# Curriculum Vitae Timothy R. Nagy, PhD

Professor and Vice Chair for Research
The University of Alabama at Birmingham (UAB)
Department of Nutrition Sciences
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## **EDUCATION:**

B.S. Biology, 1984 - Indiana University of Pennsylvania, Indiana, PA M.S. Biology, 1988 - Indiana University of Pennsylvania, Indiana, PA

Ph.D. Biology, 1992 - University of Utah, Salt Lake City, UT Postdoctoral Endocrinology, 1994 - University of Delaware, Newark, DE

Postdoctoral Energy Metabolism and Body Composition, 1996 – University of Alabama at Birmingham

Assistant Professor, Division of Physiology and Metabolism, Dept. of Nutrition Sciences,

## **ACADEMIC APPOINTMENTS:**

1996-2000

	UAB
2008- pres 2008- pres	Vice Chair for Research, Department of Nutrition Sciences, UAB Director, Small Animal Phenotyping Core, Diabetes Research and Training Center,
2006- pres	Co-Director, Small Animal Phenotyping Core, Neuroscience Blueprint Center
2005- pres	Senior Scientist, Center for Free Radical Biology, UAB
2005- pres	Senior Scientist, Center for Aging, UAB
2004- pres	Senior Scientist, Center for Minority Health and Research, UAB
2003- pres 2003- pres	Senior Scientist, Comprehensive Cancer Center, UAB
2003- pres	Director, Small Animal Phenotyping Core, Nutrition Obesity Research Center, UAB
2001- pres	Director, Small Animal Bone Phenotyping Core, Center for Metabolic Bone Disease, UAB
2001- 2007	Director, PhD Program in Nutrition Sciences, Dept. of Nutrition Sciences, UAB
0004 0007	Research Center, UAB
2000- 2004	Associate Director, Energy Metabolism and Body Composition Core, Clinical Nutrition
2000- pres	Senior Scientist, Nutrition Obesity Research Center, UAB
2000- pres	Senior Scientist, Center for Metabolic Bone Disease, UAB
1999- 2000	Associate Scientist, Center for Metabolic Bone Disease, UAB
2001- 2008	Director, Division of Physiology and Metabolism, Dept. of Nutrition Sciences, UAB
1999- 2001	Acting Director, Division of Physiology and Metabolism, Dept. of Nutrition Sciences, UAB
2005 pres	Professor, Department of Biology, UAB
2000- 2005	Associate Professor, Department of Biology, UAB
<b>2005- pres</b> 1997- 2000	Professor, Division of Physiology and Metabolism, Dept. of Nutrition Sciences, UAB Assistant Professor, Department of Biology, UAB
200E proc	Sciences, UAB  Professor, Division of Physiology and Matcheliam, Dept. of Nutrition Sciences, UAB
2000- 2005	Associate Professor ( <b>Tenured</b> ), Division of Physiology and Metabolism, Dept. of Nutrition
	University of Alabama at Birmingham (UAB)
1990- 2000	Assistant i folessor, Division of i hysiology and inetabolism, Dept. of Natificon Sciences,

# GRANT SUPPORT (PRESENT): (Note: grants in bold indicate that I am/was PI)

- 1. NIH/NIDDK (P30DK56336), Principal Investigator and Core Director at 15% effort, *UAB Nutrition Obesity Research Center Small Animal Phenotyping Core*, 04/01/00 06/31/12.
- 2. NIH (P30AR046031), Principal Investigator and Core Director at 10% effort, *UAB Core Center for Basic Skeletal Research (CCBSR)* Core D, 06/01/06 05/31/11.
- 3. NIH (P30NS057098), Co-Principal Investigator and Co-Core Director at 5% effort, *Alabama Neuroscience Blueprint Core Center, In vivo physiology and phenotyping core*, 07/01/06 06/30/11.
- 4. NIH (R01DK075996), Co-investigator at 5% effort, *Cilial dysfunction and pathogenesis of obesity*, (Principal Investigator, Bradley Yoder, PhD), 07/01/07 06/30/12.
- 5. NIH (P60DK079626), Principal Investigator and Core Director at 15% effort, *UAB Diabetes Research and Training Center, Small Animal Phenotyping Core*, 02/01/08 01/31/13.
- 6. NCI (R25CA047888-21), Principal Investigator and Director at 18% effort. Cancer Prevention & Control Training Program, 09/20/88 08/31/12.
- 7. NIH (R01AG033682), Co-principal Investigator at 15% effort, *Body composition, energetics, and longevity*, 02/15/10 02/14/15
- 8. NIH (D43CA153784), Co-investigator at 5% effort (Principal Investigator, G. Parham, MD), Zambian cervical cancer research capacity initiative, 07/01/10 06/30/13.

