

# Orwa Aboud, MD., PhD.

Neuro-Oncology Assistant Professor University of California, Davis

Cell 501-786-9272 Email arwaaboud@yahoo.com

### **Summary of Expertise**

Dr. Orwa Aboud is one of only 337 UCNS board-certified neuro-oncologists in the United States. He specializes in the diagnosis and management of primary brain tumors, particularly gliomas, with expertise spanning metabolomics, molecular markers, and biomarker-based diagnostics. With over 40 peer-reviewed publications, Dr. Aboud's research integrates advanced technologies such as machine learning and imaging to improve treatment strategies and patient outcomes. He has led multiple clinical trials and engages in translational research to bring innovative therapies from bench to bedside. Dr. Aboud envisions transforming the field through precision medicine and collaborative research, bridging the gap between scientific discovery and clinical care. As an Assistant Professor at UC Davis, Dr. Aboud brings a data-driven, patient-centered approach to neuro-oncology, making him a sought-after clinician, researcher, and expert in the field.

### **EDUCATION & TRAINING**

2007	Medical Degree (MD) University of Damascus, College of Medicine, Damascus, Syria Thesis entitled "Neurological Clinical Exam."
2013	Doctor of Philosophy (PhD) Neurobiology and Developmental Sciences University of Arkansas for Medical Sciences, Little Rock, Arkansas Thesis entitled "The influence of APOE Genotype on Cellular and Molecular Responses in Epilepsy."
2013-2014	University of Arkansas for Medical Sciences, Little Rock, Arkansas Neurology Internship, Clinical Internship
2014-2017	University of Arkansas for Medical Sciences, Little Rock, Arkansas Neurology residency, Clinical Residency
2017-2020	Johns Hopkins/National Institutes of Health Joint Program, Maryland Neuro Oncology Clinical/Research Fellowship

### **Board Certifications**

2017 American Board of Psychiatry and Neurology (ABPN)

2023 United Council for Neurological Subspecialties (UCNS), Neuro-Oncology

**Licenses** 

2020 - Present

2009 - Present Educational Commission for Foreign Medical Graduates (ECFMG) Certificate

2015 - 2020 Arkansas Medical License 2017 - 2020 Maryland Medical License

#### **EMPLOYMENT AND ACADEMIC EXPERIENCE**

8/1/2020 - Present Assistant Professor of Neuro-Oncology

**Health Sciences Clinical Professor (HSCP) series**Departments of Neurology and Neurological Surgery

University of California, Davis

California Medical License

#### **AWARDS AND HONORS**

2000 Second on the Group Award

Ministry of Education, Swaida Directorate, Swaida, Syria

Second on 12<sup>th</sup> grade group in the city of Swaida. This award granted funds for 6

years during medical school

2013 University of Arkansas for Medical Science Graduate School Achievement

**Award** 

Achievement award based on graduate schoolwork and publication

Link (UAMS Grad School, Faculty Highlighted in Awards Ceremony | UAMS

News)

2013 Travel Award

**National Institute of Neurological Disorders and Stroke** 

(NINDS)

Curing the Epilepsies: Pathways Forward (NINDS) 2013 Meeting

National Institutes of Health, Bethesda, Maryland Link (2012 – 2013 Awards | UAMS Graduate School) 2013 Travel Award

**Experimental Biology** 

Experimental Biology (EB2013) 2013 Meeting

Boston, Massachusetts

2015 Best Scientific Poster Award

University of Arkansas for Medical Sciences, Little Rock, Arkansas Third Annual Sami Harik Resident Research Day, April 2015

"Best Scientific Poster" award is given yearly for one resident based on research

poster

2016 American Academy of Neurology (AAN) 2016 Travel Award

2017 Resident of the Year Award

University of Arkansas for Medical Sciences, Little Rock, Arkansas

"Resident of the year" award is given yearly for one resident (out of 18 residents)

based on clinical service and knowledge along research productivity

2017 Jess R. Nickols Award

**Department of Veterans Affairs** 

Central Arkansas Veterans Healthcare system, Little Rock, Arkansas

"Jess R. Nickols" award is given yearly for one resident (of 18 total) based on

clinical service in the VA hospital

### **KEYWORDS/AREAS OF INTEREST**

Glioblastoma, Primary brain tumors, Metabolomics

#### **PROFESSIONAL SERVICE**

### **Department/School**

2020-present Member, Central Nervous System (CNS) Disease Team Committee

Monthly meeting; includes members from multiple departments and schools

within UC Davis to discuss clinical trial protocols for Neuro-Oncology

2020-2021 Member, Faculty recruitment committee, Department of Pathology, UC Davis

Selection of Neuropathology Faculty Candidate

2022-2023 Member, Faculty recruitment committee, Department of Neurosurgery, UC

Davis

Selection of Pediatric Neurosurgery Faculty Candidate

2021-2024 Member, Neurology Residency Selection Committee, Department of Neurology, **UC Davis Interviewed Neurology Residency Candidates** 

Member, University of California Cancer Consortium Molecular Tumor Board 5/2022-Present

Monthly meeting, includes members from multiple UC schools

2022-2023 Member, Department of Neurology "Neuro FY24 Compensation Committee"

### National/International

11/13/2020 Invited Expert Opinion and Confidential Reviewer, Neuro-Oncology Clinical Trial,

**UC Irvine** 

Provide expert opinion and a confidential review on a clinical trial in the field

Neuro-Oncology at UC Irvine

2020- present Organizer, American Academy of Neurology (AAN) Neuro-Oncology Section.

This committee organizes the Neuro-Oncology section at the AAN annual

meeting

National and International Expert Opinion Referral, Brain Tumor Management 2020- present

2022- present Member, Southwest Oncology Group (SWOG) Cancer Research Network

Regular collaborative meetings to discuss CNS tumor care

11.17.2023 Moderator, Society of Neuro Oncology (SNO) Annual Meeting, moderator for

the session on Molecular Pathology "Computational Concurrent Abstract

Session"

6.2024 Abstract reviewer, Society of Neuro Oncology (SNO) Annual Meeting, reviewer

for meeting abstracts

11.22.2024 Moderator, Society of Neuro Oncology (SNO) Annual Meeting, moderator for

"Rapid Repost Session V"

### **Community Service**

2020 - Present Speaker, 2 sessions yearly

Sacramento Brain Tumor Support group

6/30/2022 On Call Physician

Broadway at Music Circus Performance Coverage

7/2/2022 On Call Physician

Broadway at Music Circus Performance Coverage

6/13/2023 On Call Physician

Broadway at Music Circus Performance Coverage

5/7/2024 "Head to the Hill"

Participated in National Brain Tumor Society's 'Head to the Hill' advocacy event in Washington, D.C., engaging in congressional meetings to support brain tumor

research and policy initiatives.

