

RAMESH B. JEGANATHAN, PH.D.

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Director- Diabetes and Alzheimer Research Laboratory
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EDUCATION

Postdoctoral Fellowship Cell and Molecular Biosciences, Auburn University, Auburn, AL 2004- 2008

Postdoctoral Fellowship Department of Pediatrics and Adolescent Medicine, Mayo Medical School, Rochester, MN 2000-2003

Ph.D. Department of Medical Biochemistry, University of Madras, India, 2000

M.Phil. Department of Biological Sciences, University of Madras, India, 1995

M.S. Department of Biological Sciences, Annamalai University, India, 1993

B.S. Department of Biological Sciences, University of Madras, India, 1991

PROFESSIONAL POSITIONS

2016- **Associate Professor (tenured)**, Department of Nutrition, Dietetics and Hospitality Management, College of Human Sciences, Auburn University, Auburn, Alabama.

2015- **Present Graduate Program Director- Nutrition and Dietetics**, College of Human Sciences, Auburn University, Auburn, Alabama.

2010-2015 **Assistant Professor**, Department of Nutrition, Dietetics and Hospitality Management, College of Human Sciences, Auburn University, Auburn, Alabama.

2010-Present **Faculty Member**, School of Kinesiology, College of Education, Auburn University, Auburn, Alabama. (Courtesy Joint appointment)

2010-Present **Member**, Cellular and Molecular Biosciences Program, Auburn University, Auburn, Alabama.

2010-Present **Investigator**, Boshell Diabetes and Metabolic Disease Research Program, Auburn University, Auburn, Alabama.

2008-2010 **Assistant Professor**, Department of Biochemistry, Arizona College of Medicine, Dental and Optometry, Midwestern University, Glendale, Arizona.

2003-2008 **Postdoctoral Fellow**, Cell and Molecular Biosciences, Auburn University, Auburn, Alabama.

2000-2003 **Postdoctoral Fellow**, Department of Pediatrics and Adolescent Medicine, Mayo Medical School, Rochester, Minnesota.

1997-2000 **Senior Research Fellow**, Department of Medical Biochemistry, University of Madras, India.

1996-1997 **Junior Research Fellow**, Department of Medical Biochemistry, University of Madras, India.

HONORS AND AWARDS

2016: NIH-NIDDK Study Section Grant Reviewer.

2015: Associate Editor- Journal of Alzheimer Disease (JAD).

2015: NIH-NIDDK Study Section Grant Reviewer.

2014: NIH-NIDDK Study Section Grant Reviewer.

2013: Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of Food and Health Bureau

2013: Recipient of the Student Government Association (SGA) Outstanding Faculty Member for the College of Human Sciences, Auburn University, in recognition for outstanding teaching.

2013: Recipient of the Quality Life Faculty Award (\$3000), College of Human Sciences, Women’s Philanthropy Board, in recognition for an effective mentor of undergraduate student outstanding research 2012-2013.

2013: Named to Editorial Board of *Biochemistry and Molecular Biology*

2013: Named to Editorial Board of *Journal of Clinical and Experimental Neuroscience*

2013: Research featured at Auburn University Research 2012 Annual update

2013: Ad-hoc Grant Reviewer, Diabetes-UK

2013: Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of Food and Health Bureau

2012: Review Editor, *Frontiers in Nutrigenomics*

1997: Senior Research Fellowship, Council of Scientific and Industrial Research (CSIR), New Delhi, India.

1996: Junior Research Fellowship, Lady Tata Memorial Foundation, Mumbai, India.

SCHOLARLY CONTRIBUTIONS

A. TEACHING

Auburn University: 2010- Present

1. NUF5/NTRI 2000: Nutrition and Health
2. NTRI 4980: Undergraduate Research and Study
3. NTRI 7510/6: Vitamins
4. NTRI 7530/6: Human Nutrient Metabolism
5. NTRI 7990: Research and Thesis
6. NTRI 8970: Advanced Topics: Diabetes
7. NTRI 8990: Research and Dissertation

Graduate Students Completed:

Major Professor: Thesis/Dissertation

No.	Name	Degree	Dissertation / Thesis Title	Year	Current Position
1	Chen Zheng*	PhD Nutrition	The Role of Polyubiquitination in Nerve Growth Factor Signaling and its Alterations in Alzheimer’s Disease	2016	Postdoctoral Scientist, School of Medicine, Vanderbilt University
2	Shraddha Rege*	PhD Nutrition	Neuroprotective Effects of Resveratrol Against Oxidative Stress and Memory Impairment <i>in vivo</i> and <i>in vitro</i>	2016	Postdoctoral Scientist, Department of Neurosurgery and Integrative Biology and Physiology, University of California Los Angeles
3	Vishal Kothari* [§]	PhD Nutrition	Molecular Mechanism Regulating Hepatic Fetuin- A Expression	2016	Postdoctoral Scientist, Diabetes Research Center, University of Washington, Seattle, WA

4	Katie Vines*	M.S. Nutrition	TrkA and Insulin Receptor in Streptozotocin Induced Diabetes Rat Brain	2016	MD student, UAB, Birmingham, AL
5	Andrea Carter*	M.S. Nutrition	Sequestosome 1 /p62 and TRAF6 are necessary for Akt ubiquitination, translocation and activation	2014	Applying Dietetic Internship
6	Sruthi Kumar*	M.S. Nutrition	Sequestosome 1 /p62 and TRAF6 serve as a bridge to connect IRS-1 with Akt in insulin signaling	2013	Instructor in India

**Published Research Articles & Conference Proceedings; †co-major professor*

Major Professor: MS Non-thesis

No.	Name	Degree	Dissertation / Thesis Title	Year	Current Position
1	Katheryn Heidt	M.S. Nutrition (Non-thesis)	Vitamin E & Alzheimer's Disease: Prevention, Pathogenesis and Treatment Efficacy	2014	Chiropractic student, Sherman College of Chiropractic, Spartanburg, SC

Committee Member

No.	Name	Degree	Dissertation / Thesis / Non-thesis Title	Year	Current Position
1	Yueru Li	PhD Nutrition	The beneficial Effects of Stearidonic Acid in Obesity and Alzheimer's Disease	2016	Postdoctoral Scientist, Department of Nutrition, Dietetics and Hospitality Management, Auburn University, AL
2	Yuwen Luo	PhD Nutrition	The Role of Sugar-sweetened Water in the Progression of Nonalcoholic Fatty Liver Disease	2016	Seeking employment in California
3	Mary Bottcher	M.S. Nutrition (Thesis)	Mediterranean Diet Adherence in the Southeast United States: Validation of a Field-Based Survey Instrument and the Impact of Nutrition Knowledge	2016	Dietetic Internship
4	Catherine Couch	M.S. Nutrition (Non-Thesis)	Obesity Management: A Comparative Analysis of Government Funded Services in Australia, the United Kingdom and the United States	2016	Dietetic Internship
5	Yijing Qi	M.S. Nutrition (Thesis)	Blood Glucose Concentrations Are Not Increased by Chronic IP Glucagon Administration in Leptin-Treated Type 1 Diabetic Rats	2016	PhD student at Auburn University, AL

