

# CURRICULUM VITAE

Date: October 15, 2023

## PERSONAL HISTORY

Name: **Amy Willis Amara, M.D., Ph.D.**  
Prior name: Amy Catherine Willis  
**Current Position:** Visiting Professor and Movement Disorders Section Chief

Department: Department of Neurology  
Movement Disorders Section  
University of Colorado, Anschutz Medical Campus

Professional Address: 12631 E. 17<sup>th</sup> Avenue, Mail Stop B185  
Aurora, CO 80045

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## EDUCATION:

Year	Degree	Institution
May, 1998	B.A., <i>summa cum laude</i>	Agnes Scott College Atlanta, GA
May, 2003	Ph.D., with distinction	Medical College of Georgia Augusta, GA
May, 2005	M.D.	Medical College of Georgia Augusta, GA
7/2005-6/2006	Internship: Internal Medicine	University of Alabama at Birmingham
7/2006-6/2009	Residency: Neurology	University of Alabama at Birmingham
7/2010-6/2011	Fellowship: Sleep Medicine	University of Alabama at Birmingham
7/2009-6/2012	Fellowship: Movement Disorders	University of Alabama at Birmingham

## ACADEMIC APPOINTMENTS: (In reverse chronological order)

Year	Rank/Title	Institution
November 2022-present	Professor	University of Colorado, Anschutz Medical Campus
October 2021-2022	Scientist, Center for Neurodegeneration and Experimental Therapeutics	University of Alabama at Birmingham
August 2020-2022	Co-leader, Comprehensive Neuroscience Center (CNC) Sleep/Circadian Pillar	University of Alabama at Birmingham
January 2020-2022	Scientist, Center for Clinical and Translational Science	University of Alabama at Birmingham

November 2019-2022	Co-director, Sleep and Circadian Research Core	University of Alabama at Birmingham
August 2018-2022	Faculty, UAB Graduate School	University of Alabama at Birmingham
January 2018-2022	Scientist, McKnight Brain Institute	University of Alabama at Birmingham
October 2017-2022	Associate Professor Department of Neurology	University of Alabama at Birmingham
March 2017-2022	Scientist, Center for Disability Health and Rehabilitation Science	University of Alabama at Birmingham
January 2016-2022	Scientist, Alzheimer's Disease Center	University of Alabama at Birmingham
January 2015-2022	Associate Scientist, UAB Center for Exercise Medicine	University of Alabama at Birmingham
July 2012-September 2017	Assistant Professor Department of Neurology	University of Alabama at Birmingham
October 2011-2022	Faculty Mentor Undergraduate Neuroscience Program	University of Alabama at Birmingham
July 2011- June 2012	Instructor Department of Neurology	University of Alabama at Birmingham
July 2009-2022	Scientist, Comprehensive Neuroscience Center	University of Alabama at Birmingham

**HOSPITAL AND OTHER APPOINTMENTS:**

**Hospital Privileges:**

University of Colorado	2022-present
Birmingham Veterans Affairs Medical Center	2011-2012
Children's Hospital of Alabama	2010-2019
University of Alabama Hospital	2009-2022
University of Alabama at Birmingham Highlands Hospital	2009-2022
Cooper Green Hospital, Birmingham, AL	2009-2018

**Professional Consultantships:**

PhotoPharmics, Inc.	2021-present
Gray Matter Technologies, LLC	2018-present
Jazz Pharmaceuticals	2017-2018

**Military Service:**

None

**HONORS, SPECIAL RECOGNITIONS, AND AWARDS:**

2023	Top Article for October 2023 recognized by the International Parkinson's Disease and Movement Disorders Society
2020	Best Research Article published in scholarly journal <i>Movement Disorders</i> 2019-2020
2019	Health Services Foundation General Endowment Fund award
2018	B-metro Top Women in Medicine
2017	American Neurological Association invitation to present research in Data Blitz

2017 American Neurological Association Travel Award  
 2017 B-metro Top Women in Medicine  
 2016 B-metro Top Doctors- based on survey response of area physicians voting for doctors to whom they would refer a family member  
 2016 James A. Pittman, Jr. MD, Scholars Program, UAB School of Medicine  
 2016 Movement Disorders Society Leadership Development and Training Program (LEAP) representative  
 2015 B-metro Top Doctors: Sleep Medicine-based on survey response of 2600 area physicians voting for doctors to whom they would refer a family member  
 2015 UAB Center for Exercise Medicine Spotlight Member  
 2012 CCTS K-Scholars Program KL2 Award recipient (declined due to receiving NIH K23 Award)  
 2012 Movement Disorders Society Travel Grant to attend the 16<sup>th</sup> International Parkinson's Disease Congress, Dublin, Ireland  
 2012 Certificate of Completion: CCTS Clinical Skills Training Program  
 2011 2011 American Neurological Association Translational and Clinical Research Course for Clinician-Scientists  
 2010 2010 NINDS Clinical Trial Methods Course in Neurology  
 2009 Certificate of Excellence for performance on Residency In-Service Training Exam  
 2008 J. Kiffen Penry Residents Program in Epilepsy  
 2003 PhD, with distinction, Medical College of Georgia  
 2000 Institute of Molecular Medicine and Genetics Poster Award, Medical College of Georgia  
 1997, 98 Phi Beta Kappa  
 1997, 98 Mortar Board  
 1995, 96, 97, 98 Stukes Scholar (for highest GPA)-Agnes Scott College  
 1997 Howard Hughes Summer Undergraduate Research Experience (SURE)-Emory University  
 1995, 96 Agnes Scott College Research Scholar  
 1995 American Chemistry Society Freshman Chemistry Award  
 1994 LaGrange High School Valedictorian

**MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS:**

Parkinson Study Group	2018-present
American Neurological Association	2013-present
American Academy of Sleep Medicine	2010-present
International Parkinson and Movement Disorders Society	2009-present
American Academy of Neurology	2005-present
American Association for Cancer Research	2001-2005

**MAJOR COMMITTEE AND SERVICE RESPONSIBILITIES**

**National/International**

<u>International Parkinson and Movement Disorders Society</u>	
• Communication Oversight Committee	2021-2023
<u>Michael J. Fox Foundation for Parkinson's Research</u>	
• Parkinson's Progression Markers Initiative	
▪ Consensus Steering Committee	2021-present
▪ Gender Working Group	2019-2022

- BioFIND Study Steering Committee 2014-2019
- American Academy of Neurology
- Facilitator: Associate Professors' Forum 2021-2022
- Wayne A. Hening Sleep Medicine Investigator Award Workgroup 2019-present
- Research Program Subcommittee 2017-2021
- Movement Disorders Section Steering Committee 2016-2018
- Synapse AAN Online Community Movement Disorders discussion board 2016-2018
- Research Program Workgroup 2016-2017
- American Academy of Sleep Medicine
- Maintenance of Certification Question Writing Committee 2013-2018
- Movement Disorders Section member 2010-present

### **University of Colorado**

- Neuroimmunology Section Chief search committee 2022-present

### **University of Alabama at Birmingham**

- Department of Neurology 2021-2022
- Promotion and Tenure Committee
- UAB Center for Exercise Medicine 2021-2022
- Co-leader, Clinical Integration Core
- Dissertation Committee for PhD candidate: Farah Abou Daya 2022-present
- Dissertation Committee for PhD candidate: Jeevan Jadapalli 2021-present
- Dissertation Committee Chair for R25/PhD candidate: Adeel Memon, MD 2019-2022
- Dissertation Committee for PhD candidate: Jutaluk Kongsuk 2019-2021
- Dissertation Committee for PhD candidate: Katie Cederberg 2018-2020
- UAB Center for Exercise Medicine 2016-2019
- Education Committee
- Dissertation Committee for PhD candidate Ali Darwish 2016-2020
- Department of Neurology Consult Service Improvement Committee 2015-2017
- Department of Neurology Incentive Compensation Committee 2014-2015
- Neurology Residency Program Evaluation Committee 2013-2022
- Neurology Education Committee 2012-2022
- Sleep Medicine Fellowship Clinical Competency Committee 2012-2022
- Sleep Medicine Fellowship Program Evaluation Committee 2012-2022
- Sleep Medicine Fellowship Applicant Interview Committee 2011-2022