# **GRANT SUPPORT (SUBMITTED):**

- 1. NIH (R21DK091856), Co-investigator at 5% effort (Principal Investigator, Molly Bray, PhD), Circadian mechanisms linking food intake to obesity and cardiometabolic syndrome, 04/01/11 03/31/13.
- 2. NIH (P30AR046031), Core Director at 10% effort, *UAB Core Center for Basic and Translational Skeletal Research*, 06/01/11 05/31/16.
- 3. NIH (R01AR060948), Co-investigator at 5% effort (Principal Investigator, S. Ponnazhagan, PhD), Targeted stem cell therapy coupling angiogenesis and osteogenesis for bone defect, 04/041/11 – 03/31/16.
- 4. NIH (R01AG040235), Co-investigator at 2% effort (Principal Investigator, A. Javed, PhD), Osteoblast regulatory signal in bone homeostasis and skeletal aging, 07/01/11 06/30/16.
- 5. NIH, Co-investigator at 3% effort (Principal Investigator, J. Gohlke, PhD), *The developing reward system and atypical antipsychotic induced weight gain*, 07/01/11 06/30/16.
- 6. NIH, Core Director at 15% effort, Experimental Data Core Statistics for high-dimensional aging & lifespan studies: energetics & longevity, 12/01/11 11/30/13.

# **GRANT SUPPORT (PREVIOUS):**

- 1. Sigma Xi, Principal Investigator, Contribution of short-chain fatty acids to daily energy requirements in lemmings; \$500 for the period 07/01/88 to 06/30/89.
- 2. American Society of Mammalogists, Principal Investigator, *Fiber and digestive efficiency in lemmings*; \$500 for the period 07/01/90 to 06/30/91.
- 3. UAB/SHRP, Principal Investigator, *Energy expenditure and obesity the lemming model*; \$10,472 for the period 01/01/97 to 12/31/97.
- 4. UAB, Co-Investigator, *UAB Obesity Research Center*; (Principal Investigator: Roland Weinsier, MD, DrPH) 10/1/96 to 09/30/98.
- 5. Lunar Corporation, Principal Investigator, *Accuracy and precision test of the PIXI small animal bone densitometer*; \$36,500 for the period 10/12/98 to 03/11/99.
- 6. Proposals for Innovations in Nutrition Sciences (Supported by a grant from Bristol-Myers Squibb), Principal Investigator, *DXA for longitudinal measures of body composition in small animals*, \$20,000 for the period 04/01/98 to 03/31/99.
- 7. Norland Medical Systems, Inc, Principal Investigator, Accuracy and precision of the

# Norland pDEXA Sabre system, \$43,000 DC for the period 04/05/99 to 08/05/99.

- 8. Proposals for Innovations in Nutrition Sciences (Supported by a /rant from Bristol-Myers Squibb), Mentor and Project Supervisor, *Contribution of organ metabolic rates to resting energy expenditure*, (Principal Investigator: Charles S. Powell, PhD), \$6,000 DC for the 04/01/99 to 03/31/00.
- 9. Proposals for Innovations in Nutrition Sciences (Supported by a grant from Bristol-Myers Squibb), Sponsor, *Intramuscular lipids, dietary fat, and endurance training*, (Principal Investigator: D. Enette Larson, PhD, RD), \$12,000 for the period 04/01/99 to 03/31/00.
- 10. NIH/NICHHD (R01-HD/HL33064), Co-Investigator, *Intra-abdominal fat and risk of disease in adolescents*; (Principal Investigator: Michael Goran, PhD) 06/01/97 to 05/31/00.
- 11. Pfizer, Co-investigator, *Testing the possibility that dietary fat might modulate Doxazosin effects on apoptosis in the prostate of transgenic mice with altered tumor suppressor p53*, (Principal Investigator: Ada Elgavish, PhD), 01/1/01 09/01/01.
- 12. GE-Lunar, Principal Investigator, *Accuracy and precision test of the prodigy small animal software*, \$5,000 DC for the period 04/01/01 09/30/01.
- 13. UAB HSF-GEF, Principal Investigator, *Small animal phenotyping center equipment expansion*, \$125,000 DC for the period 03/01/01 02/28/02.
- 14. Proposals for Innovations in Nutrition Sciences (Supported by a grant from Bristol-Myers Squibb), Mentor and Project Supervisor, *Regulation of expression of uncoupling protein 2 and 3 in the Zucker fatty rat*, (Principal Investigator: Matt Blaylock), \$8,000 DC for the period 04/01/00 to 03/31/02.
- 15. NIH/NIDDK (R01-DK51684), Co-Investigator, *Long-term follow-up of post-obese Black and White women*; (Principal Investigator: Roland Weinsier, MD, DrPH) 05/01/97 to 04/30/02.
- 16. NIH/NICHHD (K23-HD01309), Co-mentor, *Outcome of preterm small for gestational age adolescents*, (Principal Investigator: A. Myriam Peralta-Carcelen, MD, MPH), 09/01/99 to 08/30/02.
- 17. Proposals for Innovations in Nutrition Sciences (Supported by a grant from Bristol-Myers Squibb), Principal Investigator, Resistin: A link between obesity, fat distribution, and insulin resistance, \$4,000 for the period 04/01/01 03/31/03.
- 18. NIH/NIDCR, Co-investigator, *Effect of diabetes on bone integration of implants*, (Principal Investigator: Michael McCracken, DDS, PhD), 09/15/01 09/14/03.
- 19. Eli Lilly, Co-investigator, *Development of a mouse model to study antipsychotic drug-induced weight gain*, (Principal Investigator: David Allison, PhD), 05/01/01 04/30/04.
- 20. NIH/NIDDK (R01DK54918), Principal Investigator, Regulation of energy partitioning during weight change, \$498,172 for the period 06/01/98 05/31/04.
- 21. UAB HSF-GEF, Principal Investigator or 0% effort, Enhancement of small animal phenotyping: micro-computed tomography, \$187,000 for the period 03/01/03 02/28/06.
- 22. General Mills, Principal Investigator at 10% effort, Effects of dairy products on insulin sensitivity, \$87,000 for the period 04/15/04 04/14/06.
- 23. NIH/NCI (R03CA101058), Principal Investigator at 10% effort, *Body fat, dietary restriction, and cancer prevention*, \$100,000 for the period 05/01/03 04/30/06.
- 24. UAB, Center for Aging, Principal Investigator at 2% effort, Regulation of SIRT1 by exercise and caloric restriction, \$20,000 for the period 04/01/05 03/31/06.
- 25. NIH (R01DK68261-02S1), Principal Investigator at 0% effort, *Proteomics of antipsychotic drug-induced weight gain*, \$75,000 for the period 07/01/05 06/30/06.
- 26. NIH/NIDDK (R01DK49779), Co-investigator at 8% effort, *Exercise training in obesity prone black and white women*, (Principal Investigator: Gary Hunter, PhD), 12/01/01 11/30/06.
- 27. HSF, Principal Investigator at 0% effort, *Enhancement of small animal phenotyping:* energetics and body composition, \$279,370 for the period 03/01/06 02/28/07.
- 28. NIH, (R21DK73775) Co-investigator at 5% effort, *Proteomics of oxidant-induced mitochondrial damage in an animal model of NASH*, (Principal Investigator: Shannon Bailey, PhD), 03/10/06 02/29/08.