6	Meng Ding	PhD Nutrition	The Association Between Food Insecurity and Health Behavior Outcomes	2015	Seeking employment in biotech companies
7	Dominique Harris	M.S. Nutrition (Non-Thesis)	The impact of providing nutrition information of point of purchase in food service operations: A systematic review	2015	Dietetic Internship
8	Mingyu Qiao	M.S. Poultry Science	Toxicity assessment of <i>Clitocybe nuda</i> as natural antimicrobials	2015	Ph.D. student at Auburn University, AL
9	Michael Wayne	M.S. Nutrition	Meal timing & Its effects on the pathogenesis of the metabolic syndrome	2015	Seeking employment in biotech companies
10	Guang Ren	Ph.D. Nutrition	Role of phosphorylated fetuin-A in insulin action, insulin resistance, obesity and moderate weight loss	2014	Postdoctoral Fellow at University of Alabama at Birmingham, AL
11	Taylor Rodick	M.S. Nutrition (Non-Thesis)	Coenzyme Q10: Role in health and disease	2014	Dietetic Internship
12	Brandon Willingham	M.S. Nutrition (Non-Thesis)	Vitamin D and athletic performance	2014	Sports Nutrition at Florida State University, FL
13	Jaclyn Buckreis	M.S. Nutrition (Non-Thesis)	Which diet is best? A comparison of six popular diet plans	2013	Unknown
14	Emily Jenkins	M.S. Nutrition (Non-Thesis)	Ketogenic diets and their effects on athletic performance	2013	Dietetic Technician, Children's hospital, LA
15	Carly Moss	M.S. Nutrition (Non-Thesis)	Thiamin status and supplementation in the management of diabetes mellitus and its vascular comorbidities	2013	Clinical Dietician, Georgia Regents Medical Center, GA
16	Megan Philips	M.S. Nutrition (Non-Thesis)	Do branched-chain amino acids decrease muscle breakdown following exercise?	2013	Unknown
17	Haley Shumaker	M.S. Nutrition (Non-Thesis)	The role of resistance starch in cardiovascular disease prevention	2013	Dietetic Internship
18	Carl Okerberg	M.S. Nutrition	Altered temporal changes in Ser312-phosphofetuin-A concentrations in response to a glucose challenge in a mouse model of diet-induced obesity and insulin resistance	2012	Preparing for Medical School

Outside Reader/ External Examiner

No.	Name	Degree	Dissertation / Thesis Title	Year	Current Position
1	Angelia Holland	Ph.D. in Kinesiology, Auburn University, AL	Adipose tissue and liver adaptations in exercised vs non-exercised rats fed a ketogenic diet, western diet or standard rodent chow	2016	Assistant Professor, Augusta University, Augusta, GA
2	Zhao Yang	Ph.D. in Anatomy, Physiology and Pharmacology, Auburn University, AL	Human melanocortin-3 receptor: structure function relationship of DPLIY motif and helix 8 and biased signaling	2016	Instructor in China
3	G. Ambedkar	Ph.D. Zoology, Annamalai University, India	An assessment of metals accumulation and physicochemical parameters of selected rivers and lakes in and around Cuddalore District, Tamil Nadu, India	2014	Assistant professor in India
4	T. Arun Doss	Ph.D. Zoology, Annamalai University, India	Ginkgo Biloba Nanoparticles as a new therapeutic tools for MPTP-induced parkinsonism in male mice	2014	Assistant Professor in India
5	K. Illavarasi	Ph.D. Biotechnology, Alagappa University, India	Protective effect of olive oil an Gelidiella acerosa in alleviating environmental pollutant (2,3,7,8 –tetracholorodibenzo-p-dioxin) mediated toxicity: A preclinical study	2014	Instructor in India
6	A. Kannan	Ph.D. Animal Sciences, Bharathidasan University, India	Study on Morphometry, Growth-Performance, Biochemistry, Molting and Socio Economic Approach of Penaeus monodon Fabricius 1798 (The Giant Tiger Shrimp) in Commercial Aquaculture Farms with reference to Different Salinities and Seasons	2013	Assistant Professor in India
7	R. Ramesh	Ph.D. Animal Sciences, Bharathidasan University, India	Nano Toxicological evaluation of synthesized TiO ₂ and SiO ₂ Nanoparticles on common cat fish <i>Mystus vittatus</i> (Bloch1794)	2012	Assistant Professor in India

Graduate Students Currently Serving

a. Major Professor

No.	Name	Degree Expected (Department)	Tentative Graduation Date
1	Yuxian Zhang	Ph.D. Nutrition	-
2	Olivia Smith	Ph.D. Nutrition	-
3	Marina Sycheva	M.S. Nutrition	-
4	Lauren Lynch	M.S. Nutrition	-
5	Emily Kilgo	M.S. Nutrition	-
6	Talia Tornabene	M.S. Nutrition	-
7	Mallori Roberts	M.S. Nutrition	-

**Published Research Articles & Conference Proceedings; *Co-major professor*

b. Committee Member

No.	Name	Degree Expected (Department)	Tentative Graduation Date
1	Kryta Pelchar	M.S. Nutrition	-
2	Amie Hardin	M.S. Nutrition	-
3	Mahnaz Kargar	Ph.D. Horticulture	-
4	Joel Tumwebaze	Ph.D. Nutrition	-
5	Dorcas Mukigi	Ph.D. Nutrition	-
6	Leslie E. Neidert	Ph.D. Kinesiology	-
7	Wei Wang	Ph.D. Physiology	-
8	Makenzie Callahan	M.S. Nutrition	-
9	Erin Landgrebe	M.S. Nutrition	-

Supervision of Postdoctoral Fellow

Name	Department	Year	Current Position
Geetha Thangiah*	Nutrition	Sep'11-Aug'13	Assistant Professor, Auburn University at Montgomery, AL
Nilmini Vishwaprakash*	Nutrition	May'11-Aug'11	Assistant Professor, Tuskegee University, AL
Yueru Li*	Nutrition	Jan'17-	-
Suhail Rasool	Nutrition	Jan'17-	-

**Published Research Articles & Conference Proceedings*

Undergraduate Researchers Mentored / Currently Mentoring

Name	Year	Current Position / Department and University
Chelsea Arriola	May'15 – Current	Senior, Biomedical Sciences