## Community

Parkinson's Association of Alabama  
Board Member

2018-2022

## LICENSURE:

- |                             |              |
|-----------------------------|--------------|
| 1. Colorado Medical License | 2022-present |
| 2. Alabama Medical License  | 2007-2022    |
| 3. DEA                      | 2007-present |

## BOARD CERTIFICATION:

National Board of Medical Examiners	2006
American Board of Psychiatry and Neurology	2009, 2019
American Board of Sleep Medicine	2011, 2021

## REVIEW AND REFEREE WORK:

Editorial Board: Review Editor

Frontiers in Precision Sleep Research

Frontiers in Sleep Disorders

Grant Reviewer:

NIH NINDS

Clinical Neuroscience and Neurodegeneration 2023

Study Section

Udall Centers P50 Review 2021

Department of Defense Congressionally Directed Medical Research Programs

Neurotoxin Exposure Treatment Parkinson's Program 2020

Parkinson's Research Program 2018

NIH NIA

Small Research Grant Program for the Next  
Generation of Clinical Researchers in AD and  
ADRD Research (R03 Clinical Trial Optional) 2018

American Academy of Neurology

Clinical Research Training Fellowships 2015, 2016, 2017, 2018,  
2019, 2020, 2021, 2023

Michael J. Fox Foundation Biomarkers Program 2016

*Ad hoc* reviewer for:

Movement Disorders

Annals of Neurology

Movement Disorders Clinical Practice

Frontiers in Sleep Medicine

Frontiers in Neurology

Parkinsonism and Related Disorders

Journal of Parkinson's Disease

Journal of Clinical Sleep Medicine

Sleep Medicine

Clinical Neurology and Neurosurgery

Journal of Neurology and Neurosurgery

Neuromodulation

Journal of Neuroscience and Clinical Research

## **MAJOR LECTURES AND VISITING PROFESSORSHIPS:**

### **A. Invited Lectures (National/International)**

1. 04/23/2023: Moderator: Sleep Science Session, American Academy of Neurology Annual Meeting, Boston, MA
2. 09/12/2022: Penn State College of Medicine Translational Brain Research Center: “Exercise, Sleep, and Cognition in Parkinson’s Disease”
3. 09/09/2022: Davis Phinney Foundation Victory Summit: “Sleep and Parkinson’s Disease”
4. 04/22/2022: Southern Sleep Society 44<sup>th</sup> Annual Meeting: “Non-pharmacologic Therapy for Sleep Dysfunction in Neurodegenerative Disease”
5. 04/13/2022: University of Colorado Grand Rounds: “Sleep, Cognition, and Exercise in Parkinson’s Disease”
6. 03/03/2022: Rush University Movement Disorders Grand Rounds: “Exercise and Parkinson’s Disease”
7. 09/10/2021: Temple University Neurology Grand Rounds: “Training the Brain: The Effects of Exercise on Sleep in Parkinson’s Disease”
8. 08/13/2021: Brigham and Women’s Hospital Movement Disorders Research Seminar Series: “Training the Brain: The Effects of Exercise on Sleep in Parkinson’s Disease”
9. 08/10/2021: INSIGHT into Parkinson’s 2021: “Understanding and Addressing Sleep Dysfunction in Parkinson’s Disease”
10. 07/18/2019: National Academy of Neuropsychology Webinar: “Sleep and Cognition in Neurodegenerative Disease”
11. 05/02/2019: Parkinson’s Progression Markers Initiative Annual Meeting: “Effect of Sex on Disease Progression in Parkinson’s Disease” on behalf of the Gender Working Group, New York, New York
12. 10/20/2018: 5<sup>th</sup> Annual Virginia Regional Movement Disorders Symposium: Keynote Address: “Sleep Dysfunction in Parkinson’s Disease”
13. 10/19/2018: Grand Rounds, University of Virginia: “Training the Brain: Non-Pharmacologic Interventions for Sleep and Cognition in Parkinson’s Disease”
14. 04/22/2018: American Academy of Neurology Annual meeting Experiential Talk: “The Exciting World of Movement Disorders”, Los Angeles, CA
15. 06/02/2018: Women and PD TALK Regional Forum Leader, Parkinson Foundation
16. 10/15/2017: 142<sup>nd</sup> Annual meeting of the American Neurological Association: “Slow Wave Sleep is Associated with Cognitive Performance in Patients with Parkinson’s Disease”, San Diego, CA
17. 09/22/2016: 4<sup>th</sup> World Parkinson Congress: “Sleep Disturbances in PD”, Portland, OR
18. 09/23/2016: 4<sup>th</sup> World Parkinson Congress: “Fatigue, Sleep, and PD”, Portland, OR
19. 04/19/2016: Geriatric Research Education and Clinical Centers (GRECC) Planning and Collaboration meeting: “Exercise, Sleep, and Vigilance in Parkinson’s Disease”, Atlanta, GA
20. 04/17/2015: 37<sup>th</sup> Annual Southern Sleep Society Meeting: “Sleep Disorders in Degenerative Brain Disease”; New Orleans, LA
21. 04/26/2014: American Academy of Neurology Research Career Development Symposium: How to be Successful in Academic Neuroscience. Session speaker and mentor. American Academy of Neurology Annual Meeting, Philadelphia, PA
22. 02/27/2012: Emory University Sleep Medicine Conference: “The Effects of Low Frequency Unilateral STN DBS on Sleep in Parkinson’s Disease”, Atlanta, GA

### **B. Invited Lectures (Local):**

1. 08/04/2023: University of Colorado Sleep and Circadian Summer School: “Sleep and Movement Disorders”, Boulder, CO

2. 05/11/2023: Colorado Neurological Society: "Sleep Disorders in Neurology", Denver, CO
3. 08/23/2022: UAB Neurology Grand Rounds: "Sleep, Cognition, and Exercise in Parkinson's Disease", Birmingham, AL
4. 08/06/2022: Sleep Professionals of Alabama Annual Meeting: "REM Sleep Behavior Disorder", Orange Beach, AL
5. 02/03/2022: UAB Brain Computer Interface Lecture Series: "Sleep EEG in Parkinson's disease", Birmingham, AL
6. 10/30/2020: UAB Sleep and Circadian Discussion Series: "Impact of Exercise on Sleep in Parkinson's disease", Birmingham, AL
7. 12/06/2019: Lunch & Learn: Women in Exercise Science and Medicine: "Exercise and Sleep in Parkinson's Disease", Birmingham, AL
8. 10/24/2019: Tanner Foundation Symposium: Non-motor symptoms in Parkinson's Disease", Birmingham, AL
9. 04/24/2019: UAB Family Medicine Grand Rounds: "Sleep Apnea: Impact, Diagnosis, and Treatment", Birmingham, AL
10. 10/30/2018: Rehabilitation Science Seminar Series: "Training the Brain: The Impact of Exercise on Sleep and Cognition in Parkinson's Disease", Birmingham, AL
11. 05/20/2016: Alabama Association of Sleep Professionals Annual Meeting: Effects of Exercise on Sleep", Birmingham, AL
12. 03/05/2016: 43<sup>rd</sup> Annual University of Alabama Medical Alumni Weekend CME Scientific Program: "Daytime Sleepiness in Neurological Disease"
13. 05/08/2015: Alabama Association of Sleep Professionals Annual Meeting: "Movement Disorders of Sleep and Sleep Dysfunction in Waking Movement Disorders"; Pensacola, FL
14. 04/09/2015: Comprehensive Neuroscience Center Retreat: "Use of a Virtual Reality Street-Crossing Task to Assess Daytime Vigilance in Patients with Parkinson's Disease: Columbiana, AL
15. 03/03/2015: University of Alabama at Birmingham, Department of Neurology Grand Rounds: "Excessive Daytime Sleepiness in Neurological Disease", Birmingham, AL
16. 09/15/2014: Virtual Reality Lab Meeting for laboratory of David Schwebel, PhD: "Use of a Virtual Reality Street-Crossing Task to Assess Daytime Sleepiness and Vigilance in Parkinson's Disease"
17. 10/2/2012: University of Alabama at Birmingham, Department of Neurology Grand Rounds: "The Effects of Deep Brain Stimulation on Non-Motor Symptoms in Parkinson's Disease", Birmingham, AL
18. 02/20/2012: Virtual Reality Lab Meeting for laboratory of David Schwebel, PhD: "The Effects of Low Frequency Unilateral STN DBS on Sleep in Parkinson's Disease"
19. 10/29/2011: 8<sup>th</sup> Annual UAB/Alabama Neurological Association Neurology Update: A CME Conference, "Sleep Disorders in Parkinson's Disease", Hoover, AL.
20. 10/02/2010: 2<sup>nd</sup> Annual VA Sleep Symposium: "Sleep Disorders in Parkinson's Disease and Movement Disorders of Sleep", Birmingham, AL
21. 02/23/2010: University of Alabama at Birmingham, Department of Neurology Grand Rounds: "Unilateral STN DBS Improves Sleep Quality in Parkinson's Disease", Birmingham, AL
22. 01/13/2009: University of Alabama at Birmingham, Department of Neurology Grand Rounds: "To Sleep: Perchance to Dream: Ay, There's the Rub: REM Sleep Behavior Disorder and Parkinsonism: What is the Connection?", Birmingham, AL
23. 05/??/2004: Department of Cell Biology, University of Alabama at Birmingham, "The effects of p53 mutants on wild-type p53 family members", Birmingham, AL

