

CURRICULUM VITAE**Keri Barksdale Mans, Ph.D.****EDUCATION:**

Post-Doctoral	2010-2013	MERIT (Mentored Experiences In Research, Instruction, and Teaching) Post-Doctoral Scholar Psychiatry and Behavioral Neurobiology The University of Alabama at Birmingham
Ph.D.	2004-2010	Neurobiology The University of Alabama at Birmingham
B.S.	2000-2004	Biochemistry and Molecular Biology Mississippi State University

TEACHING EXPERIENCE:**Teaching in the Classroom:**

2019-current Massachusetts General Hospital Institute for Health Professions
Role: Term Lecturer

Courses:

HE-714, Teaching Practicum
 HE-921, Cognitive Science of Learning
 Directed Individual Study

2015-current Georgia Southern University/Armstrong State University
Role: 2015-2021: Assistant Professor, Department of Rehabilitation Sciences
Role: 2021-Current: Associate Professor, Department of Rehabilitation Sciences

Courses:

Pathophysiology (KINS2533)
 Human Physiology for Rehabilitation Professionals (RHAB3500)
 Application of Research to Rehabilitation Professions (RHAB4000)
 Clinical Neuroscience for Rehabilitation Professions (RHAB4100)
 Pathophysiology for Rehabilitation Professions (RHAB4112)
 Special Topics in Rehabilitation Sciences, Neuroscience (RHAB4900)
 Functional Aspects of Movement III (PHTH7303) with Laboratory
 Clinical Medicine I (PHTH8501)
 Structural and Functional Aspects of Movement (PHTH7303)
 Pathophysiology III (PHTH7313)
 Special Topics in Science and Society (PHTH9901)
 Special Topics in Neuroscience and Neurology (PHTH9901)
 Mentored Research in Rehabilitation Sciences, Biology, Biochemistry, and Physical Therapy:
 (RHAB 4901, 4902, & 4903; BCHM 3900; BIOL 4890; PHTH 9901 & 9902)

2014-2015 Armstrong State University
Role: Instructor, Department of Biology

Courses:

Principles of Biology (BIOL1107) with Laboratory
 Concepts of Biology (BIOL1103)

- 2010-2011 Stillman College, Tuscaloosa, Alabama
Role: MERIT Postdoctoral Fellow, Lab Instructor, Guest Lecturer, and Tutor
- Courses:
 Microbiology (BIO349)
 Anatomy & Physiology II (BIO336)
 Biology II (BIO142)
 Cell Physiology (BIO448)
 Anatomy & Physiology I (BIO335)
 Biology I (BIO141)
 Biochemistry (BIO434)
 Genetics (BIO434)
- 2013-2014 Jefferson State Community College
Role: Instructor, Department of Biology
- Courses:
 Anatomy & Physiology I (BIO201) with Laboratory
 Anatomy and Physiology II (BIO202) with Laboratory
 Introduction to Biology (BIO101) with Laboratory
 Principles of Biology (BIO103) with Laboratory
- 2013-2014 University of Alabama at Birmingham Graduate School
Role: Instructor, UAB PREP (Post-Baccalaureate Research Education) Program
- Courses:
 PREP Scholars Workshop I (GRD740)
 PREP Scholars Workshop II (GRD741)
Focus: Professional development, interview skills, and scientific communication for students entering graduate programs in the biomedical sciences
- 2013 University of Alabama at Birmingham-Center for the Integration of Research, Teaching, and Learning
Role: Instructor
- Courses:
 "Developing a Teaching Portfolio" (GRD716)
- 2011-2012 Stillman College, Tuscaloosa, Alabama
Role: MERIT Postdoctoral Fellow, Lecturer
- Courses:
 Molecular Biology Methods (BIO431)
 Life Science (BIO131)

Teaching & Mentorship in Research:

