

**Ruth B. S. Harris**  
Regents' Professor  
Department of Physiology  
Augusta University  
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Augusta GA 30912  
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**EDUCATION:**

1981 Ph.D. Physiology  
University of Leeds

1977 B.Sc. Food Science and Physiology  
University of Leeds

**PROFESSIONAL EXPERIENCE:**

May 2018 - Regents Professor, Department of Physiology, Augusta University,  
Augusta, GA

July 2009 - 2018 Professor, Department of Physiology, Augusta University, Augusta,  
GA

August 2005 – 2009 Professor, Department of Foods and Nutrition,  
University of Georgia, Athens, GA.

March 2008- 2009 Adjunct Professor, Department of Cell Biology,  
University of Georgia, Athens, GA

August 2000 - 2005 Associate Professor, Department of Foods and Nutrition, University  
of Georgia, Athens, GA.

July 1999 – Aug 2000 Associate Professor, Department of Neuroscience, Pennington  
Biomedical Research Center, Baton Rouge, LA

Sept. 1994 - 1999 Assistant Professor, Department of Neuroscience, Pennington  
Biomedical Research Center, Baton Rouge, LA

Nov 1999 – Aug 2000 Adjunct Associate Professor, Department of Life Sciences,  
Louisiana State University, Baton Rouge, LA

Aug. 1995 - Aug 2000 Adjunct Associate Professor, Department of Veterinary Physiology,  
Pharmacology and Toxicology, LSU School of Veterinary Medicine,  
Baton Rouge, LA

Feb-Aug 1994 Visiting Assistant Professor, Department of Medicine, University of  
Wisconsin, Madison, WI

Oct 1993 - Feb 1994	Visiting Scholar, Department of Neurobiology and Physiology, Northwestern University, Evanston, IL
1990-1993	Senior Research Scientist II, Nutrition Research, Kraft General Foods, Inc., Glenview, IL
1989-1990	Senior Research Scientist I, Nutrition Research, Kraft General Foods, Inc
1988-1989	Research Scientist, Nutrition Research, Kraft General Foods, Inc
1987-1988	Assistant Member, Monell Chemical Senses Center, Philadelphia,
1984-1986	Research Associate, Department of Foods and Nutrition, University of Georgia, Athens, GA
1981-1984	Postdoctoral Fellow, Department of Foods and Nutrition, University of Georgia
1980-1981	Research Assistant, Department of Physiology, University of Leeds, England

### **Professional Organization Memberships**

American Physiology Society: 1996 - present

Society for Neuroscience: 1997 - present

American Institute of Nutrition: 1984 - 2008

North American Association for the Study of Obesity: 1991 – 2005

The Obesity Society: 2009-2012

Society for the Study of Ingestive Behavior: 2001 – present

Society for Experimental Biology and Medicine: 2000 –2005

American Diabetes Association 2010 - 2012

### **Professional Organization Service**

Associate Editor: Experimental Biology and Medicine 2004-2006

Section Editor: Physiology and Behavior 2014-2018

Editorial Board: Experimental Biology and Medicine 2000-2003

Editorial Board: Journal of Nutrition 2000-2007

Editorial Board: American Journal of Physiology: Regulatory, Integrative and Comparative 2001 - present

Editorial Board: American Journal of Physiology, Endocrinology and Metabolism 1998-2000

Editorial Board: Molecular and Cellular Endocrinology 2012-2018

Editorial Board: Physiology and Behavior 2018-present

Ethics Committee: North American Association for the Study of Obesity 1995-2001

Program Committee Member: The Obesity Society 2010-2012

Member External Review Board University of Colorado CNRU 2006-2010

Member External Advisory Committee Pennington Biomedical Research Center COBRE grant

2012 and 2013

Member Organizing Committee, Georgia State University Biotech Symposium 2016  
New Investigator Awards Committee: Society for the Study of Ingestive Behavior 2006, 2008  
Chair, New Investigator Awards Committee, Society for the Study of Ingestive Behavior, 2018  
Long Term Planning Committee: Society for the Study of Ingestive Behavior 2007 –2009  
Treasurer: Society for the Study of Ingestive Behavior 2009 –2015  
President: Society for the Study of Ingestive Behavior 2018 –2019

Ad hoc member of NIH Endocrinology Study Section 2000 -2003  
Member NIH Endocrinology Study Section 2003  
Member NIH IPOD Study Section 2004 – June 2007  
Ad hoc member of NIH ZRG1 IFCN-2 Special Emphasis Panel June, November 2007  
Ad hoc member of NIH ZRG1 DIG-E Special Emphasis Panel, March 2008  
Ad hoc member of NIH ZRG1 BCMB-A Special Emphasis Panel June 2009  
Member NIH NNRS study section October 2010 – 2014  
Co-chair NIH ZRG1EMNR B 02 Special Emphasis Panel July 2015  
Ad hoc member NIH IPOD study section June 2016  
Ad Hoc member NIH SYN Special Emphasis Panel February 2017  
Ad hoc member NIH IPOD study section February 2017  
Ad hoc member NIH EMNR-C(02) Special Emphasis Panel Nov 2017  
Ad Hoc member NIH ZRG1 ENMR GO2 Special Emphasis Panel Feb 2018  
Ad hoc member NIH IPOD study section June 2018  
Ad hoc member NIH ZRG1 EMNR-B 02 Integrated Metabolism Topics Nov 2018

#### **Ad Hoc Reviewer**

Netherlands Organization for Health Research and Development  
National Science Foundation  
US-Israel BiNational Agricultural Research and Development Fund  
USDA Human Nutrient Requirements Program  
Panel Member, USDA Human Nutrient Requirements Program, 1993  
NAASO Young Investigators Grant Program  
VA Medical Research Service  
New Jersey Agricultural Experiment Station  
Pork Producers Council  
Sheffield Hospitals Charitable Trust Medical Research Committee  
Medical Research Council of South Africa  
Auburn University Extramural Program  
University of Maryland, Maryland Industrial Partnerships Program  
STW-Danone Partnership Programme  
Boston Nutrition Obesity Research Center pilot grant program  
TUM School of Life Sciences of the Technische Universitaet Muenchen faculty search committee

Science  
Physiology and Behavior  
Nutrition  
Nutritional Neuroscience

Neuroendocrinology  
American Journal of Clinical Nutrition  
FASEB Journal  
Appetite  
Canadian Journal of Zoology  
Metabolism  
Obesity Research  
Journal of Endocrinology  
Neuro-Psychopharmacology and Biological Psychiatry  
Stress  
Journal of Nutritional Biochemistry  
Journal of Comparative Physiology  
Cell Biology and Toxicology  
Clinical Science  
Endocrinology  
Regulatory Peptides  
International Journal of Obesity  
Diabetes  
Obesity  
Brain Research  
Psychoneuroendocrinology  
PLOSone  
Journal of Applied Physiology  
Behavioral Processes  
Molecular and Cellular Endocrinology  
Genes Brain and Behavior  
Brain and Behavior  
Hormones and Behavior  
Journal of Psychopharmacology  
Nutrition Research  
Endocrine  
Journal of Cellular Biochemistry  
Genes and Nutrition  
Journal of Medical Foods  
Journal of Endocrinology  
Journal of Neuroendocrinology  
Journal of Investigative Dermatology

