

RAMESH BABU JEGANATHAN, PH.D.

Bruno Endowed Professor of Nutrition & Graduate Program Director

Department of Nutritional Sciences

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PROFESSIONAL EXPERIENCE

2020-Present	Professor, Department of Nutritional Sciences, College of Human Sciences, Auburn University, AL
2018 June-2019 May	Co-Interim Associate Dean for Research and Graduate Studies, College of Human Sciences, Auburn University, AL
2017-2018	SEC Provost Fellow, Auburn University, AL
2018-Present	Bruno Endowed Professorship, Department of Nutritional Sciences, College of Human Sciences, Auburn University, AL
2017 August-2022 July	Departmental Signatory*, Department of Nutrition, Dietetics and Hospitality Management, College of Human Sciences, Auburn University, AL (*Assist the Department Head with administrative duties, including attending meetings, and departmental signatory and administrative point-of- contact when the department head is off campus)
2016-2020	Associate Professor (Tenured), Department of Nutrition, Dietetics and Hospitality Management, College of Human Sciences, Auburn University, AL
2015-Present	Graduate Program Director (Nutrition), Department of Nutrition, Dietetics and Hospitality Management, College of Human Sciences, Auburn University, AL
2010-2016	Assistant Professor, Department of Nutrition, Dietetics and Hospitality Management, College of Human Sciences, Auburn University, AL
2008-2010	Assistant Professor, Department of Biochemistry, Arizona College of Medicine, Dental and Optometry, Midwestern University, AZ

- 2003-2008** Postdoctoral Fellow, Cell and Molecular Biosciences, Auburn University, AL
- 2000-2003** Postdoctoral Fellow, Department of Pediatrics and Adolescent Medicine, Mayo Medical School, MN
- 1997-2000** Senior Research Fellow, Department of Medical Biochemistry, University of Madras, TN, India

EDUCATION

Ph.D. Doctor of Philosophy: Department of Medical Biochemistry (Emphasis: Human Nutrition), University of Madras, India, 2000

M.Phil.: Master of Philosophy: Department of Biological Sciences, University of Madras, India, 1994

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

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

ADMINISTRATIVE APPOINTMENTS / TRAININGS

2015-Present: **Graduate Program Director** (Nutrition), College of Human Sciences Auburn University, Auburn, AL

2017 Aug.-2022 July: **Departmental Signatory**, Nutrition, Dietetics and Hospitality Management, College of Human Sciences, Auburn University, Auburn, AL

2018 June-2019 May: Co-Interim **Associate Dean for Research and Graduate Studies**, College of Human Sciences, Auburn University, Auburn, AL

2017-2018: **SEC Provost Fellow**, Auburn University, Auburn, AL

Graduate Program Director – Nutrition, College of Human Sciences, Auburn University (2015-Present)

- Directing MS (Thesis, Non-thesis, On campus, and Distance) and Ph.D. programs.
- Recruitment, retention, and graduation of graduate students.
- Visionary and providing leadership for expanding the graduate program.

- Doubling the size of the enrollment in the graduate program.
- Implemented the “complete online non-thesis Master of Nutrition distance program.”
- Responsible for the submission of the annual programmatic assessments for the MS and Ph.D. programs. Received the “Exemplary Assessment Report Award” seven years in a row for MS and PhD graduate programs.
- Worked with the Department head to increase the graduate student’s stipend.
- Recruiting more minority graduate students into the program.
- Presenting seminars for the incoming new graduate students about the expectations and resources.
- Working with faculty and graduate students to resolve the problems and find alternatives if needed.
- Established graduate students’ admission and retention committee in the department.
- Working with faculty about their graduate student’s progress and submitting the evaluation to the graduate school.
- Worked with the faculty on the minimum number of publications needed to graduate as a doctoral student.

Departmental Signatory – Nutrition, Dietetics and Hospitality Management, College of Human Sciences, Auburn University (2017 August – 2022 July)

- Assisting the department head with administrative duties, including attending meetings, and departmental signatory and administrative point-of-contact when the department head is off-campus.
- Worked with Nutrition faculty every week during fall 2018 and spring 2019 on the five-year strategic planning document (strategic plan 2019-24).
- Lead the nutrition department advisory board meeting along with DPD Director when department head was on sick leave.

SEC Provost Fellow- SECU Academic Leadership, Auburn University (2017-18)

- This fellowship program is designed to help faculty members to gain senior administrative experience on campus as well as with other SECUs.
- This is a competitive program offered only to a small number (~5 or less) of highly regarded faculty each year.
- Learned from Auburn University President, Provost, and several upper-level administrators about their day-to-day activities, challenges, and the complexities of their leadership roles.
- Visited Louisiana State University from October 23-25, 2017, for the fellow’s workshop and networked with other Provost Fellows from the SECU.

Co-Interim Associate Dean for Research and Graduate Studies, College of Human Sciences (CHS), Auburn University (AU) (2018-19)

- Served with one of my colleagues Dr. Stephen Erath
- Attended meetings (e.g., ADR, Grad liaison) and reported back to CHS.
- Reviewed proposals for CHS dissertation support and ADR Grantsmanship support.
- Provided internal review for AU Intramural Grants Program (AU-IGP) proposals.
- Reviewed NSF pre-proposals for down select of limited submissions from AU.
- Developed CHS research highlights for AU Research Advisory Board.
- Interviewed candidates for faculty positions in CHS.
- Summarized Alabama Agricultural Experimental Station (AAES) research programs in CHS for the United States Department of Agriculture (USDA).
- Organized the CHS Graduate Student Research Symposium.
- Participated on the CHS Dean's Leadership Team.

RESEARCH

My research areas of expertise include linking Alzheimer's disease and type 2 diabetes, insulin signaling in animal models of obesity and type 2 diabetes, ubiquitination, and trafficking of proteins in the insulin-signaling pathway, resveratrol in age-related diseases, and molecular mechanisms responsible for insulin resistance in type 2 diabetes.

TEACHING

I taught the courses listed below at Auburn University, and still teaches some of these courses*.

NUFS / NTRI 2000: Nutrition and Health

NTRI 4980: Undergraduate Research and Study*

NTRI 7510/D01: Vitamins*

NTRI 7530/D01: Human Nutrient Metabolism*

NTRI 7980/D01: Non-thesis Research*

NTRI 7990: Research and Thesis*

NTRI 8970: Advanced Topics in Nutrition and Food Science (Diabetes)

NTRI 8990: Research and Dissertation*

HONORS AND AWARDS

2023: Chair, Review Committee NIH-NIDDK Study Section (November 2023 cycle)

2023: Standing Member, Review Committee NIH-NIDDK Study Section (Continuous Submission Privilege).

2022: Standing Member, Review Committee NIH-NIDDK Study Section (Continuous Submission Privilege).

- 2021:** Reappointed as the Bruno Endowed Professor of Nutrition, College of Human Sciences, Auburn University, Auburn, AL (2021- 2024)
- 2021:** Acting Chair, Review Committee NIH-NIDDK: ZDK1 GRB-B Study Section (December 2021 cycle).
- 2021:** Standing Member, Review Committee NIH-NIDDK Study Section (Continuous Submission Privilege).
- 2019:** Research featured on the Auburn University homepage entitled Auburn University nutrition researchers investigate promising keys to unlocking the mysteries of Alzheimer's disease
- 2019:** Research featured in Auburn University Research Magazine Special issue after Auburn University obtained R1 status (R1): Diabetes and Alzheimer's Breaking the link
- 2018:** Appointed as the Bruno Endowed Professor of Nutrition, College of Human Sciences, Auburn University, Auburn, AL (2018-2021)
- 2017:** Standing Member, Review Committee NIH-NIDDK Study Section (Continuous Submission Privilege).
- 2017:** SEC Provost Fellow, SECU Academic Leadership Development Program
- 2016:** Ad hoc reviewer, National Institute of Health-National Institute of Diabetes Digestive Kidney (NIH-NIDDK) study section
- 2015:** Research featured at our year in review: A look at the Alabama Agricultural Experimental Station in 2014
- 2015:** Nominee, Provost's Award for Faculty Excellence in Undergraduate Research Mentoring
- 2015:** Ad hoc reviewer, National Institute of Health-National Institute of Diabetes Digestive Kidney (NIH-NIDDK) study section
- 2015:** Associate Editor, Journal of Alzheimer Disease (JAD)
- 2014:** Ad hoc reviewer, National Institute of Health-National Institute of Diabetes Digestive Kidney (NIH-NIDDK) study section
- 2014:** Nominee, Provost's Award for Faculty Excellence in Undergraduate Research Mentoring
- 2013:** Outstanding Faculty Member, College of Human Sciences, Auburn University, Student Government Association (SGA) in recognition for outstanding teaching
- 2013:** Quality Life Faculty Award (\$3000), College of Human Sciences, Women's Philanthropy Board, in recognition for being an effective undergraduate / graduate research mentor
- 2013:** Grant reviewer, Health and Medical Research Fund for Food and Health Bureau, Government of Hong Kong, SAR, China
- 2013:** Editorial Board member, Biochemistry and Molecular Biology
- 2013:** Editorial Board member, Journal of Clinical and Experimental Neuroscience
- 2013:** Research featured at Auburn University Research 2012 Annual update
- 2012:** Review Editor, Frontiers in Nutrigenomics
- 1997:** Senior Research Fellowship, Council of Scientific and Industrial Research (CSIR), New Delhi, India

1. SCHOLARLY CONTRIBUTIONS

A. TEACHING

Teaching at Auburn University: 2010-Present

NUFS/NTRI 2000: Nutrition and Health – This is a three-credit lecture course in introductory nutrition. This is one of the larger classes at Auburn University, averaging 250 students per section per semester. It is part of the core curriculum for students in the College of Human Sciences and a required course for pre-nursing students. It is also taken as an elective by students from a variety of disciplines. There are no teaching assistants assigned to this class, which is taught in the Fall and Spring semesters.

NTRI 7530/D01: Human Nutrient Metabolism – This is a graduate level four-credit lecture course. This course introduces graduate students to all three macronutrients and their metabolism and is taught each Fall semester.

NTRI 7510/D01: Vitamins – This is a graduate level three-credit lecture course. This course introduces graduate students to advanced study of the metabolism, requirements, interactions, and deficiencies of fat soluble and water-soluble vitamins, as related to humans, and is taught each Spring semester.

NUFS/NTRI 8970: Advanced Topics in Nutrition, Dietetics and Hospitality Management (Diabetes) – This is a graduate level three-credit lecture course, which is taught as needed, usually during the summer semester.

I developed two new graduate level courses in the Department of Nutrition, Dietetics and Hospitality Management.

1. Human Nutrient Metabolism (NTRI 7530/D01)
2. Diabetes (NTRI 8970)

Teaching at Midwestern University:

Biochemistry, Cell and Molecular Biology, Nutrition Biochemistry (**BIOC 1511 and 1522**): College of Medicine (270 Medical students*).

Nutrition Biochemistry (**BMED 450**): Biomedical Sciences Program (25 students*).

Human Biochemistry (**BIOC 451**): Physician Assistant, College of Health Sciences (86 students*).

Human Biochemistry (**BIOC 450**): Nurse Anesthesiology Program, College of Health Sciences (25 students*).

Biochemistry, Cell Biology, Molecular Biology (**BASI 1501**): Dentistry, College of Dental Medicine (110 students*); Optometry, College of Optometry (50 Students*).

* Number of students in the class.

1. Graduate Students Whose Work Has Been Completed:

a. Major Professor: Thesis/Dissertation

No.	Name	Degree	Dissertation / Thesis Title	Year	Current Position
1	Megan Robinson*	Ph.D. Nutrition	The Effect of Nerve Growth Factor on Gut Microbiota in Obesity, Type 2 diabetes Mellites and Alzheimer's Disease in Mouse Model	2023	Nutrition Scientist, Pediatric Therapy Company, Atlanta, GA
2	Xiaowen Ding*	Ph.D. Nutrition	Nerve Growth Factor in Type 2 Diabetes and Alzheimer's Disease Mouse Model	2022	Postdoctoral Fellow, Stanford University, Stanford, CA
3	Rongzi Li*	Ph.D. Nutrition	Neuroprotective Effects of Bioactive Compounds (Resveratrol and Genistein) in various mouse models	2021	Assistant Professor, China Agricultural University, Beijing, China
4	Yuxian Zhang*	Ph.D. Nutrition	High Fat Sugar Diet Induces Skeletal Muscle Degeneration and the Beneficial Effect of Time Restricted Feeding	2020	Scientist, Military Nutrition Research Institute, China
5	Marina Sycheva*	M.S. Nutrition	Pro nerve Growth Factor Induced RhoA Kinase Activation in PC12 Cells	2017	Research Fellow, CRC Atrium Health, Charlotte, NC
6	Chen Zheng*	Ph.D. Nutrition	The Role of Polyubiquitination in Nerve Growth Factor Signaling and its Alterations in Alzheimer's Disease	2016	Research Instructor, School of Medicine, Vanderbilt University, Nashville, TN
7	Shraddha Rege*	Ph.D. Nutrition	Neuroprotective Effects of Resveratrol Against Oxidative Stress and Memory Impairment <i>in vivo</i> and <i>in vitro</i>	2016	Scientist, Neuroscience, Pharmaceuticals, Mumbai, India
8	Vishal Kothari* [§]	Ph.D. Nutrition	Molecular Mechanism Regulating Hepatic Fetuin- A Expression	2016	Scientist, Pharmacology-Toxicology / Study Director Seattle, WA
9	Katie Vines*	M.S. Nutrition	TrkA and Insulin Receptor in Streptozotocin Induced Diabetes Rat Brain	2016	After graduating her MD from UAB, currently she is doing surgery fellowship, USA, Mobile, AL
10	Andrea Carter*	M.S. Nutrition	Sequestosome 1 /p62 and TRAF6 are necessary for Akt ubiquitination, translocation and activation	2014	Agriculture Development Specialist, Alabama Department of Agriculture, and Industries.