### C. Invited Community Lectures:

1. 04/10/2024: Cherry Hills Village Support Group: “Sleep in Parkinson’s Disease”, Denver, CO
2. 02/14/2024: Crocket, Texas Parkinson’s Disease Support Group: “Sleep in Parkinson’s Disease”, virtual talk
3. 10/28/2023: 10<sup>th</sup> Annual Parkinson’s Disease Symposium: Keynote speaker: “Exercise and Parkinson’s Disease”, Denver, CO
4. 09/16/2023: Parkinson’s Families of Northwest Kansas 2023 Symposium” Importance of Exercise, Nutrition, and Socialization in Parkinson’s Disease”, Colby, KS
5. 06/24/2023: Parkinson’s IQ and You: “Exploring the Latest Parkinson’s Research” Panel discussion. Denver, CO
6. 05/13/2023: Parkinson Association of the Rockies, Chat with the Parkinson’s Pro: “Parkinson’s Disease and Cognition”, Glenwood Springs, CO
7. 01/21/2022: Parkinson Foundation Lecture Series; Living with Parkinson’s disease; Beyond the Diagnosis: “Managing Changing Symptoms: Exercise and Parkinson’s disease”, virtual lecture and discussion
8. 10/21/2021: Neuroscience Café: “Training the Brain: Exercise for Neurological Disorders”, Birmingham, AL
9. 10/22/2020: Parkinson’s Association of Alabama Webinar Series: “Sleep and Parkinson’s Disease”, Birmingham, AL
10. 06/05/2020: Parkinson’s Association of Alabama Webinar Series: “Update on Parkinson’s Disease Research”, Birmingham, AL
11. 10/24/2019: Tanner Foundation Annual Symposium: “Non-motor symptoms in Parkinson’s Disease”, Birmingham, AL
12. 04/09/2019: Birmingham Parkinson’s Disease Support Group: “Sleep in Parkinson’s Disease”, Birmingham, AL
13. 03/14/2019: Neuroscience Café: “Sleep, Life, Balance, and Parkinson’s Disease, Birmingham, AL
14. 09/15/2018: Parkinson’s Association of Alabama Symposium: “Parkinson’s Disease and Sleep”, Birmingham, AL
15. 09/15/2016: Birmingham Parkinson’s Disease Support Group: “Sleep in Parkinson’s Disease”, Birmingham, AL
16. 09/13/2015: Parkinson’s Disease Support Group: “Sleep Disorders in Parkinson’s Disease”, Auburn, AL
17. 04/06/2015: Birmingham Easonian Bible College: “Alzheimer’s Disease and Parkinson’s Disease”, Birmingham, AL
18. 06/28/2014: Parkinson Association of Alabama Symposium: “Practical Information for Living with Parkinson Disease: Sleep Disorders” Homewood, AL
19. 09/20/2012: Birmingham Young Onset Parkinson’s Disease Support Group: “Sleep Disorders in Parkinson’s Disease”, Birmingham, AL
20. 11/20/2011: Birmingham Parkinson’s Disease Support Group: “Sleep Disorders in Parkinson’s Disease”, Birmingham, AL
21. 04/10/2011: Parkinson’s Disease Support Group: “Sleep disorders in Parkinson’s disease”, Huntsville, AL
22. 02/10/2011: What it means to be a scientist, discussion with Cub Scout Pack 320 for Science badge, Birmingham, AL
23. 06/13/2010: Parkinson’s Disease Support Group: “Sleep Disorders in Parkinson’s Disease”, Auburn, AL

### TEACHING EXPERIENCE:



## Formal Teaching

<b>NATIONAL COURSES</b>			
<b>Date</b>	<b>Course</b>	<b>Role/Title</b>	<b>Location</b>
April 2023 April 2022 April 2019 April 2018	American Academy of Neurology Research Career Symposium	Small Group Facilitator/Mentor	Boston, MA Seattle, WA Philadelphia, PA Los Angeles, CA
October 2022	American Neurological Association-NINDS Career Development Symposium	Panelist and Mentor	Chicago, IL
April 2021	American Academy of Neurology Research Career Symposium	Director	
<b>MEDICAL STUDENTS</b>			
2016-2022	Sleep Medicine Elective for medical students	Course Director	University of Alabama at Birmingham
2016-2022	Simulation for Neurology Clerkship	Course Co-Director	University of Alabama at Birmingham
09/05/2018	Medical Neuroscience Course Lecture	“Parkinson’s Disease: Medical and Surgical Treatments” 55-minute lecture including patient presentation	University of Alabama at Birmingham
11/08/2017 11/09/2016 11/11/2015	Medical Neuroscience Course lecture	“Parkinson’s Disease: Epidemiology, Etiology, Pathology, Clinical Features, Treatment Options, and Patient presentation” 100-minute lecture including patient presentation	University of Alabama at Birmingham
2009-2016	Medical Neuroscience Course for MS2s	Small group leader for 6 sessions each year	University of Alabama at Birmingham
11/01/2010	Pediatric Clerkship for MS3	“Pediatric Sleep Apnea” 50-minute lecture	University of Alabama at Birmingham
<b>HOUSE OFFICERS</b>			
<b>Neurology Residents</b>			
2021-2022	Neurology Resident Sleep Medicine Rotation	Course director	University of Alabama at Birmingham
3/11/2022	Neurology Residents Conference Series	“Parasomnias” 60-minute lecture and discussion	University of Alabama at Birmingham
11/5/2020	Neurology Residents Conference Series	“Sleep Disorders and Treatment” 60-minute lecture and discussion	University of Alabama at Birmingham
6/17/2019	Neurology Residents Conference Series	“Sleep Disorders II” 60-minute lecture and discussion	University of Alabama at Birmingham
5/23/2019	Neurology Residents Conference Series	“Sleep Disorders I” 60-minute lecture and discussion	University of Alabama at Birmingham
12/02/2016 03/18/2016	Neurology Residents Conference Series	“Parasomnias” 60-minute lecture and video presentation	University of Alabama at Birmingham