**Institutional Service Augusta University**

Interim Chair, Department of Physiology 2018-  
Associate-Chair, Department of Physiology 2012 – 2018  
Chair, Physiology Department Search Committee 2010-2018  
Chair, Physiology Department Promotions and Tenure Committee 2012-2018  
Member, Physiology Department Post-doc Advisory Committee 2011-2018  
Member, IACUC 2011-present  
Member, LAS Director Search Committee, 2012  
Member, Research Misconduct Inquiry Committee, 2014

Member MCG Basic Science Advisory Committee 2017-  
Member MCG Basic Science Faculty Salary Committee 2017-2018  
Augusta University Research Institute Award Selection Committee, 2018

### **Teaching Experience**

UGA 2002-2008 FDNS 6400 Macronutrient Metabolism 4 credit graduate course  
UGA 2002-2008 FDNS 8560 Proposal Writing 1 credit graduate course  
MCG, 2011- 2017 Director COGS 8033: Integrated Systems Biology 6 credit graduate course  
MCG, 2011-present MEDI 5158 Respiratory Physiology 6 hour of lecture 1<sup>st</sup> year medical students  
College of Nursing, Graduate Student Research Immersion Course, Fall, 2018.  
School of Graduate Studies, PSIO 9010, Seminar in Physiology, sixteen discussion sections, Fall, 2018,

#### *Teaching Evaluations UGA 2007-2008 (96 lecture hours/year)*

FDNS 6400 2007 evaluation: 4.6  
FDNS 8560 2007 evaluation: 4.4  
FDNS 6400 2008 evaluation: 4.7  
FDNS 8560 2008 evaluation: 4.9

#### *Teaching Evaluations Augusta University 2014-2016*

MEDI 5158: Module 3: CP Systems Phase 1 - 2014-15: evaluation: 4.5  
MEDI 5158: Module 3: CP Systems Phase 1 - 2015-16: evaluation: 4.3  
MEDI 5158: Cardiopulmonary Phase 1: 2016-2017: evaluation 3.7  
(6 lecture hours)

COGS 8033 2015: evaluation: 4.2  
COGS 8033 2016: evaluation: 4.3  
COGS 8033 2017: evaluation: 4.6  
(13.5 lecture hours)

### **Post-doctoral Mentor**

Gennady Smagin Ph.D., 1994-1999 Currently Director of Pharmacology, Melior Discovery, Exton, PA.  
You Zhou Ph.D. 1996-1998 Currently Research Professor, University of Nebraska-Lincoln, NE  
Jun Zhou Ph.D., 1999- 2000 Currently Senior Research Scientist, VA Medical Center, Washington, DC.  
Abram Madiehe Ph.D.. 2001 Currently Associate Professor, University of the Western Cape South Africa  
John Apolzan, Ph.D., 2009-2012 Currently Assistant Professor Research, PBRC, LA  
Amy Ross Ph.D., 2012 Currently Postdoctoral Associate, Georgia State University, GA

### **Graduate Student Advisor**

Jun Zhou, Ph.D., Veterinary Medicine, LSU 1999  
Heather Bowen, MS FDNS, UGA 2002  
Haiyan Gu, MS FDNS, UGA 2002  
Cherie Rooks, MS FDNS, UGA 2004  
Blair Wagoner, MS FDNS, UGA 2005

Ariadne Legrende, MS FDNS, UGA 2006  
Christina Chotiwat, MS FDNS, UGA 2007  
Joanna Miragaya, Ph.D. FDNS, UGA 2007  
Samantha Haring, MS FDNS, UGA 2009  
Isabell Scherer, MS FDNS, UGA 2009  
Bhavna Desai, Ph.D., Physiology, GRU 2014  
Marissa Seamon, PhD Candidate, Augusta University

### **Grants**

2017-2021 NIH NIDDK “Hexosamine biosynthetic pathway activation and leptin resistance”  
PI: Harris

2004-2019 NIH NIDDK "Leptin and Peripheral Glucose Utilization"  
PI: Harris

2015 Diabetes Action Research and Education Foundation “The metabolic basis of obesity caused by consumption of sucrose-containing beverages”.  
PI: Harris

2010 Diabetes and Obesity Discovery Institute, MCG “Hyperaldosteronism in Obesity and the Metabolic Syndrome”  
PI: Bollag. Co-investigator: Harris

2004-2009 NIH NIMH "Chronic Effects of Acute Stress"  
P.I: Harris

2006-2010: CSREES/GEO00932 "Environmental Factors Influencing the Efficiency of Energy Utilization"  
PI: Harris

2003-2004 Kraft Foods Inc. " Effects of different dairy proteins on body fat content"  
PI: Harris

2003-2004 Kraft Foods, Inc. "The Effect of Dietary Calcium on Body Composition and Insulin Sensitivity in Rats”  
PI: Harris

2003: NSF:Center For Behavioral Neuroscience "Do gonadal fat lipid levels control reproductive status and behavior?"  
PI: Bartness Co-Investigator: Harris

2002-2005: CSREES/GEO00932 "Environmental Factors Influencing the Efficiency of Energy Utilization"  
PI: Harris

2002-2004 Georgia Center on Obesity and Related Disorders (GCORD) "The Effects of Diet and Exercise on the Development of Obesity and Leptin Resistance"

PI: Harris

2001 Burroughs Wellcome Visiting Professor (Dr. Charles Billington)

PI: Harris

2001 Gift from Kraft Foods North America

PI: Harris

2001 - 2003 Lonza Inc. "Dietary effects of L-carnitine, orlistat and Vitamin E on high-fat diet-induced obesity"

PI: Harris Co-PI: Madiehe

2000- 2001 Genentech "Parabiosis Study"

PI: Harris

1999-2003 NIH "CRF binding protein and obesity"

PI: Pelleymounter (Neurocrine) Co-investigator: Harris

1999-2003 NIH NIDDK "Leptin and peripheral glucose utilization"

PI: Harris

1997 Pork Producers Council "Equivalent cholesterolemic effect of pork and chicken fat"

PI: Harris Co-Investigator: LeFevre

1997- 2002 U.S. Army "Studies in Military Nutrition"

PI: Ryan Project Leader "Nutrition, stress and mental performance": Harris

1996-1998 Zymogenetics Corp. "Search for islet growth factors by parabiosis".