6/27/2024 On Call Physician

Broadway at Music Circus Performance Coverage

#### **PROFESSIONAL MEMBERSHIPS**

2012 - 2015	Society for Neuroscience
2013 - 2016	American Association of Anatomists
2014 - Present	American Academy of Neurology
2015 - 2020	Arkansas Medical Society
2015 - Present	Society for Neuro Oncology
2017 - 2020	Maryland Medical Society
2020 - Present	California Medical Society
2020 - Present	UC Davis Comprehensive Cancer Center
2024 - Present	North American Skull Base Society

### PEER-REVIEW SERVICE STUDY SECTION

2024 Rare Cancers Research Program (RCRP) Concept Neurological Cancers (CON-NC-1), Department of Defense (DOD)

# TEACHING/CURRICULUM

# **University of California, Davis**

10/6/2020	Lecturer, Neurosurgery Residents, "Extra-axial tumors"
12/1/2020	Lecturer, Neurology Residents, "Extra-axial glioma tumors I"
12/11/2020	Lecturer, Medical Student group, "Neurological exam"
12/15/2020	Lecturer, Neurology Residents, "Extra-axial glioma tumors II"
8/6/2021	Lecturer, NEU 420 (Brain and Behavior), "Neoplastic Diseases"
8/18/2021	Lecturer, NEU 420 (Brain and Behavior), "Dementia"
9/7/2021	Lecturer, Objective Structured Clinical Exam (OSCE) Clinical Skills Exam for Medical Students
10/26/2021	Invited Speaker, Brain Malignancies Innovation Group, "Challenges and Opportunities in Glioblastoma"
12/17/2021	Invited Speaker, Cancer Therapeutic Program (CTP), "Challenges and Opportunities in Glioblastoma"
3/8/2022	Lecturer, Neurology Residents, "Brain tumors I"
5/3/2022	Lecturer, Neurology Residents, "Brain tumors II"
5/10/2022	Speaker, Neurosurgery Residents, "Primary Brain tumors"
9/30/2022	Invited Speaker, SIGN Neurology Research Form UC Davis medical students interested in Neurology
1/26/2023	Lab, Neu 420 (Brain and Behavior), "Motor and Reflex exam" clinical skills training
1/2023	Lecturer, Neu 420 (Brain and Behavior), "Central Nervous System Tumors"

2/22/2023 Invited speaker, Neuro-radiology education,
"Morning coffee in Glioma land"

5/9/2023 Lecturer, Physician assistant Neuroscience Curriculum Series, "Introduction to Neuro-Oncology"

8/15/2023 Lecturer, Neurology Grand Rounds, "Navigating Glioblastoma Therapies:
Overcoming Challenges and Embracing Opportunities"

1/24/2024 Lab, Neu 420 (Brain and Behavior),
"Motor and Reflex exam" clinical skills training

5/21/2024 Lecturer, Neurology Residents,
"Neurologic Complications of Cancer"

### **Other Institutions**

7/2010-6/2013	Training, Graduate and summer medical students Basic laboratory techniques University of Arkansas for Medical Sciences
5/11/2015	Lecturer, Neurology Residents "Update on Myasthenia Gravis" University of Arkansas for Medical Sciences
8/14/2015	Lecturer, Neurology Residents "Midbrain, Anatomy of the Brainstem" University of Arkansas for Medical Sciences
9/2/2015	Lecturer, Neurology Residents "Management of Acute Ischemic Stroke" University of Arkansas for Medical Sciences
9/2/2015	Lecturer, Medical Students "Multiple Sclerosis" University of Arkansas for Medical Sciences
11/23/2015	Lecturer, Medical Students "Lumbar puncture demonstration" University of Arkansas for Medical Sciences
8/22/2016	Lecturer, Neurology Residents "Neuroinfectious Emergencies in Neurology" University of Arkansas for Medical Sciences

10/18/2016	Lecturer, Neurology Residents "Cognition in Neurological Exam" University of Arkansas for Medical Sciences
4/5/2018	Speaker, tumor board continuous education lectures "World Health Organization New CNS Classification", Neuro-Oncology Branch, National Institutes of Health
4/6/2018	Speaker, Medical Oncology Walk Rounds "Neuro-Oncology Case Presentation" National Institutes of Health, Medical Oncology Department
8/28/2018	Speaker, Inaugural BTTC/NCI-Connect Journal Club "Journal Article presentation" National Institutes of Health, Neuro-Oncology Branch
9/27/2018	Speaker, NCI-Connect Histone Mutated Midline Glioma Workshop "Histone Mutated Midline Glioma Case presentation" National Institutes of Health, Neuro-Oncology Branch
11/19/2018	Speaker, NCI-Connect Oligodendroglioma Workshop "Oligodendroglioma Case presentation" National Institutes of Health, Neuro-Oncology Branch
2/21/2019	Speaker, NIH Ependymoma International Workshop "Ependymoma Case presentation" National Institutes of Health, Neuro-Oncology Branch
8/23/2019	Speaker, Neurology Residents and Fellows "Neurological Complications of Cancer" Johns Hopkins Medical Center
1/17/2020	Speaker, Medical Oncology Fellows "Management of Glioblastoma in the Elderly" Johns Hopkins Medical Center
1/23/2020	Speaker, The Adult Brain Tumor Consortium (ABTC), Winter Meeting Johns Hopkins Medical Center
1/6/2021	Invited Speaker, Neuro-Oncology International Study Group "NOTF-UCNS Study Group", "Lymphoma and Meningioma"
2/2023	Invited speaker, 8th Annual Innovative Approaches to Brain Tumor Management Seattle Science Foundation, Seattle, WA "Metabolomics in Glioblastoma"
12/19/2023	Invited speaker, Neurology Grand Rounds

University of Florida, Gainesville, FL "Navigating Glioblastoma Therapies: Overcoming Challenges and Embracing Opportunities" 2/29/2024 Invited speaker, School of Pharmacy The University of Jordan, Amman, Jordan "From Biomarkers to Diagnostics: Advancing Glioblastoma Detection Strategies" 3/3/2024 Invited speaker, Neurology Grand Rounds Jordan University of Science and Technology, Irbid, Jordan "Enhancing Glioblastoma Detection Strategies: Insights from Biomarkers and Treatment Innovations" 3/4/2024 Invited speaker, School of Pharmacy The University of Jordan, Amman, Jordan "Career Path of Clinical pharmacist in the US" 6/27/2024 Lecturer, Neurology Residents, Creighton University, Omaha, Nebraska Neurologic Complications of Cancer"