- 29. NIH/Purdue/UAB Botanicals Center, Co-Investigator at 5% effort, *Effects of mannan on body weight and body composition: A precursor to a longevity study.* (Principal Investigator, David Allison, PhD), 07/01/07 06/30/08.
- 30. ImpediMed, Inc., PI at 4% effort, Validation of the ImpediVet device for the determination of body composition in rats and mice, 01/01/08 12/31/08.
- 31. NIH/NIDDK (R01DK67426), Co-investigator at 3% effort, *Admixture mapping for insulin complex outcomes*, (Principal Investigator: Jose Fernandez, PhD), 04/10/04 03/31/09.
- 32. NIH/Echo Medical, PI at 5% effort, *A new QMR-based technique for body composition analysis in infants*, 07/01/07 06/30/09.
- 33. GWIS (Graduate Women in Science), Mentor at 0% effort. *Equal producing status and breast cancer risk among postmenopausal women*, (Principal Investigator, Mandeep Virk, MS), 07/01/09 06/30/10.
- 34. NIH (R01DK68261), Principal Investigator at 20% effort, *Antipsychotic drug-induced weight gain*, \$1,086,126 for the period 07/01/04 06/30/10.
- 35. NIH (R01AR050251), Co-investigator at 7% effort, *AAV mediated gene therapy for metabolic bone disease*, (Principal Investigator: Selvarangan Ponnazhagan, PhD), 09/15/05 09/14/10.

# AWARDS:

- 1995 NIH/NICHHD, National Research Service Award, *Obesity in Offspring of Gestationally Diabetic Women* (F32-HD08025)
- 1997 NAASO/NIDDK, New Investigator Travel Award, *Advancing the Genetics of Obesity: Strategies & Methods*, New Paltz, NY.
- 1999 ILSI N.A. Future Leader Award, Evaluation of differential gene expression during weight gain.
- 2011 Graduate Dean's Excellence in Mentorship Award, University of Alabama at Birmingham.

## **PROFESSIONAL AFFILIATIONS:**

American Association for Cancer Research (2004- pres)

American Diabetes Association (1996- pres)

American Physiological Society (1991- pres)

American Society for Nutritional Sciences/American Society for Clinical Nutrition (2002- pres)

American Society for Bone Mineral Research (2004- pres)

Comparative Nutrition Society (1998- pres)

North American Association for the Study of Obesity (1995- pres)

## SERVICE:

#### **Editorial boards:**

Physiological and Biochemical Zoology, Member-3 terms (1996-2002)
International Journal of Body Composition Research, Member (2004-2006)
International Journal of Body Composition Research, Editor-in-Chief (2006- pres)

## Journal reviewer for:

Acta Theriologica; American Journal of Clinical Nutrition; American Journal of Physiology (Endocrinology and Metabolism); British Journal of Nutrition; Comparative Biochemistry and Physiology; Diabetes; Endocrinology; FASEB Journal; General and Comparative Endocrinology; International Journal of Neuropsychopharmacology; International Journal of Obesity; Journal of Bone Mineral Research; Journal of Clinical Endocrinology and Metabolism; Journal of Comparative Physiology B; Journal of Diabetes and its Complications; Journal of Experimental Biology; Journal of Mammalogy; Journal of the American College of Nutrition; Journal of the Society for Experimental Biology and Medicine; Nutrition and Cancer; Obesity Research; Pediatrics; Physiological Genomics; Physiological and Biochemical Zoology; Physiology &

Behavior.