11	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
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***Published Research Articles & Conference Proceedings; [§]co-major professor**

Major Professor: M.S. Non-thesis

No.	Name	Degree	Dissertation / Thesis/Non-thesis Title	Year	Current Position
12	MaryGrace Gilkey	M.S. Nutrition (Non-Thesis)	Wernick's encephalopathy and thiamine treatment of alcoholics	2023	Registered Dietician, Carolinas Medical Center, Charlotte, NC
13	Erika Richter*	M.S. Nutrition (Non-Thesis)	The effects of <i>monodica charantia</i> on type 2 diabetes and Alzheimer's disease	2023	Doctoral student, Auburn University, AL
14	Sarah Tamplin	M.S. Nutrition (Non-Thesis)	Brain abnormalities in Anorexia Nervosa	2023	Completed defense and graduating this spring
15	Jessica Crim	M.S. Nutrition (Non-Thesis)	Ashwagandha and its effects on stress and neuropsychiatric disorders: Anxiety, depression and insomnia	2023	Completed defense and graduating this spring
16	Jamey Vaughn	M.S. Nutrition (Non-Thesis)	Eating disorder risk and prominence in bodybuilding populations	2023	Completed defense and graduating this spring
17	Sadie Jakim	M.S. Nutrition (Non-Thesis)	Vitamin D and Epilepsy	2023	Completed defense and graduating this spring
18	Jade Jenson	M.S. Nutrition (Non-Thesis)	Enhanced recovery after surgery (ERAS) protocol: Gastrointestinal tract surgeries	2022	Dietician, Mayo Clinic, Rochester, MN
19	Emily Knight*	M.S. Nutrition (Non-Thesis)	Role of Diet and Dietary Patterns in Parkinson's Disease	2022	Presidential Graduate Research Fellow -Doctoral student, Auburn University, AL
20	Morgan Huebner	M.S. Nutrition (Non-Thesis)	Relieving IBS Symptoms with a Low FODMAP Diet: A Review of the Literature	2022	Completed dietetic Internship; RD eligible

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21	Glenn Walter	M.S. Nutrition (Non-Thesis)	Eating Disorders and their Effect on the Female Athlete	2022	Dietetic Internship
22	Andrea Hebert	M.S. Nutrition (Non-Thesis)	Potential Role of Curcuma Longa in Treating Symptomatic Osteoarthritis	2021	Physician Assistant, Carilion Clinic, Roanoke, VA
23	Savannah Raney	M.S. Nutrition (Non-Thesis)	Caloric Restriction (CR) and Mediterranean (MD) Longevity Diets: Comparing the Efficacy of the 2 Diets in Increasing Longevity	2021	Registered Dietitian, Auburn, AL
24	Brian Bowers	M.S. Nutrition (Non-Thesis)	Intermittent Fasting and Alzheimer's Disease	2021	Registered Dietitian, Philadelphia, PA
25	Payton Parker	M.S. Nutrition (Non-Thesis)	The Effects of a Meat-Restricted Diet in the Treatment of Rheumatoid Arthritis	2020	Clinical Dietitian, Birmingham, AL
26	Kara McCracken	M.S. Nutrition (Non-Thesis)	Evaluating the Clinical Efficacy of the ERAS Protocol: Oral Carbohydrate Loading 2-3 hours Prior to Surgery	2020	Clinical Dietitian, Paradise Valley Hospital, San Diego, CA
27	Samantha White	M.S. Nutrition (Non-Thesis)	A Comparison of Pharmacological versus Non-pharmacological Treatment Approaches for Older Adults with Type 2 Diabetes and Cognitive Impairment	2020	Registered Dietitian, North Carolina
28	Lisa Clarke	M.S. Nutrition (Non-Thesis)	Polyphenols and Flavonoids on Cognitive Function and Athletic Performance: A Systematic Review	2020	Registered Dietitian
29	Emily Thompson	M.S. Nutrition (Non-Thesis)	The effects of the Ketogenic Diet on chronic disease: Alzheimer's Disease, Obesity, and Type 2 Diabetes	2019	Clinical Dietitian
30	Emily Kilgo	M.S. Nutrition (Non-Thesis)	Alzheimer's disease and B vitamins	2018	Doctoral Student, Nutritional Sciences, Auburn University, AL
31	Mallori Roberts	M.S. Nutrition (Non-Thesis)	The effect of DHA on cognitive function and serum lipid levels in elderly with mild cognitive impairment	2018	Registered Dietitian Dietetic Internship Coordinator, Auburn University
32	Katherine Salomone	M.S. Nutrition (Non-Thesis)	Vitamin D deficiency may increase risk of obesity and related complications due to gut dysbiosis	2018	Registered Dietitian Rutgers Sports Nutrition Director

33	Lauren Lynch	M.S. Nutrition (Non-thesis)	Vitamin D Deficiency in Obesity, Diabetes, and Alzheimer's Disease	2017	Ethicon Hospital and Health care
34	Talia Tornabene*	M.S. Nutrition (Non-thesis)	Obesity, Insulin Resistance and Cognitive Impairment: Pathogenesis and Treatment	2017	Ph.D. student, Auburn University, AL
35	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

b. Committee Member:

No.	Name	Degree	Dissertation / Thesis / Non-thesis Title	Year	Current Position
36	Huifei Zheng	Ph.D. Anatomy, Physiology and Pharmacology	The Role of Hormones in the Development of the Adrenal Gland	2023	Postdoctoral Scientist, City of Hope National Medical Center, Duarte, CA
37	Emma Colombo	M.S. Nutrition (Non-Thesis)	Glutamine Supplementation and Gut Health	2023	Unknown
38	Laura Robinson	M.S. Nutrition (Non-Thesis)	Assessing Knowledge, Diet Quality and Physical Activity in Student Veterans	2023	Doctoral student, Auburn University, AL
39	Abril Rodriguez	M.S. Nutrition (Non-Thesis)	Potential Risks and Metabolic Concerns Associated with Obesity and Branched Chain Amino Acids- A Narrative Review	2023	Unknown
40	Addison Rains	M.S. Nutrition (Non-Thesis)	The Effect of Vitamin D Supplementation on Depressive symptoms in Adults: A Narrative Review	2023	Unknown
41	Katherine Kinnaird	M.S. Nutrition (Non-Thesis)	The Role of Vitamin D in Post-Stroke Rehabilitation: A Narrative Review	2023	Unknown
42	Summer McNeill	M.S. Nutrition (Non-Thesis)	The Effect of Omega-3 Supplementation on Exercise Induced Inflammation and Recovery: A Literature Review	2023	Unknown
43	Serhat Yildiz	M.S. Nutrition (Thesis)	The Mediterranean Diet in a University student Population: A Cross- Sectional Study on Adherence	2023	Unknown

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			and Perceived Knowledge, Barriers and Benefits		
44	Brittannie Chester*	Ph.D. Nutrition	The Efficacy of a Diabetes Self-Management Education and Support Coaching Program for the Ongoing Management of Type 2 Diabetes in North Alabama	2022	DPD Director, Tuskegee University, Alabama
45	Heidi Lochmann-Schrader	M.S. Nutrition (Non-Thesis)	The Effect of Bariatric Surgeries on Binge Eating Disorder	2022	Registered Dietitian, Independence, M
46	Kennedy Fitzgerald	M.S. Nutrition (Non-Thesis)	Effects of Omega-3 Polyunsaturated Fatty Acids on Mild and Traumatic Brain Injury	2022	Registered Dietitian, Sports Nutrition Fellow University of Pittsburgh
47	Cailyn Meador	M.S. Nutrition (Non-Thesis)	The Effect of Creatine Supplementation on Strength and Athletic Performance	2022	Completed Dietetic Internship RD Eligible
48	Laura Bress	M.S. Nutrition (Non-Thesis)	Rural Food Access: Challenges and Opportunities	2022	Unknown
49	Grayson Till	M.S. Nutrition (Non-Thesis)	What Effect Does Antioxidant Supplementation have on Athletic Performance	2022	UAB Sports Nutrition Director, Football RD Eligible
50	Linda Steinhardt	M.S. Nutrition (Non-Thesis)	Athletes Opinions and Perceptions of, Behaviors Around, and Experience with Body Composition Testing	2022	Registered Dietitian Denver, CO
51	Priscilla Ayine*	Ph.D. Nutrition	An Analysis of Social-Ecological Elements Influence on Weight Gain in Children from Alabama	2021	Postdoctoral Fellow, Texas A &M University, Texas
52	Megan Phillips*	Ph.D. Nutrition	Association of DNA Copy Number and Structural Variation with Racial Disparities in Childhood Obesity	2021	Scientist, Discovery Life Sciences, Huntsville, AL
53	Ting Liu	Ph.D. Anatomy, Physiology & Pharmacology	Pharmacological Characterization of Fish Melanocortin-4 and Melanocortin 5 Receptors	2021	Postdoctoral Fellow, Emory School of Medicine, Atlanta, GA
54	Maranda Boyd	M.S. Nutrition (Non-Thesis)	Breastfeeding and its Association with Post-Partum Depression	2021	MS Nutrition WIC
55	Johanna Key	M.S. Nutrition (Non-Thesis)	The Effects of Food Environment on Obesity in Children	2021	Registered Dietitian Columbus, GA

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56	Kaitlin Carroll	M.S. Nutrition (Non-Thesis)	Diet as a Risk Factor for Early-onset Colorectal Cancer and Colorectal Adenomas: A Systematic Review	2021	Unknown
57	Elizabeth Miller	M.S. Nutrition (Non-Thesis)	Effects of Polyunsaturated Fatty Acids in Children Diagnosed with Attention Deficit/Hyperactivity Disorder	2021	MS Nutrition Alabama Dept of Public Health
58	Patrick Downing	M.S. Nutrition (Non-Thesis)	Mediterranean Diet Adherence Score and Perceived Barrier & Perceived Benefits in College Students	2021	Completed Dietetic Internship Foodservice Montgomery, AL
59	Larissa Hatch	M.S. Nutrition (Non-Thesis)	Fruits, Vegetables and New Orleans Community Gardens	2021	Unknown
60	Alecia Catron	M.S. Nutrition (Non-Thesis)	Evaluating the Effects of Plant Based Style Diets in Outcomes Among Hemodialysis Patients	2021	Registered Dietitian Ohio
61	Madeline Workman	M.S. Nutrition (Non-Thesis)	Effects of Beta-Alanine Supplementation on Athletic Performance	2021	Registered Dietitian Tennessee
62	Patrick Goodwin	M.S. Nutrition (Non-Thesis)	Nutrient Training and its Implication on Athletic Performance	2021	Registered Dietitian University of Nebraska Sports Nutrition
63	Alexis Roberts	M.S. Nutrition (Non-Thesis)	Negative Association Between Mediterranean Diet Adherence and COVID	2021	Registered Dietitian, North Carolina
64	Luoqi Miao	M.S. Nutrition (Non-Thesis)	Identification of the Effect of Honey on Glycemic Level in Type 2 Diabetes Mellitus	2021	MS Nutrition, Auburn Dietetic Internship – Yale University, New Haven, CT
65	Lynice Barnes	M.S. Nutrition (Non-Thesis)	The Effectiveness of Medical Nutrition Therapy on the Improvement of Glycemic Control in Patients with Type 2 Diabetes	2020	Registered Dietitian Atlanta, GA
66	Allison Tolman	M.S. Nutrition (Non-Thesis)	Perceptions of Registered Dietitians on Performance and Value of Certified Dietary Managers	2020	Registered Dietitian Georgia
67	Megan Sieprawski	M.S. Nutrition (Non-Thesis)	Evaluating the Safety and Efficacy of the Ketogenic Diet with Type 2 Diabetes and Related Precursors	2020	Registered Dietitian North Carolina

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68	Rae Leach	M.S. Nutrition (Non-Thesis)	Sports Dietitians positively impact nutrition knowledge and behavior, benefitting athletic and academic performance as well as long term health of NCAA athletes: A Narrative Review	2020	Registered Dietitian Alabama
69	Bailey Saneman	M.S. Nutrition (Non-Thesis)	Sleep Duration, Patterns and Timing Associated with Childhood Obesity	2020	Registered Dietitian Renfrew Center Maryland
70	Roberto Couto	M.S. Nutrition (Non-Thesis)	Adherence to the Mediterranean Diet in a Portuguese immigrant Community in the Central Valley of California	2020	Registered Dietitian WelbeHealth California
71	Zhi-Shuai Hou	Ph.D. Anatomy, Physiology & Pharmacology	Allosteric Modulation of Human Melanocortin-4 Receptor (MC4R) by Zinc and Copper Ions and Characterization of Spotted Sea Bass MC4R	2020	Postdoctoral Fellow, Dana-Farber Cancer Institute at Harvard Medical School, MA
72	Paije Nobles	M.S. Nutrition (Non-Thesis)	Prevalence of Gut Dysbiosis in Obesity and Anorexia Nervosa	2020	Registered Dietitian Rosewood Centers for Eating Disorders Arizona
73	Ashley Williams	M.S. Nutrition (Non-Thesis)	The Effects of Vitamin D Supplementation on Metabolic Profiles in Women with Polycystic Ovary Syndrome	2019	Dietetic Intern Morrison Healthcare, Mobile Infirmiry Hospital, AL
74	Likun Yang	Ph.D. Anatomy, Physiology & Pharmacology	Neural Melanocortin Receptors: Structure-Function Relationship of Human Melanocortin-4 Receptor and Characterization of Fish Neural Melanocortin Receptors	2019	Postdoctoral Fellow, Winship Cancer Institute, Emory University School of Medicine, Atlanta, GA
75	Bulbul Ahmed	Ph.D. Nutrition	Development and characterization of paired in vivo and in vitro models to examine obesity-linked colorectal cancer	2019	Postdoctoral Fellow, Icahn School of Medicine, NY
76	Mahnaz Karger*	Ph.D. Horticulture	Physiochemical and Nutritional Properties of Selected Banana (Musa spp.) Cultivated in Southern U.S.	2019	Postdoctoral Fellow, Department of Horticulture, North Carolina State University, Raleigh, NC
77	Sari Bornstein	M.S. Nutrition (Non-Thesis)	Comparing a Very Low-Carbohydrate versus Moderate-Carbohydrate Dietary Approach to Optimize Glycemic Control in Patients with Type 2 Diabetes: A Systematic Review	2019	Clinical Dietitian, Santa Rosa, CA