Invited speaker, Department of Neurology

"Brain tumors and Movement Disorders: Clinical Overlaps and Treatment"

Beijing Tiantan Hospital, China

### **MENTORSHIP AND TRAINEES**

8/4/2024

2021-present	<b>Nupur Lala MD</b> , Neurology Resident initially, currently neuro-oncology fellow at Memorial Sloan Kettering, mentorship in pursuing neuro-oncology as a career path
2021-2022	<b>Christopher Campos DO,</b> Neurology Resident, mentoring on research project and Grand Round preparation as well as career path
2021-Present	John Paul John Aboubechara MD., PhD., Medical Student and currently Neurology resident at UC Davis. This mentorship resulted in multiple publications (publication list below)
2021-2022	<b>Zaid Najdawi MD.,</b> Mentoring medical student in career path and pursuing Neurology residency, Zaid matched in Neurology at the University of Nebraska Medical Center in Omaha.
2022-Present	<b>Nina Yu,</b> Medical Student at UC Davis. Nina interested in Neuroscience; this mentorship resulted in multiple publications (publication list below)

2022-Present Ahmad Abuaisheh MD, Medical Student in Jordan. Ahmad interested in

Neuroscience; this mentorship resulted in multiple publications (publication list

below)

2022-Present Haitham Maragah MD, Faculty at An-Najah National University, Palestine. This

mentorship regarding career path resulted in multiple publications (publication

list below)

2024-Present **Diego Cantillo,** College student. This mentorship program via "Avenue M"

Mentorship track regarding career path

### **RESEARCH/SCHOLARLY & CREATIVE ACTIVITIES**

2008 Clinical Observership

University of Arkansas for Medical Sciences, Little Rock, Arkansas

The goal of this observership was to learn head and neck surgical anatomy and neurosurgical approaches in the laboratory of Professor M. Gazi Yasarqil

2009 Research Fellow

Roche Diagnostics, Penzberg, Germany

Developed a functional screening assay for antibodies direct against 6-amyloid. Cultivated and managed different cell lines (especially neuronal cells). Measured the expression of

hyperphosphorylation by western blot techniques. Brain section staining and immunohistochemical analysis. Flow cytometric

analysis. Professor Hans-Willi Krell

2010-11 Research Fellow

University of Arkansas for Medical Sciences, Little Rock, Arkansas

Studies directed toward understanding molecular and cellular interactions between neurons and glia, which relate to and promote neuroinflammatory events and their consequences in

Alzheimer pathogenesis. Professor W. Sue T. Griffin

2011-13 Clinical Observership

St. Vincent Infirmary Medical Center, Little Rock, Arkansas

Neuroscience research in the surgical lab

Neuroscience Institute ANI, specifically regarding the technique for temporal lobe resection used in the treatment for intractable ...

epilepsy

### 2011-2013 Pre-Doctoral Fellowship

University of Arkansas for Medical Sciences, Little Rock, Arkansas

PhD granted May, 2013

"The influence of APOE Genotype on Cellular and Molecular Responses in

Epilepsy."

A study relating to the precocious development in epileptics of

neuropathological changes noted in Alzheimer's disease, using human brain tissue from patients with intractable drug resistant epilepsy, who elected

temporal lobectomy surgery. Professor W. Sue T. Griffin

### 2013 Post-Doctoral Fellowship

University of Arkansas for Medical Sciences, Little Rock, Arkansas

A study of the role of the APOE genotype on the molecular and cellular events in the olfactory bulb using human brain tissue from patients Alzheimer's disease.

This was performed in the lab of Professor W. Sue T. Griffin

### 4/6-7/2021 Society of Neuro-oncology SNO/NCI Joint Symposium

Attending international symposiums targeting CNS tumor metabolism

### 2021 Research project collaboration

"Imaging in brain tumors"

Collaboration effort with Dr. Vladimir Ivanovic (Neuro-Radiology)

#### 2023 Research project collaboration

"Integrating immunohistochemistry and metabolomics to evaluate beta-

hydroxybutyrate in glioblastoma tissue: a novel approach"

Collaboration effort with Dr. Viharkumar Patel (Neuro-Pathology)

### **PUBLICATIONS**

### **Peer Reviewed Publications**

Journal Articles

### \*\*\* Article including trainee authors

- 1. Liu L, **Aboud O**, Jones RA, Mrak RE, Griffin ST, Barger SW. "Apolipoprotein E expression is elevated by interleukin 1 and other interleukin 1-induced factors". J Neuroinflammation 2011, 8<sup>th</sup>(1):175. **PMID:** 22171672
- 2. **Aboud** O, Mrak RE, Boop FA, Griffin WST. "Apolipoprotein epsilon 3 alleles are associated with indicators of neuronal resilience". BMC Medicine 2012 April 13<sup>th</sup>; 10:35. **PMID: 22502727**
- 3. **Aboud O,** Griffin WST, Mrak RE, Boop FA. "neuroinflammation, neurodegeneration, and APOE genotype" Acta Neuropathologica Communications, 2013 Jul 29<sup>th</sup>;1(1):41. **PMID: 24252240**

