

CURRICULUM VITAE

Date: October 14, 2025

PERSONAL HISTORY

Name: **Amy Willis Amara, M.D., Ph.D.**
Prior name: Amy Catherine Willis
Current Position: Professor and Movement Disorders Section Chief
Leopold Korn and Michael Korn Endowed Chair in Parkinson's Disease

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

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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
July 2024-present	Professor with Tenure	University of Colorado, Anschutz Medical Campus
January 2024-present	Faculty, Rehabilitation Science PhD Program	University of Colorado, Anschutz Medical Campus
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:

Parkinson Study Group, Aevum Consultant	2025
PhotoPharmics, Inc.	2021-present
Gray Matter Technologies, LLC	2018-2024
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 th 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
• MDS LEAP Steering Committee	2025-present
<u>Parkinson Foundation</u>	
• Clinical Advisory Council	2025-present
<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
<u>American Academy of Neurology</u>	
• Facilitator: Associate Professors' Forum	2021-2022
• Wayne A. Hening Sleep Medicine Investigator Award Workgroup	2019-2025
• 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
<u>American Academy of Sleep Medicine</u>	
• Maintenance of Certification Question Writing Committee	2013-2018
• Movement Disorders Section member	2010-present

University of Colorado	
Behavioral Neurology Section Chief search committee	2025-present
Department of Neurology Clinical Leadership Council	2025-present
Neuroimmunology Section Chief search committee	2022-2024
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:	2022-present
Farah Abou Daya	
Dissertation Committee for PhD candidate:	2021-present
Jeevan Jadapalli	
Dissertation Committee Chair for R25/PhD candidate:	2019-2022
Adeel Memon, MD	
Dissertation Committee for PhD candidate:	2019-2021
Jutaluk Kongsuk	
Dissertation Committee for PhD candidate:	2018-2020
Katie Cederberg	
UAB Center for Exercise Medicine	2016-2019
Education Committee	
Dissertation Committee for PhD candidate	2016-2020
Ali Darwish	
Department of Neurology Consult Service	2015-2017

Improvement Committee	
Department of Neurology Incentive	2014-2015
Compensation Committee	
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	2011-2022
Applicant Interview Committee	

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

 Aging Systems and Geriatrics Study Section

 Clinical Neuroscience and Neurodegeneration

 Study Section

 Udall Centers P50 Review

Department of Defense Congressionally Directed Medical Research Programs

 Neurotoxin Exposure Treatment Parkinson's Program

 Parkinson's Research Program

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
British Medical Journal Open

MAJOR LECTURES AND VISITING PROFESSORSHIPS:

A. Invited Lectures (National/International)

1. 09/21/2025: Movement Disorders of Sleep: Movement Disorders Society-Pan American Section, 10th Annual Movement Disorders School for Neurology Residents, Denver, CO
2. 05/29/2025: Sleep in Movement Disorders: Movement Disorders Virtual Lecture Series
3. 05/02/2025: Parasomnias and Movement Disorders of Sleep, UAB Sleep Medicine Fellowship Didactic Series, Birmingham, AL
4. 04/14/2025: Sleep EEG in Parkinson's Disease: Emory University Udall Center Symposium, Atlanta, GA
5. 10/20/2024: Movement Disorders of Sleep. Movement Disorders Society-Pan American Section, 9th Annual Movement Disorders School for Neurology Residents, Chicago, IL
6. 06/18/2024: Sleep in PD and other Movement Disorders, Movement Disorders Fellowship Didactic Series, Birmingham, AL
7. 04/17/2024: Getting the Most out of Mentor/Mentee Relationships: American Academy of Sleep Medicine Young Investigators Research Forum, Bethesda, MD
8. 04/23/2023: Moderator: Sleep Science Session, American Academy of Neurology Annual Meeting, Boston, MA
9. 09/12/2022: Penn State College of Medicine Translational Brain Research Center: "Exercise, Sleep, and Cognition in Parkinson's Disease"
10. 09/09/2022: Davis Phinney Foundation Victory Summit: "Sleep and Parkinson's Disease"
11. 04/22/2022: Southern Sleep Society 44th Annual Meeting: "Non-pharmacologic Therapy for Sleep Dysfunction in Neurodegenerative Disease"
12. 04/13/2022: University of Colorado Grand Rounds: "Sleep, Cognition, and Exercise in Parkinson's Disease"
13. 03/03/2022: Rush University Movement Disorders Grand Rounds: "Exercise and Parkinson's Disease"
14. 09/10/2021: Temple University Neurology Grand Rounds: "Training the Brain: The Effects of Exercise on Sleep in Parkinson's Disease"
15. 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"
16. 08/10/2021: INSIGHT into Parkinson's 2021: "Understanding and Addressing Sleep Dysfunction in Parkinson's Disease"
17. 07/18/2019: National Academy of Neuropsychology Webinar: "Sleep and Cognition in Neurodegenerative Disease"

18. 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
19. 10/20/2018: 5th Annual Virginia Regional Movement Disorders Symposium: Keynote Address: "Sleep Dysfunction in Parkinson's Disease"
20. 10/19/2018: Grand Rounds, University of Virginia: "Training the Brain: Non-Pharmacologic Interventions for Sleep and Cognition in Parkinson's Disease"
21. 04/22/2018: American Academy of Neurology Annual meeting Experiential Talk: "The Exciting World of Movement Disorders", Los Angeles, CA
22. 06/02/2018: Women and PD TALK Regional Forum Leader, Parkinson Foundation
23. 10/15/2017: 142nd Annual meeting of the American Neurological Association: "Slow Wave Sleep is Associated with Cognitive Performance in Patients with Parkinson's Disease", San Diego, CA
24. 09/22/2016: 4th World Parkinson Congress: "Sleep Disturbances in PD", Portland, OR
25. 09/23/2016: 4th World Parkinson Congress: "Fatigue, Sleep, and PD", Portland, OR
26. 04/19/2016: Geriatric Research Education and Clinical Centers (GRECC) Planning and Collaboration meeting: "Exercise, Sleep, and Vigilance in Parkinson's Disease", Atlanta, GA
27. 04/17/2015: 37th Annual Southern Sleep Society Meeting: "Sleep Disorders in Degenerative Brain Disease"; New Orleans, LA
28. 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
29. 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. 06/05/2024: University of Colorado Department of Neurology Research Retreat: "Imaging Glymphatics in Parkinson's disease"; Aurora, CO
2. 08/04/2023: University of Colorado Sleep and Circadian Summer School: "Sleep and Movement Disorders", Boulder, CO
3. 05/11/2023: Colorado Neurological Society: "Sleep Disorders in Neurology", Denver, CO
4. 08/23/2022: UAB Neurology Grand Rounds: "Sleep, Cognition, and Exercise in Parkinson's Disease", Birmingham, AL
5. 08/06/2022: Sleep Professionals of Alabama Annual Meeting: "REM Sleep Behavior Disorder", Orange Beach, AL
6. 02/03/2022: UAB Brain Computer Interface Lecture Series: "Sleep EEG in Parkinson's disease", Birmingham, AL
7. 10/30/2020: UAB Sleep and Circadian Discussion Series: "Impact of Exercise on Sleep in Parkinson's disease", Birmingham, AL
8. 12/06/2019: Lunch & Learn: Women in Exercise Science and Medicine: "Exercise and Sleep in Parkinson's Disease", Birmingham, AL
9. 10/24/2019: Tanner Foundation Symposium: Non-motor symptoms in Parkinson's Disease", Birmingham, AL
10. 04/24/2019: UAB Family Medicine Grand Rounds: "Sleep Apnea: Impact, Diagnosis, and Treatment", Birmingham, AL
11. 10/30/2018: Rehabilitation Science Seminar Series: "Training the Brain: The Impact of Exercise on Sleep and Cognition in Parkinson's Disease", Birmingham, AL
12. 05/20/2016: Alabama Association of Sleep Professionals Annual Meeting: Effects of Exercise on Sleep", Birmingham, AL
13. 03/05/2016: 43rd Annual University of Alabama Medical Alumni Weekend CME Scientific Program: "Daytime Sleepiness in Neurological Disease"