04/13/2015	Neurology Residents Conference Series	“Sleep and Movement Disorders” 60-minute lecture and video presentation	University of Alabama at Birmingham
03/24/2015 10/29/2013 08/28/2012	Neurology Residents Conference Series	“Clinical Manifestations, Epidemiology, and Genetics of Parkinson’s Disease” 60-minute lecture	University of Alabama at Birmingham
04/15/2014 05/18/2012	Neurology Residents Conference Series	“Movement Disorders Caused by Systemic Disease” 60-minute lecture	University of Alabama at Birmingham
10/04/2012	Neurology Residents Conference Series	“Management of Non-Motor Aspects of Parkinson’s disease” 60-minute lecture	University of Alabama at Birmingham
10/12/2011 10/28/2010	Neurology Residents Conference Series	“Nonmotor symptoms of Parkinson’s disease” 60-minute lecture	University of Alabama at Birmingham
01/31/2011 02/01/2010	Neurology Residents Conference Series	Resident In-Service Training Exam review “Clinical Adult Neurology” 60-minute lecture	University of Alabama at Birmingham
04/26/2010	Neurology Residents Conference Series	Movement Disorders Video Conference 60-minute lecture	University of Alabama at Birmingham
09/01/2009	Neurology Residents Conference Series	“Treatment of Parkinson’s disease” 60-minute lecture	University of Alabama at Birmingham
<b>Sleep Medicine Fellows</b>			
2/4/2022 5/7/2021 5/1/2020 4/19/2019	Sleep Medicine Fellows Lecture	“Sleep Related Movement Disorders II” -60-minute lecture and discussion	University of Alabama at Birmingham
8/18/2022 1/28/2022 4/30/2021 4/24/2020 4/12/2019	Sleep Medicine Fellows Lecture	“Sleep Related Movement Disorders I” 60-minute lecture and discussion	University of Alabama at Birmingham
04/01/2016 04/10/2015 04/11/2014 04/05/2013 03/30/2012	Sleep Medicine Fellows Conference Series	“Movement Disorders of Sleep” 60-minute lecture	University of Alabama at Birmingham
04/08/2015 03/04/2015 04/04/2014	Sleep Medicine Fellows Conference Series	“REM Sleep Behavior Disorder” 60-minute lecture	University of Alabama at Birmingham
03/23/2012	Sleep Medicine Fellows Conference Series	“Parasomnias in Adults and Children” 60-minute lecture	University of Alabama at Birmingham
04/08/2011	Sleep Medicine Fellows Conference Series	“Restless Legs Syndrome” 60-minute lecture	University of Alabama at Birmingham
11/08/2012 02/20/2012	Sleep Medicine Fellows Board Review Series	“Circadian Rhythm Disorders” 60-minute lecture	University of Alabama at Birmingham

09/19/2012 09/19/2011	Sleep Medicine Fellows Board Review Series	“Artifacts on Polysomnography” 60- minute lecture	University of Alabama at Birmingham
<b>Movement Disorders Fellows</b>			
10/20/2020	Movement Disorders Fellowship Lecture Series	“REM Sleep Behavior Disorder” 60- minute lecture and discussion	University of Alabama at Birmingham
1/7/2020	Movement Disorders Fellows Conference Series	“Restless Legs Syndrome” 60- minute lecture and discussion	University of Alabama at Birmingham
09/19/2017	Movement Disorders Fellowship Didactic Series	“Sleep in Parkinson’s Disease and Other Movement Disorders” 60- minute lecture	University of Alabama at Birmingham
<b>GRADUATE STUDENTS</b>			
Spring 2020 Spring 2021	GBS 747: Sleep and Circadian Journal Club	Course co-director	University of Alabama at Birmingham
Fall 2015 Fall 2016 Fall 2018 Fall 2019	GBSC 700: Sleep Medicine Journal Club	Course Director	University of Alabama at Birmingham
03/10/2016 09/24/2015	Psychology 420: Introduction to Sleep Medicine course	“REM Sleep Behavior Disorder and other Parasomnias” 70-minute lecture	University of Alabama at Birmingham
02/11/2016	Translational Approaches in Neurodegeneration (GBS 729).	“Clinical Manifestations of Parkinson’s Disease” 1-hour lecture/debate session	University of Alabama at Birmingham
04/20/2012	Circadian Rhythms Journal Club	“The Effects of Low Frequency STN DBS on Sleep in Parkinson’s Disease”	University of Alabama at Birmingham
<b>UNDERGRADUATE STUDENTS</b>			
12/07/2012	Undergraduate Neuroscience Colloquium	“The Effects of Low Frequency Deep Brain Stimulation on Sleep and Vigilance in Parkinson’s Disease” 50-minute lecture	University of Alabama at Birmingham

**Ward Attending Duties:**

University of Alabama at Birmingham:

Bedside teaching, supervision, and rounding room teaching of residents on General Neurology inpatient service and Neurology Consult inpatient service for 4-6 weeks per year from 2012-2022

**Clinic Attending Duties:**

University of Colorado:

Supervision of Neurology Residents and Movement Disorders Fellows in clinic two ½ days per week 2022-2023

University of Alabama at Birmingham:

Supervision of Neurology Residents and medical students as well as Sleep Medicine Fellows and Movement Disorders Fellows in clinic 2012-2022

- Movement Disorders Clinic: ½ day every other week

- Sleep Medicine Clinic: ½ day every week

### **Innovative Course Development:**

I served as course co-director for a neurology simulation course for 3<sup>rd</sup> year medical students, nursing students, and pharmacy students. This course was based in the Office of Interprofessional Stimulation for Innovative Clinical Practice. We designed two neurology simulation cases to provide real world education for students encountering neurological illness. Both cases utilized standardized patients rather than mannequins. I facilitated the cases by communicating with the standardized patients throughout the case to direct their responses based on the learners' questions and actions. The most important part of each session was the debriefing following the case when we reviewed the learners' feelings about the case, their actions in caring for the simulated patient, and important learning points. This was structured as a guided conversation rather than a lecture. One case was for acute ischemic stroke, and one was for new onset seizure and status epilepticus. As course co-director, I also frequently adjusted the parameters of the case based on the learners present (presence or absence of nursing and pharmacy students for each session).

### **GRANT SUPPORT:**

#### Current Support:

**R01HD100670** Amara (PI) 04/01/2021 – 03/31/2026  
NIH/NICHD TDC: \$2,383,303

Slow wave sleep as a biomarker of rehabilitation-induced cognitive improvement in Parkinson's disease  
This study will investigate deep sleep as a marker of rehabilitation-induced improvement in cognition in Parkinson's disease to guide selection of the optimal exercise prescription for individual persons with Parkinson's disease.

**PPMI 2.0** Marek (PI) 04/08/2020 - 03/31/2025  
Michael J. Fox Foundation for Parkinson's Research ADC varies: (per participant trial)  
The Parkinson's Progression Markers Initiative (PPMI) 2.0 Clinical - Establishing a Deeply Phenotyped PD Cohort

The overall goal of PPMI 2.0 is to identify markers of disease progression for use in clinical trials of therapies to reduce progression of PD disability.

Role: Site Co-Investigator

**U01NS113851** Corcos (PI) 09/25/19 – 07/31/24  
NIH NINDS ADC varies (per patient trial)

Study in Parkinson Disease of Exercise Phase 3 Clinical Trial: SPARX3  
The study objective of this 29-site, international Phase III trial is to establish the efficacy of high-intensity endurance exercise as first-line therapy for recently diagnosed people with Parkinson's disease (PD). No medications are yet proven to slow the progression of the signs of PD and dopaminergic medications do not benefit all the signs of PD. As such, people with PD have no adequate treatment to slow down the progression of the motor or non-motor signs of the disease. The key question is whether there is an additional benefit of exercising at high intensity, in terms of slowing the progression of the signs of the disease, beyond the well documented benefit of treadmill training on general parameters of fitness, gait and functional mobility.