Co-PIs: Kahn and Harris

1986 Eli Lilly Co. "Adrenergic Inhibitors of Avian Hepatic Lipogenesis"

Co-PIs: Martin and Harris

1985-1988 NIH RO1DK-36890 "Body Fat Regulation: Identification of Humoral Factors"

PI: Harris

1985-1986 Monsanto Co. "Anti-Lipogenic Factors in Parabiosed Rats"

PI: Harris

### **Honors and Awards**

Faculty Senate of the Medical College of Georgia: Distinguished Faculty Award for Basic Science Teaching 2012.

The Obesity Society: Outstanding Journal Research Article published in Obesity 2012.

AURI Distinguished Research Award 2017

### **Convention Papers**

Benjamin Franklin-Lafayette Seminars on Ingestive Behavior, Frejus France, 2013. "The effect of blocking the aqueduct on the response to third ventricle leptin infusion".

Experimental Biology, San Diego, 2012. "Is there a metabolic basis for leptin resistance?" In symposium on "The role of dietary ingredients in leptin resistance."

Benjamin Franklin-Lafayette Seminars on Ingestive Behavior, Frejus France, 2011. "Integrated Effects of Leptin in the Forebrain and Hindbrain on Energy Balance".

University of Auburn, AL January 2009. Boshell Diabetes Symposium. Plenary Speaker. "Can leptin make you fat?"

NAASO, Las Vegas, NV 2004. "Stress and Body Weight in Experimental Conditions". In symposium on "The Role of Stress and the CRF System in Obesity"

Nutrition Week, San Diego, CA. 2002. "Metabolic Effects of Leptin" In Symposium on "Adipose cell biology in obesity".

Society for the Study of Ingestive Behavior Annual Meeting, Santa Cruz, CA. 2002. "Chronic effects of acute stress" In Symposium on "Metabolic consequences of chronic stress".

American College of Sports Medicine: Southeast Regional Chapter 1997: "Leptin as a circulating lipostatic factor".

New York Academy of Sciences sponsored meeting on macronutrient substitutes. Washington, DC, 1996 "Appropriate animal models for clinical studies."

Current Progress in Military Neuroscience Research: Counter-measures for Battlefield Stressors. 1996. "REM sleep deprived rats as a model for stress-induced impairment of reference spatial memory."

Keystone Conference on Nutrition and Central Nervous System Function 1992: "Fat substitutes and regulation of food intake in rats".

FASEB minisymposium on regulation of food intake and energy utilization 1992. "Overview of animal models of efficiency of energy utilization".

Advances in Clinical Nutrition, Robert Wood Medical School 1992: "Fat substitutes"

**Invited Seminar Speaker (2000-2019)**

Michigan Nutrition Obesity Research Center Annual Symposium, 2019 "Leptin and weight loss- an integrated response"

Medical College of Georgia Department of Neuroscience and Regenerative Medicine Retreat, 2018. "Leptin and weight loss- an integrated response"

College of Veterinary Medicine, Washington State University 2017. "Integrated effects of leptin



in the forebrain and hindbrain”

Medical College of Georgia Department of Physiology, 2017. “Integrated effects of leptin in the forebrain and hindbrain”

Pennington Biomedical Research Center 2016. “Is there a metabolic link between drinking sucrose and leptin resistance?”

Medical College of Georgia Department of Neuroscience and Regenerative Medicine, 2016. “Leptin: it’s not just about the forebrain”

Medical College of Georgia Department of Physiology, 2016 “Leptin resistance in rats drinking sucrose”

University of Georgia 2013 “The metabolic link between consumption of sucrose solution and development of leptin resistance”

University of Chicago 2013. “Leptin: it’s not just about the forebrain”

Pennington Biomedical Research Center 2012. “Leptin: it’s not just about the forebrain”.

Georgia State University, Department of Biology 2012 “Disparate & Integrated Effects of Leptin in the Forebrain & Hindbrain”.

Medical College of Georgia, Department of Cell Biology 2009 “Can leptin make you fat?”

Burnham Institute, 2009 “Can leptin make you fat?”

University of Alabama, Birmingham Diabetes Institute, Boeshell Conference 2008. “Can leptin make you fat?”

Medical College of Georgia, Physiology Department, 2008 “Leptin in the regulation of body fat”

UGA Department of Cell Biology, 2008 “Stress and body weight regulation in rats”

University of North Carolina, Chapel Hill, Nutrition Department. 2007 “Leptin in the regulation of body fat”

UGA Department of Biochemistry, 2007 “Leptin in the regulation of body fat”

University of Pennsylvania. Institute for Diabetes, Obesity and Metabolism. 2006. “Leptin in the regulation of body fat”

UGA Department of Physiology and Pharmacology 2006 “Chronic effects of acute stress in rats”.

Virginia Tech, Department of Human Nutrition, Foods and Exercise, 2005 “Leptin in the regulation of body fat”.

Monell Chemical Senses Center, Philadelphia. 2003: "Circulating factors and the regulation of energy balance. What is the role of leptin?"

Department of Cellular Biology, UGA. 2003: "Circulating factors that regulate body fat content: Is leptin the answer?"

Columbia University Appetitive Seminar, New York. 2003: "Chronic changes in body weight of rats exposed to acute stress"

St Luke Roosevelt Hospital, New York. 2003: "Circulating factors and the regulation of energy balance. What is the role of leptin?"

Joslin Diabetes Center, Boston, MA. 2002: "The Circulating Lipostatic Factor : Is Leptin the Answer?"

Neuroscience and Behavior Program, University of Massachusetts, Amherst, MA. 2002: "Circulating Factors in the Regulation of Energy Balance: Is Leptin the Answer ?"

Department of Nutrition, University of Tennessee, Knoxville, TN. 2002: "Circulating Factors in the Regulation of Energy Balance: What is the role of leptin?"

Department of Food Science and Human Nutrition, University of Illinois, Urbana-Champaign 2001: "Circulating factors in the regulation of energy balance: Is leptin the answer?"