- 2021-curr. Research Mentor to Claire Lanier and Haley Herold, "The Effect of Chronic Sleep Deprivation on Mitochondrial Function in Zebrafish Brain"
- 2019-2020 Research Mentor to Austin McClanahan & Kelly Marden, "Developing a Mitochondrial Function Assay for the Adult Zebrafish Brain"
- 2018-2019 Research Mentor to Ellen Skeadas, "Effects of Environmental Enrichment on the Biochemistry of Learning and Memory in Adult Zebrafish"
- 2018-2020 Research Mentor to Colton Allgood & Mackenzie McCauley, "Effects of Nicotine on Zebrafish Brain Biochemistry"

2016-2019	Research Mentor to Nicholas Moore, "Light Sleeping: Effects of Sleep Deprivation on Zebra Fish Cognitive Function and Brain Biochemistry"
2017-2018	Mentorship of Ansley Rush for Honors Project at Georgia Southern University: "Effects of Sleep Habits on Cognition in College Students"
2017-2018	Co-Mentorship of Mary Carpenter for Honors Project at Georgia Southern University: "Development of a Cognitive Task in Zebra Fish"
2017-2018	Co-Mentorship of research student Kyle Awalt at Georgia Southern University: "Development of a Cognitive Task in Zebra Fish"
2016-2018	Research Mentor to Henning Schein, "Effects of Environmental Stress on Zebra Fish Cognitive Function and Brain Biochemistry"
2016-2018	Research Mentor to Ariana Cheas, "Effects of Nicotine Withdrawal on Zebra Fish Cognitive Function and Brain Biochemistry"
2016-2017	Mentorship of Stephanie Miller for Honors Project at Armstrong State University: "Effects of Sleep Habits on Cognitive Function in Students at Armstrong State University"
2015-2016	Mentorship of Darby Wiggins for Honors Project at Armstrong State University: "The Phantom of the Limb"
2015-2016	Mentorship of Sarah Harmon for Honors Project at Armstrong State University: "A Life Lost: Traumatic Brain Injury and Retrograde Amnesia"
2012	Training of Senior Thesis student, Jessica Miller, for completion of the undergraduate senior thesis requirement, Stillman College, Tuscaloosa, AL
2011-2012	Training of summer student, Jessica Miller, in the Minority Health and Health Disparities Research Center (MHRC) Summer Enrichment Program
2010-2011	Training of biology student Melayna Autery for completion of the undergraduate senior thesis project, Stillman College, Tuscaloosa, AL

PUBLICATIONS:

1. Moore NS, Mans RA, McCauley M, Allgood CS, Barksdale KA. 2021. Critical Effects on Akt Signaling in Adult Zebrafish Brain Following Alteration in Light Cycles. *MDPI Cells*, "Zebrafish" *Special Issue* 10(3):637.
2. Patel R*, Barksdale KA*, Effect of Supplemental Therapies on Motor and Nonmotor Outcomes in the Parkinson's Population. *In Revision at Journal of Parkinson's Disease*. *equal contribution
3. Barksdale KA, Lovicz AL, Awe A. Current Progress in Use of Zebrafish to Investigate the Effect of Stress on Learning and Memory. *In Preparation, Invited Review for MDPI, 2022*.
4. Roberts RC, Barksdale KA, Roche JK, & Lahti AC. 2015. Decreased synaptic and mitochondrial density in the postmortem anterior cingulate cortex in schizophrenia. *Schizophrenia Research*. 168(1-2):543-53.
6. Barksdale KA, Lahti AC, Roberts, RC. 2014. Synaptic proteins in the postmortem anterior cingulate cortex in schizophrenia: relationship to treatment response. *Neuropsychopharmacology*. 39(9): 2095-103.
7. Barksdale KA, Perez-Costas E, Melendez-Ferro M, Gandy JC, Roberts RC, Bijur GN. 2010. Mitochondrial Viability in Post-Mortem Brain. *Faseb J*. 24(9): 3590-9.
8. Barksdale KA, Bijur GN. 2009. The basal flux of Akt in the mitochondria is mediated by heat shock protein 90. *J. Neurochem*. 108(5): 1289-99.