Role: Site co-investigator

#### Pending Support

#### **Aligning Science Across Parkinson's (ASAP) Initiative**

La Jolla Institute for Allergy and Immunology/MJFF TDC: \$101,659

T cell responses to common antigens in individuals with Parkinson disease and Healthy controls

The goal of this study is to identify autoimmune antigens, epitopes, and T-cell responses in Parkinson's disease and to investigate the association of PD with general inflammation.

Role: Site PI

Prior Support

**CCTS Pilot Program** Shaban (PI) 05/01/2022 – 04/30/2023  
Center for Clinical and Translational Science TDC: \$60,000  
Artificial Intelligence for Identification of Mild Cognitive Impairment Biomarkers in Parkinson's disease.  
The goals of this study are to use machine and deep learning techniques of sleep EEG to predict novel features and biomarkers of cognitive dysfunction in Parkinson's disease  
Role: Co-investigator

**Pilot Program** Amara (PI) 09/01/2021 – 08/31/2022  
UCEM/HRC/McKnight Brain Institute Joint Pilot Program TDC: \$50,000  
The Heart-brain Connection, Neuroinflammation, and Cognitive Dysfunction in Older Adults  
The goals of the study are to determine relationships between cognitive performance, neuroinflammation, heart rate variability, and aerobic capacity in older adults.

**U01NS119562** Vaillancourt (PI) 12/01/2020 – 11/30/2023  
Parkinson Study Group TDC: \$96,525  
Web-based Automated Imaging Differentiation of Parkinsonism  
The primary goals are to develop and disseminate web-based automated imaging to distinguish Parkinson's disease, Multiple Systems Atrophy-Parkinsonism (MSAp), and Progressive Supranuclear Palsy (PSP).  
Role: Site PI at UAB

**U01NS11401** Videnovic (PI) 05/04/20 – 06/30/2022  
NIH/NINDS TDC: \$59,056  
A Dose Selection Trial of Light Therapy for Impaired Sleep in Parkinson's Disease  
The primary aims of this trial are to (i) determine whether once- or twice-daily bright-white light therapy (BWLTL) improves sleep in Parkinson's disease (PD) sufficiently to carry forward in a phase III efficacy trial and, if so, (ii) to select the superior dose frequency to carry forward.  
Role: Site PI at UAB

**Aligning Science Across Parkinson's (ASAP) Initiative** 10/01/2020 - 09/30/2023  
La Jolla Institute for Allergy and Immunology/MJFF  
Adaptive immunity in the etiology and progression of Parkinson's disease  
The goal of the study is to identify immune and inflammatory responses to proteins and antigens in blood collected from participants with Parkinson's disease, healthy controls, and REM sleep behavior disorder.  
Role: Site PI at UAB

**HSF GEF** Peterson, Amara, Thomas (PIs) 11/01/2019 - 10/31/2022  
Sleep and Circadian Research Core TDC: \$207,000  
The goal of this project is to establish infrastructure for patient-oriented research programs investigating sleep and circadian function and dysfunction  
Role: Co-director

N/A Amara (PI) 2/2/18 – 12/31/21  
La Jolla Instituted for Allergy and Immunology TDC: \$98,022  
Development of T Cell-Based Biomarkers for Autoimmunity in Parkinson's Disease  
The goal of this study is to test the blood of PD and control participants to identify proteins, or parts of proteins, that trigger an immune response, identify T cells that may kill neurons, and identify genotype associated with the immune response with ultimate goal of development of a library of epitopes for biomarker use or therapeutic intervention.

**17S-MC-HBEH** Amara (PI) 06/15/2018 - 06/14/2022  
EISAI, INC. ADC: \$183,264  
Effect of LY3154207 on Cognition in Mild-to-Moderate Parkinson's Disease Dementia (PDD) (The PRESENCE Study)  
The purpose of this research is to find out if the study drug (LY3154207) has a benefit on cognitive and motor function, as well as a promotion of wakefulness in sleep-deprived healthy adults. Role: Site Principal Investigator

**PPMI** Standaert (PI) 07/27/10-12/31/2023  
Michael J. Fox Foundation ADC: \$98,305  
The Parkinson Progression Markers Initiative (PPMI)  
The primary objective of this study is to identify clinical, imaging and biologic markers of PD progression for use in clinical trials of disease-modifying therapies.  
Role: Investigator

**P50NS108675** Standaert (PI), Yacoubian (Core Leader) 07/01/2018 – 08/31/2023  
NIH ADC: \$233,425  
Innate and Adaptive Immunity in Parkinson Disease - Core B: Clinical Research Core  
The overall goal of this core is to assemble a well-characterized PD patient cohort for study with regard to neuroinflammation.  
Role: Co-Investigator at UAB

**SPARK Study** Stover (PI) 04/01/2018 – 12/14/2021  
Biogen Idec, Inc. TDC: \$199,759  
A Multicenter, Randomized, Double-Blind, Placebo-Controlled Study of the Safety, Pharmacokinetics, and Pharmacodynamics of BIIB054 in Subjects with Parkinson's Disease  
The primary objective of the study is to evaluate the dose-related safety of BIIB054.  
Role: Sub-investigator at UAB

**PASADENA** Nicholas (PI) 10/02/2017 – 10/01/2020  
F. Hoffmann-La Roche Ltd. ADC: \$157,627  
A Randomized, Double-Blind, Placebo-Controlled, 52-week Phase II Study to Evaluate the Efficacy and Intravenous RO7046015 (PRX002) in Participants with Early Parkinson's Disease with a 52-week Blinded Extension (PASADENA)  
The primary objective of this trial is to evaluate the efficacy of RO7046015 versus placebo, in participants with early Parkinson's disease (PD) (H&Y Stages I-II) who are untreated or treated with monoamine oxidase-B (MAO-B) inhibitors since baseline, as measured by change from baseline over 52 weeks on the Movement Disorder Society-Unified Parkinson's Disease Rating Scale (MDS-UPDRS) Total Score (sum of Parts I, II and III).  
Role: Sub-investigator

**Parkinson's Disease Foundation** Amara (PI) 02/01/2017-12/31/2018  
Translational Research Grant ADC: \$100,000  
Impact of a novel exercise intervention on executive function and sleep in patients with Parkinson's disease. The goal of this project is to investigate the impact of a novel exercise intervention on executive dysfunction and objective sleep outcomes in persons with PD  
Role: Principal Investigator

**James A. Pittman Jr. MD, Scholars Program** Amara (PI) 01/01/16-12/31/2020  
ADC: \$12,500

Award based on nomination by department chair and awarded to ‘recognize outstanding contributions of junior faculty and support continued research and discovery in basic and clinical sciences’.

**Rehabilitation Research Resource to Enhance Clinical Trials** 07/01/2017-06/30/2018

Pilot Grant Program

Amara (PI)

ADC: \$40,000

Mechanisms underlying exercise-induced improvement in sleep and cognition in Parkinson’s disease

The goal of this project is to determine if exercise-induced reduction in pro-inflammatory cytokines mediates exercise-induced improvements in sleep and executive function in Parkinson’s disease.

Role: Principal Investigator

**1K23NS080912**

Amara (PI)

09/26/12-10/31/17

NIH/NINDS

ADC: \$173,025

The Effect of Low Frequency STN DBS on Sleep and Vigilance in PD Patients

The major goal of this project is to compare the effects of low and high frequency unilateral STN DBS on sleep efficiency, wake-time vigilance, and quality of life in patients with Parkinson’s disease, both in the sleep laboratory and in a longer duration trial in the home environment.

Role: Principal Investigator

**NILO-PD**

Stover (PI)

02/01/2018-11/24/2021

Northwestern University

TDC: \$189,960

A Randomized, Double-Blind, Placebo-Controlled, Phase IIa, Parallel Group, Two-Cohort Study to Define the Safety, Tolerability, Clinical and Exploratory Biological Activity of the Chronic Administration of Nilotinib in Participants with Parkinson’s Disease (PD)

The goal of this study is to assess the safety and tolerability of the daily oral administration of nilotinib (150-300mg once daily) in moderate/advanced and early/de novo PD participants.