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78	Kristen Smith	M.S. Nutrition (Non-Thesis)	Psychobiotics as treatment for mental health conditions and related symptoms	2019	Registered Dietitian Postdoctoral Fellow Moffitt Cancer Center Tampa, FL
79	Kristen Isacson	M.S. Nutrition (Non-Thesis)	Folate deficiency puts pregnant women at risk for preeclampsia	2019	Dietetic Internship
80	Lily Zandieh	M.S. Nutrition (Non-Thesis)	Curcumin's anti-inflammatory properties and clinical applications	2019	Ph.D. student, Auburn University, AL
81	Jennifer Goldstein	M.S. Nutrition (Non-Thesis)	Nutrition knowledge and Mediterranean diet adherence in Rome, Italy: A comparison between farmers and the general population	2018	Registered Dietitian Sports Nutrition Louisiana
82	Dorothy Irwin	M.S. Nutrition (Non-Thesis)	Fish oil as a replacement for disease modifying antirheumatic agents and nonsteroidal anti-inflammatories for rheumatoid arthritis	2018	MS Nutrition Auburn University Dietetic Technician UAB
83	Emily Dodd	M.S. Nutrition (Non-Thesis)	The ketogenic diet and inflammatory diseases	2018	Registered Dietitian Interim Clinical Nutrition Manager at WellStar Atlanta, GA
84	Joel Tumwebaze	Ph.D. Nutrition	Effectiveness of home gardening in reducing food insecurity and improving health in Chacraseca, Nicaragua	2018	Extension Specialist and Assistant Research Professor West Virginia State University Research and Development Corp
85	Dorcias Mukigi	Ph.D. Nutrition	A text-based intervention: The impact of food insecurity on dietary habits, stress management and food assistance resources among college students	2018	WIC Nutrition Evaluator and Policy Specialist at Massachusetts Dept of Public Health
86	Camille Harris	M.S. Nutrition (Non-Thesis)	Clinical health benefits of the Mediterranean diet	2018	PhD Student at Georgia Institute of Technology Atlanta
87	Kaitlin Harper	M.S. Nutrition (Non-Thesis)	Breastfeeding initiation and duration rates among low-income, minority women: Emerging interventions	2018	Registered Dietitian US Department of Veterans Affairs Athens, GA
88	Wei Wang	Ph.D.	Pharmacological Characterization and Functional Rescue of the Giant Panda	2017	Assistant Professor in China

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		Anatomy, Physiology and Pharmacology	and Human Melanocortin- 4 Receptors		
89	Leslie Neidert	Ph.D. Kinesiology	The Regulation and Release of Dipeptidyl Peptidase IV from healthy and Diabetic Skeletal Muscle	2017	Postdoctoral Fellow, Naval Medical Research Unit, San Antonio, TX
90	Amie Harden	M.S. Nutrition (Thesis)	Diabetes Self-Management Education (DSME) and Medical Nutrition Therapy for Type 2 Diabetes Improves Patient Outcomes: A Retrospective Chart Review	2017	Director, Diabetes Clinical Nutrition and Endocrinology and Metabolism, East Alabama Medical Center, Opelika, AL
91	Krysta Kellegrew	M.S. Nutrition (Non-Thesis)	Evaluating Barriers to SNAP Acceptance in Farmers Markets: A Farmer's Perspective	2017	Registered Dietitian Sacramento Co WIC California
92	Erin Landgrebe	M.S. Nutrition (Non-Thesis)	Mediterranean Diet: Nutrition Knowledge and Adherence in Central Italy	2017	Registered Dietitian Clinical Dietitian Hennepin Healthcare Minneapolis
93	Makenzie Callahan	M.S. Nutrition (Non-Thesis)	Mediterranean Diet: Nutrition Knowledge and Adherence in Southern Italy	2017	Registered Dietitian PhD UAB Redding, California
94	Christopher Wyatt	M.S. Nutrition (Non-Thesis)	Diabetes Dyslipidemia: Efficacy of Diabetes Self-Management and Medical Nutrition Therapy in Patients with Type 2 Diabetes	2017	DO Medical student
95	Jordan Park	M.S. Nutrition (Non-Thesis)	Vitamin D status and Stress Fractures: Impact on High-Intensity Athletes and Military Personnel	2017	Registered Dietitian Asst Director Sports Nutrition University of Tennessee
96	Kacie Delong	M.S. Nutrition (Non-Thesis)	Hospital Malnutrition: Screening, Diagnosis, Intervention, and Impact on Patient Outcomes	2017	Registered Dietitian Emory Atlanta
97	Yueru Li*	Ph.D. Nutrition	The beneficial Effects of Stearidonic Acid in Obesity and Alzheimer's Disease	2016	Associate Professor, Ocean University of China
98	Yuwen Luo	Ph.D. Nutrition	The Role of Sugar-sweetened Water in the Progression of Nonalcoholic Fatty Liver Disease	2016	Data Analyst, Visa, Inc

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99	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
100	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	Ph.D. student, UAB, Birmingham, AL
101	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	Completed PhD Nutrition Auburn University
102	Meng Ding	Ph.D. Nutrition	The Association Between Food Insecurity and Health Behavior Outcomes	2015	Unknown
103	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	Registered Dietitian Dialysis Clinic, Inc. Nashville, TN
104	Mingyu Qiao	M.S. Poultry Science	Toxicity assessment of <i>Clitocybe nuda</i> as natural antimicrobials	2015	Ph.D. student at Auburn University, AL
105	Michael Wayne	M.S. Nutrition	Meal timing & Its effects on the pathogenesis of the metabolic syndrome	2015	Unknown
106	Guang Ren	Ph.D. Nutrition	Role of phosphorylated fetuin-A in insulin action, insulin resistance, obesity and moderate weight loss	2014	Researcher at University of Alabama at Birmingham, and Adjunct Faculty Samford University, AL
107	Taylor Rodick	M.S. Nutrition (Non-Thesis)	Coenzyme Q10: Role in health and disease	2014	Dietetic Internship
108	Brandon Willingham	M.S. Nutrition (Non-Thesis)	Vitamin D and athletic performance	2014	Assistant Professor, Coastal Carolina University, SC
109	Jaclyn Buckreis	M.S. Nutrition (Non-Thesis)	Which diet is best? A comparison of six popular diet plans	2013	Unknown
110	Emily Jenkins	M.S. Nutrition (Non-Thesis)	Ketogenic diets and their effects on athletic performance	2013	Dietetic Technician, Children's hospital, LA

111	Carly Moss	M.S. Nutrition (Non-Thesis)	Thiamin status and supplementation in the management of diabetes mellitus and its vascular comorbidities	2013	Clinical Dietitian, Georgia Regents Medical Center, GA
112	Megan Philips	M.S. Nutrition (Non-Thesis)	Do branched-chain amino acids decrease muscle breakdown following exercise?	2013	Registered Dietitian, PhD Discovery Life Sciences Genetics Research Huntsville, AL
113	Haley Shumaker	M.S. Nutrition (Non-Thesis)	The role of resistance starch in cardiovascular disease prevention	2013	Registered Dietitian Fresenius Medical Care North America Mobile, AL
114	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	PharmD student, Auburn University, AL

c. Outside Reader/ External Examiner

No.	Name	Degree	Dissertation / Thesis Title	Year	Current Position
115	Amit Mishra	Ph.D. Life Sciences and Biotechnology, South Asian University, Delhi, India	Identification and characterization of different HBV interacting host proteins and elucidation of their mechanism of action	2023	Postdoctoral Fellow, Albert Einstein College of Medicine, Bronx, NY
116	Renlei Li	Ph.D. Anatomy, Physiology & Pharmacology, Auburn University, AL	Pharmacological regulation of melanocortin-3 and 4 receptors by melanocortin-2 receptor accessory protein 1 or 2 in humans, canine and fish	2022	Postdoctoral Fellow, Dana-Farber Cancer Institute at Harvard Medical School, MA
117	Kishore Pant	Ph.D. Life Sciences and Biotechnology, South Asian University, Delhi, India	Study of the role of butyrate, a short-chain fatty acid, in modulating HBV replication and hepatocellular carcinoma	2018	Postdoctoral Fellow, The Hormel Institute, University of Minnesota, Medical Research Center, Austin, MN
118	Tareq Anani	Ph.D. Chemical Engineering, Auburn University, AL	Matrix metalloproteinase responsive superparamagnetic iron oxide nanoparticles (SPIONs) to distinguish between aggressive and indolent cancer	2017	Scientist, Biotech company, CA

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119	A. Suyavaran	Ph.D. Biochemistry and Molecular Biology, Pondicherry University, India	Pretreatment strategies for the suppression of hepatic ischemia reperfusion injury: Insights into molecular mechanisms and biological implications	2017	Assistant professor in India
120	Angelia Holland	Ph.D. 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
121	Zhao Yang	Ph.D. Anatomy, Physiology and Pharmacology, Auburn University, AL	Human melanocortin-3 receptor: structure function relationship of DPLIY motif and helix 8 and biased signaling	2016	Assistant Professor in China
122	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	Associate professor in India
123	T. Arun Doss	Ph.D. Zoology, Annamalai University, India	Ginkgo Biloba Nanoparticles as a new therapeutic tool for MPTP-induced parkinsonism in male mice	2014	Associate Professor in India
124	K. Illavarasi	Ph.D. Biotechnology, Alagappa University, India	Protective effect of olive oil and Gelidiella acerosa in alleviating environmental pollutant (2,3,7,8 – tetracholorodibenzo-p-dioxin) mediated toxicity: A preclinical study	2014	Assistant Professor in India
125	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	Associate Professor in India
126	R. Ramesh	Ph.D. Animal Sciences, Bharathidasan University, India	Nano Toxicological evaluation of synthesized TiO ₂ and SiO ₂ Nanoparticles on common catfish <i>Mystus vittatus</i> (Bloch1794)	2012	Associate Professor in India

2. Graduate Students Currently Serving

a. Major Professor

No.	Name	Degree Expected (Department)	Tentative Graduation Date
127	Emily Knight*	Ph.D. (Nutrition)	Fall 2025
128	Jafari Hassan*	Ph.D. (Nutrition)	Fall 2024
129	Emily Bourne*	Ph.D. (Nutrition)	Spring 2024
130	Lauren Jun*	Ph.D. (Nutrition)	Spring 2024
131	Dr. Philip Hajek, MD	M.S. (Nutrition)	Fall 2023
132	Megan Shawl	M.S. (Nutrition)	Fall 2023
133	Dr. Ankita Sisselman, MD	M.S. (Nutrition)	Fall 2024
134	Courtney Frerichs	M.S. (Nutrition)	Fall 2023

b. Committee Member

No.	Name	Degree Expected (Department)	Tentative Graduation Date
135	Felicia Chin	Ph.D. (Nutrition)	Spring 2024
136	Lily Zandieh	Ph.D. (Nutrition)	Fall 2023
137	Shanshan Jiang	Ph.D. (APP)	Summer 2025
138	Priyadarshini Patel	Ph.D. (Nutrition)	Fall 2023
139	Sara Rains	Ph.D. (Nutrition)	Spring 2024
140	Becky Cannon	M.S. (Nutrition)	Spring 2024
141	Alexandra Clifton	M.S. (Nutrition)	Spring 2024
142	Gianna Edmunds	M.S. (Nutrition)	Spring 2024

3. Supervision of Postdoctoral Fellow

Name	Department	Year	Current Position
Dr. Chandra Mohan*	Nutrition	Oct'17-Jun'19	Scientist, BioGX Inc, Birmingham, AL
Dr. Suhail Rasool*	Nutrition	Jan'17-Dec'17	Principal Investigator, Johnson and Johnson Pharmaceutical, San Diego, CA
Dr. Yueru Li*	Nutrition	Jan'17-June'17	Associate Professor, Ocean University of China
Dr. Geetha Thangiah*	Nutrition	Sep'11-Aug'13	Associate Professor, Auburn University, Auburn, AL
Dr. Nilmini Vishwaprakash*	Nutrition	May'11-Aug'11	Unknown

***Published Research Articles & Conference Proceedings**

4. Undergraduate Researchers Mentored / Currently Mentoring

<i>Name</i>	<i>Year</i>	<i>Current Position / Department and University</i>
Moni Fadamiro*	May'19- May'21	Unknown
Spencer Kortum	Aug'17- Dec'19	MD student, Florida State University, FL
James DeHoop	May'15 – Dec'18	Preparing for medical school
Katie Fogle	May'16 – Dec'17	Unknown
James Owen	Jan'17 – Dec'17	Unknown
Lauren Fowler	Jan'17- Dec'17	Senior, Auburn University, AL
Brooke Polinsky	Jan'17- Dec'17	OD, Residency in Tuscaloosa VAMC, AL
Amber Preslier	Aug'16 – May'17	Certified Anesthesiologist Assistant, Colorado
Christopher Cash	Jan'16 – May'16	Medical Student (DO), VCOM, Auburn, AL
Abigail Chambley	Jan'16 – May'16	Unknown
Zachary Jarrett	Jan'16 – May'16	Medical Student (DO), VCOM, Auburn, AL
Kayla Edstrom	Aug'15 – May'16	Unknown
Haley Leibach	Jan'16 – May'16	Unknown
Joseph Pratt	Jan'16 – May'16	MD Physician, Family Medicine
Chelsea Arriola	May'15 – Dec'15	Unknown
Hannah Cox	May'15 – Dec'15	M.S. student, Auburn University, AL
Megan Goodnight	May'15 – Dec'15	Unknown
Laura Granberry	May'15 – Dec'15	Occupational Therapy student, UAB, AL
Haley Leibach	May'15 – Dec'15	Unknown
Jaclyn Bates ^{\$\$}	Jan'15 – May'15	DMD, General Dentist, Birmingham, AL
Morgan Floyd	Jan'15 – Dec'15	Ph.D. student, Auburn University, AL
Michael Matthews ^{\$}	Jan'15 – Dec'15	MD physician, University of Wisconsin, WI