14. 05/08/2015: Alabama Association of Sleep Professionals Annual Meeting: “Movement Disorders of Sleep and Sleep Dysfunction in Waking Movement Disorders”; Pensacola, FL
15. 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
16. 03/03/2015: University of Alabama at Birmingham, Department of Neurology Grand Rounds: “Excessive Daytime Sleepiness in Neurological Disease”, Birmingham, AL
17. 09/15/2014: Virtual Reality Lab Meeting for laboratory of David Schwobel, PhD: “Use of a Virtual Reality Street-Crossing Task to Assess Daytime Sleepiness and Vigilance in Parkinson’s Disease”
18. 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
19. 02/20/2012: Virtual Reality Lab Meeting for laboratory of David Schwobel, PhD: “The Effects of Low Frequency Unilateral STN DBS on Sleep in Parkinson’s Disease”
20. 10/29/2011: 8th Annual UAB/Alabama Neurological Association Neurology Update: A CME Conference, “Sleep Disorders in Parkinson’s Disease”, Hoover, AL.
21. 10/02/2010: 2nd Annual VA Sleep Symposium: “Sleep Disorders in Parkinson’s Disease and Movement Disorders of Sleep”, Birmingham, AL
22. 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
23. 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
24. 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. 07/09/2025: Davis Phinney Foundation Live Well Today Webinar: “Sleep, Light, and Parkinson’s Disease”. virtual talk
2. 06/28/2025: Grand Junction Parkinson’s Disease Support Group: “Sleep in Parkinson’s Disease”, Grand Junction, CO
3. 06/28/2025: Montrose Parkinson’s Disease Support Group: “Sleep in Parkinson’s Disease”, Montrose, CO
4. 01/28/2025: Eagle, CO Parkinson’s Support Group: “Sleep and PD”, virtual talk
5. 04/10/2024: Cherry Hills Village Support Group: “Sleep in Parkinson’s Disease”, Denver, CO
6. 02/14/2024: Crocket, Texas Parkinson’s Disease Support Group: “Sleep in Parkinson’s Disease”, virtual talk
7. 10/28/2023: 10th Annual Parkinson’s Disease Symposium: Keynote speaker: “Exercise and Parkinson’s Disease”, Denver, CO
8. 09/16/2023: Parkinson’s Families of Northwest Kansas 2023 Symposium” Importance of Exercise, Nutrition, and Socialization in Parkinson’s Disease”, Colby, KS
9. 06/24/2023: Parkinson’s IQ and You: “Exploring the Latest Parkinson’s Research” Panel discussion. Denver, CO
10. 05/13/2023: Parkinson Association of the Rockies, Chat with the Parkinson’s Pro: “Parkinson’s Disease and Cognition”, Glenwood Springs, CO

11. 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
12. 10/21/2021: Neuroscience Café: "Training the Brain: Exercise for Neurological Disorders", Birmingham, AL
13. 10/22/2020: Parkinson's Association of Alabama Webinar Series: "Sleep and Parkinson's Disease", Birmingham, AL
14. 06/05/2020: Parkinson's Association of Alabama Webinar Series: "Update on Parkinson's Disease Research", Birmingham, AL
15. 10/24/2019: Tanner Foundation Annual Symposium: "Non-motor symptoms in Parkinson's Disease", Birmingham, AL
16. 04/09/2019: Birmingham Parkinson's Disease Support Group: "Sleep in Parkinson's Disease", Birmingham, AL
17. 03/14/2019: Neuroscience Café: "Sleep, Life, Balance, and Parkinson's Disease, Birmingham, AL
18. 09/15/2018: Parkinson's Association of Alabama Symposium: "Parkinson's Disease and Sleep", Birmingham, AL
19. 09/15/2016: Birmingham Parkinson's Disease Support Group: "Sleep in Parkinson's Disease", Birmingham, AL
20. 09/13/2015: Parkinson's Disease Support Group: "Sleep Disorders in Parkinson's Disease", Auburn, AL
21. 04/06/2015: Birmingham Easonian Bible College: "Alzheimer's Disease and Parkinson's Disease", Birmingham, AL
22. 06/28/2014: Parkinson Association of Alabama Symposium: "Practical Information for Living with Parkinson Disease: Sleep Disorders" Homewood, AL
23. 09/20/2012: Birmingham Young Onset Parkinson's Disease Support Group: "Sleep Disorders in Parkinson's Disease", Birmingham, AL
24. 11/20/2011: Birmingham Parkinson's Disease Support Group: "Sleep Disorders in Parkinson's Disease", Birmingham, AL
25. 04/10/2011: Parkinson's Disease Support Group: "Sleep disorders in Parkinson's disease", Huntsville, AL
26. 02/10/2011: What it means to be a scientist, discussion with Cub Scout Pack 320 for Science badge, Birmingham, AL
27. 06/13/2010: Parkinson's Disease Support Group: "Sleep Disorders in Parkinson's Disease", Auburn, AL

TEACHING EXPERIENCE:

Formal Teaching

NATIONAL COURSES			
Date	Course	Role/Title	Location
September 2025	Movement Disorders Society-Pan American Section: 10 th Annual Movement Disorders School for Neurology Residents	Director	Denver, CO
October 2024	Movement Disorders Society-Pan American Section: 9 th Annual	Co-Director	Chicago, IL

	Movement Disorders School for Neurology Residents		
April 2024	American Academy of Sleep Medicine Young Investigators Research Forum	Faculty Mentor and Mock Grant Review Session Chair	Bethesda, MD
April 2024 April 2023 April 2022 April 2019 April 2018	American Academy of Neurology Research Career Symposium	Small Group Facilitator/Mentor	Denver, CO 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	
MEDICAL STUDENTS			
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
HOUSE OFFICERS			
Neurology Residents			
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
Sleep Medicine Fellows			
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
Movement Disorders Fellows			
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
GRADUATE STUDENTS			
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
UNDERGRADUATE STUDENTS			
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