**Peer reviewed Manuscripts:**

1. Harris, R.B.S. and R.J. Martin. 1984. Lipostatic theory: concepts and signals. *Nutrition and Behavior* 1:253-275.
2. Harris, R.B.S. and R.J. Martin. 1984. Recovery of body weight from below "set-point" in mature female rats. *J Nutr* 1143-1150.
3. Harris, R.B.S. and R.J. Martin. 1984. Specific depletion of body fat in parabiotic partners of tube-fed obese rats. *Am J Physiol* 247:R380-R386.
4. Armitage, G., R.B.S. Harris, G.R. Hervey, and G. Tobin. 1984. The relationship between energy expenditure and environmental temperature in congenitally obese and non-obese Zucker rats. *J Physiol* 350:197-207.
5. Martin, R.J., T.G. Ramsay, and R.B.S. Harris. 1984 Central role of insulin in growth and development. *Domestic Animal Endocrinology* 1:89-104.
6. Kasser, T.R., R.B.S. Harris, and R.J. Martin. 1985. Level of satiety: fatty acid and glucose metabolism in three sites associated with feeding. *Am J Physiol* 248:R447-R452.
7. Kasser, T.R., R.B.S. Harris, and R.J. Martin. 1985. .Level of satiety: GABA and pentose shunt activities in three brain sites associated with feeding. *Am J Physiol* 248: 453-R458

8. Harris, R.B.S. and R.J. Martin. 1986. The metabolic response to a specific "lipid-depleting" factor in parabiotic rats. *Am J Physiol* 250:R276-R286.
9. Harris, R.B.S. and R.J. Martin. 1986. The influence of diet on the production of a "lipid-depleting" factor in obese parabiotic rats. *J Nutr* 116:2013-2027.
10. Harris, R.B.S., T.R. Kasser, and R.J. Martin. 1986. Dynamics of recovery of body composition after over-feeding, food restriction or starvation of mature female rats. *J Nutr* 116:2536-2546.
11. Harris, R.B.S., G.R. Hervey, and G. Tobin. 1987. Body composition of lean and obese Zucker rats in parabiosis. *Int J Obesity* 11:275-283.
12. Drewry, M.M., R.B.S. Harris, and R.J. Martin. 1988. Developmental changes in response to overfeeding: effect on body composition, liver metabolism and adipocyte cellularity. *J Nutr* 118:194-198.
13. Harris, R.B.S. 1988. Voluntary food intake of lean and obese Zucker rats in relation to dietary energy and nitrogen content. *J Nutr* 118:503-514.
14. Harris, R.B.S., M.J. Neal, and R.J. Martin. 1988. The effect of adrenergic agonists and age on lipogenesis in avian hepatocytes. *Comp Biochem Physiol C*. 91:579-583.
15. Martin, R.J., M.M. Drewry, D. Jewell, R.B.S. Harris, R. Young, and J.S. Patton. 1989. Growth hormone treatment reduces total body fat accumulation in Zucker obese rats. *Int J Obesity* 13:327-335.
16. Kasser, T.R., R.B.S. Harris, and R.J. Martin. 1989. Site of action of putative lipostatic factor: hypothalamic metabolism of parabiotic rats. *Am J Physiol* 257:R224-R228.
17. Harris, R.B.S. 1989. Body composition and *in vitro* lipid metabolism of overfed hypophysectomized rats. *Int J Obesity* 13:647-660.
18. Harris, R.B.S., R.C. Bruch, and R.J. Martin. 1989. *In vitro* evidence for an inhibitor of lipogenesis in serum from overfed obese rats. *Am J Physiol* 257:R326-R336.
19. Harris, R.B.S. and R.J. Martin. 1989. Changes in lipogenesis and lipolysis associated with recovery from reversible obesity in mature female rats. *PSEBM* 191:82-89.
20. Kasser, T.R., R.B.S. Harris, and R.J. Martin. 1989. Level of satiety: *In vitro* energy metabolism in brain during hypophagic and hyperphagic weight recovery. *Am J Physiol* 257:R1322-R1327.
21. Mullen, B.J., R.B.S. Harris, and R.J. Martin. 1990. Tumor necrosis factor- $\alpha$  chronically administered in rats: lack of cachectic effect. *PSEBM* 193:318-325.

22. Harris, R.B.S. and R.J. Martin. 1990. Site of action of putative lipostatic factor: food intake and peripheral pentose phosphate shunt activity. *Am J Physiol* 259:R45 - R52.
23. Harris, R.B.S. and W.K.Jones. 1991. Physiological responses of mature rats to replacement of dietary fat with a fat substitute. *J Nutr* 121:1109-1116.
24. Harris, R.B.S. 1991. Growth measurements in Sprague Dawley rats fed very low fat diets. *J Nutr* 121:1075-1080.
25. Harris, R.B.S. and H. Kor. 1992. Rapid reversal of insulin insensitivity in rats by reducing dietary fat from 40 to 30% of energy. *J Nutr* 122:1811-1822.
26. Harris, R.B.S. 1991. Adipocyte insulin responsiveness in female Sprague Dawley rats fed a high-fat diet or a low-fat diet containing a fat mimetic. *J Nutr* 122:1802-1810.
27. Harris, R.B.S. 1993. Food intake, energy intake and body composition of growing rats offered high-or low-fat cafeteria foods. *Int J Obesity* 17:307-315.
28. Harris, R.B.S. 1994 Factors influencing energy intake and weight gain of rats fed a high-fat or a fat mimetic diet. *Int J Obesity* 18:632-640.
29. Harris, R.B.S., R.J. Martin, and R.C. Bruch. 1995. Dissociation between food intake, diet composition and metabolism in parabiotic partners of obese rats. *Am. J. Physiol.* 268:R874-R883.
30. Youngblood, B.D., J. Zhou, G.N. Smagin, and R.B.S. Harris. 1995. Rapid eye movement sleep deprivation (REMd) impairs spatial reference memory in rats. *Physiol Behav* 61:249-256.
31. Harris, R.B.S., T.R. Ramsay, S.R. Smith, and R.C. Bruch. 1996. Early and late stimulation of Ob mRNA expression in meal-fed and overfed rats. *J Clin Invest* 97:2020-2026.
32. Smagin, G.N., R.B.S. Harris, and D.H. Ryan. 1996. Corticotropin-releasing factor receptor antagonist infused into the locus coeruleus attenuates immobilization stress-induced defensive withdrawal in rats. *Neuroscience Letters* 220:167-170.
33. Smagin, G.N., J. Zhou, R.B.S. Harris, and D.H. Ryan. 1997. CRF receptor antagonist attenuates immobilization stress-induced norepinephrine release in the prefrontal cortex in rats. *Brain Res Bull* 42:431-434.
34. Zachwieja, J.J., S.L. Hendry, S.R. Smith, and R.B.S. Harris. 1997 Voluntary wheel running decreases adipose tissue mass and expression of leptin mRNA in Osborne-Mendel rats. *Diabetes* 46: 1159-1166.
35. Youngblood, B.D., D.H. Ryan, and R.B.S. Harris. 1997 Appetitive operant behavior and free feeding in rats exposed to acute stress. *Physiol Behav* 62: 827-830.