## Grant reviewer for:

National Science Foundation; The Wellcome Trust; The Israel Science Foundation; U.S.-Israel Bi-National Agricultural Research and Development Fund; NAASO Small Grants Program; UAB Clinical Nutrition Research Center Pilot/Feasibility Program; UAB/Childrens Hospital Young Faculty Grants; NIH (DDK-C1; ZDK1 GRB-8 J1; ZRG1 EMNR-A 30; ZDK1 GRB-W J1; Integrative Physiology of Obesity and Diabetes Study Section, Feb. 05, Feb. 06, ZDK1 GRB-9 M1); Univ. of Southern California TREC Pilot/Feasibility Grants; UAB/Purdue Botanical Center; UAB MHRC Grants

## Webmaster for:

Department of Nutrition Sciences, UAB (www.uab.edu/nutrition) (1998- 2001)

Obesity Research Center, UAB (1999-2000)

Comparative Nutrition Society (www.cnsweb.org) (1998-2000)

Clinical Nutrition Research Center (www.uab.edu/cnrc) (2000- 2001)

## Organizer for:

Energy Metabolism Research Unit Seminar Series (1994-1996)

Department of Nutrition Sciences Seminar Series (1996-2001)

UAB Obesity Research Center Seminar Series (Co-chair, 1998-1999)

Clinical Nutrition Research Center Seminar Series (Chair, 2000-2001)

# Committee memberships:

Learning Resource Center Advisory Committee (SHRP/SON, 1996-1997)

Department of Nutrition Sciences Strategic Planning Committee (1997)

Ad Hoc Departmental Enrichment Committee (Chair, 1998)

Department of Nutrition Sciences Enrichment Committee (Chair, 1998- 1999)

Department of Nutrition Sciences Chair Search Committee, Department of Nutrition Sciences (Member, 1999- 2001) Successfully hired W. Timothy Garvey, MD.

Department of Nutrition Sciences PhD Graduate Committee (1999- 2001)

Department of Nutrition Sciences PhD Graduate Committee (Director, 2001-2008)

Department of Nutrition Sciences Advisory Committee (1999-2003)

Clinical Nutrition Research Center Enrichment Committee (Chair, 1999-2001)

Clinical Nutrition Research Center Executive Committee (1999- pres)

Department of Nutrition Sciences Space and Equipment Committee (1999-2007)

Search Committee for Genetics/Diabetes Faculty, Dept. of Nutrition Sciences (**Chair**, 2001) Successfully hired Jose Fernandez, PhD.

Center for Metabolic Bone Disease, Basic Sciences Research Committee (Member, 2001- pres)
Organizing Committee for the 2004 FASEB Summer Conference on Obesity (Member, 2002 – 2004)

Search Committee for Biochemistry and Molecular Biology Faculty, Dept. of Nutrition Sciences (Member, 2003) Successfully hired Yuchang Fu, PhD.

Search Committee for Physiology and Metabolism Faculty, Dept. of Nutrition Sciences (**Chair**, 2003)

Successfully hired Marie-Pierre St.-Onge, PhD

Center for Metabolic Bone Disease, Steering Committee Member (Member, 2003 – pres)

Department of Nutrition Sciences, Research Advisory Committee (Member, 2003 – 2007)

School of Health Related Professions, Research Infrastructure Task Force (Member, 2003 – 2004)

Search Committee for Biochemistry and Molecular Biology Faculty, Dept. of Nutrition Sciences (Member, 2004 - 2006)

Symposium on Obesity and Cancer, UAB CCC Leadership Retreat (**Chair and Organizer**, 2004) Search Committee for Cancer Epidemiology Faculty, Dept. of Epidemiology (Member, 2004-2007)

2007 FASEB Summer Conference on Obesity (Chair and Organizer, 2004-2007)

Department of Nutrition Sciences Education Committee (Co-Chair, 2004- 2007)

Center for Free Radical Biology, Steering Committee (Member, 2005- pres)

NAASO, Section on Obesity and Cancer (Secretary, 2005-2006)

NAASO, Section on Obesity and Cancer (Vice Chair, 2006- 2009)

Search Committee for Physiology and Metabolism Faculty, Dept. of Nutrition Science (**Chair**, 2006-2007) Successfully hired Q. Yang, PhD

UAB Research Advisory Group (Member, 2006- pres)

Am. Soc. Nutr. (ASN) Osborne Mendal Award Committee (Member, 2007)

UAB SHP Faculty Affairs Committee (Member, 2007- pres)

Search Committee for Cancer Epidemiology Endowed Chair, Dept. of Epidemiology (**Chair**, 2007-2009)

Am. Soc. Nutr. (ASN) Graduate and Professional Education Committee (Member, 2008- pres) Colorado Nutrition Obesity Research Center (NIH P30), External Advisory Board (Member, 2011- pres)

Pennington Biomedical Research Center NIH Botanical Center (NIH P30), External Advisory Board (2011-pres)

Council of Core Facilities Directors, UAB (Member, 2011- pres)

## **TEACHING EXPERIENCE:**

1984- 1991	Teaching assistant for courses in Comparative Animal Physiology, Animal Physiology, Human Physiology, Human Anatomy, Mammalian Biology, Avian Biology, and General
	Biology
1994- 1996	Guest Lectures in Body Composition and Energy Metabolism, and Nutritional
	Biochemistry (graduate level courses, MS/PhD)
1997- pres	Course master for Body Composition and Energy Metabolism (NTR 650/750)
1998- 2007	Course master for Advanced Nutrition Seminar (NTR 690/788)
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1998- 2007	Course master for Advanced Nutrition Seminar (NTR 690/788)

## **GRADUATE COMMITTEE MEMBERSHIPS:**

#### **CURRENT**

Michele Cardel (Doctoral Student), *Childhood obesity and the family* (Department of Nutrition Sciences, Committee Member)

Victoria K. Gibbs (Doctoral Candidate), *Nutritional requirements of phospholipids for the growth and development of sea urchins*. (Department of Biology, Committee Member).