Hannah Cox	May'15 – Current	Senior, Food Sciences
Megan Goodnight	May'15 – Current	Senior, Animal Sciences
Laura Granberry	May'15 – Current	Sophomore, Nutrition, Dietetics and Hospitality Management
Haley Leibach	May'15 – Current	Junior, Biomedical Sciences
Jaclyn Bates ^{\$\$}	Jan'15 – Current	Dental student, UAB, Birmingham, AL
Morgan Floyd	Jan'15 – Current	Senior, Biomedical Sciences
Michael Matthews ^{\$}	Jan'15 – Current	Senior, Biomedical Sciences
Alex Mathews	Jan'15 – Current	Senior, Biomedical Sciences
Ann Smalley	Jan'15 – Current	Senior, Biomedical Sciences
Marshall Myrick	May'14 – May'15	Senior, Biomedical Sciences
Jonathon Whitehead* ^{\$}	May'14 – May'15	MD student, USA, Mobile, AL
Olivia Smith	Jan'13 – May'15	PhD student, Nutrition, Dietetics and Hospitality Management
Brooke Phillips*	Jan'14 – Dec'14	Senior, Biomedical Sciences
Taylor Pool*	Jan'14 – Dec'14	Senior, Biomedical Sciences
Olivia Demarta	May'14 – Aug'14	Senior, Nutrition, Dietetics and Hospitality Management
Joseph Grande	May'14 – Aug'14	MD student, UAB, Birmingham, AL
Chase Rushton*	Aug'13 – Dec'14	Senior, Microbiology
Salome Mathews*	Aug'12 – Dec'14	DO student, PCOM, Suwanee, GA
Mary Bottcher	Jan'13 – Dec'13	Dietetic Internship
Sandia Lehman	May'12 – July'13	Unknown
Katie Vines	May'12 – Dec'13	MD student, UAB, Birmingham, AL
Raylan Morgan	Jan'13 – May'13	M.S. student, Biomedical Sciences
Kristin Wallace	Aug'12 – Dec'12	M.S. program, University of North Carolina, Chapel Hill
Joshua Day	Aug'12 – Dec'12	MD student, UAB, Birmingham, AL
Kaitlin Harris	May'12 – Dec'12	Unknown
John White	May'12 – Dec'12	MD student, UAB, Birmingham, AL

Amy Sheil	Aug'11 – May'12	Student at Vet school, Auburn University
Grant Hitchens	Aug'11 – May'12	Physical Therapy Student, University of Tennessee
Bradford Unroe*	Aug'11 – Dec'12	MD medical student at University of Louisville
Jennifer Rojas	Aug'11 – Dec'12	Unknown
Marina Sycheva*	Aug'11 – Dec'12	M.S. student, Nutrition, Dietetics and Hospitality Management

***Published Research Articles & Conference Proceedings**

§ Supported by CMB undergraduate Research Fellowship

§§ Supported by Haggard Family Annual Award in Nutrition and Dietetics

Student Achievements /Student Grants

- *Women's Philanthropy Board (WPB) award for the undergraduate research fellowship, Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2016):* Awarded to Brooke Polinsky, undergraduate research student (August 2016 - December 2016). Role: Mentor. Total Award: \$500
- *Summer Cell and Molecular Biosciences (CMB) Research Fellowship, Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2016):* Awarded to Marina Sycheva, graduate student (May 2016 - August 2016). Role: Major Professor and thesis supervisor. Total Award: \$4500
- *Travel award, Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2016):* Awarded to Vishal Kothari, graduate student (Summer 2016). Role: Co-Major Professor and dissertation supervisor. Total Award: \$1200
- *9th Annual Boshell Diabetes Research Day, Auburn University, Poster Presentation Award (2016):* Awarded First place to Shraddha Rege, graduate student, for poster presentation entitled "Neuroprotective effects of Resveratrol on the oxidative stress and memory loss in obese mice and *in vitro*" Role: Major Professor and dissertation supervisor.
- *Haggard Family Annual Award in Nutrition and Dietetics, Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2015):* Awarded to Jaclyn Bates, undergraduate research student (April 2015 - March 2016). Role: mentor. Total Award: \$2,000 (Project Funds: \$2,000)
- *2015 Summer Cell and Molecular Biosciences undergraduate summer Research Scholars Fellowship (CMB USRS), Department of Nutrition, Dietetics and Hospitality Management, Auburn University,* awarded to Michael Matthews, undergraduate research student. Role: Mentor. Total Award: \$5,000 (Fellowship: \$3,000, Project Funds \$2,000)
- *2015 Boshell Diabetes Research Day Oral Presentation Award: Second place, awarded to Chen Zheng, graduate student, for oral presentation entitled "TrKA ubiquitination is impaired in Alzheimer's Disease"* Role: Major Professor and dissertation supervisor.
- *2014 Malone Zallen Graduate Research Fellowship, Department of Nutrition, Dietetics and Hospitality Management, Auburn University, awarded to Shraddha Rege, graduate student (April 2014-March 2015).* Role: Major Professor and thesis supervisor. Total Award: \$2,500 (Project Funds: \$2,500)

- 2014 Summer Cell and Molecular Biosciences undergraduate summer Research Scholars Fellowship (CMB USRS), Department of Nutrition, Dietetics and Hospitality Management, Auburn University, awarded to Jonathon Whitehead, undergraduate research student. Role: Mentor. Total Award: \$5,000 (Fellowship: \$3,000, Project Funds \$2,000)
- 2014 Summer Cell and Molecular Biosciences (CMB) Research Fellowship, Department of Nutrition, Dietetics and Hospitality Management, Auburn University, awarded to Katie Vines, graduate student. Role: Major Professor and thesis supervisor. Total Award: \$4500
- 2013 Malone Zallen Graduate Research Fellowship, Department of Nutrition, Dietetics and Hospitality Management, Auburn University, awarded to Chen Zheng, graduate student (April 2013-March 2014). Role: Major Professor and thesis supervisor. Total Award: \$3,150 (Project Funds: \$3,150)

B. RESEARCH/CREATIVE WORK

Research Publications

Journals:

Student contributions are marked with an asterisk (*); postdoctoral fellow's contribution is marked with double asterisk (). Last author signifies that the research was done in my lab and under my direction and serves as a corresponding author (*). IF= Impact factor; + Corresponding author. Publications in the name of Jeganathan Ramesh Babu (Babu JR). A total of over 1990 citations and h index of 17 to-date (December 15, 2016).**

1. Kothari V*, Luo Y, Tornabene T*, O'Neill AM, Greene MW, Geetha T, **Babu JR**⁺. High fat diet induces brain insulin resistance and cognitive impairment in mice. **Biochimica et Biophysica Acta Molecular Basis of Disease** 2016; 1863:499-508 [IF -5.4]
2. Rege SD*, Geetha T, Broderick TL, **Babu JR**⁺. Can diet and physical activity limit Alzheimer's disease risk? **Current Alzheimer Research** 2016; Mar 14 [Epub ahead of print; PMID: 26971938] [5Y IF-3.93]
3. Neidert LE, Wainright KS, Zheng C*, **Babu JR**, Kluess, KA. Plasma dipeptidyl peptidase IV activity measures of body composition in apparently healthy people. **Heliyon** 2016; doi: 10.1016/j.heliyon.2016. e00097.
4. Wilson DN, Schacht SE, Nakkash LA, **Babu JR**, Broderick TL. Resveratrol prevents pulmonary trunk remodeling but not right ventricular hypertrophy in monocrotaline-induced pulmonary hypertension. **Pathophysiology** 2016: May 27. doi:10.1016/j.pathophys.2016.05.004
5. Zheng C*, Geetha T, Gearing M, **Babu JR**⁺. Amyloid β -abrogated TrKA ubiquitination in PC12 cells analogous to Alzheimer's disease. **Journal of Neurochemistry** 2015; 133: 919-925 [IF-4.2]
6. Rege SD*, Geetha T, Broderick TL, **Babu JR**⁺. Resveratrol protects B amyloid induced oxidative damage and memory associated proteins in H19-7 hippocampal neuronal cells. **Current Alzheimer Research** 2015: 12: 147-156. [IF-3.9]