36. Rybkin, I.I., Y. Zhou, J. Volaufova, G.N. Smagin, D.H. Ryan, and R.B.S. Harris. 1997. The effect of restraint stress on food intake and body weight is determined by time of day. *Am J Physiol* 273: R1612-R1622.
37. Harris, R.B., J. Zhou, S.D. Weigle, and J. Kuijper. 1997. Recombinant ob protein exchanges between parabiosed mice but does not reach equilibrium. *Am J Physiol* 272: R1800 -R1808.
38. Harris, R.B.S. 1997. Loss of body fat in lean parabiotic partners of ob/ob mice. *Am J Physiol* 272: R1809-R1815.
39. Harris, R.B.S., J. Zhou, B.D. Youngblood, G.N. Smagin, and D.H. Ryan. 1998. Failure to induce depression in Wistar and Sprague Dawley rats exposed to chronic mild stress. *Physiol Behav* 63: 91-100
40. Harris, R.B.S. J. Zhou, S.M. Redmann, G.N. Smagin, S.R. Smith, E. Rodgers and J.J. Zachwieja. 1998. A leptin dose response study in obese (ob/ob) and lean (+/?) mice. *Endocrinology* 139: 8-19.
41. Harris, R.B.S. 1998 Acute and chronic effects of leptin on glucose utilization in lean mice. *BBRC* 245: 502-509.
42. Zhou, Y., P.D. Elkins, L.A. Howell, D.H. Ryan, R.B.S. Harris. 1998. Apolipoprotein-E deficiency results in an altered stress responsiveness in addition to an impaired spatial memory in young mice. *Brain Res.* 788: 151-159.
43. Smagin, G.N., L.A. Howell, D.H. Ryan, E.B. DeSouza, R.B.S. Harris. 1998. Corticotrophin releasing factor (CRF) and urocortin (UCN)-induced anorexia in rats: the role of CRF<sub>2</sub> receptors. *NeuroReport* 9: 1601-1606.
44. Harris, R.B.S. 1999. Parabiosis between db/db and ob/ob or db/+ mice. *Endocrinology.* 140: 138-145.
45. Howell, L.A., Harris, R.B.S., C. Clarke, B.D. Youngblood, D.H. Ryan, T.G. Gilbertson. 1999. The effects of acute or repeated restraint stress on taste preferences in rodents. *Physiol. Behav.* 65: 697-704.
46. Harris, R.B.S., J. Zhou, B.D. Youngblood, I.I. Rybkin, G.N. Smagin, D.H. Ryan. 1998. The effect of repeated restraint on body weight and composition of rats fed low and high fat diets. *Am. J. Physiol.* 275: R1928-R1938.
47. Zhou, J., X. Yan, D.H. Ryan, R.B.S. Harris. 1999. Sustained effects of repeated restraint stress on muscle and adipocyte metabolism in high fat fed rats. *Am. J. Physiol.* 277: R757-R766.
48. Zhou, Y., A. Cheshire, L.A. Howell, D.H. Ryan, R.B.S. Harris. 1999. Neuroautoantibody

- immunoreactivity in relation to aging and stress in apolipoprotein E-deficient mice. *Brain Res.* 49: 173-180.
49. Smagin, G.N., L.A. Howell, S. Redmann, D.H. Ryan, R.B.S. Harris. 1999. Prevention of stress-induced weight loss by third ventricle corticotropin releasing factor receptor antagonist. *Am. J. Physiol.* 276: R1461-R1468.
  50. Youngblood, B.D., G.N. Smagin, P.D. Elkins, D.H. Ryan, R.B.S. Harris. 1999. Sleep deprivation and valine effect spatial learning and brain 5-HT metabolism. *Physiol. Behav.* 67: 643-649.
  51. Friedman, M.I., R.B.S. Harris, H. Ji, I. Ramirez, M.G. Tordoff. 1999. Fatty acid oxidation affects food intake by altering hepatic energy status. *Am. J. Physiol.* 276: R1046-R1053.
  52. Bramlett, S.B., J. Zhou, R.B.S. Harris, S.L. Hendry, T.L. Witt, J.J. Zachweija. 1999. Does  $\beta$ -adrenoreceptor blockade attenuate acute exercise induced reductions in leptin mRNA? *J. Appl. Physiol.* 87: 1678-1683.
  53. Shi, M., X. Yan, D.H. Ryan, R.B.S. Harris. 2000. Identification of urocortin mRNA antisense transcripts in rat tissue. *Brain Res. Bull.* 53: 317-324.
  54. Zhou, J., M. Shi, T. Mitchell, G. Smagin, S. Thomas, D.H. Ryan, R.B.S. Harris. 2001. Changes in rat adipocyte and liver glucose metabolism following repeated restraint stress. *Proc.Soc.Exp.Biol.Med.* 226: 312-319
  55. Truett, G.E., J.A. Walker, R.B.S. Harris. 2000. A developmental switch affecting growth in fatty rats. *Am. J. Physiol.* 279: R1956-R1963.
  56. Harris, R.B.S., T.D. Mitchell, X. Yan, J.S. Simpson, S.R. Redmann. 2001. Metabolic responses to leptin in obese db/db mice are strain dependent. *Am. J. Physiol* 281: R115-R132
  57. Zhou, J., M. Shi, S. Redmann, Jr., R. L. Mynatt, D. H. Ryan, R.B.S. Harris. 2001. Exaggerated stress responsiveness in mice over-expressing agouti protein. *Physiol. Behav.* 73: 599-608, 2001.
  58. Harris, R.B.S., T.D. Mitchell, J. Simpson, S. M. Redmann, Jr., B. D. Youngblood, D. H. Ryan. 2002. Chronic weight loss in rats exposed to repeated acute restraint stress is independent of energy balance or leptin status. *Am.J. Physiol.* 282: R77-88.
  59. Harris, R.B.S., T.D. Mitchell, R.L. Mynatt. 2002. Leptin responsiveness in mice that ectopically express agouti protein. *Physiol. Behav.* 75: 159-167.
  60. Ansel K.M., R.B.S. Harris, J.G. Cyster. 2002. CXCL13 is required for B1 cell homing, natural antibody production and body cavity immunity. *Immunity* 16: 67-76.
  61. Harris, R.B.S., J. Zhou, T. Mitchell, S. Hebert, D.H. Ryan. 2002. Rats fed only during the light period are resistant to stress-induced weight loss. *Physiol. Behav.* 76: 543-550.