- 4. **Aboud O**, Griffin ST. "Silver Staining of Alzheimer's Disease". Journal of neurological disorders. 2014 October 28<sup>th</sup>; 2(6). **PMID: 26949718**
- 5. Zawada MW, Mrak RE, Biedermann J, Palmer QD, Gentleman SM, **Aboud O**, Griffin WST. "Loss of angiotensin II receptor expression in dopamine neurons in Parkinson's disease correlates with neuropathological progression and is accompanied by increases in Nox4- and 8-OH guanosine-related nucleic acid oxidation and caspase-3 activation" Acta Neuropathologica Communications, 2015 Feb 3;3 (1):9. **PMID**: **25645462**
- 6. **Aboud O,** Parcon P, DeWall KM, Liu L, Mark RE, Griffin WST. "Aging, Alzheimer's, and APOE genotype influence the expression and neuronal distribution patterns of microtubule motor protein dynactin-P50". Frontiers Cell NeuroSci, 2015 Mar 25<sup>th</sup>;9:103. **PMID: 25859183**
- 7. **Aboud O**, Aboud T, Janjua BM, Raja A. "Image-Guided Spinal Navigation for C1-C2 Instrumentation: Part I". Contemporary Neurosurgery. 2015 March 30<sup>th</sup>; 37(6):1-5. **PMID: 27175042**
- 8. **Aboud O**, Al-Salaimeh A, Raina SK, Sahaya K, Hinduja A. "Positive clinical signs in neurological diseases-An observational study". Journal of Clinical Neuroscience. 2018 November 19<sup>th</sup>. **PMID:** 30467051
- 9. Penas-Prado M, Wu J, Cahill D, Brat D, Costello J, Kluetz P, Cairncross J, Van den Bent M, Verhaak R, **Aboud O**, Burger P, Chang S, Cordova C, Huang R, Rowe L, Taphoorn M, Gilbert M, Armstrong T. "Proceedings of the Comprehensive Oncology Network Evaluating Rare CNS Tumors (NCI-CONNECT) Oligodendroglioma Workshop". Journal of Neuro-Oncology Advances. 2019 December 6<sup>th</sup>. **PMID:** 33289010
- 10. Theeler B, Dalal Y, Monje M, Shilatifard A, Suvà A, Aboud O, Camphausen K, Cordova C, Finch E, Heiss J, Packer R, Romo C, Aldape K, Penas-Prado M, Armstrong T, Gilbert M. "Comprehensive Oncology Network Evaluating Rare CNS Tumors. Histone Mutated Midline Glioma Workshop Proceedings" Journal of Neuro-Oncology Advances. 2020 January 16<sup>th</sup>. PMID: 32642676
- 11. Ahsan B, Aldwaikat A, **Aboud O**, Ramadan A, Abu-Asab MS. "Retinal and choroidal capillaries contribution to age-related macular degeneration (AMD) phenotypes in murine models of the disease". Journal of Ultrastructural Pathology. 2020 Feb 21<sup>st</sup>:1-8. **PMID: 32079449**
- 12. Rowe L, Vera E, Acquaye A, Crandon S, Shah V, Bryla C, Wu J, Wall K, Siegel C, Reyes J, Penas-Prado M, Leggiero N, Cordova C, Burton E, Antony R, Boris L, **Aboud O**, Vyas Y, Mathen P, Gilbert M, Camphausen K, Mendoza T, Armstrong T. "The prevalence of altered body image in patients with primary brain tumors: an understudied population". Journal of Neuro-Oncology. 2020 February 24<sup>th</sup>. **PMID: 32096067**
- 13. Penas-Prado M, Theeler B, Cordeiro B, Dunkel I, Hau P, Mahajan A, Robinson G, Willmarth N, **Aboud O**, Aldape K, Butman J, Gajjar A, Kelly W, Rao G, Raygada M, Seigel C, Romo C, Armstrong T, and Gilbert M. "Proceedings of the Comprehensive Oncology Network Evaluating Rare CNS Tumors (NCI-CONNECT) Adult Medulloblastoma Workshop". Journal of Neuro-Oncology Advances. 2020 August 17<sup>th</sup>. **PMID: 33005896**

- 14. Wu J, Yuan Y, Long Priel D, Fink D, Peer C, Sissung T, Su YT, Pang Y, Yu G, Butler M, Mendoza T, Vera E, Ahmad S, Bryla C, Lindsley M, Grajkowska E, Mentges K, Boris L, Antony R, Garren N, Siegel C, Lollo N, Cordova C, Aboud O, Theeler B, Burton E, Penas-Prado M, Leeper H, Gonzales J, Armstrong T, Calvo K, Figg W, Kuhns D, Gallin J and Gilbert M. "Phase I Study of Zotiraciclib in Combination with Temozolomide for Patients with Recurrent High-grade Astrocytomas" Journal of Clinical Cancer Research 2021 March 30<sup>th</sup>. PMID: 337785481
- 15. Pan Y, Yu G, Butler M, Sindiri S, Song Y, Wei J, Wen X, Chou HC, Quexado M, Pack S, Xi L, Abdullaev Z, Kim O, Ranjan A, Merchant M, Anthony R, Boris L, **Aboud O**, Kamson D, Kaplan R, Mackey M, Camphausen K, Zaghloul K, Armstrong T, Gilbert M, Aldape K, Holdhoff M, Khan J, Wu J "Report of Canonical BCR-ABL1 Fusion in Glioblastoma" JCO Precision Oncology 2021 August 25<sup>th</sup>. **PMID: 34485806**
- 16. **Aboud O,** Shah R, Vera E, Burton E, Theeler B, Wu J, Boris L, Quezado M, Reyes J, Wall K, Gilbert M, Armstrong T, and Penas-Prado M. "Challenges of imaging interpretation to predict oligodendroglioma grade: a report from the Neuro-Oncology Branch" CNS Oncology 2022 February 10<sup>th</sup>. **PMID: 35142534**
- 17. Yu N and **Aboud O**. "Metabolomics in High Grade Gliomas" RAS Oncology and Therapy 2022 Sep 30. **PMID**: **36643416** \*\*\*
- 18. **Aboud O,** Liu YA, Fiehn O, Brydges C, Fragoso R, Lee HS, Riess J, Hodeify R, and Bloch O. "Application of Machine Learning to Metabolomic Profile Characterization in Glioblastoma Patients Undergoing Concurrent Chemoradiation" metabolites 2023 Feb 17<sup>th</sup>. **PMID: 36837918**
- 19. Maraqah HH, Abu-Asab MS, Lee HS, and **Aboud O**. "Comparative survey of mitochondrial ultrastructure in IDH1-mutant astrocytoma and IDH1-wildtype glioblastoma (GBM)" Ultrastructural Pathology 2023 Feb 25<sup>th</sup>. **PMID: 36841772\*\*\***
- 20. Yu N, Lee HS, Raslan O, Lee-Way J, and **Aboud O**. "H3G34-mutant diffuse hemispheric glioma with osseous metastases: a case report and literature review" CNS Oncology 2023 Mar 15<sup>th</sup>. **PMID: 36919796\*\*\***
- 21. Maraqah HH, Abu-Asab MS, Lee HS, and **Aboud O**. "Astrocytoma and glioblastoma IDH1-wildtype cells colonize tumor vessels and deploy vascular mimicry" Ultrastructural Pathology 2023 May 5<sup>th</sup>. **PMID:** 37144386\*\*\*
- 22. **Aboud O**: "On family history" Archives of Clinical and Medical Case Reports, Accepted May 19<sup>th</sup>, 2023. **PMID**: 39206017
- 23. Raslan O, Ozturk A, Karli Oguz K, Sen F, **Aboud O**, Ivanovic V, Assadsangabi R, Hacein-Bey L: "*Imaging Cancer in Neuroradiology*" Current Problems in Cancer 2023 June 4<sup>th</sup>. **PMID: 37349190**
- 24. Abuaisheh A, **Aboud O**: "Biogenic Amines in Gliomas: A Comprehensive Literature Review" Frontiers in Bioscience-Lanmark, 2023, July 20<sup>th</sup>. **PMID**: 37525923\*\*\*
- 25. **Aboud O,** Liu YA, Dahabiyeh LA, Abuaisheh A, Li F, Aboubechara JP, Riess J, Bloch O, Hodeify R, Tagkopoulos I, and Fiehn O. "*Profile Characterization of Biogenic Amines in Glioblastoma Patients Undergoing Standard of Care Treatment*" Biomedicines, 2023, August 13<sup>th</sup>. **PMID: 37626757\*\*\***