Mandeep Virk (Doctoral Candidate), Equol producing status and breast cancer risk among postmenopausal women. (Department of Nutrition Sciences, Committee Chair)

R. Grace Walton (Doctoral Candidate), Effect of adipose-specific MINOR over-expression on glucose and lipid homeostasis in mice. (Department of Nutrition Sciences, Committee Member)

Yongbin Yang (Doctoral Student), *Effect of body weight cycling on longevity*, (Department of Nutrition Sciences, Committee Chair)

PAST

1996 Michelle Petko, MS-Relationship between bone mineral density, body composition, and strength in moderately obese pre-menopausal women involved in a dietary-induced weight loss program. (Department of Nutrition Sciences, Committee Member)

1996 Chris A. Trowbridge, RD, MS-Maximum oxygen consumption in African-American and Caucasian Children. (Department of Nutrition Sciences, Committee Member)

- 1998 Ching-Yi Ku, MS-Ethnic differences in insulin secretion and sensitivity in prepubertal children: Role of physical fitness and physical activity. (Department of Nutrition Sciences, Committee Member)
- 2000 Min Sun, MS, PhD-Ethnic differences in energy expenditure in prepubertal African American and Caucasian children. (Department of Nutrition Sciences, Committee Member)
- 2001 Heather Hunter, MS-Metabolic effects of estradiol in rats. (Department of Biology, Committee Chair)
- 2001 Mickie Powell, PhD-*Metabolic adaptations in the crayfish* Procambarus clarkii *and* Procambarus zonangulus. (Department of Biology, Committee Member)
- 2001 Brenda Wallace, MS-The effects of dietary protein concentration on feeding and growth characteristics of juveniles of the sea urchin Lytechinus variegatus. (Department of Biology, Committee Member)
- 2002 Chirdeep Chandrakeerthi, MS-*Dual-energy X-ray absorptiometry in the estimation of bone mineral density.* (Department of Dentistry, Committee Member)
- 2002 Scott C. Hofer (MS), *The effect of temperature on feeding and growth on the sea urchin* Lytechinus variegates (*Echinodermata: Echinoidae*). (Department of Biology, Committee Member)
- 2003 Michele Schuler, DVM, PhD, *Disorders of fatty acid oxidation: Role of LCAD, SCAD, and VLCAD.* (Department of Genomics and Pathobiology, Committee Member)
- 2003 Cristina Lara-Castro, MD, PhD, Genetic markers associated with levels of visceral adipose tissue in women from a bi-ethnic population. (Department of Nutrition Sciences, Committee Member)
- 2003 Mathew Blaylock, PhD, Role of uncoupling proteins in the regulation of body mass. (Department of Nutrition Science, Committee Chair)
- 2004 Chenxi Wang, PhD, Novel statistical methods for the analysis of nutritionally related traits: development and application to human obesity. (Department of Nutrition Sciences, Committee Member)
- 2004 Erin Ceaser Arnold, PhD, Modulation of mitochondrial function by oxidized LDL: Implications for atherosclerosis. (Department of Pathology, Committee Member)
- 2005 Amanda Watts, M.S., *Validation of small animal phenotyping methods.* (Department of Biology, Committee Chair)
- 2005 Victoria K. Gibbs, M.S., The effect of temperature on the development and biochemical composition of the gonads in the regular sea urchin Lytechinus variegates. (Department of Biology, Committee Member)
- 2005 Laila Abou-agag, MD, PhD, Effects of Quercetin on endothelial nitric oxide synthase; role for transcription and post-translational modifications. (Department of Nutrition Sciences, Committee Member)
- 2005 LaWanda T. Holland, PhD, *Insulin regulated gene expression in vivo*. (Department of Pathology, Committee Member)
- 2005 Lara Nyman, PhD, *CPT1a and insulin resistance*. (Department of Genomics and Pathobiology, Committee Member)
- 2005 Randall J. Watts, MS, *Validation of dual-energy X-ray absorptiometry for predicting body composition of channel catfish, Ictalurus punctatus*. (Department of Biology, Committee Member)
- 2006 Paula Chandler, PhD, *Neurochemical differences between rats susceptible and resistant to dietary-induced obesity.* (Department of Psychology, Committee Member)
- 2006 Hugh S. Hammer, PhD, Effect of dietary protein on growth and development of the sea urchin, Lytechinus variegates. (Department of Biology, Committee Member)
- 2006 Tamara M. Crutchley, PhD, A survey of veterinarians to determine the level of preparedness for an infectious disease outbreak. (Department of Nutrition Sciences, Committee Member)
- 2007 Preeti M. Chopri, MS, Micro-computed tomography analysis of bone healing subsequent to graft placement. (School of Dentistry, Committee Member).
- 2007 James Davenport PhD, *The role of primary cilium in energy balance*. (Department of Cell Biology, Committee Member)
- 2007 Angela Jones, MS, Validation of quantitative magnetic resonance for the determination of body composition. (Department of Biology, Committee Chair)