7. Pondugula SR, Flannery PC, Apte U, **Babu JR**, Geetha T, Rege SD*, Chen T, Abott KL. PPM1A phosphatase is involved in regulating PXR-mediated CYP3A4 gene expression. **Drug Metabolism and Disposition** 2015; 43:385-391. [IF-3.3]
8. Zheng C*, Geetha T, **Babu JR**[†]. Failure of ubiquitin proteasome system: Risk for neurodegenerative diseases. **Neurodegenerative Diseases** 2014; 14: 161-175. [IF-3.4]
9. Brust KB, Corbell KA, Al-Nakkash L, **Babu JR**, Broderick TL. Expression of gluconeogenic enzymes and 11beta-HSD type 1 in liver of diabetic mice after acute exercise. **Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy** 2014; 7: 495-504.
10. Rege SD*, Geetha T, Griffin GD, Broderick TL, **Babu JR**[†]. Neuroprotective effects of resveratrol in Alzheimer pathology. 2014; **Frontiers in Aging Neuroscience**. 2014: doi: 10.3389/fnagi.2014.00218 [IF-2.8]
11. Desai G*, Zheng C*, Geetha T, Mathews ST, White BD, Huggins KW, Zizza CA, Broderick TL, **Babu JR**[†]. The pancreas-brain axis: Insight into disrupted mechanisms associating type 2 diabetes and Alzheimer disease. **Journal of Alzheimer's disease**. 2014; 42:347-356. [IF-3.6]
12. Rege SD*, Kumar S*, Wilson D, Tamura L, Geetha T**, Mathews ST, Huggins KW, Broderick TL, **Babu JR**[†]. Resveratrol protects the brain of obese mice from oxidative damage **Oxidative Medicine and Cellular Longevity** 2013; 2013: 419092 [IF-3.4]
13. Geetha T**, Rege SD*, Mathews SE*, Meakin SO, White MF, **Babu JR**[†]. Nerve growth factor Receptor TrKA, a new receptor in insulin signaling pathway in PC12 cells. **Journal of Biological Chemistry** 2013; 288: 23807-23813. [IF-4.8]
14. Rege SD*, Geetha T**, Pondugula S, Zizza C, Wernette C, **Babu JR**[†]. Non-coding RNAs in Neurodegenerative Diseases. **ISRN Neurology** 2013 Apr 30; 2013:375852. doi: 10.1155/2013/375852.
15. Geetha T**, Zheng C*, McGregor WC, White DB, Diaz-Meco MT, **Babu JR**[†]. TRAF6 and p62 inhibit amyloid β -induced neuronal death through p75 neurotrophin receptor. **Neurochemistry International** 2012; 61: 1289-1293. [IF-2.9]
16. Geetha T**, Zheng C*, Vishwaprakash N**, Broderick TL, **Babu JR**[†]. Sequestosome 1 / p62, a scaffolding protein, is a newly identified partner of IRS-1. **Journal of Biological Chemistry** 2012; 287: 29672-29678. [IF-4.8]
17. Geetha T**, Zheng C*, Unroe B*, Sycheva M*, Kluess H, **Babu JR**[†]. Polyubiquitination of the neurotrophin receptor p75 directs neuronal cell survival. **Biochemical and Biophysical Research Communications** 2012; 421: 286-290. [IF-2.5]
18. Geetha T**, Vishwaprakash N**, Sycheva M*, **Babu JR**[†]. Sequestosome 1 / p62: Across diseases. **Biomarkers** 2012; 17: 99-103. [IF-2.2]

19. Diarra A*, Geetha T**, Potter P, **Babu JR**. Signaling of the neurotrophin receptor p75 in relation to Alzheimer's Disease. **Biochemical and Biophysical Research Communications** 2009; 390: 352-356. [IF-2.5]
20. **Babu JR**, Seibenhener ML, Peng J, Stroem AL, Kempainen R, Cox N, Zhu H, Wooten M, Diaz-Meco MT, Moscat J. Wooten MW. Genetic inactivation of p62 leads to accumulation of hyperphosphorylated tau and neurodegeneration. **Journal of Neurochemistry** 2008; 106: 107-120. [IF-4.0]
21. Wooten MW, Geetha T, **Babu JR**, Seibenhener ML, Peng J, Cox N, Diaz-Meco MT, Moscat J. Essential role of SQSTM1/p62 in regulating accumulation of K63-ubiquitinated proteins. **Journal of Biological Chemistry** 2008; 283: 6783-6789. [IF-4.8]
22. Zhou X#, **Babu JR**#, Silva S*, Shu Q, Graef I, Oliver T, Tomoda T, Tani T, Wooten MW, and Wang, F. Unc-51-like kinase $\frac{1}{2}$ - mediated endocytic process regulate NGF signaling and filopodia extension in sensory axons. **Proceedings of the National Academy of sciences** 2007; 104: 5842-5847. (# Equal Contribution) [TC-48; IF-9.7]
23. Wooten MW, Hu X, **Babu JR**, Seibenhener, ML, Geetha T, Paine MG, and Wooten MC. [Signaling, polyubiquitination, trafficking, and inclusions: sequestosome 1/p62's role in neurodegenerative disease](#). **Journal of Biomedicine and Biotechnology** 2006; 62079-62096. (Invited Review Article – 18 pages) [IF-2.9]
24. Paine MG, **Babu JR**, Seibenhener ML, and Wooten MW. Evidence for p62 aggregate formation: role in cell survival. **FEBS Letters** 2005; 579: 5029-5034. [IF-3.5]
25. Wooten MW, Geetha T, Seibenhener ML, **Babu JR**, Diaz-Meco MT, and Moscat J. The p62 scaffold regulates nerve growth factor-induced NF-kappa B activation by influencing TRAF6 polyubiquitination. **Journal of Biological Chemistry** 2005; 280: 35625-35629. [IF-4.8]
26. **Babu JR**, Geetha T, Wooten MW. Sequestosome 1/p62 shuttles polyubiquitinated tau for proteasomal degradation. **Journal of Neurochemistry** 2005; 94: 192-203. [IF-4.0]
27. Seibenhener ML, **Babu JR**, Geetha T, Wong H, Krishna NR, Wooten MW. Sequestosome/p62 is a polyubiquitin chain binding protein involved in ubiquitin proteasomal degradation. **Molecular and Cellular Biology** 2004; 24: 8055-8068. [IF-5.7]
28. **Babu JR**, Jeganathan KB, Baker DJ, Wu X, Kang-Decker N, van Deursen JM. Rae1 is an essential checkpoint regulator that cooperates with Bub3 to prevent missegregation. **Journal of Cell Biology** 2003; 160: 341-353. [IF-10.8]