- 26. Li A, Hancock J, Quezado M, Ahn S, Briceno N, Celiku O, Ranjan S, **Aboud O**, Colwell N, Kim S, Nduom E, Kuhn S, Park D, Vera E, Aldape K, Armstrong T, Gilbert M "*TGF-B and BMP Signaling are Associated with the Transformation of Glioblastoma to Gliosarcoma and then Osterosarcoma*" Neuro-Oncology Advances 2023 December 19<sup>th</sup>. **PMID: 38292240**
- 27. Yu N, Raslan OA, Lee HS, Theeler B, Raafat T, Fragoso R, Shahlaie K, and **Aboud O**. "Promising response to vermurafenib and cobimetinib treatment for BRAF V600E mutated craniopharyngioma: a case report and literature review" CNS Oncology 2024 Feb 13. **PMID: 36348829** \*\*\*
- 28. Ezzati S, Salib S, Balasubramaniam M, and **Aboud O**. "Epidermal Growth Factor Receptor Inhibitors in Glioblastoma: Current Status and Future Possibilities" International Journal of Molecular Sciences 2024 Feb 15. **PMID: 38396993** \*\*\*
- 29. Rogers JL, Wall T, Acquaye-Mallory AA, Boris L, Kim Y, Aldape K, Quezado MM, Butman JA, Smirniotopoulos JG, Chaudhry H, Tsien CI, Chittiboina P, Zaghloul K, **Aboud O**, Avgeropoulos NG, Burton EC, Cachia DM, Dixit KS, Drappatz J, Dunbar EM, Forsyth P, Komlodi-Pasztor E, Mandel J, Ozer BH, Lee EQ, Ranjan S, Lukas RV, Raygada M, Salacz ME, Smith-Cohn MA, Snyder J, Soldatos A, Theeler BJ, Widemann BC, Camphausen KA, Heiss JD, Armstrong TS, Gilbert MR, and Penas-Prado M. "Virtual multi-institutional tumor board: a strategy for personalized diagnoses and management of rare CNS tumors" Journal of Neurooncology 2024 March 1st. **PMID: 38427131**\*\*\*
- 30. Yu N and **Aboud O**. "The Lipidomic Signature of Glioblastoma: A Promising Frontier in Cancer Research" Cancers 2024 Mar 8<sup>th</sup>. **PMID: 38539424\*\*\***
- 31. Liu YA, **Aboud O**, Dahabiyeh LA, Bloch O, and Fiehn O. "*Metabolomic characterization of human glioblastoma and patient plasma: a pilot study"* F1000 Research 2024 Mar 23ed. **PMID: 39371551**
- 32. Nisanova A, Parajuli A, Antony B, **Aboud O,** Sun J, Daly M, Fragoso R, Yiu G, Liu Y. "Retinal Microstructural Changes Reflecting Treatment-Associated Cognitive Dysfunction in Patients with Lower-Grade Gliomas" Ophthalmology Science 2024 July 25<sup>th</sup>. **PMID: 39263578\*\*\***
- 33. Maraqah HH, Aboubechara JP, Abu-Asab MS, Lee HS, and **Aboud O**. "Excessive lipid production shapes glioma tumor microenvironment" Ultrastructural Pathology 2024 August 19<sup>th</sup>. **PMID**: **39157967**\*\*\*
- 34. Aboubechara JP and **Aboud O**. "Metabolic Risk Factors and Survival in Patients with Glioblastoma" Cancers 2024 October 30<sup>th</sup>. **PMID: 39518104\*\*\***
- 35. Hodeify R, Yu N, Balasubramaniam M, Godinez F, Liu Y, and **Aboud O**. "Metabolomic Profiling and Machine Learning Models for Tumor Classification in Patients with Recurrent IDH-Wild-Type Glioblastoma: A Prospective Study" Cancers 2024 November 17<sup>th</sup>. **PMID: 39594811\*\*\***

#### **In-Press Articles**

#### **Submitted Articles**

1. Toedebusch R, Hwang C, Sayed-Quadri S, **Aboud O**, Woodlard KD, York D, Dickinson PJ, Meyers FJ, Toedebusch CM: "Canine glioma stem-like cells demonstrate DNA methylation-dependent

enhancement of cellular respiration following low oxygen tension", submitted to cancer cell international, August 2024

### **Non-Peer Reviewed Publications**

Aboubechara JP, **Aboud O**: "IDH mutant diffuse astrocytomas" MedLink Neurology March 2022 <a href="https://www.medlink.com/media/idhoa1">https://www.medlink.com/media/idhoa1</a>

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2011	Griffin S, <b>Aboud O</b> , Jones R, Mrak R, Boop F, Barger S. (2011, March). "Epilepsy: A Model for Studying Early Events in the Evolution of Alzheimer's disease And Parkinson's disease". Poster presented at: The Tenth International Conference on Alzheimer's disease and Parkinson's disease; Barcelona, Spain
2011	Griffin WST, Zawada M, <b>Aboud O</b> , Liu L, Barger S, Mrak R, Dewall M. (November 2011) "APOE genotype, Alzheimer neuritic pathologies, and microtubule motor proteins". Poster presented at: Society for Neuroscience (SFN) 2011 meeting; Washington, DC
2011	Mrak R, Griffin WST, Barger SW, <b>Aboud O</b> , Jones R, Boop F. (2011, November). "APOE genotype governs Alzheimer neuropathologies in epilepsy". Poster presented at: Society for Neuroscience (SFN) 2011 meeting; Washington, DC
2012	Mrak R, Biedermann J, <b>Aboud O</b> , Griffin S, Zawada M. (2012, October). "Angiotensin II type 1 receptor associates with the nuclear pore complex in the human substantia nigra: Relevance to Parkinson's disease". Poster presented at: Society for Neuroscience (SFN) 2012 meeting; New Orleans, LA
2012	Griffin S, <b>Aboud O</b> , Mrak R, Boop F. (2012, October). "APOE genotype influences cellular and molecular responses in epilepsy". Poster presented at: Society for Neuroscience (SFN) 2012 meeting; New Orleans, LA
2012	<b>Aboud O,</b> Griffin WST, Biedermann J, Mrak R. (2012, October) "APOE genotype influences olfactory bulb changes in Alzheimer's disease". Poster presented at: Society for Neuroscience (SFN) 2012 meeting; New Orleans, LA
2012	<b>Aboud O</b> , Aboud E, Krisht A. (2012, October). "Extradural origin of the ophthalmic artery: far less incidence than reported". Poster presented at: 2012 Congress of Neurological Surgeons Annual Meeting; Chicago, IL
2013	<b>Aboud O</b> , Mrak R, Boop F, Griffin S. (2013, April). "The Influence of APOE Genotype on Neuronal Resilience in Epilepsy: Implications for Early Intervention". Poster presented at: Curing the epilepsies: pathways forward (NINDS) 2013 meeting; NIH, Bethesda, MD