- 2007 Derek Huffman, MA, PhD, Caloric restriction, body fat, and cancer prevention. (Department of Nutrition Sciences, Committee Chair)
- 2008 Torey Combs, MA, Effects of atypical antipsychotic drugs on weight gain in male mice. (Department of Pathology, Committee Chair)
- 2010 Matthew Carle, MS Student, *Validation of BIS for the determination of mouse body composition*. (Department of Biology, Committee Chair).
- 2010 Maria Azrad, PhD, Effects of weight loss and exercise on biomarkers of cancer. (Department of Nutrition Sciences, Committee Chair)
- 2010 David L. Mayhew, PhD, *Skeletal muscle protein synthesis and breakdown*. (Medical Scientist Training Program and Department of Physiology and Biophysics, Committee Member)
- 2010 Zhu Xiaolin, PhD, *Role of MINOR in insulin signaling*. (Department of Nutrition Sciences, Committee Member)

## **EXAMINER:**

- 2000 Diane Jackson, PhD, *Non-shivering thermogenesis and overwinter survival of field voles*. (Department of Zoology, University of Aberdeen, Scotland) External examiner for PhD.
- 2004 Amit Bandyopadhyay, PhD, Relationship between body composition and maximum oxygen uptake capacity (Q.C. test) in sedentary individuals and sportspersons. (Department of Physiology, University of Calcutta, India) External examiner for PhD.
- 2008 Kerry Cameron, PhD, *Regulation of body weight following calorie restriction*. (Department of Zoology, University of Aberdeen, Scotland) External examiner for PhD.
- 2010 Aneta Stefanidis, PhD, Toward an understanding of antipsychotic drug induced weight gain. (Department of Physiology, Monash University, Australia) External examiner for PhD.

# **POSTDOCTORAL FELLOWS:**

1998- 2001	C. Stephenson Powell, Jr., PhD. University of Alabama at Birmingham. Energy
	expenditure and the regulation of body mass.
2000- 2001	Riuxue Wang, PhD. University of Alabama at Birmingham. <i>Molecular mechanisms</i>
	regulating weight gain.
2001-2002	Maria Johnson PhD Aberdeen University Scotland, Mechanisms regulating energy

01- 2002 Maria Johnson, PhD. Aberdeen University, Scotland. Mechanisms regulating energy balance.

2001- 2003 William Fernando Carroll, MD. Universidad Autonoma de Bucaramanga, Colombia. *Validation of imaging techniques for phenotyping small animals.* 

2001- 2007 Mark Cope, PhD. University of Alabama at Birmingham. Development of an animal model to study the effects of antipsychotic drugs on weight gain.

2005- 2007 Catherine DiCostanza, PhD. Vanderbilt University. *Antipsychotic drug-induced weight gain*.

2007- 2009 Xingsheng Li, PhD. Chinese Academy of Sciences. *Effects of atypical antipsychotics on energy expenditure.* 

2007- 2010 Daniel Smith, PhD. University of Virginia. Calorie restriction and aging.

## **VISITING TRAINEES:**

1999	Anne-Laure Clair. Second-year research training period for engineering students.
	Université de Bourgogne (Dijon, France) (1 peer-reviewed paper)
2001	David Kryzwanski. Doctoral student from the UAB program in Toxicology (1 peer-
	reviewed paper).
2001-2002	Eva Potter. Undergraduate intern, University of Ulster, Ireland (3 peer-reviewed papers)
2001- 2002	Niamh Landy. Undergraduate intern, University of Ulster, Ireland (3 peer-reviewed papers)
2002	Danielle McShan. McNair Fellow, Talladega College, Talladega, AL.
2002	Gregory Sweeney. Dental Fellow, School of Dentistry, UAB.

2007 Paige R. Perry. Highschool summer student (CORD Program)

2008- 2009 Sybil Sexton. Chemistry Honors Student, The effect of olanzapine on hemoglobin expression in the hypothalamus of mice.