@Editorial text <http://www.jcb.org/cgi/content/full/160/3/284-a>

J. Pines: Faculty of 1000 Biology, 4 Feb 2003; T. Yen: Faculty of 1000 Biology, 20 Mar 2003 <http://www.f1000biology.com/article/id/1011606/evaluation>

29. Wang X, **Babu JR**, Harden JM, Jablonski SA, Gazi MH, Lingle WL, de Groen PC, Yen TJ, van Deursen JM. The mitotic checkpoint protein hBUB3 and the mRNA export factor hRAE1 interact with GLE2p-

binding sequence (GLEBS)-containing proteins. **Journal of Biological Chemistry** 2001; 276: 26559-26567. [IF-4.8]

30. **Babu JR**, Sundravel S, Arumugam G, Renuka R, Deepa N, Sachdanandam P. Salubrious effect of vitamin C and vitamin E on tamoxifen-treated women in breast cancer with reference to plasma lipid and lipoprotein levels. **Cancer Letters** 2000; 151: 1-5. [IF-4.8]
31. Thangaraju M, **Babu JR**, Vasavi H, Ilanchezhian S, Vinitha R, Sachdanandam P. The salubrious effect of tamoxifen on serum marker enzymes glycoprotein and lysosomal enzymes level in breast cancer women. **Molecular and Cellular Biochemistry** 1998; 185: 85-94. [IF-2.3]
32. Vasavi H, Thangaraju M, **Babu JR**, Sachdanandam P. The salubrious effects of ascorbic acid on cyclophosphamide instigated lipid abnormalities in fibrosarcoma bearing rats. **Cancer Biochemistry Biophysics** 1998; 16: 71-83.

Abstract Publications

1. Geetha T, Zheng C*, Kothari V*, Carter A*, Vines K, * Sutarich J, **Babu JR**. The RING finger domain of TRAF6 interacts with Akt for its ubiquitination and activation of insulin stimulation. **Diabetes** 2016; 65: A452. [IF-8.47]
2. Kothari V*, Tornabene T*, Luo Y, Greene M, Geetha T, **Babu JR**[†]. High fat western diet-induced brain insulin resistance and cognitive impairment. **Diabetes** 2016; 65: A498. [IF-8.47]
3. Geetha T, Zheng C*, Baker J, Gearing M, and **Babu JR**. Polyubiquitination of Akt is impaired in Alzheimer's disease. **Alzheimer's & Dementia** 2015; 11: P861. [5Y IF-13.32]
4. Geetha T, Rege SD*, Vines K*, White D, Carroll C, Broderick T, **Babu JR**. TrkA Receptor in Streptozotocin-induced Diabetic Rat Brain (2842-PO). **Diabetes** 2015; 64: A715. [IF-8.47]
5. Rege Sv, Geetha T, Broderick T, and **Babu JR**[†]. Resveratrol Protects Proteins Associated with Memory Loss in Obese Diabetic Mice (1988-P). **Diabetes** 2014; 63: A509. [IF-8.47]
6. Rege S*, Bottcher M*, Geetha T, Broderick T, **Babu JR**[†]. Neuroprotective effects of resveratrol against β -amyloid induced oxidative damage and memory loss in rat hippocampal (H19-7) cells (647.44). **The FASEB Journal** 2013; 28: 647.44. [IF-5.04]
7. Geetha T, Zheng C*, Broderick T, and **Babu JR**[†]. Sequestosome 1/p62, a novel IRS-1 interacting protein, regulates insulin stimulated glucose uptake (1626-P). **Diabetes** 2012; 61: A421. [IF-8.47]
8. **Babu JR**[†], Diarra A*, Geetha T. Sequestosome 1/p62, a new interacting adapter protein with IRS-1 in insulin signaling (22-OR). **Diabetes** 2011; 60: A6. [IF-8.47]
9. Wooten MW, **Babu JR**, Seibenhener L, Geetha T, Cox N, Suppramaniam V, Diaz-Meco MT, Moscat J. Accumulation of tau and amyloid beta in p62 deficient mice (P1-040). **Alzheimer's & Dementia** 2006; 2: S106. [IF-12.41]

Papers and Lectures

a. Papers at International / National meetings (* student and **postdoctoral fellow from my lab contributed; # Invited for oral presentation)

1. Kothari V*, Tornabene T*, Luo Y*, O'Neill A, Greene MW, Geetha T and **Babu JR** (2016). High fat western diet induced brain insulin resistance and cognitive impairment. American Diabetes Association", 76th Scientific Sessions, New Orleans, LA, USA, June 10-14, 2016. Abstract NO.1936-P (This poster was selected to be featured on a moderated poster discussion)
2. Geetha T, Chen Z*, **Babu JR** (2016). The RING domain of TRAF6 interacts with Akt for its ubiquitination and activation. American Diabetes Association", 76th Scientific Sessions, New Orleans, LA, USA, June 10-14, 2016.
3. Geetha T, Chen Z*, Gearing M, and Babu JR (2015). Polyubiquitination of Akt is impaired in Alzheimer's disease. "Alzheimer's Association International Conference", Washington, D.C, USA, July 18-23, 2015. Abstract No. P4-211.
4. Rege, S*, Bottcher M, Geetha T, Broderick T, and **Babu JR** (2014). Neuroprotective effects of resveratrol against β -amyloid induced oxidative damage and memory loss in rat hippocampal (H19-7) cells. "ASN Scientific Sessions and Annual Meeting at Experimental Biology", San diego, California, 27th April 2014. Abstract no. C403.
5. Zheng C*, Mathews S*, Geetha T, **Babu JR** (2014). Polyubiquitination is essential for Akt activation in nerve growth factor signaling. Neuroscience 2014, Washington, DC, November 11th 2014. Abstract # 121.07/A18.
6. Rege S*, GeethaT, Broderick T, and **Babu JR** (2014). "Resveratrol Protects Proteins Associated with Memory Loss in Obese Diabetic Mice" at the American Diabetes Association 74th Scientific Sessions, San Francisco, California. Jun 2014. Abstract #2014-A-4820.
7. Zheng C*, Geetha T**, Gearing M, and **Babu JR**. Amyloid β induced impairment of TrkA signaling in PC12 cells equivalent to Alzheimer's Disease. "23rd Neuropharmacology Conference", San Diego, CA, USA, 7 -8 November 2013.
8. Geetha T**, Zheng C*, Diaz-Meco, M, Moscat J, and **Babu JR**. TRAF6/p62 complex prevents amyloid β induced neuronal death. "23rd Neuropharmacology Conference", San Diego, CA, USA, 7 -8 November 2013.
9. Zheng C*, Geetha T**, and **Babu JR**. TRAF6 and p62 inhibit amyloid β -induced neuronal death through p75 neurotrophin receptor. "Society for Neuroscience", 42nd Annual Meeting, New Orleans, USA, 13-17 October 2012. Abstract No. 66.27/U4.
10. Geetha T**, Zheng C*, Broderick T, and **Babu JR**. Sequestosome 1/p62, a novel IRS-1 interacting protein, regulates insulin stimulated glucose uptake. "American Diabetes Association", 72nd Scientific Sessions, Philadelphia, PA, USA, 8-12 June 2012. Abstract No. 2012-A-3475. (This poster was selected to be featured on a guided tour in the Poster Hall)
11. **Babu JR**, Diarra A*, Vishwaprakash T**, Geetha T**. Ubiquitination of p75 neurotrophin receptor in Alzheimer's disease. "Society for Neuroscience 2011" Washington, DC, USA, November 12-16, 2011 Abstract No. 666.12/N7
12. **Babu JR**, Diarra A*, Geetha T**. Sequestosome 1/p62, a New Interacting Adapter Protein with IRS-1 in Insulin Signaling. "American Diabetes Association", 71st Scientific Sessions, San Diego, CA, USA, 24-28 June 2011. Abstract No. 0022-OR#.