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Alex Mathews	Jan'15 – Dec'15	Unknown
Ann Smalley	Jan'15 – May'15	Unknown
Marshall Myrick	May'14 – May'15	Dentist, Defuniak Springs Family Dental, Defuniak Springs, FL
Jonathon Whitehead* [§]	May'14 – May'15	MD student at UAB, Birmingham, AL
Olivia Smith	Jan'13 – May'15	Looking for postdoctoral position
Brooke Phillips*	Jan'14 – Dec'14	MD physician, New Lenox, IL
Taylor Pool*	Jan'14 – Dec'14	Unknown
Olivia Demarta	May'14 – Aug'14	DO, Family Medicine, location unknown
Joseph Grande	May'14 – Aug'14	MD physician, location unknown
Chase Rushton*	Aug'13 – Dec'14	After completing his Ph.D., he is working as a bioinformatics specialist at Penn Medicine, University of Pennsylvania Health system
Salome Mathews*	Aug'12 – Dec'14	DO Physician currently doing a second-year family medicine residency
Mary Bottcher	Jan'13 – Dec'13	unknown
Sandia Lehman	May'12 – July'13	Unknown
Katie Vines*	May'12 – Dec'13	MD Physician currently doing residency in USA, AL
Raylan Morgan	Jan'13 – May'13	Unknown
Kristin Wallace	Aug'12 – Dec'12	Associate Professor, Medical University of South Carolina, SC
Joshua Day	Aug'12 – Dec'12	MD Physician doing residency
Kaitlin Harris	May'12 – Dec'12	Unknown
John White	May'12 – Dec'12	MD physician, Emergency medicine physician, Birmingham, AL
Amy Sheil	Aug'11 – May'12	DVM, Surgical resident, VCA
Grant Hitchens	Aug'11 – May'12	DPT, Physical therapist, Yanceyville, NC
Bradford Unroe*	Aug'11 – Dec'12	MD physician, Women's Reproductive Mental health of Texas
Jennifer Rojas	Aug'11 – Dec'12	Unknown
Marina Sycheva*	Aug'11 – Dec'12	Preparing for Medical School after her Master's in Nutrition

****Published Research Articles & Conference Proceedings***

§ Supported by *CMB undergraduate Research Fellowship*

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

Medical Students, Technicians, and M.S. Students Mentored at Midwestern University (2008-2010)

Name	Year	Department / Position Mentored	Current Position
Karelle Slater	2008-2010	Biochemistry, M.S. (Co-major professor)	Manufacturing Technician at BioMarin Biotechnology, CA
Adama Diarra*	2008-2010	Biochemistry Medical student	Physician, Portland, OR
Anant Patel*	2008-2010	Biochemistry Medical student	Physician, Fort Worth, TX
Kevin Lau*	2008-2010	Biochemistry Lab Technician	Laboratory Supervisor at International Genomics Consortium, Phoenix, AZ

***Published Research Articles & Conference Proceedings**

a. Undergraduate Students /Graduate Students Achievements (\$49,875)

Through research mentorship, I have assisted my undergraduate research students and graduate students in receiving awards and funding for their research projects, as shown below:

- 14th Annual Boshell Diabetes Research Day, Auburn University, *Outstanding Oral Presentation Award (2023)*: Awarded first place to Lauren Jun, graduate student, for oral presentation entitled “Molecular mechanisms of muscle atrophy in obese and type 2 diabetes mouse model” Role: Major Professor and dissertation supervisor.
- *Malone-Zallen Graduate Research Fellowship, Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2022)*: Awarded to Megan Robinson, Doctoral Student (May 2022- April 2023). Role: Major Professor. Total Award: \$2000 (Project Funds: \$2000)
- Outstanding International Graduate Student Award: Awarded to Rongzi Li, Doctoral Student, (2021) Role: Major Professor
- 12th Annual Boshell Diabetes Research Day, Auburn University, *Outstanding Poster Presentation Award (2019)*: Awarded Third place to Rongzi Li, graduate student, for poster presentation entitled “Neuroprotective effects of Resveratrol training in the Alzheimer’s disease mice model”” Role: Major Professor and dissertation supervisor.
- *Summer Cell and Molecular Biosciences Undergraduate Summer Research Scholars Fellowship (CMB USRS), Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2018)*: Awarded to Spencer Kortum, undergraduate research student (May 2018- August 2018). Role: Mentor. Total Award: \$5,000 (Fellowship: \$3,000, Project Funds \$2,000).

- Awarded First place to Yuxian Zhang, graduate student, for *Doctoral Poster Presentation Award at CHS Graduate Student Research Symposium* entitled “High fat diet with sugar induces skeletal muscle degeneration by modulating inflammation in mice” (2018) Role: Major Professor and dissertation supervisor.
- *Summer Cell and Molecular Biosciences Undergraduate Summer Research Scholars Fellowship (CMB USRS), Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2017)*: Awarded to Connor Koch, undergraduate research student (May 2017- August 2017). Role: Mentor. Total Award: \$5,000 (Fellowship: \$3,000, Project Funds \$2,000).
- Awarded second place to Olivia Altonji, graduate student, for *Doctoral Research Presentation Award at CHS Graduate Student Research Symposium* entitled “The Potential of p62 to Ameliorate the Effects of a High Fat High Sugar Diet” (2017) Role: Major Professor and dissertation supervisor.
- Undergraduate Research Fellowship Program (URFP), Department of *Nutrition, Dietetics, and Hospitality Management, Auburn University (2017)*: Awarded to Brooke Polinsky, undergraduate research student (May 2017- August 2017). Role: Mentor. Total Award: \$4,000 (Fellowship: \$2,250, Project Funds \$1,750).
- *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)

- *Malone-Zallen Graduate Research Fellowship, Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2015)*: Awarded to *Katie Vines*, graduate student (April 2015 -March 2016). Role: Major Professor and thesis supervisor. Total Award: \$3,525 (Project Funds: \$3,525)
- *Summer Cell and Molecular Biosciences Undergraduate Summer Research Scholars Fellowship (CMB USRS), Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2015)*: Awarded to *Michael Matthews*, undergraduate research student (May 2015 - August 2015). Role: Mentor. Total Award: \$5,000 (Fellowship: \$3,000, Project Funds \$2,000)
- *8th Annual Boshell Diabetes Research Day, Auburn University, Oral Presentation Award (2015)*: Awarded Second place to *Chen Zheng*, graduate student, for oral presentation entitled “TrkA ubiquitination is impaired in Alzheimer’s disease” Role: Major Professor and dissertation supervisor.
- *Malone-Zallen Graduate Research Fellowship, Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2014)*: Awarded to *Shraddha Rege*, graduate student (April 2014 - March 2015). Role: Major Professor and thesis supervisor. Total Award: \$2,500 (Project Funds: \$2,500)
- *Summer Cell and Molecular Biosciences undergraduate summer Research Scholars Fellowship (CMB USRS), Department of Nutrition, Dietetics and Hospitality Management, Auburn University (2014)*: Awarded to *Jonathon Whitehead*, undergraduate research student (May 2014 - August 2014). Role: Mentor. Total Award: \$5,000 (Fellowship: \$3,000, Project Funds \$2,000)
- *Summer Cell and Molecular Biosciences (CMB) Research Fellowship, Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2014)*: Awarded to *Katie Vines*, graduate student (May 2014 - August 2014). Role: Major Professor and thesis supervisor. Total Award: \$4500
- *Malone-Zallen Graduate Research Fellowship, Department of Nutrition, Dietetics, and Hospitality Management, Auburn University (2013)*: Awarded to *Chen Zheng*, graduate student (April 2013 -March 2014). Role: Major Professor and thesis supervisor. Total Award: \$3,150 (Project Funds: \$3,150)
- *Kenneth A. Suarez Research Fellowship, Department of Biochemistry, Midwestern University (2006)*: Awarded to *Adama Diarra*, medical student (January 2009 - December 2009). Role: Mentor. Total Award: \$2,000 (Project Funds: \$2,000)

B. RESEARCH /CREATIVE WORK

B. RESEARCH/CREATIVE WORK

1. Books

Selvaraju V, **Babu JR**, Geetha T. “Salivary C-reactive protein as a biomarker and implications for diabetes”. In: Patel V.B., Preedy V.R. (eds) **Biomarkers in Diabetes. Biomarkers in Disease: Methods, Discoveries and Applications**, 2022. Springer International Publishing. https://doi.org/10.1007/978-3-030-81303-1_17-1

Publications in the name of Jeganathan Ramesh Babu (Babu JR).

2. Article Length Publications

Articles in Refereed Journals:

All categories are listed in reverse chronological order. Student contributions are marked with an asterisk (*); Candidate-mentored postdoctoral fellow’s contributions are marked with a double asterisk (**). The first author is most significant, although I allowed graduate students/postdoctoral fellows as first authors. When my name as the last author, the research was done in my research laboratory under my direction. **My research articles have been cited over 4719 times in high impact journals and h index is 32; i10 index is 50.** Citation numbers are only provided to the articles cited over 100 times.

+ Corresponding author; Publications in the name of Jeganathan Ramesh Babu (Babu JR).

1. Richter E*, Geetha T, Burnett D, Broderick TL, **Babu JR**⁺. The effects of *momordica charantia* on type 2 diabetes and Alzheimer’s disease. **International Journal of Molecular Sciences** 2023; 24: 4543. doi: 10.3390/ijms24054643. (+ corresponding author). (Impact factor 6.2)
2. Knight E*, Geetha T, Broderick TL, **Babu JR**⁺. The role of dietary antioxidants and their potential mechanisms in Alzheimer’s disease treatment. **Metabolites** 2023; 17: 438. doi: 10.3390/metabo13030438. (+ corresponding author). (Impact factor 5.6)
3. Jun L*, Robinson M*, Geetha T, Broderick TL, **Babu JR**⁺. Prevalence and mechanisms of skeletal muscle atrophy in metabolic conditions. **International Journal of Molecular Sciences** 2023; 24: 2973. doi: 10.3390/ijms24032973. (+ corresponding author). (Impact factor 6.2)
4. Patel P, Selvaraju V, **Babu JR**, Geetha T. Association of the DNA methylation of obesity related genes with the dietary nutrient intake in children. **Nutrients** 2023; 15: 11: 2840. doi: 10.3390/nu15132840 (Impact factor 5.7)

5. Patel P, Selvaraju V, **Babu JR**, Wang X, Geetha T. Novel differentially methylated regions identified by genome-wide DNA methylation analyses contribute to racial disparities in childhood obesity. **Genes (Basel)** 2023; 17: 14: 1098. doi: 10.3390/genes14051098. (Impact factor 3.9)
6. Oyerinde AS, Selvaraju V, **Babu JR**, Geetha T. Potential role of oxidative stress in production of volatile organic compounds in obesity. **Antioxidants (Basel)** 2023; 12: 1: 129. doi: 10.3390/antiox12010129. (Impact factor 7.6)
7. Key J, Burnett D, **Babu JR**, Geetha T. The effect of food environment on obesity in children: A systematic review. **Children** 2023; 10: 1: 98. doi: 10.3390/children10010098. (Impact factor 2.8)
8. Knight E*, Geetha T, Burnett D, **Babu JR**[†]. The role of diet and dietary patterns in Parkinson's Disease. **Nutrients** 2022; 14: 21: 4472. doi: 10.3390/nu14214472. (+ corresponding author) (Impact factor 6.7)
9. Patel P, Selvaraju V, **Babu JR**, Wang X, Geetha T. Racial disparities in methylation of *NRF1*, *FTO*, and *LEPR* gene in childhood obesity. **Genes (Basel)** 2022; 13: 11: 2030. doi: 10.3390/genes13112030. (Impact factor 3.9)
10. Li Y, Lai W, Zhang C*, **Babu JR**, Xue C, Ai Q, Huggins KW. Neuroprotective effect of stearidonic acid on amyloid β induced neurotoxicity in rat hippocampal cells. **Antioxidants** 2022; 11: 12: 2357. doi: 10.3390/antiox11122357. (Impact factor 7.6)
11. Li R*, Ding X*, Geetha T, Fadamiro M*, Aubin C, Shim M, Al-Nakkash L, Broderick T, **Babu JR**[†]. Effects of Genistein and exercise training on brain damage induced by a high fat high sucrose diet in female C57BL/6 Mice. **Oxidative Medicine and Cellular Longevity** 2022; 17: 22: e14155. doi: 10.1111/jfbc.1415. (+ corresponding author) (Impact factor 6.5)
12. Li R*, Robinson M*, Ding X*, Geetha T, Al-Nakkash L, Broderick T, **Babu JR**[†]. Genistein: A focus on several neurodegenerative diseases. **Journal of Food Biochemistry** 2022; 22:e14155. doi: 10.1111/jfbc.14155. (+ corresponding author) (Impact factor 2.7)
13. Kothari V*, **Babu JR**, Mathews ST. AMP activated kinase negatively regulates hepatic Fetuin-A via p38 MAPK-C/EBP β /E3 ubiquitin ligase signaling pathway. **PLoS One** 2022; 17:e0266472. doi: 10.1371/journal.pone.0266472. eCollection 2022. (Impact factor 3.7)
14. Selvaraju V, **Babu JR**, Geetha T. Salivary neurotrophins brain-derived neurotrophic factor and nerve growth factor associated with childhood obesity: A multiplex

- magnetic luminescence analysis. **Diagnostics (Basel)** 2022; 12:1130. doi: 10.3390/diagnostics12051130. (Impact factor 3.99)
15. Selvaraju V, **Babu JR**, Geetha T. Multiplexed measurements of salivary Fetuin-A, insulin and adiponectin as potential noninvasive biomarkers in childhood obesity. **Cytokine** 2022; 153:155843. doi: 10.1016/j.cyto.2022.155843. (Impact factor 3.48)
 16. Patel P, **Babu JR**, Wang X, Geetha T. Role of macronutrient intake in the epigenetics of obesity. **Biochemical Society Transactions** 2022; BST202111069. doi: 10.1042/BST20211069. (Impact factor 6.5)
 17. Philips M, Selvaraju V, Fouty A, **Babu JR**, Sandey M, Geetha T. High olfactory receptor-rich 11q11 copy number in girls and African American children. **Genes** 2021; 12: 1943. doi: 10.3390/genes12121943. (Impact factor 4.14)
 18. Ding XW*, Robinson M*, Li R*, Aldhowayan H*, Geetha T, **Babu JR**†. Mitochondrial dysfunction and beneficial effects of mitochondria-targeted small peptide SS-31 in diabetes mellitus and Alzheimer's disease. **Pharmacological Research** 2021; 171:105783. doi: 10.1016/j.phrs.2021.105783 (+ corresponding author). (Impact factor 10.3)
 19. Balakrishnan B, Selvaraju V, Chen J, Ayine P, Yang L, **Babu JR**, Geetha T, Taneja V. Ethnic variability associating gut and oral microbiome with obesity in children. **Gut Microbes** 2021; 13(1):1-15. doi: 10.1080/19490976.2021. (Impact factor 9.43)
 20. Riviere AJ, Leach R, Mann H, Robinson S Burnett DO, **Babu JR**, Fruge AD. Nutrition knowledge of collegiate athletes in the United States and the impact of sports dietitians on related outcomes: A narrative review. **Nutrients** 2021; 13(6):1772. doi: 10.3390/nu13061772. (Impact factor 6.7)
 21. Selvaraju V, Phillips M, Fouty A, **Babu JR**, Geetha T. Telomere length as a biomarker for race-related health disparities. **Genes** 2021; 12(1):78. doi: 10.3390/genes12010078. (Impact factor 4.1)
 22. Broderick TL, Rasool S**, Li R*, Zhang Y*, Anderson M, Al-Nakkash L, Plochocki JH, Geetha T, **Babu JR**†. Neuroprotective effects of chronic resveratrol treatment and exercise training in the 3xTg-AD mouse model of Alzheimer's disease. **International Journal of Molecular Sciences** 2020; 21: E7337] (+ corresponding author). (Impact factor 6.2)
 23. Ding X*, Li R, Geetha T, Tao Y, **Babu JR**†. Nerve growth factor in metabolic complications and Alzheimer's disease: Physiology and therapeutic potential. **Biochim Biophys Acta-Molecular Basis of Disease** 2020;1866: 165858 (+ corresponding author). (Impact factor 6.63)