Supervision of Sleep Medicine Fellows once a month

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 3rd 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 NIH/NICHD	Amara (PI)	04/01/2021 – 03/31/2026 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.		
KH007 Koneksa Health	Wagner (PI)	05/10/2024 – 04/30/2029 ADC varies (per participant trial)
A Two Part, Observational Basket Study to Determine Usability, Validity and Biomarker Discovery for Mobile EEG, Wearable and Device Collected Objective Measurement of Disturbed Sleep and Neurological Disorders (LEARNS) Role: Site PI		
BHV8000-301 Biohaven Therapeutics, LTD		10/01/2025 – 09/30/2030 ADC varies (per participant trial)
A Phase 2/3, Double-Blind, Placebo-Controlled Study of BHV-8000 in Participants with Early Parkinson's Disease. Role: Site PI		
Aligning Science Across Parkinson's (ASAP) Initiative La Jolla Institute for Allergy and Immunology/MJFF	Sulzer (PI)	08/31/2023 - 09/01/2024 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		
PPMI 2.0 Michael J. Fox Foundation for Parkinson's Research	Marek (PI)	04/08/2020 - 03/31/2025 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 Investigator

U01NS113851

Corcos (PI)

NIH NINDS

09/25/19 – 07/31/25

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 investigator

Pending Support

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 (BWLT) 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 Safety of 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

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

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

Axovant Sciences, Ltd.

Amara (PI)

10/17/2016-10/16/2020

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

Michael J. Fox Foundation for Parkinson's Research

Amara (PI)

11/01/2016-10/31/2018

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)

Michael J. Fox Foundation

Amara (PI)

11/17/15-12/31/18

ADC: \$161,200

The purpose of this study is to characterize the distribution of α -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

NIH/NINDS

Szaflarski (PI)

01/01/2012-12/31/2017

ADC: \$377,283

Post-Stroke Aphasia and rTMS Treatment (PART) Study

Role: Investigator

M12-920

AbbVie Laboratories

Standaert (PI)

12/20/12-12/19/17

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

Royal Center: P30 AG022838

Pilot grant program

Amara (PI)

06/01/15-05/31/17

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

CCTS Multidisciplinary Pilot Program

Amara (PI)

09/01/15-08/30/16

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

Michael J. Fox Foundation

Amara (PI) 02/21/14-12/31/15

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

Health Services Foundation General Endowment Fund

Avis (PI) 03/01/12-02/28/14

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

Biogen Idec

Rinker (PI) 04/17/12-04/16/13

ADC: \$32,830

Therapeutic Effects of Natalizumab on Multiple Sclerosis Associated Ataxia and Tremor

Role: Investigator

68-PA-11

American Sleep Medicine Foundation

Amara (PI) 08/15/11-08/14/12

ADC: \$69,444

2011 Physician Scientist Training Award

Title: *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

BIBLIOGRAPHY:

95 peer-reviewed manuscripts

Papers Published in Peer-Reviewed Journals:

1. Lai, K, AC Willis, and LJ Elsas. (1999) The Biochemical Role of Glutamine 188 in Human Galactose-1-Phosphate Uridyltransferase. *Journal of Biological Chemistry*. 274:6559-66. PMID: 10037750
2. Willis, AC and X Chen. (2002) The Promise and Obstacle of p53 as a Cancer Therapeutic Agent. *Current Molecular Medicine*. 2:329-45. PMID: 12108946
3. Chen, X, G Liu, J Zhu, J Jiang, S Nozell, and AC Willis. (2003) Isolation and characterization of fourteen novel putative and nine known target genes of the p53 family. *Cancer Biology and Therapy*. 2:55-62. PMID: 12673118

4. **Willis, AC**, J Zhu, T Pipes, and X Chen. (2003) p73 can suppress the proliferation of cells that express mutant p53. *Oncogene*. 22:5481-95. PMID: 12934108
5. Nozell, S, Y Wu, K McNaughton, G Liu, **AC Willis**, JC Paik, and X Chen. (2003) Characterization of p73 functional domains necessary for transactivation and growth suppression. *Oncogene*. 22:4333-47. PMID: 12853970
6. **Willis, AC**, EJ Jung, T Wakefield, and X Chen. (2004) Mutant p53 exerts a dominant negative effect by preventing wild-type p53 from binding to the promoter of its target genes. *Oncogene*. 23:2330-8. PMID: 14743206
7. **Amara, AW**, K Bashir, CA Palmer, and HC Walker (2011) Challenges in diagnosis of isolated central nervous system vasculitis. *Brain and Behavior*. 1: 57-61. PMID: 22398982, PMC3217675
8. **Amara, AW**, RL Watts, and HC Walker. (2011) The effects of deep brain stimulation on sleep in Parkinson's disease. *Therapeutic Advances in Neurological Disorders*. 4: 15-24. PMID: 21339905, PMC3036959
9. **Amara, AW**, DG Standaert, S Guthrie, G Cutter, RL Watts, and HC Walker (2012) Unilateral subthalamic nucleus deep brain stimulation improves sleep quality in Parkinson's disease. *Parkinsonism and Related Disorders*. 18:63-8. PMID: 21924664, PMCID: PMC3249526
10. Sung, VW, RL Watts, CJ Schrandt, S Guthrie, D Wang, **AW Amara**, BL Guthrie, and HC Walker (2013) The relationship between clinical phenotype and early staged bilateral deep brain stimulation in Parkinson disease. *Journal of Neurosurgery*. 119: 1530-6. PMID: 24074493, PMCID: PMC3992872
11. Rinker, JR, AR Salter, HC Walker, **AW Amara**, W Meador, and GR Cutter. (2015) Prevalence and characteristics of tremor in the NARCOMS multiple sclerosis registry: a cross-sectional survey. *BMJ Open*. PMID: 25573524, PMCID: PMC4289717
12. Simuni, T, C Caspell-Garcia, C Coffey, LM Chahine, S Lasch, WH Oertel, G Mayer, B Hogl, R Postuma, A Videnovic, **AW Amara**, and K Marek (2015) Correlates of Excessive Daytime Sleepiness in De Novo Parkinson's Disease: A Case Control Study. *Movement Disorders*. 30:1371 PMID: 26095202
13. Chahine, LM*, **AW Amara***, and A Videnovic. (2016) A Systematic Review of the Literature on Disorders of Sleep and Wakefulness in Parkinson's Disease From 2005-2015. *Sleep Medicine Reviews*. PMID: 27863901, PMCID: PMC5332351 *These authors contributed equally to this work
14. Khawaja, AM, BL Vines, DW Miller, JP Szaflarski, and **AW Amara** (2016) Refractory Status Epilepticus and Glutamic Acid Decarboxylase Antibodies in Adults: Presentation, Treatment, and Outcomes. *Epileptic Disorders*. 18:34-43. PMID: 26878120
15. Chahine LM, SX Xie, T Simuni, B Tran, R Postuma, **AW Amara**, WH Oertel, A Iranzo, C Scordia, M Fullard, C Linder, R Purri, A Darin, L Rennert, A Videnovic, P Del Riva, and D Weintraub. (2016) Longitudinal changes in cognition in early Parkinson's disease patients with REM sleep behavior disorder. *Parkinsonism and Related Disorders*. 27:102. PMID: 27010070; PMCID: PMC5031362
16. Kang, UJ, JG Goldman, RN Alcalay, T Xie, P Tuite, C Henchcliffe, P Hogarth, **AW Amara**, S Frank, A Rudolph, C Casaceli, H Andrews, K Gwinn, M Sutherland, C Kopil, L Vincent, and M Frasier. (2016) The BioFIND Study: Characteristics of a Clinically Typical Parkinson's Disease Biomarker Cohort. *Movement Disorders*. 31:924. PMID: 27113479; PMCID: PMC5021110