13. **Babu JR**, Seibenhener ML, Geetha T, Cox N, Parameshwaran K, Suppramaniam V and Wooten M.W. Alzheimer-like characteristics associated with p62 knockout mice. "Society for Neuroscience," 36th Annual Meeting, Atlanta, GA, USA, 14-18 October 2006. Abstract No. 754.3.
14. Wooten MW, **Babu JR**, Seibenhener L, Geetha T, Cox N, Suppramaniam V, Diaz-Meco MT, Moscat J. Accumulation of tau and amyloid beta in p62 deficient mice. "10th International Conference on Alzheimer's Disease and Related Disorders," July 15- 20, 2006, Centro De Convenciones, Madrid, Spain. Published in Alzheimer's & Dementia: July 2006: Vol. 2 Issue 3 (Supplement), Page S106.
15. Geetha T, Seibenhener ML, **Babu JR**. and Wooten MW. Interaction of TRAF6 with the p62 scaffold drives neurotrophin activation of NF-kB. "Society for Neuroscience," 35th Annual Meeting, Washington, DC, USA, 12-16 November 2005, Abstract No. 148.24.
16. Paine MG, **Babu JR**, Seibenhener ML, Wooten MW. Aggregation properties of the polyubiquitin binding protein sequestosome 1/ p62. American Society for Biochemistry and Molecular Biology Annual Meeting, April 2-6, 2005, San Diego, CA, USA.
17. Seibenhener ML, **Babu JR**, Geetha T, Wooten MW. Protein misfolding in Alzheimer's and other age-related neurodegenerative diseases. "5th Neurobiology of Aging Conference." October 21-22, 2004, San Diego, CA, USA. Abstract No. P18.
18. **Babu JR**, Wooten MW. "9th International Conference on Alzheimer's Disease and Related Disorders," July 17-22, 2004, Philadelphia, PA, USA.
19. **Babu JR**, Sundravel S, Renuka R, Sachdanandam P. Rejuvenating effect of vitamin C and vitamin E on erythrocyte membrane glycoproteins of tamoxifen treated post-menopausal women with breast cancer. J Pharm Pharmacol. 1999; 51: 149. "136th British Pharmaceutical Conference," Sep 13-16, 1999, Cardiff, U.K. Abstract No. M99312.
20. **Babu JR**, Sundravel S, Renuka R, Sachdanandam P. **Babu JR**, Sachdanandam P. XV Asia Pacific Cancer Congress. December 12-15, 1999, Chennai, India. Abstract No.036.
21. Sachdanandam P, **Babu JR**. XV Asia Pacific Cancer Congress, December 12-15, 1999, Chennai, India. Abstract No.037.
22. **Babu JR**, Thangaraju M, Sachdanandam P. Effect of tamoxifen on lipid metabolizing enzymes in women with breast cancer. J Pharm Pharmacol. 1998; 50: 201 "135th British Pharmaceutical Conference," Sep 12-16, 1998, Eastbourne, U.K. Abstract No. M98174.
23. **Babu JR**, Sachdanandam P. The salubrious effect of vitamin C and vitamin E on tamoxifen instigated lipid abnormalities in postmenopausal breast cancer women. J Surg Oncol. 1998; 721-724. "17th International Cancer Congress," August 23-28, 1998, Rio de Janeiro, Brazil. Abstract No. 00319.
24. Sachdanandam P, **Babu JR**. "17th International Cancer Congress," August 23-28, 1998, Rio de Janeiro, Brazil. Abstract No. 00318.

b. Papers at State and Local professional meetings (* student and **postdoctoral fellow from my lab contributed; # oral presentation)

1. Geetha T, Sycheva M, Sustarich J, Suchdeva S, Zheng C, **Babu JR** (2016) Overexpression of proNGF in Alzheimer's disease leads to neuronal death. "This is Research - Faculty Symposium", Auburn University, Auburn, AL, USA, Sep 16, 2016.
2. **Babu JR**, Kothari V, Luo Y, Tornabene T, Luo Y, Greene MW, O'Neill AM, Geetha T (2016) High fat diet induces brain insulin resistance and cognitive impairment in mice. "This is Research - Faculty Symposium", Auburn University, Auburn, AL, USA, Sep 16, 2016.
3. Vines K, Zheng C, Rege S, Matthews M, Bates J, Sustarich J, Geetha T, Broderick TL and **Babu JR** (2016) TrkA and insulin receptor in streptozotocin induced diabetes rat brain. "9th Annual Boshell Diabetes and Metabolic Diseases conference", Auburn University, Auburn, AL, USA, February 26, 2016. Abstract No. 007. (Oral presentation)
4. Zheng C, Geetha T, Kothari V, Carter A, Sustarich J and **Babu JR** (2016) TRAF6 interact with Akt for its ubiquitination and activation on insulin stimulation. "9th Annual Boshell Diabetes and Metabolic Diseases conference", Auburn University, Auburn, AL, USA, February 26, 2016. Abstract No. P25.
5. Kothari V, Tornabene T, Luo Y, O'Neill AM, Greene MW, Mathews S, Geetha T and **Babu JR** (2016) High fat and sugar in mice brain. "9th Annual Boshell Diabetes and Metabolic Diseases conference", Auburn University, Auburn, AL, USA, February 26, 2016. Abstract No. 002. (Oral presentation)
6. Rege S, Kumar S, Wilson D, Geetha T, Broderick TL and **Babu JR** (2016) Neuroprotective effects of Resveratrol against oxidative damage and memory loss in vivo and in vitro. "9th Annual Boshell Diabetes and Metabolic Diseases conference", Auburn University, Auburn, AL, USA, February 26, 2016. Abstract No. P19.
7. Kothari V*, **Babu JR** and Mathews ST (2016) Regulation of hepatic fetuin-A expression: differential effect of lipopolysaccharide and tumor necrosis factor- α . "9th Annual Boshell Diabetes and Metabolic Diseases conference", Auburn University, Auburn, AL, USA, February 28, 2016. Poster No.12
8. Li Y, Nie B, Zheng C*, **Babu JR**, Arnold RD, Huggins KW (2016) The protective effect of stearidonic acid (SDA) on amyloid beta 40 induced toxicity in H19-7 hippocampal cells. "9th Annual Boshell Diabetes and Metabolic Diseases conference", Auburn University, Auburn, AL, USA, February 28, 2016. Poster No.13
9. Matthews M*, Vines K*, and **Babu JR** (2015) Interaction of TrkA receptor with INSR/IRS-1 is impaired in type 1 diabetes rat brain. "AU-CMB Undergraduate Summer Research Scholars Colloquium", Auburn University, Auburn, AL, USA, July 24, 2015. Oral presentation#.
10. Zheng C*, Whitehead J*, Baker J, Sustarich J, Geetha T and **Babu JR** (2015) Impairment of NGF signaling in Alzheimer disease. "6th Annual UAB Diabetes Research Day 2015", The University of Alabama at Birmingham, Birmingham, AL, USA, May 5, 2015. Poster No. 42.
11. Rege S*, Geetha T, and **Babu JR** (2015) Neuroprotective effect of resveratrol in rat hippocampal (H19-7) neuronal cells. "6th Annual UAB Diabetes Research Day 2015", The University of Alabama at Birmingham, Birmingham, AL, USA, May 5, 2015. Poster No. 35.
12. Carter A*, Geetha T, and **Babu JR** (2015) TRAF6 and p62 complex is necessary for Akt ubiquitination, activation and translocation in insulin signaling. "8th Annual Boshell Diabetes and Metabolic diseases conference", Auburn University, Auburn, AL, 13th February 2015. Abstract no. 7.