## **PUBLICATIONS (PEER-REVIEWED):**

- 1. **Nagy TR**, and DH Pistole. 1988. The effects of fasting on some physiological parameters in the meadow vole, *Microtus pennsylvanicus*. *Comp. Biochem. Physiol.* 91A:679-684
- 2. Berger PJ, NC Negus, AJ Pinter, and **TR Nagy**. 1992. Offspring growth and development responses to maternal transfer of 6-MBOA information in *Microtus montanus*. *Can. J. Zool*. 70:518-522.
- 3. Gower BA, **TR Nagy**, and MH Stetson. 1992. Role of photoperiod in reproductive maturation and peripubertal hormone concentrations in male collared lemmings, *Dicrostonyx groenlandicus*. *J. Reprod. Fertil.* 96:153-163.
- 4. Gower BA, **TR Nagy**, and MH Stetson. 1993. Role of prolactin and the gonads in seasonal physiological changes in the collared lemming (*Dicrostonyx groenlandicus*). *J. Exp. Zool.* 266:92-101.
- 5. **Nagy TR** 1993. Effects of photoperiod history and temperature on male collared lemmings, *Dicrostonyx groenlandicus*. *J. Mammal*. 74:990-998.
- 6. **Nagy TR**, and NC Negus. 1993. Energy acquisition and allocation in male collared lemmings (*Dicrostonyx groenlandicus*): Effects of photoperiod, temperature, and diet quality. *Physiol. Zool.* 66:537-560.
- 7. **Nagy TR**, BA Gower, and MH Stetson. 1993. Threshold photoperiods for the induction of short day traits in the collared lemming (*Dicrostonyx groenlandicus*). *J. Exp. Zool.* 267:57-66.
- 8. **Nagy TR**, BA Gower, and MH Stetson. 1993. Development of collared lemmings, *Dicrostonyx groenlandicus*, is influenced by pre- and postweaning photoperiods. *J. Exp. Zool.* 267:533-542.
- 9. Gower BA, C Hadjipanayis, **TR Nagy**, and MH Stetson. 1994. Response of collared lemmings to melatonin: II. infusions and photoperiod. *J. Pineal Res.* 17:185-194.
- Gower BA, TR Nagy, and MH Stetson. 1994. Effect of photoperiod, testosterone, and estradiol on body mass, bifid claw size, and pelage color in collared lemmings (*Dicrostonyx groenlandicus*). Gen. Comp. Endocrinol. 93:459-470.
- 11. **Nagy TR**, BA Gower, and MH Stetson. 1994. Response of collared lemmings to melatonin: I. implants and photoperiod. *J. Pineal Res.* 17:177-184.
- 12. **Nagy TR**, BA Gower, and MH Stetson. 1994. Photoperiod effects on body mass, body composition, growth hormone, and thyroid hormones in male collared lemmings (*Dicrostonyx groenlandicus*). *Can. J. Zool.* 72:1726-1734.
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- 98. Nagy TR 2008. State-of-the-art measurements in animal body composition. Int. J. Body Comp. Res., 6:2-S.
- 99. Johnson MS, Smith DL Jr, and **TR Nagy**. 2008. Validation of the quantitative magnetic resonance instrument for the determination of body composition on rats. *Int. J. Body Comp. Res.*, 6:2-OR.
- 100. Smith DL Jr, MS Johnson, and **TR Nagy**. 2008. Validation of the ImpediVET<sub>tm</sub> BIS device for in vivo body composition measurement of rats. *Int. J. Body Comp. Res.*, 6:20-P.
- 100. Li, MS Johnson, DL Smith Jr, and **TR Nagy**. 2008. Mild caloric restriction induces fat accumulation in female C57BI/6J mice. Obesity,
- 101. Hu HH, DL Smith Jr, **TR Nagy**, MI Goran, and KS Nayak. 2009. Identification of brown adipose tissue using IDEAL fat-water MRI. *Submitted*.

## **INVITED SEMINARS AND WORKSHOPS:**

- 1. Environmental factors and phenotypic plasticity in collared lemmings. Dept of Biology, The University of Pennsylvania, Philadelphia, PA. (10/07/93)
- 2. Seasonal body mass dynamics of collared lemmings: Ultimate and proximate mechanisms. Dept of Biology, UAB. (02/24/95)
- 3. Historical perspectives of data normalization. Workshop on data normalization in nutrition and physiology research, Experimental Biology (American Institute of Nutrition), Washington D.C. (4/14/96)
- 4. Leptin: A review. Seminar for the continuing medical education conference entitled "Obesity Update 1997" sponsored by the UAB Department of Nutrition Sciences, the UAB Obesity Research Center, and the UAB School of Medicine. (10/24/97)
- 5. The lemming (Dicrostonyx groenlandicus) as a model to study the regulation of body mass. Dept of Comparative Medicine, UAB. (02/27/98)
- 6. Leptin, body composition, and energy expenditure. Center for Human Nutrition, UCLA. (11/16/98)
- 7. Seasonal body mass dynamics in collared lemmings: Ultimate and proximate mechanisms. Institute of Arctic Biology, University of Alaska Fairbanks. (4/26/99)
- 8. DXA: A non-invasive method for measuring body composition in small animals. Dept of Biology and Wildlife, University of Alaska Fairbanks. (4/27/99)
- 9. Mechanisms regulating body weight: Insights from a novel animal model, the collared lemming. Dept of Biology, University of New Orleans. (3/20/00)
- 10. Regulation of body weight: Lessons from lemmings. Dept of Biology, University of Mississippi. (4/28/00)