Role: Sub-investigator at UAB

**JZP166-201**

Amara (PI)

04/01/2018 – 11/14/2021

Jazz Pharmaceuticals, Inc.

TDC: \$110,584

A 4-Week, Double-blind, Placebo-Controlled, Randomized, Multicenter, Crossover Study of the Safety, Efficacy, and Pharmacokinetics of JZP-110 [(R)-2-Amino-3-Phenylpropylcarbamate Hydrochloride] in Subjects with Parkinson’s Disease and Excessive Sleepiness

The primary objective of the study is to evaluate the safety and tolerability of JZP-110 in the treatment of excessive sleepiness in adult subjects with Parkinson’s disease.

Role: Site Principal Investigator at UAB

**RVT-102-2002**

Amara (PI)

10/17/2016-10/16/2020

Axovant Sciences, Ltd.

ADC: \$108,970

A Phase 2, double-blind, randomized, placebo-controlled study of nelotanserin versus placebo in patients with dementia with Lewy bodies (DLB) experiencing REM sleep behaviors (RBD).

Role: Site Principal Investigator at UAB

**CIS-PD**

Amara (PI)

11/01/2016-10/31/2018

Michael J. Fox Foundation for Parkinson’s Research

ADC: \$89,280

Clinician-input study: how the Fox Wearable Companion mobile application can influence treatment and care. The goal of this study is to assess the feasibility of use and clinical impact of the wearable device derived patient performance data in the clinical setting.

Role: Site Principal Investigator at UAB

**(Systemic Synuclein Sampling Study)**

Amara (PI)

11/17/15-12/31/18

Michael J. Fox Foundation

ADC: \$161,200

The purpose of this study is to characterize the distribution of  $\alpha$ -synuclein pathology in multiple tissues and body fluids in individual subjects with clinically typical Parkinson's disease as compared to healthy controls  
Role: Site Principal Investigator at UAB

**7R01HD068488** Szaflarski (PI) 01/01/2012-12/31/2017  
NIH/NINDS ADC: \$377,283  
Post-Stroke Aphasia and rTMS Treatment (PART) Study  
Role: Investigator

**M12-920** Standaert (PI) 12/20/12-12/19/17  
AbbVie Laboratories ADC: \$156,189  
An Open-Label, Two Part, Multicenter Study to Assess the Safety and Efficacy of Levodopa-Carbidopa Intestinal Gel (LCIG) for the Treatment of Non-Motor Symptoms in Subjects with Advanced Parkinson's Disease  
Role: Investigator

**Roybal Center: P30 AG022838** Amara (PI) 06/01/15-05/31/17  
Pilot grant program ADC: \$43,646  
The Effect of Speed of Processing Training on Pedestrian Behavior in Parkinson's Disease and Healthy Older Adults  
The primary objective of this project is to determine the effects of speed of processing training as an intervention to improve safe pedestrian behavior in patients with Parkinson's disease and healthy older adults.  
Role: Principal Investigator

**Center for Clinical and Translational Science** Amara (PI) 09/01/15-08/30/16  
CCTS Multidisciplinary Pilot Program ADC: \$60,000  
The Effect of Exercise on Functional Connectivity and Vigilance in Parkinson's Disease  
The primary objective of this project investigate the differential effects of high intensity exercise training and standard of care on functional connectivity within the alerting attention network as it relates to vigilance in patients with Parkinson's disease.  
Role: Principal Investigator

**BioFIND** Amara (PI) 02/21/14-12/31/15  
Michael J. Fox Foundation ADC: 95,260  
The primary objective of this study is to identify clinical and biologic markers of moderate to advanced Parkinson's disease.  
Role: Site Principal Investigator at UAB

**HSF-GEF P2012-02** Avis (PI) 03/01/12-02/28/14  
Health Services Foundation General Endowment Fund ADC: \$75,300  
*Actigraphy Program for Patient-Oriented Research on Sleep and Circadian Rhythm Disorders*  
The major purpose of this project is to purchase equipment needed to establish an actigraphy program for research on sleep and circadian rhythm disorders.  
Role: Collaborator

**US-TYS-11-10238** Rinker (PI) 04/17/12-04/16/13  
Biogen Idec ADC: \$32,830  
*Therapeutic Effects of Natalizumab on Multiple Sclerosis Associated Ataxia and Tremor*  
Role: Investigator



**68-PA-11**Amara (PI) 08/15/11-08/14/12  
ADC: \$69,444American Sleep Medicine Foundation  
2011 Physician Scientist Training AwardTitle: *The Effects of Lower and High Frequency Unilateral STN DBS on Sleep in Parkinson's Disease*

Role: Principal Investigator

**UAB K-Scholars Program**

Amara (PI) Awarded; declined due to receipt of K23

UAB Center for Clinical and Translational Sciences

The Effect of Low Frequency Unilateral STN DBS on Sleep in Parkinson's Disease.

The major purpose of this project is to use a within-subject design to determine if low frequency unilateral STN DBS improves sleep efficiency and wake-time vigilance in patients with Parkinson's disease more effectively than high frequency stimulation.

Role: Principal Investigator

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69. Feuerstein, J and **AW Amara**. (2023) REM Behavior Disorder: Implications for PD Therapeutics. *Current Neurology and Neuroscience Reports; Section: Movement Disorders*. In press
70. Memon, AA, K Gelman, J Melott, M Fullard, C Catiul, S Miocinovic, and **AW Amara**. (2023) A systematic review of health disparities research in deep brain stimulation surgery for Parkinson's disease. *Frontiers in Human Neuroscience, Section: Brain Imaging and Stimulation*. In press
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72. Weintraub, D, C Marras, **AW Amara**, KE Anderson, LM Chahine, S Eberly, A Hosamath, D Kinel, S Mantri, S Mathur, D Oaks, JL Purks, DG Standaert, I Shoulson, and L Arbatti. (2024) Association between Subjective Cognitive Complaints and Incident Functional Impairment in Parkinson's Disease. *Movement Disorders*

#### **Letters to the Editor:**

73. **Amara, AW** and DG Standaert (2013) Metabolomics and the Search for Biomarkers in Parkinson's Disease. *Movement Disorders*. 28:1620-1. PMID: 24105981, PMCID: PMC4050667
74. **Amara AW**, KH Wood, A Joop, RA Memon, J Pilkington, SC Tuggle, J Reams, MJ Barrett, DA Edwards, AL Weltman, CP Hurt, G Cutter, MM Bamman. (2020) Reply to Exercise for "Sleep Rehabilitation" in Parkinson's Disease. *Movement Disorders*. 35:1286 PMID: 32691908
75. **Amara, AW**, C Catiul, A Videnovic. (2024) Let There be Light for Parkinson's Disease...but Only at the Right Time. *Sleep*. In press

#### **Submitted manuscripts under review:**

-- **AW Amara**, C Marras, A Hosamath, KE Anderson, LM Chahine, S Eberly, D Kinel, S Mantri, S Mathur, D Oakes, JL Purks, DG Standaert, D Weintraub, I Shoulson, and L Arbatti. Self-reported physical activity levels predict patient reported cognitive problems in Parkinson's disease.

-- KH Wood, R Nenert, AM Miften, GW Kent, RA Memon, A Joop, J Pilkington, AA Memon, RN Wilson, C Caiul, J Szaflarski, and **AW Amara**. Glymphatic function is associated with disease progression in Parkinson's disease.

-- R Nenert, C Mueller, C Catiul, J Pilkington, P Levan, A Sharma, JP Szaflarski, and **AW Amara**. Brain physiological pulsations are linked to quality of sleep and cognitive performance in older adults.

-- C Mueller, R Nenert, C Catiul, J Pilkington, JP Szaflarski, and **AW Amara**. Relationship between physical fitness, cognition, and brain microstructure in healthy older adults.