9. King TD, Clodfelder-Miller B, Barksdale KA, Bijur GN. 2008. Unregulated mitochondrial GSK3beta activity results in NADH:ubiquinone oxidoreductase deficiency. *Neurotox Res.* 14(4): 367-82.

SELECTED PRESENTATIONS:

**denotes oral presentation

Lorden, H; Gritis, M; McCluskey, K; Brown, CS; Mincer, AB; Mans, KA. 2022. Clinical Expertise Isn't Enough: Therapists Misunderstand Barriers to Compliance. American Physical Therapy Association Combined Sections Meeting 2022.

**Patel, R & Barksdale KA. 2021. Effect of Supplemental Therapies on Motor and Nonmotor Outcomes in the Parkinson's Population. American Physical Therapy Association Combined Sections Meeting, 2021.

Baker, S; Baumgarter, R; Carpenter, M; Stevenback, E; Lorden, H; Mincer, AB; Mans, KA. 2021. Caregivers' Self-Reported Compliance and Perceived Barriers to Compliance with Home Programs Prescribed to Children with Down Syndrome. American Physical Therapy Association Combined Sections Meeting, 2021.

Marden, KL; McClanahan, AJ; Moore, NS; Barksdale-Mans, KA
Effect of Sleep Deprivation on Mitochondrial Complex I Function in the Adult Zebrafish Brain
Georgia Academy of Sciences Annual Meeting, 2020 (peer reviewed abstract accepted)

Allgood, CS; McCauley, MK; Barksdale-Mans, KA
Testing the Effect of Nicotine on the Adult Zebrafish Brain: A Tale of Two Methods
Georgia Academy of Sciences Annual Meeting, 2020 (peer reviewed abstract accepted)

Mans, KA

The Winding Road to Success

National Society for Leadership and Success, Georgia Southern University Chapter
Keynote Speaker; Induction Ceremony 2019

Allgood, CS; McCauley, MK; Mans, KA
**Effect of Nicotine on the Zebrafish Brain
SYNAPSE Meeting, High Point University, 2019

Allgood, CS; McCauley, MK; Mans, KA
Effect of Nicotine on the Zebrafish Brain
Georgia Southern University Student Scholars Symposium, 2019

Arp, M; Fender, R; Wiggins, D; Mincer, AB; Lorden, H; Mans KA
**"Establishing normative data for bone mineral density in college age females: A preliminary correlational study of lifestyle factors and bone mineral density"
Georgia Southern University (Armstrong Campus) Student Scholars Symposium 2018

Mans, KA; Mans, RA
**Effects of Stress on Biochemical Aspects of Learning and Memory in *Danio rerio*
Georgia Southern University Faculty Development Seminar Series, 2018

Moore, NM; Mans, KA.
**Light Sleeping: The Effects of Chronic Sleep Deprivation on Zebrafish Learning and Memory
Georgia Southern University (Armstrong Campus) Student Scholars Symposium, 2018

Moore, NM; Mans, KA.
Light Sleeping: The Effects of Chronic Sleep Deprivation on Zebrafish Learning and Memory
SYNAPSE Meeting, High Point University 2018

Schein, HS; Mans, KA.
The Effect of Vibration Stress on Zebrafish Learning and Memory
Georgia Southern University (Armstrong Campus) Student Scholars Symposium 2018

Schein, HS; Mans, KA.

The Effect of Vibration Stress on Zebrafish Brain Biochemistry
SYNAPSE Meeting, High Point University 2018

Carpenter, M; Awalt, K; Mans, KA; Mans, RA

Biochemical Aspects of Learning and Memory
Georgia Southern University (Armstrong Campus) Student Scholars Symposium 2018

Carpenter, M; Awalt, K; Mans, KA; Mans, RA

Biochemical Aspects of Learning and Memory
National Honors Conference 2018

Carpenter, M; Awalt, K; Mans, KA; Mans, RA

Biochemical Aspects of Learning and Memory
SYNAPSE Meeting, High Point University 2018

Arp, M; Fender, R; Wiggins, D; Mincer, AB; Lorden, H; Mans KA

**Establishing normative data for bone mineral density in college age females: A preliminary correlational study of lifestyle factors and bone mineral density
Georgia Southern University (Armstrong Campus) Student Scholars Symposium 2018

Moore, NM; Mans, KA.