13. Rege S*, Geetha T, and **Babu JR** (2015) Resveratrol protects hippocampal neurons from β -amyloid induced oxidative damage and memory associated proteins. "8th Annual Boshell Diabetes and Metabolic diseases conference", Auburn University, Auburn, AL, 13th February 2015. Abstract no. P22.
14. Zheng C*, Whitehead J*, Phillips B*, Pool T*, Rushton C*, Geetha T, Gearing M, and Babu **JR**. (2015) TrKA ubiquitination is impaired in Alzheimer's disease. "8th Annual Boshell Diabetes and Metabolic diseases conference", Auburn University, Auburn, AL, 13th February 2015. Abstract no. O02 Oral presentation#.
15. **Babu JR**, Zheng C*, and Geetha T (2014) Neurotrophin in Alzheimer Disease. Auburn Research day 2014 Tuesday June 3 (make-up day) Oral presentation#.
16. Mathews S*, Zheng C*, Geetha T and **Babu JR** (2014) Ubiquitination of TRAF6 is impaired in Alzheimer's Disease. Auburn Research day 2014 Tuesday June 3 (make-up day) oral presentation#.
17. Rege S*, Geetha T, Broderick T, and **Babu JR** (2014). Neuroprotective effect of Resveratrol in Obese Diabetic Mice. "Graduate Scholars forum", Auburn University, Auburn, AL, 4th March 2014. Oral Presentation#.
18. Zheng C*, Mathews S, Qayum M, Geetha, T, and **Babu JR** (2014) Nerve growth factor leads to ubiquitination and phosphorylation of AKT. "7th Annual Boshell Diabetes and Metabolic diseases conference", Auburn University, Auburn, AL, 28th February 2014. Abstract no. P024.
19. Rege, S*, Mathews S, Qayum M, Geetha T, and **Babu JR** (2014) Neuroprotective effect of resveratrol in the brain of obese diabetic mice. "7th Annual Boshell Diabetes and Metabolic diseases conference", Auburn University, Auburn, AL, 28th February 2014. Abstract no. P017.
20. Zheng C*, Mathews S*, Qayum M, Geetha T and **Babu JR**. Polyubiquitination of Akt in nerve growth factor signaling. Graduate Scholars forum", Auburn University, Auburn, AL, 4th March 2014. Oral Presentation.
21. Geetha T, Rege S*, Mathews S*, Meakin S, Morris M and Babu JR (2014) nerve growth factor receptor TrKA interacts with insulin receptor. "7th Annual Boshell Diabetes and Metabolic diseases conference", Auburn University, Auburn, AL, 28th February 2014. Abstract no. P021.
22. Whitehead J*, Zheng C* and **Babu JR** (2014) Accumulation of pro-NGF in hippocampus of postmortem human Alzheimer's disease brain. AU- CMB Undergraduate Summer Research Scholars Colloquium, Auburn University, Auburn, AL, July 25th, 2014 Oral presentation#.
23. Wilson D, Rege SD*, Kumar S*, Geetha T**, **Babu JR** and Broderick TL (2013) Beneficial effect of resveratrol on antioxidant status in brain of obese diabetic mice. "MWU Research day", Midwestern University, AZ, 16th April 2013. Abstract No. P097
24. **Babu JR**, Zheng C*, Geetha, T**, Kluess, H, Singh, N, Diaz-Meco M.T. and Moscat J (2013) Amyloid β -induced neuronal death through p75 receptor is rescued by TRAF6 and p62. "Research Week", Auburn University, Auburn, AL, 1-4 April 2013.
25. Zheng C*, Geetha, T**, Gearing M, and **Babu JR** (2013) A β impairs TrkA polyubiquitination and activation of MAPK and Akt. "6th Annual Boshell Diabetes and Metabolic diseases conference", Auburn University, Auburn, AL, 1st March 2013. Abstract no. P017.
26. Geetha T**, Rege S*, Mathews S*, Meakin S, and **Babu JR** (2013) Interaction of IRS-1 with nerve growth factor receptor TrkA. "6th Annual Boshell Diabetes and Metabolic diseases conference", Auburn University, Auburn, AL, 1st March 2013. Abstract no. P021.