62. Madiehe, A.M. S. Hebert, T. D. Mitchell, R.B.S. Harris. 2002. Strain-dependent stimulation of growth in leptin-treated obese *db/db* mice. *Endocrinology*. 143:3875-3883.
63. Harris, R.B.S., D.B. Hausman and T.J. Bartness. 2002. Compensation for partial lipectomy in mice with genetic alterations of leptin and its receptor subtypes. *Am. J. Physiol.* 283: R1094-1103.
64. Chu Y., M.F. Mouat, R.B.S. Harris, J.A. Coffield, A. Grider. 2003. Water maze performance and changes in serum corticosterone levels in zinc deprived and pair-fed rats. *Physiol. Behav.* 78; 569-578.
65. Harris, R.B.S., T.D. Mitchell, S. Herbert. 2003. Leptin-induced changes in body composition in mice fed low- or high-fat diet. *Exp Biol Med* 228:24-32.
66. Bowen, H., T.D. Mitchell and R.B.S. Harris. 2003. Method of leptin dosing, strain and group housing influence leptin sensitivity in high-fat fed weanling mice. *Am. J. Physiol.* 284: R87-100.
67. Papakonstantinou, E., W.P. Flatt, P.J. Huth, R.B.S. Harris. 2003. High dietary calcium reduces body fat content, digestibility of fat, and serum Vitamin D in rats. *Obesity Res* 11: 387-394.
68. Harris, R.B. S., H. M. Bowen, T.D. Mitchell. 2003. Leptin resistance in mice is determined by gender and duration of exposure to high-fat diet. *Physiol Behav* 78; 543-555.
69. Madiehe, A.M., T.D. Mitchell, R.B.S. Harris. 2003. Hyperleptinemia and reduced TNF- $\alpha$  secretion cause resistance of *db/db* mice to endotoxin. *Am. J. Physiol.* 284:R763-R770
70. Papkonstantinou, E., D.H. Ryan, R.B.S. Harris. 2003. Dietary fish oil does not protect rats exposed to restraint or sleep deprivation stress. *Physiol Behav* 78: 759-765.
71. Hausman, D.B., J. Lu, D.H. Ryan and R.B.S. Harris. 2004. Compensatory growth of adipose tissue after partial lipectomy: involvement of serum factors. *Exp Biol* 229:512-520.
72. Haltiner AL, Mitchell TD, Harris RB. 2004 Leptin action is modified by an interaction between dietary fat content and ambient temperature. *Am J Physiol Regul Integr Comp Physiol.* 287:R1250-5.
73. Harris R.B.S., H.Gu, T.D. Mitchell, L. Endale, M. Russo, and D.H. Ryan. 2004. Increased glucocorticoid response to a novel stress in rats that have been restrained. *Physiol Behav* 81:557-568.
74. Rooks, C.R., T. Bennet, T.J. Bartness and R.B.S. Harris. 2004. Compensation for an increase in body fat caused by donor transplants into mice. *Am. J. Physiol.* 286:R1149-1155.
75. Bowers R.R., Gettys T.W., Prpic V., Harris R.B.S., Bartness T.J. 2005 Short photoperiod

exposure increases adipocyte sensitivity to noradrenergic stimulation in Siberian hamsters. *Am J Physiol* 288:R1354-R1360.

76. Rooks C.R., Penn D.M., Kelso E.E., Bowers R.R., Bartness T.J., Harris R.B.S. 2005 Sympathetic denervation does not prevent a reduction in fat pad size of rats or mice treated with peripherally administered leptin. *Am J Physiol* 289: R92- 102
77. Guo H., Brewer J.M., Champhekar A., Harris R.B.S., Bittman E.L. 2005 Differential control of peripheral circadian rhythms by suprachiasmatic-dependent neural signals. *Proc Natl Acad Sci U S A.*; 102:3111-3116.
78. Harris R.B.S. 2005 Dairy protein, calcium and body weight--the need for a mechanism. *Int J Obes Relat Metab Disord.*29:388-90.
79. Song C.K., Jackson, R., Harris, R.B.S., Richard, D., Bartness T.J. 2005 Melanocortin-4 receptor mRNA is expressed in sympathetic nervous system outflow neurons to white adipose tissue. *Am J Physiol Regul Integr Comp Physiol.* 289:R1467-76
80. Harris R.B., Kelso E.W., Flatt W.P., Bartness T.J., Grill H.J. 2006 Energy Expenditure and body composition of chronically maintained decerebrate rats in the fed and fasted condition. *Endocrinology* 147:1365-76.
81. Harris R.B., Palmondon, J., Leshin, S., Flatt, W.P., Richard, D. 2006. Chronic disruption of body weight but not of stress peptides or receptors in rats exposed to repeated restraint stress. *Horm Behav.* 49:615-25
82. Wagoner, B., Hausman, D.B., Harris, R.B.S. 2006. Direct and indirect effects of leptin on preadipocyte proliferation and differentiation. *Am J. Physiol.* 290:R1557-64
83. Chotiawat C, Harris R.B.S. 2006 Increased anxiety-like behavior during the post-stress period in mice exposed to repeated restraint stress. *Horm Behav.* 50: 489-495.
84. Penn D.M., Jordan L.C., Kelso E.W., Davenport J.E., Harris R.B.S. 2006 The effects of central or peripheral leptin administration on norepinephrine turnover in defined fat depots. *Am J Physiol Regul Integr Comp Physiol.* 291:R1613-1621
85. Legendre A, Harris R.B.S. 2006 Exaggerated response to mild stress in rats fed high-fat diet. *Am J Physiol Regul Integr Comp Physiol.* 291:R1288-1294.
86. Harris R.B.S., Mitchell T.D., Kelso E.W., Flatt W.P. 2007 Changes in environmental temperature influence leptin responsiveness in low- and high-fat fed mice. *Am J Physiol Regul Integr Comp Physiol.* 293: R106-115
87. Legendre A., Papkonstantinou E., Roy M-C, Richard D., Harris R.B.S. 2007 Differences in response to corticotrophin releasing factor following short and long-term consumption of a high fat diet. *Am J Physiol Regul Integr Comp Physiol* 293:R1076-1085
88. Harris, R.B.S., Bartness, T.J., Grill H.J. 2007. Leptin responsiveness in chronically