**Light Sleeping: The Effects of Chronic Sleep Deprivation on Zebrafish Brain Biochemistry
Armstrong State Undergrad Research Spotlight Seminar Series 2017

Cheas, AC; Mans, KA.

Biochemical Effects of Withdrawal-Induced Stress in *Danio rerio*
Armstrong State University Student Scholars Symposium 2017

Moore, NM; Mans, KA.

Light Sleeping: The Effects of Chronic Sleep Deprivation on Zebrafish Brain Biochemistry
Armstrong State University Student Scholars Symposium 2017

Schein, HS; Mans, KA.

The Effect of Vibration Stress on Zebrafish Brain Biochemistry
Armstrong State University Student Scholars Symposium
2017

Miller, S; Mans, KA

**The Effect of Sleeping Habits on Cognitive Function in College Students at Armstrong State University
Armstrong State University Student Scholars Symposium
2017

Miller, S; Mans, KA

**The Effect of Sleeping Habits on Cognitive Function in College Students at Armstrong State University
National Honors Conference 2017

Jones, C; McGuire, E; Mettenburg, T; Hill, B; Henderson, N; Worst, H; Mans, KA; Davies, G.

The Effects of Isolated Joint Versus Multiple Joint Training on the Shoulder
APTA (American Physical Therapy Association) Combined Sections Meeting 2017

Mans, K; Mans, R

Incorporation of Active Learning into Supplemental Instruction at Armstrong State University
International SOTL (Scholarship of Teaching and Learning) Commons Conference 2016

Wiggins, D; Mans, KA

**The Phantom of the Limb
Armstrong State University Student Scholars Symposium 2016

Harmon, S; Mans, KA

**A Life Lost: Effects of Retrograde and Anterograde Amnesia Following Traumatic Brain Injury
Armstrong State University Student Scholars Symposium 2016

Barksdale, KA; Roberts, RC

An examination of vesicular glutamate transporter (vGLUT) terminals in the postmortem human striatum: a light and electron microscopy study.

University of Alabama at Birmingham Postdoctoral Research Day 2012

Barksdale, KA; Roberts, RC; Lahti, AC

Mitochondrial deficits in the anterior cingulate cortex of subjects with schizophrenia.

Society for Neuroscience (SFN) 42nd Annual Meeting 2012

Barksdale, KA; Roberts, RC; Lahti, AC

Synaptic and Mitochondrial deficits in the anterior cingulate cortex of subjects with schizophrenia. American College of Neuropsychopharmacology Annual Meeting 2012

Autery, M, Roberts, RC, Barksdale, KA

Vesicular Glutamate Transporter Localization in the Striatum of Rats Treated with Antipsychotic Drugs: A Light and Electron Microscopy Study

University of Alabama at Birmingham Psychiatry Research Symposium 2011

Barksdale, KA, Roberts, RC

An examination of vesicular glutamate transporters (vGLUTs) in postmortem human striatum. Institutional Research and Academic Career Development Award (IRACDA) Program Conference of the National Institute of General Medical Sciences 2011

Barksdale, KA

**An Introduction to Molecular Biology Methods Course Design.

2nd Annual MERIT Retreat, University of Alabama at Birmingham 2011

Barksdale, KA; Roberts, RC

**An examination of vesicular glutamate transporter (vGLUT) terminals in the postmortem human striatum: a light and electron microscopy study.