24. Li R*, Geetha T, Al-Nakkash L, Broderick T, **Babu JR**[†]. Beneficial effect of genistein on diabetes-induced brain damage in ob/ob mouse model. **Drug Design Development and Therapy** 2020; 14: 3325-3336 (+ corresponding author). (Impact factor 3.02)
25. Selvaraju V, Venkatapoorna CP**, **Babu JR**, Geetha T. Salivary amylase gene copy number is associated with the obesity and inflammatory markers in children. **Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy** 2020; 13: 1695-1701.
26. Williams A, **Babu JR**, Wadsworth D, Burnett D, Geetha T. The effects of vitamin D on metabolic profiles in women with polycystic ovary syndrome: A systematic review. **Hormone and Metabolic Research** 2020; 52: 485-491. (Impact factor 2.93)
27. Venkatapoorna C**, Ayine P, Selvaraju V, Parra EP, Koenigs T, **Babu JR**, Geetha T. The relationship between obesity and sleep timing behavior, television exposure, and dinnertime among elementary school-age children. **Journal of Clinical Sleep Medicine** 2020; 16: 129-136. (Impact factor 4.32)
28. Phillips M, **Babu JR**, Wang X, Geetha T. DNA copy number and structural variations (CNV) contributions to adult and childhood obesity. **Biochemical Society Transactions** 2020; BST20200556. doi: 10.1042/BST20200556. (Impact factor 6.5)
29. Smith KS, Greene MW, **Babu JR**, Fruge AD. Psychobiotics as treatment for anxiety, depression, and related symptoms: a systematic review. **Nutritional Neuroscience** 2019; doi: 10.1080/1028415X.2019.1701220. (Impact factor 5)
30. Vines K*, Li R*, Geetha T, Broderick T, Carroll C, **Babu JR**[†]. Nerve growth factor receptor TrkA signaling in streptozotocin-induced type 1 diabetes rat brain. **Biochemical and Biophysical Research Communications** 2019; 514: 1285-1289. doi: 10.1016/j.bbrc.2019.04.162. (+ corresponding author) (Impact factor 3.32)
31. Sycheva M*, Sustarich J, Zhang Y*, Selvaraju V, Geetha T, Gearing M, **Babu JR**[†]. Pro-nerve growth factor induces activation of RhoA kinase and neuronal cell death. **Brain Sciences** 2019; 9: 204. doi: 10.3390/brainsci9080204. (+ corresponding author) (Impact factor 3.33)
32. Selvaraju V, Ayine P, Fadamiro M*, **Babu JR**, Brown MD and Geetha T. Urinary biomarkers of inflammation and oxidative stress are elevated in obese children and correlate with a marker of endothelial dysfunction. **Oxidative Medicine and Cellular Longevity** 2019; 16:2019:9604740. doi: 10.1155/2019/9604740. (Impact factor 6.5)
33. Brittannie C, **Babu JR**, Greene M, Geetha T. The effects of popular diets on type 2 diabetes management. **Diabetes Metabolism Research and Reviews** 2019; e3188. doi: 10.1002/dmrr.3188. (Impact factor 8.1)

34. Venkatapoorna C**, Ayine P, Parra E, Koenigs T, Phillips M, **Babu JR**, Sandey M, Geetha T. Association of salivary amylase (AMY1) gene copy number with obesity in Alabama elementary school children. **Nutrients** 2019; 11:1379. doi: 10.3390/nu11061379. (Impact factor 6.7)
35. Selvaraju V, **Babu JR**, Geetha T. Association of salivary C-reactive protein with the obesity measures and markers in children. **Diabetes Metabolic Syndrome and Obesity** 2019; 12: 1239-1247.
36. Li R*, Zhang Y*, Rasool S**, Geetha T, **Babu JR**[†]. Effects and underlying mechanisms of bioactive compounds on type 2 diabetes mellitus and Alzheimer's disease. **Oxidative Medicine and Cellular Longevity** 2019;2019:1-25. <https://doi.org/10.1155/2019/8165707>] (+ corresponding author). (Impact factor 6.5)
37. Alkhouli MF, Hung J, Squire M, Anderson M, Catro M, **Babu JR**, Al-Nakkash L, Broderick TL, PloChocki JH. Exercise and resveratrol increase fracture resistance in the 3xTg-AD mouse model of Alzheimer's disease. **BMC Complementary and Alternative Medicine** 2019;19:39. doi: 10.1186/s12906-019-2451-6.
38. Esfandiarei M, Hoxha B, Talley NA, Anderson MR, Alkhouli MF, Squire MA, Eckman DM, **Babu JR**, Lopaschuk GD, Broderick TL. Beneficial effects of resveratrol and exercise training on cardiac and aortic function and structure in the 3xTg mouse model of Alzheimer's disease. **Drug Design, Development and Therapy** 2019;13: 1197-1211.
39. Rasool S**, Geetha T, Broderick TL, **Babu JR**[†]. High fat with high sucrose diet leads to obesity and induces myodegeneration. **Frontiers in Physiology** 2018; 9: 1-10. **16,253 total views (highly accessed article)** (+ corresponding author). (Impact factor 4.1)
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41. Rodick T, Seibels D, **Babu JR**, Huggins KW, Ren G, Mathews ST. Potential role of coenzyme Q10 in health and disease conditions. **Nutrition and Dietary Supplements** 2018; 10:1-11.
42. 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** 2017; 1863:499-508. (+ corresponding author) (**Cited 258 times**) (Impact factor 6.6)

43. Li Y, Rong Y, Bao L, Nie B, Ren G, Zheng C*, Amin R, Arnold RD, **Babu JR**, Huggins KW. Suppression of adipocyte differentiation and lipid accumulation by stearidonic acid (SDA) in 3T3-L1 cells. **Lipids in Health and Disease** 2017; 16:181-191. (Impact factor 4.3)
44. Rege SD*, Geetha T, Broderick TL, **Babu JR**⁺. Can diet and physical activity limit Alzheimer's disease risk? **Current Alzheimer Research** 2017; 14:76-93. (+ corresponding author) (Impact factor 3.04)
45. Neidert LE, Wainwright 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. (Impact factor 3.77)
46. 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 (Impact factor 1.88)
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48. Rege SD*, Geetha T, Broderick TL, **Babu JR**⁺. Resveratrol protects β amyloid induced oxidative damage and memory associated proteins in H19-7 hippocampal neuronal cells. **Current Alzheimer Research** 2015; 12: 147-156. (+ corresponding author) (Impact factor 3.04)
49. 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. (Impact factor 3.9)
50. Zheng C*, Geetha T, **Babu JR**⁺. Failure of ubiquitin proteasome system: Risk for neurodegenerative diseases. **Neurodegenerative Diseases** 2014; 14: 161-175 (+ corresponding author) (Impact factor 3.4)
51. Brust KB, Corbell KA, Al-Nakkash L, **Babu JR**, Broderick TL. Expression of gluconeogenic enzymes and 11 β -HSD type 1 in liver of diabetic mice after acute exercise. **Diabetes, Metabolic Syndrome and Obesity: Targets and Therapy** 2014; 7: 495-504.
52. Rege SD*, Geetha T, Griffin GD, Broderick TL, **Babu JR**⁺. Neuroprotective effects of resveratrol in Alzheimer pathology. **Frontiers in Aging Neuroscience** 2014; doi:

- 10.3389/fnagi.2014.00218 (+ corresponding author) (**Cited 229 times**) (Impact factor 5.7)
53. 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. (+ corresponding author) (Impact factor 4.47)
 54. 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; doi: 10.1155/2013/419092 (+ corresponding author) (Impact factor 6.5)
 55. 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. (+ corresponding author) (Impact factor 5.48)
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 58. 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. (+ corresponding author) (Impact factor 5.48)
 59. 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. (+ corresponding author) (Impact factor 3.57)
 60. Geetha T**, Vishwaprakash N**, Sycheva M*, **Babu JR**⁺. Sequestosome 1 / p62: Across diseases. **Biomarkers** 2012; 17: 99-103 (+ corresponding author) (Impact factor 2.01)
 61. 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. (+ corresponding author) (Impact factor 3.57)

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64. 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 ½- 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) **(Cited 134 times)** (Impact factor 12.78)
65. 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.
66. Paine MG, **Babu JR**, Seibenhener ML, and Wooten MW. Evidence for p62 aggregate formation: role in cell survival. **FEBS Letters** 2005; 579: 5029-5034. (Impact factor 4.12)
67. 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. **(Cited 252 times)** (Impact factor 5.48)
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70. **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. **(Cited 427 times)** (Impact factor 10.54)

71. 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. **(Cited 151 times)** (Impact factor 5.48)
72. **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. (Impact factor 8.67)
73. Thangaraju M, **Babu JR**, Vasavi H, Ilanchezhian S, Vinitha R, Sachdanandam P. The salubrious effect of tamoxifen on serum marker enzymes glycoprotein and lysosomal enzyme levels in breast cancer women. **Molecular and Cellular Biochemistry** 1998; 185: 85-94. (Impact factor 3.82)
74. 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. (Impact factor 2.61)

Abstract Publications in Peer Reviewed Journals

1. Phillips M, Selvaraju V, Fouty A, Sandey M, **Babu JR**, Geetha T. Gender differences in the copy number of 11q11 gene in European American obese children. **Diabetes** 2020; 66: 1256-P. (Impact factor 7.27)
2. Venkatapoorna C**, Aiyne P, Parra P, Koenigs T, Sandey M, **Babu JR**, Geetha T. Low AMY1 gene copy number is associated with increased childhood obesity in Alabama. **Diabetes** 2019; 65: A5064. (Impact factor 7.27)
3. Selvaraju V, Aiyne P, Parra P, Brown M, **Babu JR**, Geetha T. Endothelial dysfunction, inflammation, and oxidative stress urinary biomarkers in obese children from Alabama. **Diabetes** 2019; 65: A6137. (Impact factor 7.27)
4. Aiyne P, Parra P, **Babu JR**, Geetha T. Influence of race, ethnicity, and behavioral factors on childhood obesity. **Diabetes** 2018; 65: A452. (Impact factor 7.27)
5. 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. (Impact factor 7.27)

6. 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. (Impact factor 7.27)
7. Geetha T, Zheng C*, Baker J, Gearing M, **Babu JR**. Polyubiquitination of Akt is impaired in Alzheimer's disease. **Alzheimer's & Dementia** 2015; 11: P861. (Impact factor 16.65)
8. 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. (Impact factor 7.27)
9. Rege SD*, Geetha T, Broderick T, **Babu JR**[†]. Resveratrol Protects Proteins Associated with Memory Loss in Obese Diabetic Mice (1988-P). **Diabetes** 2014; 63: A509. (Impact factor 7.27)
10. 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. (Impact factor 5.83)
11. 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. (Impact factor 7.27)
12. **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. (Impact factor 7.27)
13. 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. (Impact factor 16.65)

3. Papers and Lectures

a. *Papers at International / National meetings*

(* student and **postdoctoral fellow from the Candidate's lab contributed; # Invited for oral presentation)

1. Patel P, Selvaraju V, Wang X, **Babu JR**, and Geetha T (2022). Disparities in epigenetic modifications in NRF1 and FTO genes in children. "American Society of Human Genetics" 2022 Annual meeting, October 25-29, 2022. Abstract # PB2394.
2. Phillips M, Selvaraju V, Fouty A, Sandey M, **Babu JR**, and Geetha T (2020). Gender

differences in the copy number of 11q11 gene in European American obese children. "American Diabetes Association" 80th Scientific Sessions, Virtual Meeting, June 12-16, 2020. Abstract no. 1256-P.

3. Venkatapoorna C**, Aiyne P, Parra P, Koenigs T, Sandey M, **Babu JR**, Geetha T (2019). Low AMY1 gene copy number is associated with increased childhood obesity in Alabama. American Diabetes Association", 78th Scientific Sessions, San Francisco, CA, USA, June 7-11, 2019. Abstract #5064-P
4. Selvaraju V, Aiyne P, Parra P, Brown M, **Babu JR**, Geetha T (2019). Endothelial dysfunction, inflammation, and oxidative stress urinary biomarkers in obese children from Alabama. American Diabetes Association", 78th Scientific Sessions, San Francisco, CA, USA, June 7-11, 2019. Abstract #6137-P
5. Aiyne P, Parra P, **Babu JR**, Geetha T (2018) Influence of race, ethnicity, and behavioral factors of childhood obesity. American Diabetes Association", 77th Scientific Sessions, Orlando, FL, USA, June 22-26, 2018. Abstract #2083-P
6. 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)
7. 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.
8. Sustarich J, Suchdeva S, Sycheva M*, **Babu JR**, Geetha T (2016). Increased pro-nerve growth factor induces RhoA activation in PC12 cells similar to Alzheimer's disease. "Society for Neuroscience", 46th Annual meeting, San Diego, CA, USA, November 12-16, 2016. Abstract No. 514.06/Z2.
9. Geetha T, Chen Z*, Gearing M, **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.
10. Rege S*, Bottcher M, Geetha T, Broderick T, **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, CA, USA, April 27, 2014. Abstract No. C403.
11. Zheng C*, Mathews S*, Geetha T, **Babu JR** (2014). Polyubiquitination is essential for Akt activation in nerve growth factor signaling. "Society for Neuroscience 2014",

Washington, DC, USA, November 11, 2014. Abstract No. 121.07/A18.