27. Rege S*, Kumar S*, Wilson D, Geetha T**, Broderick T, and **Babu JR** (2013) Resveratrol protects the oxidative damage in the brain of ob/ob mice. In: Proc. 6th Annual Boshell Diabetes Research Day held at Auburn University, Auburn, AL. Abstract No. P014.
28. Kumar, S*., Rege, S*., Wilson, D., Geetha, T**., Broderick, T., and **Babu JR** (2012) Attenuation of oxidative damage in brain of obese mice by resveratrol. “Vanderbilt Diabetes Day”, Vanderbilt University, Nashville, TN, 14th November 2012. Abstract no. 38.
29. Geetha, T**., Zheng, C*., Broderick, T., and **Babu JR** (2012) Sequestosome 1/p62 regulates insulin stimulated glucose uptake. In: Proc. 5th Annual Boshell Diabetes Research Day Abstract No. P013, held at Auburn University, Auburn, AL, Mar. 2, 2012.
30. **Babu JR**, Diarra A*, Geetha T**. Sequestosome 1 / p62, a new family member in the IRS-1 signaling complex. “Boshell Diabetes”, 4th Annual Research Day, Auburn University, Auburn, AL, 4 March 2011.
31. Diarra A*, Patel A*, Lau K, Potter P, **Babu JR**. Ubiquitination of p75 receptor attenuates the activation of apoptotic pathway. “Student Osteopathic Medical Association (SOMA) Conference”, 53rd Annual Research Meeting, New Orleans, Louisiana, USA, 1 November 2009. Abstract No. 2009-S129.
32. Paine MG, Seibenhener ML, **Babu JR**, Wooten MW. Aggregation properties of the K63 polyubiquitin binding protein sequestosome1/p62. Research Forum, October 18, 2004, Auburn University, AL, USA.
33. **Babu JR**, van Deursen JM. “Mayo Research Forum,” September 21-22, 2001, Rochester, USA, Paper No.60.
34. **Babu JR**, Arumugam G, Vijayasathy K, Manikavasagam M, Vijayakumar VG, Sachdanandam P. “19th Annual Conference Indian Association of Biomedical Scientists,” Dept. of Physiology at Kasturba Medical College, Mangalore, India, Oct 30th - 1st Nov., Abstract No. Fa-6.

GRANTS

a. Current:

1. *Alabama Agricultural Experimental Station (AAES) Hatch Funding: Nerve Growth Factor and its receptor TrKA in insulin signaling (Oct 1, 2016– Sep 30, 2021)* **Role: Principle Investigator**
2. *Alabama Agricultural Experimental Station (AAES) AgR SEED Competitive: Nerve Growth Factor in Diabetes. (Oct 1, 2016– Sep 30, 2018)* **Role: Principle Investigator**
3. *Alabama Agricultural Experimental Station (AAES) Competitive: AAES Research support for postdoctoral Fellow. (January 1, 2017– Dec 30, 2017)* **Role: Principle Investigator**
4. *Alabama Agricultural Experimental Station (AAES) Competitive: Does central leptin administration decrease the responsiveness to glucagon and epinephrine in type 1 diabetic rats. (Oct 1, 2015– Sep 30, 2017)* **Role: Co-Investigator:** PI: Doug White
5. *Alabama Agricultural Experimental Station (AAES) AgR SEED Competitive: Expanding the Science of race and health in rural America. (Oct 1, 2016– Sep 30, 2018)* **Role: Co-Investigator:** PI Thomas Fuller-Rowell

b. Completed last 4 years:

1. *Diabetes Research and Action Education Foundation (DRAEF):* p62/TRAF6 in Type 2 Diabetes. (Jan 1, 2014 – Dec 31, 2014) **Role: Principal Investigator**
2. *Auburn University Intramural Grants program (AU-IGP: Level 4):* Metabolic Cages for cancer, drug and metabolic diseases research. (Feb 1, 2014 – Jan 30, 2016) **Role: Co-Investigator (Co-I)** PI: Michael Greene
3. *Alabama Agricultural Experimental Station (AAES) Young Investigator Award:* Sequestosome 1 / TRAF6 in Obesity and Type 2 Diabetes (Oct 1, 2013 – Sep 30, 2015) **Role: Principal Investigator**
4. *Auburn University Intramural Grants program (AU-IGP: Level 3):* Role of Neurotrophin Receptor in Alzheimer's Disease. (Feb 1, 2012 – Jan 30, 2014) **Role: Principal Investigator**
5. *Alabama Agricultural Experimental Station (AAES) Competitive:* Sequestosome 1 in obesity and type 2 diabetes. (Oct 1, 2011– Sep 30, 2012) **Role: Principal Investigator**
6. *Alabama Agricultural Experimental Station (AAES) Hatch:* Role of sequestosome 1 in insulin signaling. (Oct 1, 2011– Sep 30, 2016) **Role: Principal Investigator**
7. *Auburn University Intramural Grants Program (Level 2):* Neuroprotective effect of a ketogenic diet in Alzheimer's: Role of Adiponectin. (Jan 1, 2011– Dec 31, 2011). **Role: Co-Investigator**, PI: Robert Judd.

c. Teaching Grants Funded:

Women's Philanthropy Board Faculty Award: Award given for being an effective mentor to undergraduate student's research 2012-2013 (\$3000) (also given under Awards and Honors)

C. SERVICE

a. Service to the University

- 2016– Present: Member, Academic Classroom and Laboratory Complex (ACLC) Programming Committee
- 2015– Present: Steering Committee Member, Health Disparities Cluster
- 2012 – Present: Member, CMB Undergraduate Summer Research Scholarships Committee
- Chair for Oral Session (Graduate students /Postdoctoral fellows), 8th Annual Boshell Diabetes Research Symposium, Chair for Oral session February 13, 2015, Auburn, AL
- Chair for Oral Session (Faculties /Postdoctoral fellows), 7th Annual Boshell Diabetes Research Symposium, February 28, 2014, Auburn, AL
- 2014: Judge for graduate students oral and poster presentations – AU Research week 2014
- Judge for Oral Presentations (Graduate students /Postdoctoral fellows), 6th Annual Boshell Diabetes Research Symposium, March 1, 2013, Auburn, AL
- 2013: Judge for graduate students oral and poster presentations – AU Research week 2013
- Judge for Oral Presentations (Graduate students /Postdoctoral fellows), 5th Annual Boshell Diabetes Research Symposium, March 2, 2012, Auburn, AL
- 2012: Judge for graduate students oral and poster presentations – AU Research week 2012
- 2011 – 2012: Member, AU-CCF (Central Classroom Facility)

b. Service to the College

- 2015 – Present: Member, College of Human Sciences Research Advisory Committee
- 2012: Member, Search Committee, Associate Dean for Research and Graduate Studies, College of Human Sciences, Auburn University, AL (Recruited Dr. Jennifer Kerpelman).
- 2012: Represent College of Human Sciences for Office of Information Technology Center for Advanced Technologies Meeting on February 15, 2012.
- 2012- Present: Represent College of Human Sciences for Premedical Professions Advisory Committee.

c. Service to the Department

- 2016: Peer evaluation for teaching for a faculty member
- 2015: Peer evaluation for teaching for a faculty member
- 2014: Member, Search Committee, Instructor Position, Department of Nutrition, Dietetics and Hospitality Management (Recruited Ms. Amy Willis)
- 2013: Reviewer, AAES-Hatch Grant
- 2013: Member, Search Committee, Instructor Position, Department of Nutrition, Dietetics and Hospitality Management (Recruited Ms. Gwen Lloyd)
- 2012: Peer evaluation for teaching for a faculty member

d. Membership of Professional Organizations

- Member, Professional Section, American Diabetes Association (ADA)
- Member, Society For Neuroscience (SFN)