- 11. Eat the same but double your weight; the life of a lemming. Am. Assoc. Lab. Animal Science, Birmingham, AL. (4/26/01)
- 12. Resting energy expenditure and animal models of obesity. Advances in Obesity From the Environment to the Gene. FASEB Summer Conference, Snowmass Village, CO. (8/18-23/01)
- 13. Measuring energy expenditure and body composition in mice: let's get longitudinal. Dept of Genomics and Pathobiology, UAB. (11/16/01)
- 14. Relating energy expenditure and body composition in animal models. Nutricia Inc., Boca Raton, FL. (2/7/02)
- 15. Phenotyping 101: Relating energy expenditure and body composition in animal models. NIH-NCI. (2/20/02)
- 16. Energy partitioning: Increasing body mass without increasing food intake. Dept of Pathology, UAB. (3/21/02)
- 17. Role of energy expenditure in obesity; studies from animal models. Vascular Biology and Hypertension Program, Dept of Medicine, UAB. (4/12/02)
- 18. Determination of relative body fat and liver fat using pQCT. pQCT User's Workshop (a satellite symposium of the 32<sup>nd</sup> Annual Sun Valley Hard Tissue Workshop, Sun Valley, ID. (8/2-3/02)
- 19. Of X-rays and mouse phenotyping. Dept of Prosthodontics and Biomaterials, School of Dentistry, UAB. (8/7/02)
- 20. In vivo methods for phenotyping small animals. Arena Pharmaceuticals, San Diego, CA. (4/10/03)
- 21. In vivo phenotyping of small animals: an update. Ligand Pharmaceuticals, San Diego, CA. (4/11/03)
- 22. Methods for body composition analysis. Dept of Pediatrics, UAB. (5/1/03)
- 23. Energy partitioning and body weight regulation. Dept of Molecular Physiology & Biophysics, Vanderbilt University Medical Center. (5/22/03)
- 24. Be opportunistic. Preparing Future Faculty Program, The Graduate School, UAB (10/30/03)
- 25. Body fat, dietary restriction, and cancer prevention. Comprehensive Cancer Center, UAB. (11/12/03)
- 26. Computed tomography. Symposium on Non-invasive Body Composition Analysis in Small Animals. Experimental Biology '04, Washington, D.C. (04/19/04)
- 27. Obesity, dietary restriction, and cancer. Dept of Biology, University of Alabama, Tuscaloosa, AL (04/29/04)
- 28. In vivo methods for phenotyping small animals. Dept of Biology, UAB (04/15/05)
- 29. The skinny on fat and cancer. Dept of Nutritional Sciences, Rutgers University. (04/19/05)
- 30. Obesity, dietary restriction, and cancer. Cardiovascular Research Institute, Morehouse School of Medicine, Atlanta, GA (05/17/05)
- 31. The skinny on fat and cancer. Dept of Pathology, UAB (05/19/05)
- 32. *Dual-energy X-ray absorptiometry*. Symposium on Small Animal Phenotyping held at the European Congress of Obesity, Athens, Greece (06/03/05)
- 33. Phenotyping the obese mouse. Dept of Cell Biology, UAB (10/6/05)
- 34. *Body fat, dietary restriction, and cancer progression*. Symposium on Obesity and Cancer held at the annual UAB Comprehensive Cancer Center Retreat, Birmingham, AL (10/24/05)
- 35. The skinny on fat and cancer. Minority Health and Research Center Annual Conference on "Eliminating Health Disparities: Obesity & Diabetes", UAB (03/22/06)
- 36. Body fat, dietary restriction, and cancer progression. Women's Cancer Symposium, Sandestin, FL (04/22/06)
- 37. Innovations for body composition analyses in humans and animals. Recent Advances and Controversies in Measuring Energy Metabolism, University of Colorado at Denver Health Sciences Center, Denver, CO (02/09/08)
- 38. Obesity and cancer. Progress in OB/GYN 2008. Birmingham, AL (02/29/08)
- 38. Calorie restricted yet fat. how's that work? Comparative Aging Meeting, San Antonio, TX (03/08/08)
- 40. Body fat, dietary restriction, and cancer progression. Dept of Molecular and Cellular Biology, Ohio University (04/18/08)
- 41. State-of-the-art measurements in animal body composition: A moving frontier of clinical importance. 8<sup>th</sup> International Symposium on In Vivo Body Composition Studies, New York, NY (07/09/08)
- 42. In vivo phenotyping of small animals: 2008 update. Dept of Biology, Auburn University, Auburn, AL (09/05/08)
- 43. *In vivo phenotyping of small animals: 2008 update*. Arkansas Children's Nutrition Center, University of Arkansas for Medical Sciences, Little Rock AR 09/09/08.
- 44. Obesity, energy balance, and disease. Division of Medicine, University College London (09/25/08)

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- 45. Obesity, energy balance, and disease. Pennington Biomedical Research Institute, Baton Rouge, LA (02/26/09)
- 45. Obesity, energy balance, and disease. Dept of Molecular and Cellular Physiology, LSU, Shreveport, LA (03/11/09)
- 46. *In vivo phenotyping of small animals*. Barshop Institute, University of Texas, San Antonio, TX (05/06/09)
- 47. In vivo phenotyping of small animals. Southwest Foundation for Biomedical Research, San Antonio, TX (05/07/09)
- 48. Prostate cancer and energy balance. NCI-TREC Conference on Energy Balance, Cancer Prognosis, and Survivorship, Fred Hutchinson Cancer Research Center, Seattle, WA (10/07/09)
- 49. *In vivo phenotyping of small animals*. Nestle-Purina Petcare, ST. Louis, Mo (04/20/10)
- 50. Obesity and cancer. Zambia Medical Association CME course Nutrition, Lusaka, Zambia (01/05/11)

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