12. Rege S*, Geetha T, Broderick T, **Babu JR** (2014). Resveratrol Protects Proteins Associated with Memory Loss in Obese Diabetic Mice. "American Diabetes Association" 74th Scientific Sessions, San Francisco, CA, USA, June 13-17, 2014. Abstract No. 2014-A-4820.
13. Zheng C*, Geetha T, Gearing M, and **Babu JR** (2013). Amyloid β induced impairment of TrkA signaling in PC12 cells equivalent to Alzheimer's disease. "23rd Neuropharmacology Conference", San Diego, CA, USA, November 7-8, 2013.
14. Geetha T, Zheng C*, Diaz-Meco, M, Moscat J, **Babu JR** (2013). TRAF6/p62 complex prevents amyloid β induced neuronal death. "23rd Neuropharmacology Conference", San Diego, CA, USA, November 7-8, 2013.
15. Zheng C*, Geetha T**, **Babu JR** (2012). TRAF6 and p62 inhibit amyloid β -induced neuronal death through p75 neurotrophin receptor. "Society for Neuroscience 2012", New Orleans, LA, USA, October 13-17, 2012. Abstract No. 66.27/U4.
16. Geetha T**, Zheng C*, Broderick T, **Babu JR** (2012). Sequestosome 1/p62, a novel IRS-1 interacting protein, regulates insulin stimulated glucose uptake. "American Diabetes Association", 72nd Scientific Sessions, Philadelphia, PA, USA, June 8-12, 2012. Abstract No. 2012-A-3475. (This poster was selected to be featured on a guided tour in the Poster Hall).
17. **Babu JR**, Diarra A*, Vishwaprakash N**, Geetha T** (2011). 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.
18. **Babu JR**, Diarra A*, Geetha T** (2011). Sequestosome 1/p62, a New Interacting Adapter Protein with IRS-1 in Insulin Signaling. "American Diabetes Association", 71st Scientific Sessions, San Diego, CA, USA, June 24-28, 2011. Abstract No. 0022-OR#.
19. **Babu JR**, Seibenhener ML, Geetha T, Cox N, Parameshwaran K, Suppramaniam V and Wooten MW (2006). Alzheimer-like characteristics associated with p62 knockout mice. "Society for Neuroscience 2006", Atlanta, GA, USA, October 14-18, 2006. Abstract No. 754.3.
20. Wooten MW, **Babu JR**, Seibenhener L, Geetha T, Cox N, Suppramaniam V, Diaz-Meco MT, Moscat J (2006). Accumulation of tau and amyloid beta in p62 deficient mice. "10th International Conference on Alzheimer's Disease and Related Disorders", Madrid, Spain, July 15-20, 2006.

21. Geetha T, Seibenhener ML, **Babu JR**, Wooten MW (2005). Interaction of TRAF6 with the p62 scaffold drives neurotrophin activation of NF- κ B. "Society for Neuroscience 2005", Washington, DC, USA, November 12-16, 2005. Abstract No. 148.24.
22. Paine MG, **Babu JR**, Seibenhener ML, Wooten MW (2005). Aggregation properties of the polyubiquitin binding protein sequestosome 1/p62. "American Society for Biochemistry and Molecular Biology Annual Meeting", San Diego, CA, USA, April 2-6, 2005.
23. Seibenhener ML, **Babu JR**, Geetha T, Wooten MW (2004). Protein misfolding in Alzheimer's and other age-related neurodegenerative diseases. "5th Neurobiology of Aging Conference" San Diego, CA, USA, October 21-22, 2004. Abstract No. P18.
24. **Babu JR**, Wooten MW (2004). Role of p62 in Alzheimer's Disease. "9th International Conference on Alzheimer's Disease and Related Disorders", Philadelphia, PA, USA, July 17-22, 2004.
25. **Babu JR**, Sundravel S, Renuka R, Sachdanandam P (1999). Rejuvenating effect of vitamin C and vitamin E on erythrocyte membrane glycoproteins of tamoxifen-treated postmenopausal women with breast cancer. "136th British Pharmaceutical Conference", Sep 13-16, 1999, Cardiff, U.K. Abstract No. M99312.
26. **Babu JR**, Sundravel S, Renuka R, Sachdanandam P (1999). Vitamin C and E along with tamoxifen on postmenopausal breast cancer women's lipid profile. "XV Asia Pacific Cancer Congress", Chennai, India, December 12-15, 1999. Abstract No.036.
27. Sachdanandam P, **Babu JR** (1999). Salubrious effect of vitamins C and E on tamoxifen treated women in breast cancer. "XV Asia Pacific Cancer Congress", Chennai, India, December 12-15, 1999. Abstract No.037.
28. **Babu JR**, Thangaraju M, Sachdanandam P (1998). Effect of tamoxifen on lipid metabolizing enzymes in women with breast cancer. J Pharm Pharmacol. 1998; 50: 201. "135th British Pharmaceutical Conference", Eastbourne, U.K, Sep 12-16, 1998. Abstract No. M98174.
29. **Babu JR**, Sachdanandam P (1998). 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", Rio de Janeiro, Brazil, August 23-28, 1998. Abstract No. 00319.
30. Sachdanandam P, **Babu JR** (1998). Effect of vitamins C and E on tamoxifen treated women in breast cancer with reference to lipids and lipoproteins. "17th International Cancer Congress", Rio de Janeiro, Brazil, August 23-28, 1998. Abstract No. 00318.

b. Papers at State and Local professional meetings

(*student and **postdoctoral fellow from the Candidate's lab contributed; #oral presentation)

31. Jun L, Ding X, Jafari H, Knight, E, Greene, MW, Geetha T, **Babu JR** (2023). Exploring molecular mechanisms of muscle atrophy in obesity and type 2 diabetes mellitus and the potential effects of nerve growth factor. "Cell and Molecular Biology Symposium", Auburn University, Auburn, AL, USA, Oct 23, 2023. (Oral Presentation).
32. Patel P, Selvaraju V, Wang X, **Babu JR**, Geetha T (2023). Racial disparities in methylation of NRF1, FTO, and LEPR genes in childhood obesity. "Cell and Molecular Biology Symposium", Auburn University, Auburn, AL, USA, Oct 23, 2023. (Oral Presentation).
33. Jafari H, Selvaraju V, Jun L, Knight E, Geetha T. **Babu JR** (2023). Role of nerve growth factor in diabetic cardiomyopathy "Cell and Molecular Biology Symposium", Auburn University, Auburn, AL, USA, Oct 23, 2023.
34. Aldhowayan H, Jun L, **Babu JR**, Lipke E, Greene (2023). Role of CXCL7 in colon cancer cell proliferation. "Auburn University Cell and Molecular Biology Symposium", Auburn University, Auburn, AL, USA, Oct 23, 2023.
35. Patel P, Selvaraju V, Wang X, **Babu JR**, Geetha T (2023). Epigenome-wide identification of novel methylated regions in childhood obesity. "14th Annual Boshell Diabetes and Metabolic Disease Conference", Auburn University, Auburn, AL, USA, Apr 28, 2023. Abstract number 003 (Oral Presentation).
36. Jun L, Ding X, Robinson N, Jafari H, Geetha T, **Babu JR** (2023). Molecular mechanisms of muscle atrophy on obese and T3DM mouse model. "14th Annual Boshell Diabetes and Metabolic Disease Conference", Auburn University, Auburn, AL, USA, Apr 28, 2023. Abstract number 009 (Oral Presentation). Awarded first place for oral presentation.
37. Robinson M, Jun L, Robinson N, Morrow C, Geetha T, Greene M, **Babu JR** (2023). I've Gut a Feeling": The effect of nerve growth factor on the gut microbiome in an obese, diabetic, and Alzheimer's disease mouse model. 14th Annual Boshell Diabetes and Metabolic Disease Conference", Auburn University, Auburn, AL, USA, Apr 28, 2023. Abstract number P42
38. Patel P, Selvaraju V, Wang X, **Babu JR**, Geetha T (2023). Genome-wide DNA methylation analyses identify novel differentially methylated regions in childhood obesity. of novel methylated regions in childhood obesity. "2023 Auburn Research Student Symposium", Auburn University, Auburn, AL, USA, Mar 28, 2023. (Oral Presentation).

39. Megan R*, **Babu JR** (2023). The effect of nerve growth factor administration on gut microbiota homeostasis in obese, type 2 diabetes mellitus, and Alzheimer's disease mouse model. College of Human Sciences Research Symposium, Auburn University, March 17, 2023. (Oral presentation)
40. Jun L*, **Babu JR** (2023). Molecular mechanisms of muscle atrophy in obese and type 2 diabetes mellitus mouse model. College of Human Sciences Research Symposium, Auburn University, March 17, 2023. (Oral presentation)
41. Megan R*, **Babu JR** (2022). Nerve growth factor administration restores microbiota homeostasis in an obese, type 2 diabetic and Alzheimer's disease mouse model. College of Human Sciences Research Symposium, Auburn University, March 21, 2022. (Oral presentation)
42. Jun L*, **Babu JR** (2022). Nerve growth factor in skeletal muscle. College of Human Sciences Research Symposium, Auburn University, March 21, 2022. (Oral presentation)
43. Patel P, Selvaraju V, Wang X, **Babu JR**, Geetha T (2022). Racial variability in methylation of NRF1 and FTO gene in childhood obesity. "2022 Auburn Research Student Symposium", Auburn University, Auburn, AL, USA, March 28, 2022. Awarded first place in University-Wide Graduate Students oral presentation. (Oral presentation)
44. Ding X*, G Selvaraju V, P Li R*, G Aldhowayan A*, Geetha T, Greene MW, **Babu JR** (2021). Role of nerve growth factor in insulin resistance amelioration and cognitive performance improvement in diabetic mice brain. "13th Annual Boshell Diabetes and Metabolic Diseases Conference", Auburn University, Auburn, AL, USA, Sep 17, 2021. Abstract No. O12 (oral presentation).
45. Patel P, Selvaraju V, **Babu JR**, Geetha T (2021). Epigenetic changes in obesity-related genes amongst races in children. "Auburn University Health Disparities Research Initiative – Virtual Symposium", Auburn University, Auburn, AL, USA, Nov 5, 2021.
46. Aldhowayan A*, Ding X*, Li R*, G Selvaraju V, P Greene MW, Geetha T, **Babu JR** (2021). Nasal administration of nerve growth factor (NGF) implies cardioprotective properties and enhancing insulin sensitivity among high fat high sugar diet-fed mice. "13th Annual Boshell Diabetes and Metabolic Diseases Conference", Auburn University, Auburn, AL, USA, Sep 17, 2021. Abstract No. P04.
47. Patel P, Selvaraju V, **Babu JR**, Geetha T (2021). Epigenetic changes in NRF1 and FTO gene through Methylight assay amongst races in children. "13th Annual Boshell Diabetes and Metabolic Diseases Conference", Auburn University, Auburn, AL, USA, Sep 17, 2021. Abstract No. P20.

48. Selvaraju V, P Balakrishnan B, Chen J, Ayine P, Yang L, **Babu JR**, Geetha T (2021). Ethnic-specific association of gut microbiome with childhood obesity. "13th Annual Boshell Diabetes and Metabolic Diseases Conference", Auburn University, Auburn, AL, USA, Sep 17, 2021. Abstract No. P32.
49. Li R*, Geetha T, **Babu JR** (2021). Beneficial effects of exercise and/or genistein treatment on high-fat, high-sugar diet-induced brain damage in C57BL/6 mice. "2021 Auburn Research Student Symposium", Auburn University, Auburn, AL, USA, March 29 – April 2, 2021. Awarded second place in University-Wide Graduate Students poster presentation.
50. Ding X*, Geetha T, **Babu JR** (2021). Role of nerve growth factor in insulin resistance amelioration and cognitive performance improvement in diabetic mouse brain. "2021 Auburn Research Student Symposium", Auburn University, Auburn, AL, USA, March 29 – April 2, 2021. Awarded third place in University-Wide Graduate Students poster presentation.
51. Selvaraju V, Phillips M, Fouty A **Babu JR**, Geetha T. Telomere length as a biomarker for race-related health disparities. "Health Disparities Research Initiative Virtual Symposium", Auburn University, Auburn, AL, USA, July 29, 2020.
52. Fouty A, Blocker A, Phillips M, Selvaraju V, **Babu JR**, Sandey M, Geetha T. The relationship between the copy number of 11q11 gene and childhood obesity. "Virtual Symposium", Auburn University, Auburn, AL, USA, April 2020.
53. Selvaraju V, **Babu JR**, Geetha T (2020) Association of Salivary neurotrophins and insulin in childhood obesity. "Center for Neuroscience Initiative Inaugural Retreat", Auburn University, Auburn, AL, USA, February 28, 2020. Abstract No. 57.
54. Zhang Y*, Rasool S**, Woodie L, Greene MW, Miller ME, Geetha T, **Babu JR** (2019) Restricted time feeding ameliorates high fat sugar diet induced skeletal muscle degeneration. 12th Annual Boshell Research Day, Feb 15, 2019, The Hotel at Auburn University and Dixon Conference Center, Auburn, AL, USA.
55. Li R*, Rasool S**, Broderick T, Geetha T, **Babu JR** (2019) Neuroprotective roles of resveratrol and exercise training in Alzheimer disease mice model. 12th Annual Boshell Research Day, Feb 15, 2019, The Hotel at Auburn University and Dixon Conference Center, Auburn, AL, USA.
56. Zhang Y*, **Babu JR** (2018) High fat diet with sugar induces deposition of amyloid beta and hyperphosphorylated tau in mice skeletal muscle. "This is Research – Student Symposium", Auburn University, Auburn, AL, USA, Mar 26, 2018.
57. Polinsky B*, **Babu JR** (2018) High fat diet impairing autophagy and induces