17. Birchall EL, HC Walker, G Cutter, S Guthrie, A Joop, RA Memon, RLWatts, DG Standaert, and **AW Amara**, (2016) The Effect of Unilateral Subthalamic Nucleus Deep Brain Stimulation on Depression in Parkinson's Disease, *Brain Stimulation*. 10: 651. PMID: 28065487
18. **Amara, AW**, LM Chahine, and A Videnovic. (2017) Treatment of Sleep Dysfunction in Parkinson's Disease. *Current Treatment Options in Neurology*. 19:26. PMID: 28567500
19. **Amara, AW**, HC Walker, A Joop, G Cutter, JL DeWolfe, SM Harding, and DG Standaert. (2017) Effects of Subthalamic Nucleus Deep Brain Stimulation on Objective Sleep Outcomes in Parkinson's Disease. *Movement Disorders Clinical Practice*. 4:183. DOI: 10.1002/mdc3.12375. PMCID: 28924578; PMC5600204
20. **Amara, AW** and A Memon. (2017) Effects of Exercise on Non-motor Symptoms in Parkinson's Disease. *Clinical Therapeutics*. 40:8-15 PMID: 29198450
21. **Amara, AW**, LM Chahine, C Caspell-Garcia, JD Long, C Coffey, B Hogl, A Videnovic, A Iranzo, G Mayer, N Folvary, R Postuma, W Oertel, S Lasch, K Marek, T Simuni, and the Parkinson's Progression Markers Initiative. (2017) Longitudinal Assessment of excessive daytime sleepiness in early Parkinson's disease. *Journal of Neurology, Neurosurgery, and Psychiatry*. 88:653. PMID: 28554959: PMCID pending
22. Kelly, NA*, KH Wood*, JB Allendorfer, MP Ford, CS Bickel, J Marstrander, **AW Amara**, T Anthony, MM Bamman, and FM Skidmore. (2017) High-intensity Exercise Acutely Increases Substantia Nigra and Prefrontal Brain Activity in Parkinson's Disease. *Medical Science Monitor*. 23:6064. *These authors contributed equally to this work 23:6064-6071. PMID: 29273705
23. Ford, K, A Joop, KH Wood, K Ball, GR Cutter, DC Schwebel, and **AW Amara** (2017) Pedestrian Safety in Patients with Parkinson's Disease: A Case-Control Study. *Movement Disorders*. 32:1748-1755. PMID: 28976016. PMCID: PMC5732050
24. Joy, BR, **AW Amara**, and A Nakhmani (2017) Transform with No Parameters Based on Extrema Points for Non-Stationary Signal Analysis. *Circuits, Systems, and Signal Processing*. <https://doi.org/10.1007/s00034-017-0676-5>
25. Goldman, JG, H Andrews, **AW Amara**, A Naito, RN Alcalay, LM Shaw, P Taylor, T Xie, P Tuite, C Henchcliffe, P Hogarth, S Frank, M-H Saint-Hilaire, M Frasier, V Arnedo, AN Reimer, M Sutherland, C Swanson-Fischer, K Gwinn, and UJ Kang. (2017) CSF, plasma, and saliva in the BioFIND study: relationships among biomarkers and Parkinson's disease features. *Movement Disorders*. 33:282-288. PMID: 29205509
26. Sharma, VD, S Sengupta, S Chitnis, and **A.W. Amara** (2018) Deep Brain Stimulation and Sleep-Wake Disturbances in Parkinson Disease: A Review. *Frontiers in Neurology*. 9:697; PMID: 30210429; PMCID: PMC6119706
27. Beach, TG, GE Serrano, T Kremer, M Canamero, S Dziadek, H Sade, P Derkinderen, AG Corbille', F Letourneau, DG Munoz, CL White, J Schneider, JF Crary, LI Sue, CH Adler, MJ Glass, A Intoria, JE Walker, T Foroud, CS Coffey, D Ecklund, H Riss, J Goßmann, F Konig, CM Kopil, V Arnedo, L Riley, C Linder, KD Dave, D Jennings, J Seibyl, B Mollenhauer, LM Chahine, and the Systemic Synuclein Sampling Study (2018) Immunohistochemical Method and Histopathology Judging for the Systemic Synuclein Sampling Study. *Journal of Neuropathology and Experimental Neurology*. 77:793 PMID: 30107604, PMC6097838

28. Szalflarski, JP, J Friffis, J Vannest, JB Allendorfer, R Nenert, **AW Amara**, V Sung, HC Walker, AN Martin, VW Mark, and X Zhou (2018) A Feasibility Study of Combined Intermittent Theta Burst Stimulation and Modified Constraint-Induced Aphasia Therapy in Chronic Post-Stroke Aphasia. *Restorative Neurology and Neuroscience*. 36:503. PMID: 29889086

29. Marek, K, S Chowdhury, A Siderowf, S Lasch, CS Coffey, C Caspell-Garcia, T Simuni, D Jennings, CM Tanner, JQ Trojanowski, LM Shaw, J Seibyl, N Schuff, A Singleton, K Kieburtz, AW Toga, B Moellenhauer, D Galasko, LM Chahine, D Weintraub, T Foroud, D Tosun-Turgut, K Poston, V Arnedo, M Frasier, T Sherer, and the Parkinson's Progression Markers Initiative (2018) The Parkinson's progression markers initiative (PPMI)-establishing a PD biomarker cohort. *Annals of Clinical and Translational Neurology*. 5:1460. PMID: 30564614. PMC6292383

30. **Amara, AW**, L Chahine, N Seedorff, CJ Caspell-Garcia, C Coffey, T Simuni and the Parkinson's Progression Markers Initiative. (2019) Self-reported Physical Activity Levels and Clinical Progression in Early Parkinson's Disease. *Parkinsonism and Related Disorders*. 61:118. PMID: 30554993