2013 **Aboud O**, Griffin S, Parcon P, Biedermann J, Mrak R. (2013, April). "The role of APOE genotype on Alzheimer's neuropathological changes in human olfactory bulb". Poster presented at: Experimental Biology (EB2013) 2013 meeting; Boston, MA 2013 Zawada M, Mrak R, Biedermann J, Palmer Q, Aboud O, Griffin WST. (November 2013) "Angiotensin II type 1 receptor accumulates within nuclei of dopaminergic neurons in nigrosome 1, suggesting a role for nuclear oxidative stress in Parkinson's disease". Poster presented at: Society for Neuroscience (SFN) 2013 meeting; San Diego, CA 2013 **Aboud O**, Mrak R, Boop F, Griffin WST. (November 2013) "Neuronal stress responses are more related to APOE genotype than to stress modality or age". Poster presented at: Society for Neuroscience (SFN) 2013 meeting; San Diego, CA 2014 Parcon P, Aboud O, Biedermann J, Mrak R, Griffin S. (April 2014). "Alzheimer's is associated with neuropathological changes in olfactory bulb that are related to APOE genotype". Poster presented at: Experimental Biology (EB2014) 2014 meeting; San Diego, CA 2015 Aboud O, Al Salaimeh A, Sahaya K. Hinduja A. (April 2015). "Discrepant Clinical Signs among Patients with Organic Neurological Diseases". Poster presented at: UAMS Neurology Third Annual Sami Harik Resident Research Day, Little Rock, AR 2015 Parcon P, Aboud O, Biedermann J, Mrak R, Griffin S. (April 2015). "Alzheimer's is associated with neuropathological changes in olfactory bulb that are related to APOE genotype". Poster presented at: UAMS Neurology Third Annual Sami Harik Resident Research Day, Little Rock, AR 2015 Aboud O, Al Salaimeh A, Sahaya K, Hinduja A. (April 2015). "Discrepant Clinical Signs among Patients with Organic Neurological Diseases". Poster presented at: American Academy of Neurology AAN 2015; Washington, DC 2016 Aboud O, Willaims H, Gundogdu B. (February 2016). "Rare Case of Neutral Lipid Storage Disease with Myopathy with Mutation in PNPLA2". Poster Accepted: Carrell-Krusen Neuromuscular Symposium, 2016; Dallas, TX 2016 Aboud O, Kumbham P, Angtuaco E, Gundogdu B. (April 2016). "A Case of Unusual Complication of Deep Brain Stimulator". Poster presented at: UAMS Neurology Fourth Annual Sami Harik Resident Research Day; Little Rock, AR 2017 **Aboud O,** Al Salaimeh A, Sahaya K, Hinduja A. (April 2017). "Follow up on Discrepant Clinical Signs among Patients with Organic Neurological Diseases". Poster presented at: American Academy of Neurology AAN 2017; Boston, MA

2018

Mathen P, Armstrong T, Vera E, Acquaye A, Crandon S, Fletcher M, **Aboud O**, Boris L, Brown M, Garren N, Ji M, Levine J, Mackey M, Romo C, Reyes J, Siegel C, Smart D, Wu J, Gilbert M, Camphausen K, Mendoza T, Rowe L. (November 2018). "Association between body image investment and alteration in patients with primary brain tumors" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PMC:6217485** 

2018

Garren N, Vera E, **Aboud O**, Acquaye A, Boris L, Brown M, Crandon S, Ji M, Levine J, Reyes J, Romo C, Siegel C, Wu J, Gilbert M, Armstrong. (November 2018). "Patient reported outcomes measurement information system (PROMIS) screening for anxiety & depression in central nervous system (CNS) cancer: Large cohort report from the neuro-oncology branch natural history study (NOB-NHS)" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PMC:6217497** 

2018

Acquaye A, Armstrong T, Vera E, Crandon S, Fletcher M, **Aboud O**, Boris L, Brown M, Garren N, Ji M, Levine J, Romo C, Reyes J, Siegel C, Wu J, Gilbert M, Scheurer M. (November 2018). "Capturing the Primary Brain Tumor (PBT) Patient's Experience of Body Image Dissatisfaction: Report from the Neuro-oncology Branch-natural History Study (NOB-NHS)" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PMC:6217489** 

2018

Acquaye A, Vera E, **Aboud O**, Armstrong T, Boris L, Brown M, Crandon S, Garren N, Ji M, Levine J, Romo C, Reyes J, Siegel C, Wu J, Mackey M, Camphausen K, Mathan P, Smart D, Fletcher M, Mendoza T, Gilbert M, Rowe L. (November 2018). "Preliminary Examination of Confirmed Glioma Risk Factors Among Ependymoma Patients in the Neuro-oncology Branch Natural History Study (NOB-NHS) and Risk and Outcomes Study (ROS)" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PCM:6217488** 

2018

Rowe L, Vera E, Acquaye A, Crandon S, Fletcher M, **Aboud O**, Boris L, Brown M, Garren N, Ji M, Levine J, Mackey M, Mathan P, Romo C, Reyes J, Siegel C, Smart D, Wu J, Gilbert M, Camphausen K, Mendoza T, Armstrong T. (November 2018). "Body Image Disturbance in Patients with Primary Brain Tumors" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PMC:6217478** 

2018

Siegel C, **Aboud O**, Brown M, Chung HJ, Raffeld M, Crandon S, Ji M, Levine J, Vera E, Patel S, Reyes J, Armstrong T, Xi L, Acquaye A, Boris L, Briceno N, Garren N, Romo C, Quezado M, Wu J, Theeler B, Gilbert M. (November 2018). "Utilizing Next Generation Sequencing Reports in Clinical Decision Making: Report from the National Institutes of Health (NIH) Neuro-oncology Branch (NOB) Natural History Study (NHS) Primary Brain Tumor Panel (PBTP)" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PMC:6216959** 

2018

Schreck K, Vera E, **Aboud O**, Acquaye A, Boris L, Briceno N, Brown M, Chung HJ, Crandon S, Ji M, Levine J, Patel S, Quezado M, Raffeld M, Reyes J, Romo C, Siegel