- deposition of oligomeric/fibrillary species of amyloid beta in mice brain. "This is Research – Student Symposium", Auburn University, Auburn, AL, USA, Mar 26, 2018.
58. Kortum, S* and **Babu JR** (2018) High fat diet induces muscle degeneration in mice. "Undergraduate Summer Research Scholars, AU-CMB, Auburn University, Auburn, AL, USA, July 27, 2018.
 59. Rasool S**, Zhang Y*, Li R**, Glabe C, Thangiah G, Anderson M, Broderick TL, **Babu JR** (2018). Effects of resveratrol and exercise training on amyloid beta and neurotrophic factors in the 3xTg mouse model of Alzheimer's disease. 11th Annual Boshell Research Day, Feb 16, 2018, The Hotel at Auburn University and Dixon Conference Center, Auburn, AL, USA.
 60. Parra P, Ayine P, Carmona B, Lopez I, **Babu JR**, Thangiah G (2018). Racial and ethnic disparities of behavioral determinates in childhood obesity. 11th Annual Boshell Research Day, Feb 16, 2018, The Hotel at Auburn University and Dixon Conference Center, Auburn, AL, USA.
 61. Zhang Y*, Rasool S**, Woodie L, Greene M, Glabe C, Thangiah G, Miller M, **Babu JR** (2018). Beyond obesity: Western diet induces deposition of toxic species of amyloid beta and hyperphosphorylated tau: A key role in muscle degeneration. 11th Annual Boshell Research Day, Feb 16, 2018, The Hotel at Auburn University and Dixon Conference Center, Auburn, AL, USA.
 62. Zhang Y*, and **Babu JR** (2018). High fat diet with sugar induces deposition of plaques and tangles in skeletal muscle. Annual CHS Graduate student Research Symposium, Auburn University, Auburn, AL, USA.
 63. Li R*, and **Babu JR** (2018). Effect of exercise and /or resveratrol in Alzheimer's disease mouse model. Graduate student Research Symposium, Auburn University, Auburn, AL, USA.
 64. Kargar M, Woods F, Shetty K, Wall M, Kessler J, Fonsah E, **Babu JR**, Larsen N (2018) Preliminary study of enzymatic browning susceptibility in banana peel and pulp tissues in relation to genotyping and ripening. American Society for horticultural sciences (ASHS), Washington DC, USA, July 31-August 3, 2018.
 65. Kargar M, Woods F, Shetty K, Wall M, Kessler J, Fonsah E, **Babu JR**, Larsen N (2018) Influence of maturity on physicochemical quality of genomically diverse banana cultivars from the southern united states. Southern regional American society of horticultural sciences (SRASHS), Jacksonville, FL, USA, February 2-4, 2018.
 66. Rasool S**, Zhang Y*, Li Y**, Woodie L, Greene M, Geetha T, **Babu JR** (2017) High fat diet in mice induced skeletal muscle degeneration. "10th Annual Boshell Diabetes

- and Metabolic Diseases conference”, Auburn University, Auburn, AL, USA, March 3, 2017. Abstract No. 014. (Oral presentation)
67. Li Y**, Zhang Y*, Rasool S**, Luo Y, Greene M, Geetha T, **Babu JR** (2017) High fat sugar diet in mice induces impaired hepatic insulin signalling, activation of inflammation and apoptosis. “10th Annual Boshell Diabetes and Metabolic Diseases conference”, Auburn University, Auburn, AL, USA, March 3, 2017. Abstract No. 016.
 68. Sycheva M*, Sustarich J, **Babu JR**, Geetha T (2017) Pro-nerve Growth factor induces activation of RhoA kinase in Alzheimer’s disease. “10th Annual Boshell Diabetes and Metabolic Diseases conference”, Auburn University, Auburn, AL, USA, March 3, 2017. Abstract No. 029.
 69. 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.
 70. **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.
 71. Vines K*, Zheng C*, Rege S*, Matthews M, Bates J, Sustarich J, Geetha T, Broderick TL, **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)
 72. Zheng C*, Geetha T, Kothari V*, Carter A*, Sustarich J, **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.
 73. 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)
 74. Rege S*, Kumar S*, Wilson D, Geetha T, Broderick TL, **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.

75. Kothari V*, **Babu JR**, 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
76. 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
77. 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#.
78. 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.
79. 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.
80. Whitehead J*, Zheng C*, and **Babu JR** (2015) Accumulation of Pro-NGF in hippocampus of postmortem human Alzheimer's disease brain. "This is Research - Student symposium 2015", Auburn University, Auburn, AL, USA, April 13, 2015. Oral presentation#.
81. Rege S*, Geetha T, and **Babu JR** (2015) Resveratrol protects against β -amyloid induced toxicity. "This is Research - Student symposium 2015", Auburn University, Auburn, AL, USA, April 13, 2015. Oral presentation#.
82. Zheng C*, Whitehead J*, Phillips B*, Pool T*, Rushton C*, Geetha T, Gearing M, and **Babu JR**. (2015) TrkA in Alzheimer's disease. "This is Research - Student symposium 2015", Auburn University, Auburn, AL, USA, April 13, 2015. Oral presentation#.
83. 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, USA, February 13, 2015. Abstract No. 7.
84. 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, USA, February 13, 2015. Abstract No. P22.

85. 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, USA, February 13, 2015. Abstract No. O02, Oral presentation#.
86. **Babu JR**, Zheng C*, and Geetha T (2014) Neurotrophin in Alzheimer Disease. Auburn Research Day 2014, Auburn University, Auburn, AL, USA, June 3, 2014 (make-up day). Oral presentation#.
87. Mathews S*, Zheng C*, Geetha T and **Babu JR** (2014) Ubiquitination of TRAF6 is impaired in Alzheimer's disease. Auburn Research Day 2014, Auburn University, Auburn, AL, USA, June 3, 2014 (make-up day). Oral presentation#.
88. 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, USA, March 4, 2014. Oral Presentation#.
89. 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, USA, February 28, 2014. Abstract No. P024.
90. 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, USA, February 28, 2014. Abstract No. P017.
91. Zheng C*, Mathews S*, Qayum M, Geetha T and **Babu JR** (2014). Polyubiquitination of Akt in nerve growth factor signaling. Graduate Scholars forum", Auburn University, Auburn, AL, USA, March 4, 2014. Oral Presentation#.
92. 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, Auburn, AL, USA, February 28, 2014. Abstract No. P021.
93. 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, USA, July 25, 2014. Oral presentation#.

94. 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, Phoenix, AZ, USA, April 16, 2013. Abstract No. P097.
95. **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, USA, April 1-4, 2013.
96. 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, USA, March 1, 2013. Abstract No. P017.
97. 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, USA, March 1, 2013. Abstract No. P021.
98. 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. "6th Annual Boshell Diabetes and Metabolic Diseases conference", Auburn University, Auburn, AL, USA, March 1, 2013. Abstract No. P014.
99. 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, USA, November 14, 2012. Abstract No. 38.
100. Geetha T**, Zheng C*, Broderick T, and **Babu JR** (2012) Sequestosome 1/p62 regulates insulin stimulated glucose uptake. "5th Annual Boshell Diabetes and Metabolic Diseases conference", Auburn University, Auburn, AL, USA, March 2, 2012. Abstract No. P013.
101. **Babu JR**, Diarra A*, Geetha T** (2011). Sequestosome 1/p62, a new family member in the IRS-1 signaling complex. "4th Annual Boshell Diabetes and Metabolic Diseases conference", Auburn University, Auburn, AL, March 4, 2011.
102. Diarra A*, Patel A*, Lau K, Potter P, **Babu JR** (2009). Ubiquitination of p75 receptor attenuates the activation of apoptotic pathway. "Student Osteopathic medical Association (SOMA) Conference", 53rd Annual Research Meeting, New Orleans, Louisiana, USA, November 1, 2009. Abstract No. 2009-S129.
103. Paine MG, Seibenhener ML, **Babu JR**, Wooten MW (2004). Aggregation properties

of the K63 polyubiquitin binding protein sequestosome1/p62. "Research Forum", Auburn University, Auburn, AL, USA, October 18, 2004.

104. **Babu JR**, van Deursen JM (2001). Rae1 is an essential mitotic checkpoint regulator. "Mayo Research Forum," September 21-22, 2001, Rochester, MN, USA, Paper No.60.
105. **Babu JR**, Arumugam G, Vijayasarathy K, Manikavasagam M, Vijayakumar VG, Sachdanandam P (1998). Effect of vitamin C and E on tamoxifen treated postmenopausal breast cancer patients. "19th Annual Conference Indian Association of Biomedical Scientists," Dept. of Physiology at Kasturba Medical College, Mangalore, India, October 30- November 1, 1998. Abstract No. Fa-6.

c. Invited speeches and lectures (SELECTED)

1. Undergraduate Summer Research Scholars, Auburn University Cellular and Molecular Biosciences (AU-CMB), Auburn University, AL: Diabetes and Alzheimer 's Disease: Chicken or Egg? May 23, 2018.
2. Hope College, Holland, MI: Type 2 Diabetes and Alzheimer Disease Connection, February 24, 2017.
3. Biomedical Seminar Series, College of Veterinary Medicine, Auburn University, AL: Type 2 diabetes and Alzheimer Disease Connection, November 4, 2016.
4. Undergraduate Summer Research Scholars, Auburn University Cellular and Molecular Biosciences (AU-CMB), Auburn University, AL: Type 3 diabetes, July 15, 2015.
5. Honors Lyceum, Honors College at Auburn University, AL: p62 and TrkA in insulin signaling, April 2, 2015.
6. Department of Cell, Developmental and Integrative Biology, The University of Alabama at Birmingham (UAB), Birmingham, AL: Sequestosome 1/p62 in insulin signaling, January 7, 2015.
7. Auburn Research Day, Auburn University, Auburn, AL: Neurotrophin in Alzheimer Disease, June 3, 2014.
8. Auburn Dietetic Group, East Alabama Medical Center, Auburn, AL: Type II Diabetes and Alzheimer Disease Connection, November 8, 2013.

9. Kappa Omicron Nu Honor Society Spring Meeting Keynote speaker, College of Human Sciences, Auburn University, AL: Undergraduate Research: How to Develop a Research Project, April 25, 2013.
10. Department of Biochemistry and Cancer Biology, Meharry Medical College, Nashville, TN: Good and Bad of p62, February 11, 2008.

4. Grants and Contracts

a. Research Grants Funded: (\$2,880,866)

1. *Academic Research Enhancement Award for Undergraduate-focused Institutions- NIH R15: Identifying interconnections of the disparities in childhood obesity (May 1, 2023-April 30, 2026). Role: Co-Investigator, PI: Geetha Thangiah \$441,498.*
2. *USDA, Alabama Agricultural Experimental Station (AAES), ARES-AgR SEED Award: Nerve Growth Factor on muscle atrophy associated with obesity and type 2 diabetes (Oct 1, 2023 – Sep 30, 2025) Role: Principal Investigator, \$50,000.*
3. *USDA, Alabama Agricultural Experimental Station (AAES), ARES Award for Interdisciplinary Research (AIR): Role of CXCL7 in obesity-linked colon cancer. (Oct 1, 2021 – Sep 30, 2023) Role: Co-Principal Investigator, PI: Mike Greene \$150,000.*
4. *USDA, Alabama Agricultural Experimental Station (AAES), Hatch Funding Program: Neurotrophin in obesity, diabetes, and neurodegeneration. (Oct 1, 2022 – Sep 30, 2027) Role: Principal Investigator, \$87,656.*
5. *Office of Provost Auburn University, Specialized Laboratory Equipment Proposal for the Department: Histopathology Laboratory. Role: Principal Investigator, \$55,000.*
6. *USDA, Alabama Agricultural Experimental Station (AAES), ARES Equipment Grant Program: Hybrid Fluorescence Microscopy for Health Sciences Research. Role: Co-Principal Investigator, PI: Geetha Thangiah \$51,114.62.*
7. *USDA, Alabama Agricultural Experimental Station (AAES), ARES Award for Interdisciplinary Research (AIR) Competitive: Nerve Growth Factor Administration for Treating Type2 Diabetes Linked Alzheimer's Disease. (Oct 1, 2018 – Sep 30, 2020) Role: Principal Investigator, \$140,000.*
8. *Presidential Awards for Interdisciplinary Research (PAIR) TIER II: Establishment of a Center of Neuroscience (CNS). (Jul 1, 2018 – Jun 30, 2021) Role: Co-Investigator, \$637,500.*

9. *Women's Philanthropy Board Philanthropic Impact Grant (WPB): Treat Obesity in College- Age Women with Trauma Informed Nutrition Care: A Needs Assessment.* (Apr 1, 2018 – Dec 30, 2018) **Role: Co-Investigator**, PI: Donna Burnett \$9000.
10. *USDA, Alabama Agricultural Experimental Station (AAES), Hatch Funding Program: Nerve Growth Factor and its Receptor in TrkA in Insulin Signaling.* (Oct 1, 2016 – Sep 30, 2021) **Role: Principal Investigator**, \$373,423.
11. *USDA, Alabama Agricultural Experimental Station (AAES), AgR SEED: Nerve Growth Factor in Diabetes* (Oct 1, 2016 – Sep 30, 2018) **Role: Principal Investigator**, \$50,000.
12. *USDA, Alabama Agricultural Experimental Station (AAES): AAES Research Support for Postdoctoral Fellow* (Jan 1, 2017 – Dec 30, 2017) **Role: Principal Investigator**, \$50,000.
13. *USDA, Alabama Agricultural Experimental Station (AAES), AgR SEED: Expanding the Science of Race and Health in Rural America.* (Oct 1, 2016 – Sep 30, 2018) **Role: Co-Investigator (Co-I)** PI Thomas Fuller-Rowell, \$50,000.
14. *USDA, Alabama Agricultural Experimental Station (AAES): 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, \$50,000.
15. *Diabetes Research and Action Education Foundation (DRAEF): p62/TRAF6 in Type 2 Diabetes.* (Jan 1, 2014 – Dec 31, 2014) **Role: Principal Investigator**, \$10,000.
16. *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, \$182,000.
17. *USDA, 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**, \$50,000.
18. *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**, \$82,000.
19. *USDA, Alabama Agricultural Experimental Station (AAES): Sequestosome 1 in obesity and type 2 diabetes.* (Oct 1, 2011– Sep 30, 2012) **Role: Principal Investigator**, \$25,000.