31. Chahine, L.M, A Iranzo, A Fernandez-Arcos, T Simuni, N Seedorff, C Caspell-Garcia, **AW Amara**, C Comella, B Hogl, J Hamilton, K Marek, G Mayer, B Mollenhauer, R Postuma, E Tolosa, C Trenkwalder, A Videnovic, W Oertel, and the PPMI Sleep Working Group. (2019) Basic clinical features do not predict dopamine transporter binding in idiopathic REM behavior disorder. *NPJ Parkinson's disease*. 5:2. PMID: 30701189. PMC6351563

32. Lindestam Arlehamn, CS, J Pham, RN Alcalay, A Frazier, E Shorr, C Carpenter, J Sidney, R Dhanwani, J Agin-Liebes, F Garretti, **AW Amara**, DG Standaert, EJ Phillips, SA Mallal, B Peters, D Sulzer, and A Sette (2019). Widespread Tau-specific CD4 T-cell Reactivity in the General Population. *J. of Immunology*. 203:84. PMID: 31085590. PMCID: PMC6581570

33. Elm, JJ, M Daeschler, L Bataille, R Schneider, **AW Amara**, AJ Espay, M Afek, C Admati, A Teklehaimanot, T Simuni (2019) Feasibility and Clinical Utility of a Clinician Dashboard from Wearable and Mobile Application data for Parkinson's disease: The Clinician Input Study. *NPJ Digital Medicine*. 2:95. PMID: 31583283. PMCID: PMC6761168

34. Luo, L, H Andrews, RN Alcalay, FC Poyraz, AK Boehme, JG Goldman, T Xie, P Tuite, C Henchcliffe, P Hogarth, **AW Amara**, S Frank, M Sutherland, C Kopil, A Naito, UJ Kang (2019) Motor phenotype classification in moderate to advanced PD in BioFIND study. *Parkinsonism and Related Disorders*. 65:178. PMID: 31255537

35. Cederberg, KL, EB Brinkley, N Belotserkovskya, RA Memon, RW Motl, and **AW Amara** (2019) Does restless legs syndrome impact cognitive function via sleep quality in adults with Parkinson's disease? *The International Journal of Neuroscience*. 130:322. PMID: 31625438

36. Lindestam Arlehamn, CS, R Dhanwani, J Pham, R Kuan, A Frazier, JR Dutra, EJ Phillips, SA Mallal, M Roderer, KS Marder, **AW Amara**, DG Standaert, JG Goldman, I Litvan, B Peters, D Sulzer, and A Sette. (2020) α -synuclein-specific T cell reactivity is associated with preclinical and early Parkinson's disease. *Nature Communications*. 11:1875 PMID: 32313102, PMCID: PMC7171193

37. Wallace, DM. WK Wohlgemuth, LM Trott, **AW Amara**, IA Malaty, SA Factor, S Nallu, L Wittine, RA Hauser (2020) Practical evaluation and management of insomnia in Parkinson's disease: a review. *Movement Disorders Clinical Practice*. 7:250. PMID: 32258222; PMCID: PMC7111581

38. **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) Randomized Controlled Trial of Exercise on Objective and Subjective Sleep in Parkinson's Disease. *Movement Disorders*. 35:947. PMID: 32092190; PMCID PMC8826749

39. Chahine, LM, TG Beach, MC Brumm, CH Adler, CS Coffey, S Mosovsky, C Capsell-Garcia, GE Serrano, DG Munoz, CL White, JF Crary, D Jennings, P Taylor, T Foroud, V Arnedo, CM Kopil, L Riley, KD Dave, B Mollenhauer, and the Systemic Synuclein Sampling Study (2020) *Neurology* 95: e1267. PMID 32747521. PMC7538226

40. Memon, AA, J Coleman, **AW Amara**. (2020) Effects of Exercise on Sleep in Neurodegenerative Disease. *Neurobiology of Disease* 140:104859 PMID: 32243913, PMCID pending

41. Cristini, J, M Weiss, B de Las Heras, A Medina-Rincón, A Dagher, RB Postuma, R Huber, J Doyon, P Rosa-Neto, J Carrier, **AW Amara**, M Roig. (2020) The effects of exercise on sleep quality in persons with Parkinson's Disease: a systematic review with meta-analysis. *Sleep Medicine Reviews* 55:101384 PMID: 32987321

42. **Amara, AW** (2020) Sleep and cognition in Parkinson's disease. *Sleep Medicine*. 73:179 PMID: 32841925

43. Chahine, LM, MC Brumm, C Caspell-Garcia, W Oertel, B Mollenhauer, **AW Amara**, A Fernandez-Arcos, E Tolosa, C Simonet, B Hogl, A Videnovic, SJ Hutten, C Tanner, D Weintraub, E Burghardt, C Coffey, HR Cho, K Kieburtz, KL Postono, K Merchant, D Galasko, T Foroud, A Siderowf, K Marek, T Simuni, and A Iranzo. (2021) Dopamine transporter imaging predicts clinically-defined α -synucleinopathy in REM sleep behavior disorder. *Annals of Clinical and Translational Neurology*. 8:201. PMID: 33321002. PMC7818144

44. Wood, KH, AA Memon, RA Memon, A Joop, J Pilkington, C Catiul, A Gerstenecker, K Triebel, G Cutter, MM Bamman, S Miocinovic, and **AW Amara**. (2021) Slow wave sleep and EEG delta spectral power are associated with cognitive function in Parkinson's disease. *J. Parkinson's Disease*. 11:703. PMID: 33361608. PMC8058231

45. Lee, I, M Kazamel, T McPherson, J McAdam, M. Bamman, **AW Amara**, DL Smith, PH King. (2021) Fat mass loss correlates with faster disease progression in amyotrophic lateral sclerosis patients: Exploring the utility of dual-energy x-ray absorptiometry in a prospective study. *PLOS One*. 16: e0251087. PMID: 33956876. PMC8101939

46. Singhania, A, J Pham, R Dhanwani, A Frazier, J Rezende Dutra, KS Marder, E Phillips, S Mallal, **AW Amara**, DG Standaert, D Sulzer, B Peters, A Sette, CS Lindestam Arlehamn. The TCR repertoire of α -synuclein-specific T cells in Parkinson's disease is surprisingly diverse. (2021) *Scientific Reports*. 11:302. PMID: 33432042. PMC7801678

47. Cederberg, KLJ, AS Walters, **AW Amara**, TJ Braley, ML Schuetz, BG Mathison, RW Motl. (2021) Validity and reliability of the suggested immobilization test for measurement of restless legs syndrome severity in adults with multiple sclerosis. *Sleep Medicine*. 84:343. PMID: 34242924

48. Szaflarski, JP, R Nenert, JB Allendorfer, AN Martin, **AW Amara**, JC Griffis, A Dietz, VW Mark, VW Sung, HC Walker, X Zhou, CJ Lindsell. (2021) Intermittent Theta Burst Stimulation (iTBS) for Treatment of Chronic Post-Stroke Aphasia: Results of a Pilot Randomized, Double-Blind, Sham-Controlled Trial. *Medical Science Monitor*. 27:e9311468. PMID: 34183640