C, Theeler B, Xi L, Gilbert M, Grossman S, Armstrong T, Wu J. (November 2018). "The Natural History of braf v600e-mutated Glioblastomas in Adults" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. PMC:6216675

2018

Giles A, Vezina A, Acquaye A, Fletcher M, **Aboud O**, Hutchinson MK, Lugo M, Reid C, Sonnemann H, Yang L, Gilbert M, Armstrong T. (November 2018). "The Neuro-oncology Branch Translational Research Immersion Program: Results from Two Years of Development and Participant Feedback" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PMC:6217156** 

2018

Briceno N, Crandon S, Vera E, Siegel C, **Aboud O**, Brown M, Chung HJ, Ji M, Levine J, Patel S, Reyes J, Raffeld M, Gilbert M, Xi L, Armstrong T. (November 2018). "Nucleic Acid Adequacy from Archived Formalin-fixed Paraffin Embedded (FFPE) Tumor Tissue for Next-generation Sequencing (NGS) in National Cancer Institute (NCI)- natural History Study (NHS) of Primary CNS Tumor" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PMC:6217206** 

2018

**Aboud O,** Raffeld M, Brown J, Sabersky A, Briceno N, Brown M, Chung HJ, Crandon S, Ji M, Levine J, Patel S, Reyes J, Siegel C, Vera E, Xi L, Nduom E, Quezado M, Ray-Chaudhury A, Lopes O, Armstrong T, Gilbert M, Theeler B. (November 2018). "Mutations in MAPK Pathway Genes Are Characteristic and Confirmatory of Multinodular and Vacuolating Neuronal Tumor of the Cerebrum" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PMC:6217702** 

2018

Boris L, Bryla C, Vera E, **Aboud O**, Garren N, Park D, Siegel C, Theeler B, Wu J, Armstrong T, Gilbert M. (November 2018). "A Descriptive Report of Patients with Rare Central Nervous System (CNS) Cancers on an Nci-connect Cancer Moonshot Immune Checkpoint Inhibitor Trial" Poster presented at: Society of NeuroOncology SNO 2018; New Orleans, LA. **PMC:6217685** 

2019

**Aboud O,** Al Salaimeh A, Hinduja A. (May 2019). "Positive signs in Organic Neurological Diseases". Poster presented at: American Academy of Neurology 2019; Philadelphia, PA

2019

**Aboud O,** Gilbert M, Armstrong T, Vera E, Wu J, Wall K, Theeler BJ, Siegel C, Reyes J, Leggiero N, Crandon S, Cordova C, Boris L, Bryla C, Burton E, Antony R, Quezado M, Shah R, Penas-Prado M. (November 2019). "Challenges of imaging interpretation to predict Oligodendroglioma grade" Poster presented at: Society of NeuroOncology SNO 2019; Phoenix, AZ

2019

Cordova C, Vera E, **Aboud O**, Antony R, Boris L, Bryla C, Burton E, Crandon S, Leggiero N, Reyes J, Siegel C, Theeler BJ, Vyas Y, Wall K, Wu J, Gilbert M, Armstrong T, and Penas-Prado M. (November 2019). "MRI Findings at Progression in Adult Patients with Medulloblastoma" Poster presented at: Society of NeuroOncology SNO 2019; Phoenix, AZ

2019

Vyas Y, Vera E, Bryla C, Crandon S, Wu J, Wall K, Theeler BJ, Siegel C, Reyes J, Penas-Prado M, Leggiero N, Cordova C, Burton E, Antony R, Boris L, **Aboud O**, Gilbert M, and Armstrong T. (November 2019). "Association of common patient-reported immunotherapy symptomatic side effects and pseudoprogression in patients with primary central nervous system (CNS) tumors" Poster presented at: Society of NeuroOncology SNO 2019; Phoenix, AZ

2019

Siegel C, Raygada M, Acquaye A, Stearn S, Wall K, Crandon S, Stevens-Brown K, Wu J, Vera E, Theeler BJ, Reyes J, Leggiero N, Cordova C, Bryla C, Burton E, Boris L, Antony R, Ani T, **Aboud O,** Armstrong T, Gilbert M, and Penas-Prado M. (November 2019). "Improving care for adult patients with rare CNS tumors: The National Cancer Institute-Comprehensive Oncology Network Evaluating Rare CNS Tumors (NCI-CONNECT) program and clinic" Poster presented at: Society of NeuroOncology SNO 2019; Phoenix, AZ

2021

**Aboud O,** O'Donnell R, Bloch O, Sung Lee H, and Fragoso R. (April 2021). "Meningioma with leptomeningeal dissemination". Poster presented at: American Academy of Neurology 2021; San Francisco, CA

2021

Rogers J, Acquaye A, Ikiddeh-Barnes U, Benson K, Boris L, Akindona F, Frederico S, Jammula V, Kim Y, Timmer M, **Aboud O**, Avgeropoulos N, Burton E, Cachia D, Colman H, Dixit K, Drappatz J, Dunbar E, Forsyth P, Komlodi-Pasztor E, Mandel J, Lee E, Ranjan S, Lukas R, Salacz M, Smith-Cohn M, Snyder J, Wooley J, Chaudhry H, Theeler BJ, Tsien C, Smirniotopoulos J, Butman J, Chittiboina P, Heiss J, Zaghloul K, O'Donnell K, Quezado M, Aldape K, Raygada M, Armstrong T, Gilbert M, Penas-Prado M, and members of the BTTC Network. (November 2021). "An innovative virtual multi-institutional, multidisciplinary neuro-oncology tumor board" The NIH-NOB experience during the COVID-19 pandemic" Poster presented at: Society of NeuroOncology SNO 2021; Boston, MA

2022

**Aboud O,** Bautista W, Bloch O, Harsh G, Sung Lee H, and Abu-Asab M. (March 2022). "Mitochondrial Dysfunction is Common in IDH Mutant and Wildtype High Grade Gliomas: An Ultrastructural Perspective". Poster presented at: World Foundation of Neuro-Oncology Societies; Seoul, South Korea

2022

**Aboud O,** Ye X, Grossman S. (August 2022). "Incidence of intracranial hemorrhage in glioma patients with venous thromboembolism converted from LMWH to Apixaban". Poster presented at: SNO/ASCO conference on CNS Clinical Trials & Brain Metastases; Toronto, Canada

2022

Liu Y, **Aboud O,** Daly M, Bloch O, and Yin G (November 2022). "A pilot study on retinal features and cognitive function in patients with low grade gliomas" Poster presented at: Society of NeuroOncology SNO 2022; Tampa, FL