20. *USDA, Alabama Agricultural Experimental Station (AAES), Hatch Funding Program: Role of sequestosome 1 in insulin signaling. (Oct 1, 2011– Sep 30, 2016) Role: Principal Investigator, \$333,675.*
21. *Midwestern University Intramural Funding: Neurotrophin receptor and Alzheimer's disease. (July 1, 2009 – June 30, 2010). Role: Principal Investigator, \$3,000.*

b. Teaching Grants:

- Women's Philanthropy Board Faculty Award: Award given for being an effective mentor to Undergraduate Research Student's Research 2012-2013 (\$3000) (also given under Awards and Honors)
- Auburn University Immersive Learning Experiences Grant: Immerse VR culinary experience for multiclass/multidisciplinary use. 2023. (\$15,000) **Role: Co- Investigator PI: Donna Burnett**

5. Description of Scholarly Program

Research in my laboratory focuses on investigating the molecular links between type 2 diabetes (T2DM) and Alzheimer's disease (AD), emphasizing aspects that have potential clinical significance. Many recent studies indicate that type 2 diabetes mellitus in midlife is associated with an increased risk of developing Alzheimer's disease in later life. We have over thirty million people living with T2DM in our country. As the population ages, we may soon face the frightening challenge of dealing with a new population—people who suffer from type 2 diabetes AND Alzheimer's disease. So far, exactly how type 2 diabetes mellitus and AD are linked is not completely understood. My research laboratory is exploring the genes, molecules, and cellular processes that could promote and cause Alzheimer's disease in type 2 diabetes patients. Using various physiologically relevant mouse models, cell lines, and human postmortem brain tissues, his aim is to discover novel agents to disrupt the diabetes and Alzheimer's disease axis. My research group identified two new genes that play a key role in type 2 diabetes. This discovery has received much attention in the diabetes and Alzheimer's disease fields and beyond.

My laboratory research has shown that p62 interacts with IRS-1 and participates in the insulin signaling pathway. Previous studies have shown that ubiquitin ligase TRAF6 interacts with p62 and deletion of the sequestosome 1 / p62 gene in mice resulted in obesity and progressed to insulin resistance, leptin resistance, and type 2 diabetes. Our research goal is to determine if p62 and TRAF6 can connect IRS-1 and Akt, which in turn will lead to ubiquitination, activation, and membrane recruitment of Akt, thereby inducing GLUT4 translocation. Findings from these studies will be an important

breakthrough in understanding the role of p62 and TRAF6 complex in the insulin signaling pathway, and the mechanisms for regulation of glucose homeostasis.

My research laboratory group has reported that nerve growth factor (NGF) or insulin induces TrkA neurotrophin receptor to form a molecular complex with insulin receptor (INSR) and insulin receptor substrate-1 (IRS-1). Also, TrkA influences insulin signaling through the activation of Akt and Erk5. Insulin does not regulate glucose uptake in the brain in the same way that it regulates glucose metabolism in skeletal muscle and adipose tissue. Our research shows that NGF-TrkA signaling overlaps with insulin receptor (INSR) signaling, and that NGF and insulin may function synergistically to regulate glucose homeostasis. Research in my lab is aimed to fill this knowledge gap and is important for understanding glucose metabolism in neurons, and will have implications for our understanding of diabetes and AD.

Amyloid β ($A\beta$) aggregates are the primary component of senile plaques in Alzheimer's disease patient's brains. $A\beta$ is known to bind p75 neurotrophin receptor (p75NTR) and mediates $A\beta$ -induced neuronal death. Results from my laboratory showed that NGF leads to p75NTR polyubiquitination, which promotes neuronal cell survival. In addition, our research demonstrated that $A\beta$ stimulation impaired the p75NTR polyubiquitination. TRAF6 and p62 are required for polyubiquitination of p75NTR on NGF stimulation. Interestingly, we found that overexpression of TRAF6/p62 restored p75NTR polyubiquitination upon $A\beta$ /NGF treatment. $A\beta$ significantly reduced NF- κ B activity by attenuating the interaction of p75NTR with IKK β . p75NTR increased NF- κ B activity by recruiting TRAF6/p62, which thereby mediated cell survival. These findings indicate that TRAF6/p62 abrogated the $A\beta$ -mediated inhibition of p75NTR polyubiquitination and restored neuronal cell survival. Understanding the mechanism of TRAF6/p62-mediated ubiquitination of p75 will yield a new view of the relationship between p75, cell survival, and AD, and the potential for development of biomarkers for disease diagnosis. This research will have implications for both basic and future clinical research directions.

Another area of my research deals with human nutrition and health. In collaboration with Dr. Thomas Broderick, Professor, Laboratory of Diabetes and Exercise Metabolism, Midwestern University, my research group showed neuroprotective effect of resveratrol. Resveratrol, a naturally occurring polyphenol belonging to the phytoalexin family, is found in peanuts and in the skin and seeds of grapes. Resveratrol is one of the active ingredients in red wine. My research group's findings indicate the neuroprotective effect of resveratrol by a mechanism that prevents oxidative damage in brain tissue of obese mice. In addition, we found that resveratrol reduces plaques and tangles, a hallmark of AD in the brains of AD mice.

In collaboration with Dr. Mike Greene, we used a high fat and sugar diet (typical western diet, effectively a burger and soda) in a mouse model and showed that peripheral and central insulin resistance were sufficient to develop Alzheimer's disease phenotype.

Our research has made an impact and will continue to positively impact public health nationwide. My research team has published several manuscripts in peer-reviewed journals and was invited to present their findings at major conferences. I supported and trained many undergraduate and graduate students to understand research techniques in these areas. Ultimately, our research work will lead to the identification of new diagnostic and therapeutic techniques to treat obesity, diabetes, and Alzheimer's disease.

C. OUTREACH

I do not have an outreach appointment. However, I have participated in some outreach activities related to nutrition.

- Lee County Sunrise Rotary Club, Auburn, AL: Research on diabetes, obesity, and Alzheimer's. April 03, 2023.
- Lions Club, Vridhachalam, TN, India: Obesity, Diabetes and Alzheimer's disease. July 22, 2022.
- Rotary program, Auburn, AL: Diabetes and Alzheimer Disease connection. October 14, 2019.
- High School Student Mentor: Mentored high school students for three months, by teaching cellular and molecular biology techniques in nutrition research. Students: Mr. Mihir John; June - August 2012.
- Invited Speaker: Healthy Eating for Elderly People: American Red Cross – East Alabama, Auburn, AL; April 27, 2011.

D. SERVICE

a. Service to the University (SELECTED)

- 2021- Present : Member, Faculty Dismissal Hearing Committee, Auburn University, Auburn, AL.
- 2017- Present : Member, Student Academic Grievance Committee, Auburn University, Auburn, AL.
- 2020 : Represented CHS and served on "Barkley Professorship Selection Committee" (Provost office), Auburn University, Auburn, AL

- 2018-2020 : Member, Honors College Advisory Council, Auburn University, AL.
- 2018-2019 : Member, Auburn University Health Sciences Research Initiative (AUHSRI) Steering Committee, Auburn University, AL.
- 2018-Present : Member, Boshell Diabetes and Metabolic Diseases Board of Directors, Auburn University, AL.
- 2018-Present : Member, Center for Neuroscience Initiative, Auburn University, AL.
- 2017-Present : Ad hoc grant proposal reviewer, Auburn University – Intramural Grant Program (AU-IGP) Grant Review Panel, Auburn University, AL.
- 2015-2020 : Steering Committee Member, Health Disparities Cluster, Auburn University, AL.
- 2012-2018 : Judge, graduate student oral and poster presentations, This is a Research Student Symposium, Auburn University, AL.
- 2014- 2019 : Pre-health Professions Advisory Committee (PPAC) member, College of Human Science, Auburn University, AL.
- 2012 – 2018 : Member, Cellular and Molecular Biosciences Undergraduate Summer Research Scholarships Committee (CMB-USRSC), Auburn University, AL.
- 2011 – 2012 : Member, AU-CCF (Central Classroom Facility- MELL CLASSROOM), Auburn University, AL. This committee worked with the larger facilities project team, including University architects, facilities design manager, facilities management personnel, and construction manager to develop the program requirements and complete the design for the central classroom facility.

b. Service to the College (SELECTED)

- 2021 : Member, Rane Professorship Review Committee, College of Human Sciences.
- 2018 : Member, College of Human Sciences (CHS) Dean Search Committee (**Recruited Dr. Susan Hubbard**).
- 2015- Present : Member, College of Human Sciences Research Advisory Committee.

- 2012- 2019 : Represent College of Human Sciences for Premedical Professions Advisory Committee.
- 2012 : Member, Search Committee, Associate Dean for Research and Graduate Studies, College of Human Sciences (**Recruited Dr. Jennifer Kerpelman**).
- 2010- Present : Ad hoc grants proposal reviewer, Hatch Proposals, College of Human Sciences.

c. Service to the Department of Nutritional Sciences (SELECTED)

- 2023 : Member, Instructor/ DPD Director Search Committee, Department of Nutritional Sciences (**Recruited Ms. Blanche Moreman**).
- 2022 : Chair, Assistant/ Associate Professor/ Extension Specialist Search Committee, Department of Nutritional Sciences.
- 2018 : Member, Faculty Search Committee, Department of Nutrition, Dietetics and Hospitality Management (**Recruited Dr. Onikia Brown**).
- 2017 : Chair, DPD Director Search Committee, Department of Nutrition, Dietetics and Hospitality Management (**Recruited Dr. Andrew Fruge**).
- 2017 : Peer evaluation for teaching for Dr. Yee Ming Lee.
- 2016 : Member, Faculty Search Committee, ISPP Director Position, Department of Nutrition, Dietetics and Hospitality Management (**Recruited Dr. Donna Burnett**).
- 2015 : Peer evaluation for teaching for two faculty in the department (Dr. Michael Greene and Dr. Onikia Brown).
- 2014 : Member, Search Committee for the Instructor position, Department of Nutrition, Dietetics and Hospitality Management. (**Recruited Ms. Amy Willis**).
- 2013 : Member, Search Committee for the Instructor position, Department of Nutrition, Dietetics and Hospitality Management. (**Recruited Ms. Gwen Lloyd**).

Professional Service

d. Associate Editor

Journal of Alzheimer's Disease (2015)

e. Review Editor

Frontiers in Nutrigenomics (2015-2020)

f. Manuscript Review

Ad Hoc Reviewer:

- World Journal of Biological Chemistry
- BBA Molecular Basis of Disease
- Proceedings of the National Academy of Sciences (PNAS)
- Scientific reports
- Journal of Neurochemistry
- Biochemical Biophysical Research communications
- Journal of Neuroscience Research
- ASN NEURO
- Journal of Molecular Neuroscience
- Neurochemical Research
- Neurotoxicity Research
- Neurochemistry International
- Journal of Receptors and Signal Transduction
- Endocrine Journal
- Diabetes and Metabolism
- Diabetes Metabolism Research and Reviews
- Journal of Diabetes Research
- Current Alzheimer Research
- Journal of Biological Chemistry

g. Grant Review

- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Member, 2023 (spring and summer).*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Member, 2022 (spring and summer).*
- *Reviewed grants for Florida Department of Health Ed and Ethel Moore Alzheimer's Disease Research program 2022-2023*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) – ZDK1 GRB-B study section Acting Chair, 2021 (fall).*
- *Reviewed grants for Pennsylvania Department of Health: Alzheimer Disease Research Program 2021*
- *Government of Hong Kong SAR, China, Grant Review panel "Health and Medical Research Fund of the Food and Health Bureau 2021*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Member, 2021 (spring, summer, and fall).*

- *Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of the Food and Health Bureau 2020*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Member, 2020 (spring, summer, and fall).*
- *Reviewed grants for Florida Department of Health: Alzheimer Disease Research Program 2020*
- *Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of the Food and Health Bureau 2019*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Member, 2019 (spring, summer, and fall).*
- *Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of the Food and Health Bureau 2019*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Member, 2018 (spring, summer, and fall).*
- *Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of the Food and Health Bureau 2018).*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Ad hoc grant reviewer, 2017 (spring, summer, and fall).*
- *Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of the Food and Health Bureau 2017.*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Ad hoc grant reviewer, 2016 (spring, summer, and fall).*
- *Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of the Food and Health Bureau 2016.*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Ad hoc grant reviewer, 2015 (spring, summer, and fall).*
- *Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of the Food and Health Bureau 2015.*
- *National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK) study section Ad hoc grant reviewer, 2014 (fall).*
- *Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of the Food and Health Bureau 2014.*
- *Government of Hong Kong SAR, China, Grant Review panel “Health and Medical Research Fund of the Food and Health Bureau 2013.*
- *Diabetes U.K., Ad hoc grant reviewer, 2012.*

h. Symposium - Session Chair / Judge

- *14th Annual Boshell Diabetes Research Symposium*, Oral session Chair (Faculty Postdoctoral fellows /Graduate students), April 28, 2023, Auburn, AL.
- *13th Annual Boshell Diabetes Research Symposium*, Oral session Chair (Faculty Postdoctoral fellows /Graduate students), September 17, 2021, Auburn, AL.
- *12th Annual Boshell Diabetes Research Symposium*, Oral session Chair (Faculty Postdoctoral fellows /Graduate students), February 15, 2019, Auburn, AL.
- *11th Annual Boshell Diabetes Research Symposium*, Oral session Chair (Faculty Postdoctoral fellows /Graduate students), February 16, 2018, Auburn, AL.
- *10th Annual Boshell Diabetes Research Symposium*, Oral session Chair (Faculty Postdoctoral fellows /Graduate students), March 3, 2017, Auburn, AL.
- *9th Annual Boshell Diabetes Research Symposium*, Oral session Chair (Faculty Postdoctoral fellows /Graduate students), February 26th, 2016, Auburn, AL.
- *8th Annual Boshell Diabetes Research Symposium*, Oral session Chair (Faculty Postdoctoral fellows /Graduate students), February 13th, 2015, Auburn, AL.
- *7th Annual Boshell Diabetes Research Symposium*, Oral session Chair (Faculty Postdoctoral fellows /Graduate students), February 28, 2014, Auburn, AL.
- *6th Annual Boshell Diabetes Research Symposium*, Oral session Judge (Graduate students /Postdoctoral fellows), March 1, 2013, Auburn, AL.

i. Membership in Professional Organizations

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