49. Videnovic, A, **AW Amara**, C Comella, PK Schweitzer, H Emsellem, K Liu, AL Sterkel, MD Gottwald, JR Steinerman, P Jochelson, K Zomorodi, RA Hauser. (2021) Solriamfetol for Excessive Daytime Sleepiness in Parkinson's Disease: Phase 2 Proof-of-Concept Trial. *Movement Disorders*. 36:2408. PMID: 34191352. PMC8596433

50. Pierpaoli-Parker, C, C Bolstad, E Szkody, **AW Amara**, MR Nadorff, SJ Thomas. The Impact of Imagery Rehearsal Therapy on Dream Enactment in a Patient with REM-Sleep Behavior Disorder: A Case Study. (2021) *Dreaming* 31:195. DOI: 10.1037/drm0000174

51. Memon, A, ME Bagley, RB Creed, **AW Amara**, MS Goldberg, LL McMahon (2021) Basal Synaptic Transmission and Long-Term Plasticity at CA3-CA1 Synapses are Unaffected in Young Adult PINK1-deficient rats. *Frontiers in Neuroscience*. 15:655901. PMID: 34483814. PMC8414523

52. Picillo, M, D-E LaFontant, S Bressman, C Caspell-Garcia, C Coffey, HR Cho, N Dahodwala, R Sanders-Pullman, C Tanner, **AW Amara**, the Parkinson's Progression Markers Initiative. (2022) Sex-related longitudinal change of motor features and biological biomarkers in early Parkinson's disease. *Journal of Parkinson's Disease*. 12:421. PMID: 34744052. PMC8842783

53. Srivastava, H, A Joop, RA Memon, J Pilkington, KH Wood, M Natelson Love, and **AW Amara** (2022) Taking the Time to Assess Cognition in Parkinson's Disease: The Clock Drawing Test. *Journal of Parkinson's Disease*. 12:713. PMID: 34864688

54. Shaban, M and **AW Amara** (2022) Resting-State Electroencephalography Based Deep-Learning for the Detection of Parkinson's Disease. *PLOS ONE*. 17:e0263159. PMID: 35202420. PMC8870584

55. Dhanwani, R, J Rodrigues Lima-Junior, A Sethi, J Pham, G Williams, April Frazier, Y Xu, **AW Amara**, D G Standaert, J Goldman, I Litvan, R Alcalay, B Peters, D Sulzer, CS Lindestam Arlehamn, and A Sette (2022) Transcriptional analysis of peripheral memory T cells reveals Parkinson's disease-specific gene signatures. *npj Parkinson's Disease*. 8:30. PMID: 35314697

56. Kongsuk, J, SE Perumean-Chaney, DC Knight, CJ Brown, **AW Amara**, and CP Hurt (2022) Development of Dynamic Measures to Assess Balance Confidence and State Anxiety While Walking at Increasing Speeds in Young and Older Adults. *Journal of Aging and Physical Activity*. Online ahead of print. PMID: 35339111

57. Memon, AA, C Catiul, Z Irwin, J Pilkington, RA Memon, A Joop, KH Wood, G Cutter, M Bamman, S Miocinovic, and **AW Amara** (2022) Effects of exercise on sleep spindles in Parkinson's disease. *Frontiers in Rehabilitation Sciences*. 3: 952289. PMID: 36188974. PMC9397800

58. Mansuri, Z, A Reddy, R Vadukapuram, C Trivedi, **AW Amara** (2022) Pimavanserin in the treatment of Parkinson's disease psychosis: Meta-analysis and meta-regression of randomized clinical trials. *Innovations in Clinical Neuroscience*. 19:46. PMID: 35382074. PMC8970241

59. Tan, C, H Nawaz, SK Lagman, LJ Cloud, **AW Amara**, TJ Druzgal, BD Berman, N Mukhopadhyay, and MJ Barrett (2022) Cholinergic Nucleus 4 Degeneration and Cognitive Impairment in REM Sleep Behavior Disorder. *Movement Disorders*. In press

60. Yacoubian, TA, YD Fang, A Gerstenecker, **AW Amara**, N Stover, L Ruffrage, C Collette, R Kennedy, Y Zhang, H Hong, H Qin, J McConathy, EN Benveniste, and DG Standaert (2023) Brain and systemic inflammation in de novo Parkinson's disease. *Movement Disorders*. PMID: 36853618

61. Memon, AA, C Catiul, Z Irwin, J Pilkington, RA Memon, A Joop, KH Wood, G Cutter, S Miocinovic, **AW Amara**. (2023) Quantitative sleep electroencephalogram in Parkinson's disease: A Case-Control Study. *Journal of Parkinson's Disease*. 13:351. PMID: 37066921, PMC10200139

62. Parajuli, M, **AW Amara**, and M Shaban. (2023) Screening of Mild Cognitive Impairment in Patients with Parkinson's Disease Using a Variational Mode Decomposition Based Deep-Learning. 2023 11th International Institute of IEEE/EMBS Conference on Neural Engineering.

63. Williams, GP, K Muskat, A Frazier, Y Xu, J Mateus, A Grifoni, R da Silva Antunes, D Weiskopf, **AW Amara**, DG Standaert, JG Goldman, I Litvan, RN Alcalay, D Sulzer, CS Lindestam Arlehamn, and A Sette (2023) Unaltered T cell responses to common antigens in individuals with Parkinson's disease. *Journal of the Neurological Sciences*. 444:120510. PMID: 36495691, PMC9950758

64. Chahine LM, TG Beach, CH Adler, M Hepker, A Kanthasamy, S Appel, S Pritzkow, M Pinho, S Mosovsky, GE Serrano, C Coffey, MC Brumm, LMA Oliveira, J Eberling, B Mollenhauer. (2023) Central and peripheral α -synuclein in Parkinson disease detected by seed amplification assay. *Annals of Clinical and Translational Neurology* 10:696. PMID: 36972727, PMC10187727

65. Marras, C, L Arbatti, A Hosamath, **AW Amara**, KE Anderson, LM Chahine, S Eberly, D Kinel, S Mantri, S. Mathur, D Oakes, JL Purks, DG Standaert, CM Tanner, D Weintraub, and I Shoulson. (2023) What Patients Say: Large-scale Analyses of Replies to the Parkinson's Disease Patient Report of Problems (PD-PROP). *Journal of Parkinson's Disease*. 13:757. PMID: 37334615. PMCID: PMC10473108

66. Cristini J, A Potvin-Desrochers, F Seo, A Dagher, RB Postuma, P Rosa-Neto, J Carrier, **AW Amara**, S Steib, C Paquette, and M Roig. (2023) The Effect of Different Types of Exercise on Sleep Quality and Architecture in Parkinson Disease: A Single-Blinded Randomized Clinical Trial Protocol. *Physical Therapy*. Epub ahead of print. PMID: 37354450.

