MD Research Fellow, July 2006 - 2007

Research fellow training  
Daniel Kainer, PhD, Postdoctoral Fellow, Sept 2000-January 2002  
Melissa Zanquetta, PhD, Postdoctoral Fellow, Feb 2007-Feb 2008  
Mary Sailors, PhD, Postdoctoral Fellow, Jan 2010 – May 2011  
Matt Herring, PhD, Postdoctoral Fellow, July 2011 – 2013  
Jacqueline Crissey, PhD, Postdoctoral Fellow, January 2014 – 2016  
Lauri Lashinger, PhD, Research Scientist, May 2014 - 2019

Graduate student training  
Mitzi Laughlin, PhD, September 2000 – May 2001 – NASA/JSC  
Ron McNeel, PhD, June 2001 – May 2003 – Baylor College of Medicine  
Darin Tessier, MS, Sept 2001 – May 2003 – Univ of Texas Medical School, San Antonio  
Aime Serna, MD, MPH, Sept 2002 – Dec 2003, Univ of Texas Medical School El Paso  
Cristina Barroso, PhD, August 2000 – May 2004 – U.T. Health Science Center  
Christina Lee, MPH, January 2003 – May 2004 – U.T. Medical School, San Antonio  
Amy Heck, MS, Sept 2002 – Aug 2005 – Sleep Research Center, Virginia  
Margaret Callie, MPH, May 2003 – May 2005 – University of Houston  
Alex Emery, MPH, Sept 2002 – Aug 2006  
Megan Grove, MS, Sept 2005 – May 2007  
Fred Miller, PhD candidate, August 2003 – Aug 2008  
Cassie Robinson - MPH student, August 2006 - Aug 2008  
Ian Turpin, PhD candidate, August 2005 – May 2009  
Mary Hart Sailors, PhD, August 2006 – December 2010  
Danielle Hessong, MPH, August 2012 – 2014  
Jennifer Williams, MPH, August 2012 – 2014  
Tana Birky, MS, January 2012-December 2013  
Jaehyun Joo, PhD, January 2014 – May 2017  
Lyn Chen, MS, January 2014 – 2016  
Celina Harp, MS, August 2014 – May 2016  
Diana Gutierrez, PhD, August 2014 – May 2021  
Vasavi Shabrish, PhD – August 2015 – May 2022  
Meredith McDaniel, MS – August 2016 – May 2018  
Jessica Boisseau, MS – August 2016 – May 2018  
Graham Salmun – August 2018 – May 2019  
Ashley Neely, MS – August 2019 – 2021  
Ashley Neely, PhD – August 2021 – present  
Jesse Balderrama, MS – August 2019 – 2021  
Jesse Balderrama, PhD – January 2022 – present

Kristi Pham, MS – August 2020 – Dec 2022  
Montavious Coleman, PhD – August 2021- present  
Summer Messer, PhD – August 2022 – present

#### Undergraduate Training

Natasha Chernis – August 2013 – May 2014  
Ashleigh Frank – August 2013 – May 2014  
Lauren Jung – August 2013 – May 2014  
Erin Kriendler – August 2014 – May 2015  
Helen Wang – August 2014 – May 2016  
Eliza Plummer – August 2015 – May 2016  
Zainab Shahid – August 2015 – May 2016  
Ella Hawes – August 2017 – May 2018  
Masumi Yoshimoto – August 2017 – May 2019  
Lawrence Chu – August 2017 – May 2019  
Jessica Tan – August 2017 – May 2019  
Brandon Nguyen – August 2017 – May 2019  
Sarah Koo – August 2019 – May 2021  
Julia Hirsch – August 2020 – May 2021  
Riona Saha – August 2020 – May 2021  
Kishore Botla – August 2021 – present  
Dianne Zhao – August 2021 – present

#### Course Lectures

Continuing Education Genetics Series for Science Educators in South Texas  
“How do Genes Make People Ill?”

SPH Research Day, May 2003  
“Genetics of Response to Obesity Interventions”

PH 3720 – Social and Economic Determinants of Health, 2001-2005 annually  
“Implications of Genetic on Population Health”

PH3340 – Genetic Epidemiology of Chronic Disease, 2001-2006 annually  
“Genetics of Obesity”

PH 3315 – Molecular and Cellular Approaches to Human Genetics, 2002-2005 annually  
“Linkage Mapping and Strategies for Finding Disease Genes”

PH 1235 – Social and Behavioral Aspects of Physical Activity and Public Health, 2004-2006 annually, “The Genetics of Obesity and Exercise”

Digestive Diseases Research Seminar, BCM, January 2005  
“The Role of Genetic Variation in Obesity and Response to Treatment ”

University of Houston Research Seminar Series, February 2005  
“To Carb or Not to Carb”

University of Houston Research Seminar Series, April 2005  
“Obesity and Exercise: All in the Genes or Jeans?”