Society for Neuroscience (SFN) 41st Annual Meeting 2011

FUNDED RESEARCH ACTIVITY:

Principal Investigator

\$25,000

"The effect of stress on metabolic and biochemical aspects of learning and memory"

Waters Professor Endowment Award, Georgia Southern University (2021-2026)

Principal Investigator

\$3000

"Integration of Hypothesis-Driven Active Learning into an Upper-Level Neurophysiology Course"

2019-2020; Georgia Southern University Faculty Development Award

Principal Investigator

\$9,891.95

"The effect of stress on metabolic and biochemical aspects of learning and memory"

2018-2019; Georgia Southern University Internal Faculty Research Grant Competition

Research Mentor

\$200

"*Light Sleeping*: Biochemical and Behavior Effects of Sleep Deprivation-Induced Stress in *Danio rerio*"

2017-2018; Internal Grant for Undergraduate Research, Armstrong State University

Research Mentor

\$200

"Development of a Novel Object Recognition Task in *Danio rerio*"

2017-2018; Internal Grant for Undergraduate Research, Armstrong State University

Project Director

\$1994

"Effect of Stress on the Biochemical and Behavioral Aspects of Learning and Memory"

2017-2018; Internal Grant for Research & Scholarship, Armstrong State University

Research Mentor

\$1964

"*Light Sleeping*: Biochemical and Behavior Effects of Sleep Deprivation-Induced Stress in *Danio rerio*"

2016-2017; Internal Grant for Research & Scholarship, Armstrong State University

Research Mentor

\$200

"Biochemical and Behavioral Effects of Withdrawal-Induced Stress in *Danio rerio*"

2016-2017; Internal Grant for Undergraduate Research, Armstrong State University

Project Director

\$2000

"Enrichment of Student Research Experience in the Neuroscience Minor"

2015-2017; Internal Grant for Teaching and Learning, Armstrong State University

Project Director

\$2000

"Modeling Biology: Active/Tactile Learning in Supplemental Instruction"

2014-2016; Internal Grant for Teaching and Learning, Armstrong State University

Collaborator

\$5000

"Enhancing the Student Experience Through Supplemental Instruction"

2014-2015; Internal Grant: Armstrong State University SPARC (Strategic Planning and Resource Council)

CURRENT/ACTIVE RESEARCH ACTIVITY:Principal Investigator:

"The Effect of Stress on Metabolic and Biochemical Aspects of Learning and Memory"

Georgia Southern University

Waters Professor Endowment Award; Departmental

Project Collaborator:

"Perceptions of Physical Therapists Regarding Exercise Prescription in the Down Syndrome Population"

Georgia Southern University

Funding: Departmental

Project Collaborator:

"Gender Equity in Grand Rounds"

MGH Institute of Health Professions

ACADEMIC SERVICE:

2021-Current Undergraduate Program Coordinator, Department of Rehabilitation Sciences, Georgia Southern University

2021-Current IACUC (Institutional Animal Care and Use Committee), Georgia Southern University

2021-Current	Search Committee Member for Assistant/Associate Professor of Communication Sciences and Disorders
2020-Current	Curriculum Committee, MGH Institute of Health Professions
2019-Current	Waters College of Health Professions Curriculum Committee, Georgia Southern University *Chair 2021-2022
2018-Current	Department of Rehabilitation Sciences STEP Mentorship Program, Georgia Southern University **Chair and Creator
2018-Current	Doctor of Physical Therapy White Coat Ceremony Committee, Georgia Southern University **Chair and Founder
2018-Current	Georgia Southern University, Department of Rehabilitation Sciences Undergraduate Student Engagement Committee, **Co-chair & Founder
2018-2019	Doctor of Physical Therapy Research Capstone Symposium Committee, Georgia Southern University **Chair
2018-2020	Georgia Southern University, Faculty Grievance Committee
2015-2018	Armstrong State University/Georgia Southern University-Armstrong Campus College of Health Professions Academic Appeals Committee
2017-2018	Search Committee Member, Associate Vice President of Student Engagement, Georgia Southern University
2017	First Year Experience Task Force, Operational Working Group for consolidation of Armstrong State University with Georgia Southern University
2016-2017	Armstrong State University NAVIGATE! Summer orientation Faculty Leader
2015-2017	Chapter coordinator and Chair for Low-country/Savannah Brain Bee
2015-2017	Institutional Animal Care and Use Committee, Armstrong State University
2014-2015	Co-coordinator and facilitator for the College of Science and Technology Supplemental Instruction (SI) program, Department of Biology, Armstrong State University
2012	Served as a facilitator for the annual UAB Book Discussion, <u>The Immortal Life of Henrietta Lacks</u> . University of Alabama at Birmingham