- decerebrate rats. *Endocrinology* 148:4623-4633.
89. Miragaya, J. R., Harris, R.B.S. 2008. Antagonism of corticotrophin-releasing factor receptors in the fourth ventricle modifies responses to mild but not restraint stress. *Am. J. Physiol Regul Integr Comp Physiol.* 295:R404-16
  90. Wilson, M.E., Fisher, J., Fisher, A., Harris, R.B.S., Bartness, T.J. 2008. Quantifying food intake in socially housed monkeys: social status effects on caloric consumption.. *Physiol Behav* 94:586-94
  91. Song, C. K, Vaughan, C. H., Keen-Rhinehart, E, Harris, R.B.S., Richard, D. and Bartness, T. J. 2008 Melanocortin-4 receptor mRNA expressed in sympathetic outflow neurons to brown adipose tissue: Neuroanatomical and functional evidence *Am. J. Physiol Regul Integr Comp Physiol.* 295:R417-28
  92. Chotiawat, C., Harris, R.B.S. 2008 Antagonism of specific corticotropin releasing factor receptor subtypes selectively modifies weight loss in restrained rats. *Am. J. Physiol. Regul Integr Comp Physiol.* 295:R1762-73
  93. Harris, R.B.S. and R. L. Leibel. 2008. "Location, location, location...." Preview of paper by Tran et al. *Cell Metabolism.* 7:359-61.
  94. Nautiyal K.M., Dailey M.E., Brito N., D.A. Brito M.N., Harris R.B., Bartness T.J., Grill H.J. 2008. Energetic Responses to Cold Temperatures in Rats Lacking Forebrain-Caudal Brainstem Connections. *Am J Physiol Regul Integr Comp Physiol.*295:R789-98
  95. Harris R.B.S. Kelso E.W., Flatt W.P., Grill H.J., Bartness TJ. 2009 Testosterone replacement does not normalize carcass composition in chronically decerebrate male rats. *Am J Physiol Regul Integr Comp Physiol.* 296: R1687-94
  96. Harris R.B.S. 2009 Nature or nurture?: focus on "Preadipocyte transplantation: an in vivo study of direct leptin signaling on adipocyte morphogenesis and cell size". *Am J Physiol Regul Integr Comp Physiol* 296: R1336-8. Editorial Focus
  97. Chotiawat C., Kelso E.W., Harris R.B.S. 2010 The effects of repeated restraint stress on energy balance and behavior of mice with selective deletion of CRF receptors. *Stress* 13: 203- 213
  98. Harris, R.B.S. 2010 Leptin responsiveness of mice deficient in corticotrophin-releasing hormone receptor type 2. *Neuroendocrinology.* 92:198-206.
  99. Bellinger LL, Wellman PJ, Harris RB, Kelso EW, Kramer PR. 2010 The effects of chronic nicotine on meal patterns, food intake, metabolism and body weight of male rats. *Pharmacol Biochem Behav.* 95:92-9
  100. Chu Y, Huddleston GG, Clancy AN, Harris RB, Bartness TJ.2010 Epididymal fat is

necessary for spermatogenesis, but not testosterone production or copulatory behavior. *Endocrinology* 151:5669-79

101. Scherrer, I., Holmes, P.V., Harris, R.B.S. 2011 The importance of corticosterone in mediating restraint-induced weight loss in rats. *Physiol Behav*, 102:225-33
102. Haring, S.J., Harris, R.B.S. 2011. The relation between dietary fructose, dietary fat and leptin responsiveness in rats. *Physiol Behav* 104: 914-22
103. Apolzan, J.W., Harris, R.B.S. 2011. Differential effects of chow and purified diet on the consumption of sucrose solution and lard and the development of obesity. *Physiol Behav.* 105: 325-331
104. Xing, Y., Rainey, W.E., Apolzan, J.W., Francone, O.L., Harris, R.B.S., Bollag, W.B. 2012 Adrenal cell aldosterone production is stimulated by very low density lipoprotein (VLDL). *Endocrinology* 153:721-31
105. Harris, R.B.S., Apolzan, J.W. 2012. Changes in glucose tolerance and leptin responsiveness of rats offered a choice of lard, sucrose and chow. *Am. J. Physiol.* 302: R1327-39
106. Harris, R.B.S. 2012. Sympathetic denervation of one white fat pad changes norepinephrine content and turnover in intact white and brown fat depots. *Obesity* 20:1355-64 (Awarded best basic science paper in Obesity 2012)
107. Harris, R.B.S. 2012. Preface to the Special Issue of Physiology and Behavior from the 2011 Annual meeting of the Society for the Study of Ingestive Behavior (SSIB). *Physiol Behav.* 106:305-6
108. Apolzan, J.W. and Harris, R.B.S. 2013 Rapid onset and reversal of peripheral and central leptin resistance in rats offered chow, sucrose solution, and lard. *Appetite* 60: 65-73
109. Harris, R.B.S. 2013 Leptin-induced increase in body fat content of rats. *Am J Physiol Endocrinol Metab* 304: E267-281
110. Vasselli, J.R., Scarpace, P.J., Harris R.B.S., and Banks, W.A. 2013. Dietary components in the development of leptin resistance. *Advan Nutr* 4: 164-175
111. Desai, B.N. and Harris, R.B.S. 2013. Integrated effects of leptin in the forebrain and hindbrain of male rats. *Endocrinology* 154: 2663-2675.
112. Harris, R.B.S. 2013. Evidence that leptin-induced weight loss requires activation of both forebrain and hindbrain receptors. *Physiol Behav* 120:83-92
113. Nishimoto, K. Harris, R.B., Rainey, W.E., Seki, T. 2014 Sodium deficiency regulates rat adrenal zona glomerulosa gene expression. *Endocrinology* 155: 1363-1372
114. Vaill, M.I., Desai, B.N., Harris, R.B.S. 2014. Blockade of the cerebral aqueduct in rats

- provides evidence of antagonistic leptin responses in the forebrain and hindbrain. *Am.J. Physiol. Endocrinol Metab* 306:E414-423.
115. Desai, B.N., Harris, R.B.S. 2014 An acute method to test leptin responsiveness in rats. *Am J. Physiol. Reg, Integr, Comp.* 306:R852-860
  116. Zimmerman, A.D., Harris, R.B.S. 2015. In vivo and vitro evidence that chronic activation of the hexosamine biosynthetic pathway interferes with leptin-dependent STAT3 phosphorylation. *Am J Physiol Reg Integr Comp.* 308: R543-555
  117. Harris, R.B.S., Apolzan, J.W. 2015. Hexosamine biosynthetic pathway activity in leptin resistant sucrose-drinking rats. *Physiol Behav* 138:208-218.
  118. Woolaston-Hayden, E.E., Harris, R.B.S., Liu, B., Bridger, R., Xu, Y., Wells, L. 2014 Global *O*-GlcNAc levels modulate adipocytokine transcription during chronic insulin resistance. *Front Endocrinol* 5:223.
  119. Desai, B.N., Harris, R.B. 2015. Leptin in the hindbrain facilitates phosphorylation of STAT3 in the hypothalamus. *Am J Physiol Endocrinol Metab* 308: E351-361
  120. Zhou, H, Lei, X, Benson, T, Mintz, J, Xu, X, Harris, RB, Weintraub, NL, Wang, X, Chen, W. 2015. Berardinelli-Seip congenital lipodystrophy 2 regulates adipocyte lipolysis, browning and energy balance in adult animals. *J Lipid Res* 56: 1912-1925.
  121. Harris, R.B. 2015. In vivo evidence for unidentified leptin-induced circulating factors that control white fat mass. *Am J Physiol. Regul Integr Comp Physiol* 309:R1499-R1511
  122. Harris, R.B.S. 2016. Repeated restraint stress lowers the threshold for response to third ventricle CRF administration. *Horm Behav* 89:64-68
  123. Harris, R.B.S., Desai B.N. 2016 Fourth ventricle leptin infusions dose dependently activate hypothalamic signal transducer and activator of transcription 3 (STAT3). *Am J Physiol Endocrinol Metab* 311:E939-E948
  124. Harris, R.B. 2017 Low dose leptin infusion in the fourth ventricle of rats enhances the response to third ventricle leptin injection. *Am J Physiol Endocrinol Metab.* 313:E134-147
  125. Harris R.B., 2018 Source of dietary sucrose influences development of leptin resistance in male and female rats *Am J Physiol. Regul Integr Comp Physiol* 314: R589-610
  126. Vaibhav, K., Braun, M., Khan, M.B., Fatima, S., Saad, N., Shankar, A., Khan, Z.T., Harris, R.B., Yang, Q., Huo, Y., Arbab, A., Giri, S., Alleyne, C.H., Vender, J.R., Hess, D.C., Baban, B., Hoda, M.N., Dhandapani, K.M. 2018. Remote ischemic post-conditioning promotes hematoma resolution via AMPK-dependent immune regulation. *J Exp Med.* 215: 2636-2654.
  127. Harris, R.B. 2019. Development of leptin resistance in sucrose drinking rats is associated