University of Texas Medical Student Research Seminar, June 2005  
“Mining the Human Genome for Obesity Genes”

Pediatric GI Workshop Lecture Series, September 2005  
“Exploring New Pathways that Lead to Obesity”

U.T. Cardiology Research Seminar, October 2005  
“A Multi-level Approach for the Study of Obesity”

U.T. Department of Integrative Biology, March 2006  
 "Obesity: Nature or Nurture?"

U.T./MD Anderson Genetic Epidemiology, March 2006  
 "Genetic Basis of Obesity"

Baylor College of Medicine Alumni Symposium, May 2007  
 "Gene-Environment Interactions in Obesity"

U.T./MD Anderson Genetic Epidemiology, June 2007  
 "Genetics of Obesity and Response to Treatment"

Digestive Diseases Center Seminar Series, Baylor College of Medicine, November 2007  
 "Genetics of Obesity and Response to Treatment"

U.T./MD Anderson Genetic Epidemiology, March 2008  
 "Genetics of Obesity and Response to Treatment"

Faculty Seminar, USDA/ARS Children's Nutrition Research Center, May 2008  
 "Circadian Rhythms and Obesity: Is there an Optimal Time to Eat?"

Cardiovascular Basic Science Seminar, Baylor College of Medicine, June 2008  
 "New Approaches to Gene Discovery in Obesity"

Molecular and Human Genetics Seminar, University of Texas HSC-Houston, Jan 2009  
 "Linking Circadian Rhythms to Obesity"

Animals Models Seminar Series, University of Texas HSC-Houston, Jan 2009  
 "Statistical Analysis of Animal Phenotypes"

Human Genetic Epidemiology Seminar, University of Texas HSC-Houston, Feb 2009  
 "Current Advances in Obesity Genetics"

Genetics and Genomics Seminar Series, Univ of Alabama at Birmingham, Feb 2010  
 "Circadian Rhythms, Genes and the Underpinnings of Obesity"

Nutritional Sciences 500 Seminar, Univ of Illinois at Urbana-Champaign, Mar 2010  
 "Circadian Rhythms, Genes and the Underpinnings of Obesity"

GBS704 Introduction to Experimental Medicine, December 2011  
 "Microarrays, Bioinformatics Data Mining, and Network analyses"

UAB Psychology Department Seminar Series, February 2012  
 "Exercise Adherence: How Genomics Can Reveal New Insight into Behavior"

UAB Center for Aging, March 2012  
 "Genomics Resources for Aging Research"

UAB Department of Microbiology, March 2012  
 "Genomics Resources for Gene Discovery in Microbiology"

UAB Epigenetics Retreat, July 2012  
 "Aerobic Exercise Induces Changes in Global Methylation in Young Adults"

UAB Center for Exercise Medicine Distinguished Scientist Lecture, November 2012  
 "Genes, Environments, and their Interactions in Predicting Exercise Response and Adherence"

PH2950 Genetic Epidemiology of Human Disease, 2014  
 "Genetics of Human Obesity"

UT Research+Pizza, February 2014  
 "Diet, Discipline & DNA"

PH2950 Genetic Epidemiology of Human Disease, 2016

“Genetics of Human Obesity”  
PH2950 Genetic Epidemiology of Human Disease, March 2017  
“Genetics of Human Obesity”  
NTR312H Fundamentals of Nutrition  
“Molecular and Genetic Basis of Human Obesity”  
NTR365.4 Obesity and Metabolic Health, October 2017  
“Molecular and Genetic Basis of Obesity”  
PH2950 Genetic Epidemiology of Human Disease, March 2018  
“Genetics of Human Obesity”  
NTR365.4 Obesity and Metabolic Health, October 2018  
“Molecular and Genetic Basis of Obesity”  
PH2950 Genetic Epidemiology of Human Disease, March 2019  
“Genetics of Human Obesity”  
PH2950 Genetic Epidemiology of Human Disease, Feb 2020  
“Genetics of Human Obesity”  
PH2950 Genetic Epidemiology of Human Disease, April 2021  
“Genetics of Human Obesity”  
NTR392.13 Nutrition and Disease, October 2021  
“Molecular and Genetic Basis of Obesity”  
PH2950 Genetic Epidemiology of Human Disease, March 2022  
“Genetics of Human Obesity”  
NTR392.13 Nutrition and Disease, October 2022  
“Molecular and Genetic Basis of Obesity”  
PH2950 Genetic Epidemiology of Human Disease, March 2023  
“Genetics of Human Obesity”