67. Memon, AA, C Catiul, Z Irwin, J Pilkington, RA Memon, A Joop, KH Wood, G Cutter, S Miocinovic, and **AW Amara**. (2023). Quantitative Sleep Electroencephalogram and Cognitive Performance in Parkinson's Disease with and without REM Sleep Behavior Disorder. *Frontiers in Neurology, section Sleep Disorders*. 14:1223974. PMID: 37745647. PMCID: PMC10512724

68. Memon, AA, BS Edney, AJ Baumgartner, AJ Gardner, C Catiul, Z Irwin, A Joop, S Miocinovic, **AW Amara**. (2023) Effects of Deep Brain Stimulation on Quantitative Sleep Electroencephalogram during Non-Rapid Eye Movement Sleep in Parkinson's Disease. *Frontiers in Human Neuroscience, Section: Brain Imaging and Stimulation*. 17:1269864. PMID: 37810765. PMCID: PMC10551142

69. Feuerstein, J and **AW Amara**. (2023) REM Behavior Disorder: Implications for PD Therapeutics. *Current Neurology and Neuroscience Reports; Section: Movement Disorders*. 23:727. PMID: 37831394.

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*. 17:1269401. PMID: 37964803. PMCID: PMC10641459

71. Chahine, LM, L Arbatti, A Hosamath, **AW Amara**, KE Anderson, J Purks, S Eberly, D Kinel, S Mantri, S Mathur, D Oakes, DG Standaert, D Weintraub, I Shoulson, and C Marras. (2023). Internal Tremor in People with Parkinson's Disease: Demographic Characteristics and Comorbid Symptoms. *Clinical Parkinsonism and Related Disorders*. 9:100229. PMID: 38045566; PMCID: PMC10689282

72. Memon, A, EB George, T Nazir, Y Sunkara, C Catil, and **AW Amara**. (2024) Heart rate variability during sleep in synucleinopathies: A review. *Frontiers in Neurology*. 14:1323454. PMID: 38239321. PMCID: PMC10794570

73. 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*. 39:706. PMID: 38318953

74. Mantri, S, JL Purks, D Kinel, L Arbatti, A Hosamath, A Allen, **AW Amara**, K Anderson, LM Chahine, S Eberly, S Mathur, DG Standaert, D Oakes, D Weintraub, I Shoulson, and C Marras. (2024) In Their Own Words: Fears Expressed by People with Parkinson's Disease in an Online Symptom Database. *Journal of Parkinson's Disease*. 14:865. PMID: 38669556. PMCID: PMC11191490

75. Purks, JL, L Arbatti, A Hosamath, **AW Amara**, KE Anderson, LM Chahine, S Eberly, D Kinel, S Mantri, S Mathur, D Oakes, DG Standaert, D Weintraub, I Shoulson, and C Marras. (2024) Cognitive Symptoms in Cross-Sectional Parkinson Disease Cohort evaluated by Human-in-the-Loop Machine Learning & Natural Language Processing. *Neurology: Clinical Practice*. 14:e200334. PMID: 38962394. PMCID: PMC11221914

76. T Dam, G Pagano, MC Brumm, C Gochanour, KL Poston, D Weintraub, LM Chahine, C Coffey, CM Tanner, CM Kopil, Y Xiao, S Chowdhury, L Concha-Marambio, P DiBiaso, T Foroud, M Frasier, D Jennings, K Kieburtz, K Merchant, B Mollenhauer, TJ Montine, K Nudelman, J Seibyl, T Sherer, A Singleton, D Stephenson, M Stern, C Soto, E Tolosa, A Siderowf, B Dunn, T Simuni, K Marek; Parkinson's Progression Markers Initiative. Neuronal alpha-Synuclein Disease Integrated staging system performance in PPMI, PASADENA, and SPARK baseline cohorts. *npj Parkinson's disease*. 2024. 10: 178. PMID: 39333167

77. Mueller, C, R Nenert, C Catil, J Pilkington, JP Szaflarski, **AW Amara**. (2024) Relationship between sleep, physical fitness, brain microstructure, and cognition in healthy older adults: A pilot study. *Brain Research*. 1839:149016. PMID: 38768934

78. Mueller, C, A Thomas, **AW Amara**, J DeWolfe, SJ Thomas. (2024) Effects of exercise on sleep in patients with epilepsy: A systematic review. *Epilepsy and Behavior Reports*. 26:100675. PMID: 38779424

79. Mueller, C, R Nenert, C Catil, J Pilkington, JP Szaflarski, and **AW Amara**. (2024) Brain metabolites are associated with sleep architecture and cognitive functioning in older adults. *Brain Communications*. 6:fcae245. PMID: 39104903. PMCID: PMC11300014

80. Wood, KH, R Nenert, AM Miften, GW Kent, M Sleyster, RA Memon, A Joop, J Pilkington, AA Memon, RN Wilson, C Caiul, J Szaflarski, and **AW Amara**. (2024) Diffusion Tensor Imaging-Along the Perivascular Space Index is Associated with Disease Progression in Parkinson's Disease. *Movement Disorders*. 39:1504. PMID: 38988232; PMCID: PMC11524528

81. Aslam S, C Hu, **AW Amara**, M Olson, S Felsen, F Ponce, HA Shill (2024) The Effect of Exercise on Nonmotor Symptoms in Parkinson's Disease with Deep Brain Stimulation. *Movement Disorders Clinical Practice*. 12:539. PMID: 39691994

82. Anderson KE, C Marras, **AW Amara**, LM Chahine, S Eberly, A Hosamath, D Kinel, S Mantri, S Mathur, D Oakes, JL Purks, DG Standaert, D Weintraub, I Shoulson, L Arbatti. (2025) What Parkinson's disease patients say in their own words about their mood and anxiety symptoms. *Parkinsonism and Related Disorders*. 130:107190. PMID: 39579746

83. Baumgartner, AJ, L Hirt, **AW Amara**, DS Kern, and JA Thompson. (2025) Diurnal fluctuations of subthalamic nucleus local field potentials follow naturalistic sleep-wake behavior in Parkinson's disease. *SLEEP*. Epub ahead of print. PMID: 39798074

84. Forbes, E, L Lattanzio, K Hardin, L Quiller, **AW Amara**, LC Seeberger, and I Buard. (2025) Neurologic Music Therapy for Fine Motor Recovery in Huntington's Disease: A Proof-of-Concept Magnetoencephalography Evaluation. *NeuroRehabilitation*. Epub ahead of print. PMID: 40350667

85. R Nenert, C Mueller, C Catul, J Pilkington, P Levan, A Sharma, JP Szaflarski, and **AW Amara**. (2025) Brain physiological pulsations are linked to quality of sleep and cognitive performance in older adults. *Neuroimage*. 311:121187. PMID: 40187437

86. E Johansson, A Freuchet, GP Williams, T Michealis, A Frazier, I Litvan, JG Goldman, RN Alcalay, DG Standaert, **AW Amara**, N Stover, EA Fon, RP Postuma, J Sidney, D Sulzer, CS Lindestam Arlehamn, and A Sette. (2025) T cell responses towards PINK1 and α -synuclein are elevated in prodromal Parkinson's disease. *NPJ Parkinson's Disease*. 11:137. PMID: 40419563. PMCID: PMC12106619

87. MJ Russo, UJ Kang; BioFIND Study (RN Alcalay, **AW Amara**, V Arnedo, S Frank, M Frasier, JG Goldman, K Gwinn, C Henchcliffe, P Hogarth, A Naito, AN Reimer, M-H Saint-Hilaire, C Swanson-Fischer, M Sutherland, P Tuite, T Xie). (2025) New diagnostic and staging framework applied to established PD in the BioFIND cohort. *NPJ Parkinsons Disease*. 11:151. PMID: 40467579; PMCID: PMC12137746.