--C Mueller, R Nenert, C Catiul, J Pilkington, JP Szaflarski, and **AW Amara**. Brain metabolites are related to sleep architecture and cognitive functioning in older adults.

### **Book Chapters:**

1. Dohn, M, SE Nozell, **AC Willis**, and X Chen. (2003) "Tumor Suppressor Gene-inducible cell lines". In W El-Deiry (Ed.) Tumor Suppressor Genes: Volume 2: Regulation, Function, and Medicinal Applications, USA, Humana Press. PMID: 12777734
2. **Amara, AW** and HC Walker (2015), "Impact of Surgical Therapies on Sleep and Alertness in Parkinson's Disease". In Videnovic, A. and B. Högl (Eds.) Disorders of Sleep and Circadian Rhythms in Parkinson's Disease. Springer
3. **Amara, AW** and MH Maddox (2016), "Epidemiology of Sleep Medicine". In Kryger, M.H., T. Roth, and W. Dement (Eds.) Principles and Practice of Sleep Medicine (6<sup>th</sup> ed.). Philadelphia, PA, Elsevier
4. Dean, M and **AW Amara** (2020), "Clinical Trials for Sleep Disorder and Daytime Somnolence in Parkinson's Disease", In Perez-Lloret, S. (Eds.) Clinical Trials in Parkinson's Disease Neuromethods Vol. 160, (1<sup>st</sup> ed.). Springer.
5. Harsanyi, K, K Ratarasan, **AW Amara**, and MH Maddox (2022). "Epidemiology of Sleep Medicine". In Kryger, MH, TH Roth, and CA Goldstein (Eds.) Principles and Practice of Sleep Medicine (7<sup>th</sup> ed.). Philadelphia, PA, Elsevier

### **Other Products of Scholarship:**

1. **Amara, AW**, (2012), Video editor [DVD accompanying book], In RL Watts, DG Standaert, and JA Obeso (Eds.) Movement Disorders (3<sup>rd</sup> ed.). New York, McGraw Hill Medical.

### **Scientific Abstracts:**

#### Competitive

1. Purks, J, L Arabatti, L Hosamath, **AW Amara**, K Anderson, L Chahine, S Eberly, D Kinel, S Mathur, S Oakes, DG Standaert, D Weintraub, I Shoulson, and C Marras. (2023) PD-PROP reporting in



participants own words shows high burden of cognitive symptoms in early Parkinson' disease. International Parkinson's Disease and Movement Disorders Congress. Copenhagen, Denmark

2. Tan, C, H Nawaz, SK Lagman, LJ Cloud, **AW Amara**, TJ Druzgal, BD Berman, N Mukhopadhyay, and MJ Barrett (2023) Cholinergic Nucleus 4 Degeneration and Cognitive Impairment in REM Sleep Behavior Disorder. American Academy of Neurology Annual Meeting, Boston, MA; Oral presentation
3. Edney, B, AA Memon, C Catiul, Z Irwin, J Pilkington, RA Memon, A Joop, KH Wood, G Cutter, S Miocinovic, and **AW Amara**. (2022) Effects of STN DBS on quantitative sleep EEG in Parkinson's disease. Society for Neuroscience, San Diego, CA, Poster
4. Catiul, C, AA Memon, A Joop, R Memon, J Pilkington, KH Wood, and **AW Amara**. (2022) Comparison of polysomnography with actigraphy and Pittsburgh Sleep Quality Index in assessing sleep in Parkinson's disease. American Neurological Association, Chicago, IL, Poster
5. Memon AA, C Catiul, Z Irwin, J Pilkington, A Joop, RA Memon, KH Wood, G Cutter, S Miocinovic, and **AW Amara**. (2022) Sigma Absolute Spectral Power is Associated with Depression in Parkinson's Disease. International Congress of Parkinson's Disease and Movement Disorders (MDS), Madrid, Spain, Poster
6. Memon, AA, C Catiul, Z Irwin, J Pilkington, A Joop, RA Memon, KH Wood, S Miocinovic, and **AW Amara**. (2022) Frontal Slow Oscillation is Associated with Cognitive Function in Parkinson's Disease. 4 th Pan American Parkinson's Disease and Movement Disorders Congress, Miami, FL, Poster
7. Memon, A., C. Catiul, Z. Irwin, J. Pilkington, A. Joop, R. Memon, K.H. Wood, S. Miocinovic, and **A.W. Amara**. (2022) Frontal low delta spectral power is lower in patients with Parkinson's disease than in matched controls. American Academy of Neurology, Seattle, WA, Poster
8. Memon, A., C. Catiul, Z. Irwin, J. Pilkington, A. Joop, R. Memon, K.H. Wood, S. Miocinovic, and **A.W. Amara**. (2022) Frontal Slow Oscillation is Associated with Cognitive Function in Parkinson's Disease. 4<sup>th</sup> Pan American Parkinson's Disease and Movement Disorders Congress, Miami, FL, Poster
9. C. Catiul, R.A. Memon, A. Memon, A. Joop, J. Pilkington, K.H. Wood, and **A.W. Amara** (2021) Daytime Sleepiness in Parkinson's Disease: Subjective and Objective Measures. 146<sup>th</sup> Annual Meeting of the American Neurological Association, virtual poster
10. C. Catiul, A.A. Memon, JJ. Davis, J. Pilkington, A. Joop, K.H. Wood, and **A.W. Amara** (2021) Assessing the Role of Slow Wave Sleep on Longitudinal Cognitive Performance in Parkinson's Disease. Alabama Academy of Neurology Annual Meeting, Birmingham, AL, Poster
11. C. Catiul, R. Memon, A.A. Memon, A. Joop, J. Pilkington, K.H. Wood, and **A.W. Amara** (2021) Links between Cognitive Impairment and Contrast Sensitivity in Parkinson's Disease. International Parkinson's Disease and Movement Disorders Congress, virtual poster
12. A.A. Memon, K.H. Wood, A. Joop, R. Memon, J. Pilkington, C. Catiul, M. Bamman, S. Miocinovic, and **A.W. Amara** (2021) High Intensity Exercise Improves Sleep EEG Delta Power in Parkinson's Disease. International Parkinson's Disease and Movement Disorders Congress, virtual poster
13. **Amara, A.W.**, K.H. Wood, A. Joop, R. Memon, J. Pilkington, M. Bamman, and C. P. Hurt (2019) Relationship between Cognitive Performance and Mobility in Parkinson's Disease. International Congress of Parkinson's Disease and Movement Disorders, Nice, France, Poster