PROFESSIONAL DEVELOPMENT:

2022	CITI: IACUC Member Basic Course
2021	Building a Better U: Diversity training for Search Committee Members, Georgia Southern University
2021	IACUC 101 Plus (2 day webinar), National Institutes of Health, US Dept of Agriculture
2021	Faculty Diversity and Equity Learning Community, "We Can't Talk About that at Work!"
2020	Faculty Learning Community, "How Human Beings Learn", Georgia Southern University
2019	Office of Institutional Effectiveness, Assessment Institute, Georgia Southern University
2018/2021	Development and approval of the Institutional Animal Care and Use Committee (IACUC) Protocol update for Georgia Southern University

2018/2021	CITI: Institutional Review Board Social and Behavioral Research Basic Course
2018/2021	CITI: Working with Zebrafish in Research Settings Course
2018/2021	CITI: Working with Fish in Research Settings Course
2018/2021	CITI: Institutional Care and Use Committee (IACUC) Basic Course
2017	Quality Matters "Teaching Online: An introduction to Online Delivery" course completion
2017	College of Health Professions Tenure and Promotion Seminar
2017	Right to Know: Global Harmonized System Training
2017	Georgia X-ray Safety Course
2016	Armstrong State University Faculty Development Workshop: Grant Writing
2016	Armstrong State University Safe Space Training
2016	Attendance and Participation at the Annual SOTL (Scholarship of Teaching and Learning) Commons Conference.
2016	Appointment to Graduate Faculty Status, Armstrong State University
2013	Attendance and participation at the annual ABRCMS (Annual Biomedical Research Conference for Minority Students) Meeting
2010-2013	Attendance and participation at the annual MERIT (Mentored Experiences in Research, Instruction, and Teaching) Conference at the University of Alabama at Birmingham
2010-2013	Attendance and participation in the annual IRACDA (Institutional Research and Academic Career Development Award Conference)
2010-2013	UAB MERIT (Mentored Experiences in Research, Instruction, and Teaching) Program (2010-2013), funded by the NIH IRACDA (National Institutes of Health Institutional Research and Academic Career Development Award), K12 Grant
2011	<u>UAB Course GRD 716</u> : Developing a Teaching Portfolio
2010	- <u>UAB Course GRD 705</u> : Teaching at the College Level and Beyond - <u>UAB Course GRD 707</u> : Giving Professional Presentations

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:

SfN: Society for Neuroscience
2005-current

FUN: Faculty for Undergraduate Neuroscience
2013-current

PULSE (Partnership for Undergraduate Life Science Education)
2013-current

Phi Kappa Phi Honor Society
2015-current

AWARDS:

2021-2026	Waters Professor Endowment Award, Georgia Southern Univeristy
2020	Georgia Southern University, Nominee for Faculty Award for Student Success
2020	Nominee for Faculty Award for Waters College of Health Professions Service
2016	Armstrong State University, Phi Kappa Phi Invitation and Induction
2013	University of Alabama at Birmingham, Center for the Integration of Research, Teaching, and Learning (CIRTL) Practitioner Certification
2013	University of Alabama at Birmingham, Center for the Integration of Research, Teaching, and Learning (CIRTL) Fellow Certification
2011	University of Alabama at Birmingham Bevill Neuroscience Research Symposium, Best Poster by a Postdoctoral Fellow.
2010	University of Alabama at Birmingham Outstanding Doctoral Graduate Student, 2009-2010.
2009	MERIT (Mentored Experiences in Research, Instruction, and Teaching) Scholars Fellowship from the NIH IRACDA (<i>Institutional Research and Academic Career Development Awards</i>) Program. This award funds three years of postdoctoral research with emphasis on instruction in college-level teaching in the lab and in the classroom.