88. S Aslam, AJ Sharrief, SK Holden, M Fullard, JS Holtrop, AM Maw, and **AW Amara**. (2025) The future of Parkinson's care: A need to expand access. *Frontiers in Neurology*. 16:1622283.

89. **AW Amara**, KH Wood, AM Miften, L Kleinschmidt, CS White, A Joop, RA Memon, J Pilkington, J Kongsuk, C Catul, AA Memon, MM Bamman, and CP Hurt. (2025) Gait and balance dysfunction are associated with cognitive performance only in men with Parkinson's disease. *Clinical Parkinsonism and Related Disorders*. 13:100363. PMID: 40687115. PMCID: 12274842

90. A Videnovic, CS Coffee, EB Klerman, M Cudkowicz, HJ Cho, **AW Amara**, K Marder, P Zee, C Desir, H Ernst, E Steinhart, M Costigan, A Gudjonsdottir, E Klingner, D Ecklund, M Chase, A Wang, D Charles, D Clifford, J Coleman, AJ Espay, A Hung, S Kadimi, A Killoran, L Luo, R Malkani, J Margolesky, J Marsella, C Maurer, D Mihaila, P Moretti, A Park, N Philipp, H Sarva, B Shah, HA Shill, A Siderowf, V Suski, J Tate, W Tse, K Wyant, L Zhang, C Annis, K Ambrogi, G Auerbach, M Benge, E Blystone, L Brenner, CB Aguilar G Bwala, J Dorsch, E Goude, H Gutierrez, K Harper, S Hochberger, P Kalyani, J Lamb, K Maupin, A Molloy, S Mosovsky, M Sissine, J Steele, M Szela, M Teshome, M Wencel, EA Macklin, and the NeuroNEXT ENLITE PD Investigators. (2025) ENLITE PD – A Randomized Clinical Trial of Light Therapy for Impaired Sleep in Parkinson's Disease. *Movement Disorders*. In press

91. T Yacoubian, H Qin, **AW Amara**, N Stover, L Ruffrage, Y Zhang, R Kennedy, D Geldmacher, A Gerstenecker, DG Standaert, EN Benveniste (2025) Inflammatory changes in early Dementia with Lewy Bodies. *Frontiers in Neurology*. In press

Letters to the Editor:

92. **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

93. **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
94. **Amara, AW**, C Catiul, A Videnovic. (2024) Let There be Light for Parkinson’s Disease...but Only at the Right Time. *Sleep*. Epub. PMID: 38880971
95. Baumgartner, AJ and **AW Amara**. (2025) The Role of Tissue-Based Biomarkers in Isolated REM Sleep Behavior Disorder: Implications for Early Detection and Prognostication. *Sleep*. PMID: 40679429

Submitted manuscripts under review:

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

R Nenert, C Catiul, P Levan, AM Miften, JP Szaflarski, and **AW Amara**. Alterations in brain physiological pulsations in Parkinson’s disease: a case-control study. Under review at *Movement Disorders*

AA Memon, SH Choi, J Yin, D-E LaFontant, C Caspell=Garcia, D Weintraub, **AW Amara***, M Picillo*, and the Parkinson’s Progression Markers Initiative. Longitudinal Investigation of Autonomic Dysfunction in Biologically Confirmed (SAA+) Parkinson’s Disease. Under review at *Movement Disorders Clinical Practice*.
*Co-senior authors

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 (6th 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. (1st 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 (7th 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 (3rd ed.). New York, McGraw Hill Medical.

Scientific Abstracts:

Competitive

1. Miften, AM, KH Wood, R Nenert, JR Andrefsky, ML Sleyster, K Wolfe, GW Kent, RN Wilson, RA Memon, A Joop, J Pilkington, A Memon, C Catil, J Szaflarski, and **AW Amara**. (2024) Lower Glymphatic Function is Associated with Disease Progression in Parkinson's Disease. American Neurological Association Annual Meeting, Philadelphia, PA. Abstract of Distinction
2. 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
3. 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
4. Edney, B, AA Memon, C Catil, 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
5. Catil, 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
6. Memon AA, C Catil, 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
7. Memon, AA, C Catil, 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
8. Memon, A., C. Catil, 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
9. Memon, A., C. Catil, 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. 4th Pan American Parkinson's Disease and Movement Disorders Congress, Miami, FL, Poster
10. C. Catil, 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. 146th Annual Meeting of the American Neurological Association, virtual poster

11. C. Catiul, A.A. Memon, J.J. 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
12. 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
13. 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
14. **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
15. 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
16. **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. 71st Annual meeting of the American Academy of Neurology, Philadelphia, PA, Poster
17. 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
18. **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. 142nd Annual meeting of the American Neurological Association, San Diego, CA, Oral presentation
19. 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. 142nd Annual meeting of the American Neurological Association, San Diego, CA, Poster
20. **A.W. Amara**, N. Seedorff, L.M. Chahine, K. Kieburtz, C.J. Caspell-Garcia, and T. Simuni (2017). Physical Activity Habits in Early Parkinson's Disease and Healthy Controls. 21st International Congress of Parkinson's Disease and Movement Disorders, Vancouver, BC, Canada, Poster
21. 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. 21st International Congress of Parkinson's Disease and Movement Disorders, Vancouver, BC, Canada, Poster

22. 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. 21st International Congress of Parkinson's Disease and Movement Disorders, Vancouver, BC, Canada, Poster

23. 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

24. 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. 1st Pan American Parkinson's Disease and Movement Disorders Congress. Miami, FL, Poster

25. 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. 1st Pan American Parkinson's Disease and Movement Disorders Congress. Miami, FL, Poster

26. **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

27. 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

28. 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

29. 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. 20th International Congress of Parkinson's Disease and Movement Disorders, Berlin, Germany, Poster

30. **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 (140th Annual Meeting of the American Neurological Association), Chicago, IL, Poster

31. 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: 29th Annual Meeting of the Associated Professional Sleep Societies (American Academy of Sleep Medicine and the Sleep Research Society), Seattle, WA, Poster

32. 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

33. 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

34. **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. 15th International Congress of Parkinson's Disease and Movement Disorders, Dublin, Ireland, Poster

35. **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

36. **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

37. **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

38. **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