14. Layman, A. J.B. Allendorfer, A. Joop, R. Nenert, R. Memon, J. Pilkington, A.M. Goodman, A. Gerstenecker, K. Triebel, M.M. Bamman, **A.W. Amara**, J.P. Szaflarski, and K.H. Wood (2019) Exercise, cognition, and neural substrates of attention in Parkinson's disease. Annual Meeting of the Alabama Advanced Imaging Consortium. Delta, AL, Poster
15. **Amara, A.W.**, A. Joop, R. Memon, J. Pilkington, K.H. Wood, and M.M. Bamman (2019) The Effects of High-Intensity Exercise on Sleep in Parkinson's Disease. 71<sup>st</sup> Annual meeting of the American Academy of Neurology, Philadelphia, PA, Poster
16. McGhee, S.A., Fleming, L., Memon, R., Joop, A., Nenert, R., Pilkington, J., Gerstenecker, A., Triebel, K., Bamman, M.M., Visscher, K.M., **Amara, A.W.**, Wood, K.H. (2018). Brain atrophy is associated with cognitive function and motor features of Parkinson's disease. Annual Meeting of the Alabama Advanced Imaging Consortium. Delta, AL, Poster
17. **A.W. Amara**, R. Memon, A. Joop, J. Pilkington, A. Gerstenecker, K. Triebel, M. Bamman, and K.H. Wood. (2017) Slow Wave Sleep is Associated with Cognitive Performance in Patients with Parkinson's Disease. 142<sup>nd</sup> Annual meeting of the American Neurological Association, San Diego, CA, Oral presentation
18. A. Memon, R. Memon, K.H. Wood, A. Joop, J. Pilkington, S. Pati, M. Bamman, and **A.W. Amara**. (2017) The Influence of Exercise on Heart Rate Variability during REM Sleep in Parkinson's Disease. 142<sup>nd</sup> Annual meeting of the American Neurological Association, San Diego, CA, Poster
19. **A.W. Amara**, N. Seedorff, L.M. Chahine, K. Kiebertz, C.J. Caspell-Garcia, and T. Simuni (2017). Physical Activity Habits in Early Parkinson's Disease and Healthy Controls. 21<sup>st</sup> International Congress of Parkinson's Disease and Movement Disorders, Vancouver, BC, Canada, Poster
20. R.N. Alcalay, **A.W. Amara**, P. Taylor, H. Andrews, J.G. Goldman, T. Xie, P. Tuite, C. Henchcliffe, P. Hogarth, S. Frank, M-H. Saint-Hilaire, A. Naito, M. Frasier, V. Arnedo. A.N. Reimer, M. Sutherland, C. Swanson-Fischer, K. Gwinn, and U.J. Kang. (2017). CSF, plasma, and saliva alpha-Synuclein in moderately advanced Parkinson's disease cohort: the BioFIND study. 21<sup>st</sup> International Congress of Parkinson's Disease and Movement Disorders, Vancouver, BC, Canada, Poster
21. J.G. Goldman, **A.W. Amara**, L.M. Shaw, P. Taylor, H. Andrews, R.N. Alcalay, T. Xie, P. Tuite, C. Henchcliffe, P. Hogarth, S. Frank, M-H. Saint-Hilaire, A. Naito, M. Frasier, V. Arnedo. A.N. Reimer, M. Sutherland, C. Swanson-Fischer, K. Gwinn, and U.J. Kang. (2017). Association of CSF biomarkers with motor and non-motor features in moderately advanced Parkinson's disease cohort: the BioFIND study. 21<sup>st</sup> International Congress of Parkinson's Disease and Movement Disorders, Vancouver, BC, Canada, Poster
22. Wood, K.H., Memon, R.A., Reid, M.A., Joop, A., Pilkington, J., Harnett, N.G., DeRamus, T.P., White, D.M., Lahti, A.C., Gerstenecker, A., Triebel, K., Bamman, M.M., **Amara, A.W.** (2017). Hippocampal neurochemistry is associated with cognitive performance in patients with Parkinson's disease. Movement Disorders Society: Neuroimaging in Parkinson's disease and Related Disorders Symposium. Calgary, AB, Canada, Poster
23. Memon, R.A., Memon, A.A., Joop, A., Pilkington, J. Wood, K. and **Amara, A.W.** (2017). Comparison of Actigraphy with Polysomnographic studies in Patients with Parkinson Disease. 1<sup>st</sup> Pan American Parkinson's Disease and Movement Disorders Congress. Miami, FL, Poster

24. Memon, A.A. Memon, R.A., Joop, A., Pilkington, J., Wood, K., and **Amara, A.W.** (2017). Relationship between subjective and objective measures of sleepiness in Parkinson Disease. 1<sup>st</sup> Pan American Parkinson's Disease and Movement Disorders Congress. Miami, FL, Poster
25. **Amara, A.W.**, K.H. Wood, A. Joop, J. Pilkington, R. Memon, G. Cutter, and M. Bamman (2017). Effect of a Novel Exercise Intervention on Sleep and Executive Function in Parkinson's Disease. AMC21 School of Medicine Research Retreat. Birmingham, AL, Poster
26. Wood, K.H., Kelly, N.A., Allendorfer, J.B., Ford, Matthew P., Bickel, C.S., Marstrander, J., **Amara, AW**, Anthony, T., Bamman, M.M., Skidmore, F.M. (2016). Exercise increases resting-state brain activity in Parkinson's disease. American Physiological Society: The Integrative Biology of Exercise VII, Poster
27. Wood, K.H., Kelly, N.A., Allendorfer, J.B., Ford, Matthew P., Marstrander, J., **Amara, AW**, Bamman, M.M., and Skidmore, F.M. (2016). Exercise increases substantia nigra and prefrontal brain activity in Parkinson's disease. 4th Annual UAB Center for Exercise Medicine Symposium. Birmingham, AL, Poster
28. Luo, L., H.F. Andrews, J.G. Goldman, R.N. Alaclay, T. Xie, P. Tuite, C. Henchcliffe, P. Hogarth, **A. Amara**, S. Frank, A. Randolph, C. Casaceli, K. Gwinn, M. Sutherland, C. Kopil, L. Vincent, M. Frasier, U.J. Kang. (2016). Motor phenotype classification in moderate to advanced PD: Data from the BioFIND study. 20<sup>th</sup> International Congress of Parkinson's Disease and Movement Disorders, Berlin, Germany, Poster
29. **Amara, A.W.**, H.C. Walker, A. Joop, G. Cutter, S.M. Harding, and D.G. Standaert. (2015). Effects of STN DBS on Objective Sleep Measures in PD. ANA2015 (140<sup>th</sup> Annual Meeting of the American Neurological Association), Chicago, IL, Poster
30. Ford, K.J., D. Schwebel, A. Johnston, G. Cutter, and **A.W. Amara**. (2015). Sleepiness, Impaired Vigilance, and Visual Processing Deficits Affect Pedestrian Safety in Parkinson's Disease. SLEEP: 29<sup>th</sup> Annual Meeting of the Associated Professional Sleep Societies (American Academy of Sleep Medicine and the Sleep Research Society), Seattle, WA, Poster
31. Khawaja, A. and **A.W. Amara**. (2014). Refractory Status Epilepticus: A Report Of Two Cases To Illustrate The Significance Of GAD Antibody. American Academy of Neurology Annual Meeting. Philadelphia, PA, Poster
32. Ford, K.J., D. Schwebel, A. Johnston, G. Cutter, D.G. Standaert, and **A.W. Amara**. (2013). Evaluation of Vigilance in Parkinson's Disease Using a Virtual Reality Street-Crossing Task. American Neurological Association Annual Meeting, New Orleans, LA, Poster
33. **Amara, A.W.**, H.C. Walker, G. Cutter, S. Guthrie, R.L. Watts, and D.G. Standaert. (2012). Unilateral STN DBS Improves Depression in Patients with Moderate to Advanced Parkinson's Disease. 15<sup>th</sup> International Congress of Parkinson's Disease and Movement Disorders, Dublin, Ireland, Poster
34. **Amara, A.W.**, J. DeWolfe, H.C. Walker, G. Cutter, D. Schwebel, S. Harding, P. King, and D.G. Standaert. (2012). Proposed Study: The Effect of Low Frequency Unilateral STN DBS on Sleep in Parkinson's Disease. VA Research Week, Birmingham Veterans Affairs Medical Center, Birmingham, AL, Poster

35. **Amara, A.W.**, H.Walker, S. Guthrie, G. Cutter, D.G. Standaert, and R.L.Watts. (2010). Unilateral STN DBS improves sleep in Parkinson's Disease, American Academy of Neurology Annual Meeting, Integrated Neuroscience Session poster presentation, Poster
36. **Willis, A.C.**, J. Zhu, T. Pipes, and X. Chen. (2002) p73 can suppress the proliferation of cells that express mutant p53. poster presentation, International p53 Workshop, Barcelona, Spain, Poster
37. **Willis, A.C.**, J. Zhu, T. Pipes, and X. Chen. (2001) p73 can suppress the proliferation of tumor cells that carry mutant p53. poster presentation, *American Association for Cancer Research* Annual Meeting, New Orleans, LA, Poster

#### **MISCELLANEOUS:**

Dissertation Defense:

May, 2003: Medical College of Georgia, Institute of Molecular Medicine and Genetics: "The effects of p53 mutants on wild-type p53 family members", Augusta, GA, oral presentation