with consuming carbohydrate-containing solutions and not calorie-free sweet solution. *Appetite* 132: 114-121.

128. Harris, R.B. 2019. Low dose infusions of leptin into the nucleus of the solitary tract increase sensitivity to third ventricle leptin. *Am J Physiol Endocrinol Metab.* EPub.

**Book Chapters and Reviews:**

1. Martin, R.J., R.B.S. Harris, and D.D. Jones. Evidence for central mechanisms of obesity in the Zucker fatty rat (fa/fa). *PSEBM* 183:1-10, 1986.
2. Harris, R.B.S. Role of set-point theory in the regulation of body weight. *FASEB J* 4:3310-3318 (invited review), 1990.
3. Harris, R.B.S. Factors influencing body weight regulation. *Digestive Diseases* 11:133-145 (invited review), 1993.
4. Martin, R.J., D. White, and M.G. Hulsey. The regulation of body weight. *American Scientist* (Invited Review that KGF would not allow published in my name) Nov-Dec 528-541, 1991.
5. Armitage, G., R.B.S. Harris, G.R. Hervey, and G. Tobin. The part played by variation in energy expenditure in the regulation of energy balance. In: *The body weight regulatory system: normal and disturbed mechanisms*. Raven Press, New York, 1981.
6. Harris, R.B.S. and R.J. Martin. Physiological and metabolic changes in parabiotic partners of obese rats. In: *Hormones, thermogenesis and obesity*. Ed. H.Lardy and F.Stratman. Elsevier Publishing Co. pp 233-243, 1989.
7. Harris, R.B.S. Fat substitutes and food intake in rats. In: *Appetite and body weight regulation. Sugar, fat and macronutrient substitutes*. CRC Press, Boca Raton, FL, 1994.
8. Smagin, G., R.B.S. Harris, and D.H. Ryan. The role of the locus coeruleus CRF-norepinephrine interaction in the behavioral response to stress. *Pennington Nutrition Series 10: Countermeasures for battlefield stressors*. pp: 88-100. LSU Press, Baton Rouge, LA. 2000
9. Harris, R.B.S., B. Youngblood, J. Zhou, G. Smagin, and D.H. Ryan. REM sleep deprived rats demonstrate a stress-induced impairment of spatial memory. *Pennington Nutrition Series 10: Countermeasures for battlefield stressors*. pp: 101-115. LSU Press, Baton Rouge, LA. 2000
10. Harris, R.B.S. Appropriate animal models for clinical studies. *Annal NY Acad Sci.*, 819, 1997.
11. Harris, R.B.S., L.A. Howell, T. Mitchell, B.D. Youngblood, D.A. York and D.H. Ryan. Stress and macronutrient selection. In: *Neural control of macronutrient selection*. Pp: 473-486. CRC Press, Boca Raton, FL 2000.

12. Harris R.B.S. Leptin – Much more than a satiety signal. *Ann. Rev. Nutr.* Vol 20. 25-45, 2000
13. Mauer, M.M., R.B.S. Harris and T.J. Bartness. The regulation of total body fat: Lessons learned from lipectomy studies. *Neuroscience and Biobehavioral Reviews* 25: 15-28. 2001
14. Harris, R.B.S. Consideration of experimental design for studies in Nutritional Neuroscience. In: *Nutritional Neuroscience: Overview of an emerging field.* pp 11-24. Taylor and Francis, New York. 2005
15. Penn, DM, C.R. Rooks and R.B.S. Harris. Leptin: A metabolic perspective. *Handbook of Contemporary Neuropharmacology* John Wiley and Sons 2007
16. Harris, R.B.S. Is Leptin the Parabolic “Satiety” Factor ? Past and Present Interpretations. *Appetite* 61: 111-118 2013
17. Harris, R.B.S. Contribution made by parabiosis to the understanding of energy balance regulation. *BBA-Molecular Basis of Disease (Invited review)* 1832:1449-1455 2013
18. Harris, R.B.S. Direct and Indirect Effects of Leptin on Adipocyte Metabolism. *BBA-Molecular Basis of Disease (Invited review)* 1842:414-423 2013
19. Harris R.B.S. Chronic and acute effects of stress on energy balance: are there appropriate animal models? *Am J Physiol* 308:R250-65 2015
20. Harris, R.B.S. The hamster as a model of human ingestive behavior. Chapter 3. *Appetite and Food intake: Central control.* Ed: R.B. S. Harris, CRC Press, Taylor Francis Group, Boca Raton, FL. 2017.
21. Harris, R.B.S. Denervation as a tool for testing sympathetic control of white adipose tissue. *Physiol Behav.* 190: 3-10, 2018.

#### **Books/Journal Issues Edited**

1. *Appetite and Food Intake: Behavioral and Physiological Considerations.* Eds: R.B. S. Harris, R. Mattes. CRC Press, Taylor Francis Group, Boca Raton, FL. 2008.
2. Special Issue of *Molecular and Cellular Endocrinology*. “Molecular and Cellular Aspects of Adipocyte Development and Function” Eds: R.B.S. Harris, J.M. Stephens, Elsevier Press, Burlington, MA. 2010.
3. Special Issue of *Physiology & Behavior*. “Proceedings of SSIB 2011”. Eds: R.B.S. Harris M. Yeomans, Elsevier Press, Burlington, MA. 2012.
4. *Appetite and Food Intake: Central Control.* Ed: R.B. S. Harris, CRC Press, Taylor Francis Group, Boca Raton, FL. 2017.