2022

**Aboud O,** Liu Y, Fiehn O, Bridges C, Fragoso R, Hodeify R, and Bloch (November 2022). "Metabolomic changes in glioblastoma patients undergoing concurrent

chemoradiation therapy" Poster presented at: Society of NeuroOncology SNO 2022; Tampa, FL 2023 Aboubechara JP, **Aboud O** (November 2023). "Metabolomic risk factors and outcomes in patients with glioblastoma" Poster presented at: Society of NeuroOncology SNO 2023; Vancouver, Canada. 2023 Aboubechara JP, Liu Y, Fiehn O, Fragoso R, Lee H, Riess JW, Hodeify R, Bloch, and Aboud O, (November 2023). "Metabolomic approach to identification of prognostic biomarkers of glioblastoma" Poster presented at: Society of NeuroOncology SNO 2023; Vancouver, Canada. 2024 Aboubechara JP, Aboud O (April 2024). "Metabolomic risk factors and outcomes in patients with glioblastoma" Poster presented at: American Academy of Neurology AAN 2024; Denver, CO. 2024 Sulman M and Aboud O, (November 2024). "Exploring Ultrastructural Pathology in Gliomas: Insights From Recent Studies" Poster presented at: Society of NeuroOncology SNO 2024; Houston, TX. 2024 Aboubechara JP and **Aboud O**, (November 2024). "Impact of Metabolic Risk Factors on Survival in Glioblastoma" Poster presented at: Society of NeuroOncology SNO 2024; Houston, TX. 2024 Aboubechara JP, Maragah H, Abu-Asab M, Lee H, and Aboud O, (November 2024). "Excessive Lipid Production Shapes Glioma Tumor Microenvironment" Poster presented at: Society of NeuroOncology SNO 2024; Houston, TX.

### **EXTENDING KNOWLEDGE AND ALTERNATIVE MEDIA**

4/2022 "A discussion on Gliomas and Glioblastoma", "Beat Cancer Podcast",

https://anchor.fm/beat-cancer/episodes/Brain-Cancer-A-Discussion-on-

Gliomas-and-Glioblastomas-with-Dr--Orwa-Aboud-e1h4sos

### **PRESENTATIONS**

FILISTIATION	
2/2012	<b>Aboud O.</b> "Apolipoprotein E expression in response to the cytokine cycle", Department of Neurobiology and Developmental Sciences, University of Arkansas for Medical Sciences (UAMS)
5/2012	<b>Aboud O.</b> "The influence of APOE genotype on cellular and molecular responses in epilepsy.", Department of Neurobiology and Developmental Sciences (UAMS)
8/2012	<b>Aboud O.</b> "The influence of APOE genotype on cellular and molecular responses in epilepsy.", Department of Neurological Surgery, University of Illinois at Chicago (UIC)

**4/2013 Aboud O.** "The influence of APOE genotype on cellular and molecular responses in epilepsy", Ph.D, Defense presentation, Department of Neurobiology and developmental Sciences, University of Arkansas for Medical Sciences (UAMS)

**Aboud O.** "Alzheimer's is associated with neuropathological changes in olfactory bulb that are related to APOE genotype". UAMS Neurology Third Annual Sami Harik Resident Research Day, Department of Neurobiology and developmental Sciences, University of Arkansas for Medical Sciences (UAMS)

**Aboud O.** "Progressive Supranuclear Palsy", UAMS Med Path, Department of Internal Medicine, University of Arkansas for Medical Sciences (UAMS)

**Aboud O.** "Olfactory Bulb: the portal to neuropathogenesis", UAMS Neurology Grand Round, Department of Neurology, University of Arkansas for Medical Sciences (UAMS)

**Aboud O.** "Interpretation of Neurological Autoimmune Antibody Profile". UAMS Neurology Grand Round, Department of Neurology, University of Arkansas for Medical Sciences (UAMS)

Garren N, Vera E, **Aboud O**, Acquaye A, Boris L, Brown M, Crandon S, Ji M, Levine J, Romo C, Reyes J, Siegel C, Wu J, Gilbert M, Armstrong T. "Patient reported outcomes measurement information system (PROMIS) screening for anxiety & depression in central nervous system (CNS) cancer: large cohort report from the Neuro-Oncology brain natural history study (NOB-NHS)" Society of NeuroOncology SNO 2018; New Orleans, LA

Crandon S, Vera E, Acquaye A, Siegel C, **Aboud O**, Boris L, Brown M, Garren N, Ji M, Levine J, Romo C, Reyes J, Wu J, Gilbert M, Armstrong T. *"Characterization of symptom burden in minority patients with CNS tumors: a report from the neuro-oncology branch (NOB) natural history study (NHS)"*, Society of NeuroOncology SNO 2018; New Orleans, LA

Mathen P, Armstrong T, Vera E, Acquaye A, Crandon S, Fletcher M, **Aboud O**, Boris L, Brown M, Garren N, Ji M, Levine J, Mackey M, Romo C, Reyes J, Siegel C, Smart D, Wu J, Gilbert M, Camphausen K, Mendoza T, Rowe L. "Association between body image investment and alteration in patients with primary brain tumors", Society of NeuroOncology SNO 2018; New Orleans, LA

**Aboud O**, Vera E, Aldape K, Armstrong T, Briceno N, Chung HJ, Cordova C, Crandon S, Ji M, Levine J, Patel S, Penas-Prado M, Quezado M, Raffeld M, Ray-Chaudhury A, Reyes J, Siegel C, Wu J, Xi L, Gilbert M, and Theeler B. "Diffuse Midline and Histone-Mutated Gliomas in Adults: Clinical, Molecular and Radiographic Features", American Academy of Neurology 2019; Philadelphia, PA

10/2015

4/2015

3/2016

9/2016

11/2018

11/2018

11/2018

4/2019

**11/2019** Wu J, Bryla C, Su Y, Grajkowska E, McCoy A, Boris L, Antony R, Garren N, Siegel

C, Cordova C, **Aboud O**, Vera E, Lawhon T, Penas-Prado M, Theeler BJ, Mendoza T, Armstrong T, Yuan Y, and Gilbert M. "*Phase I trial of TG02 plus dose-dense or metronomic temozolomide for recurrent high-grade astrocytoma in adults*",

Society of NeuroOncology SNO 2019; Phoenix, AZ

11/2019 King A, Shuboni-Mulligan D, Vera E, Crandon S, Aboud O, Antony R, Boris L,

Bryla C, Burton E, Cordova C, Gartland C, Grajkowska E, Penas-Prado M, Reyes J, Leggiero N, Siegel C, Theeler BJ, Wall K, Wu J, Gilbert M, and Armstrong T. "The importance of sleep disturbance in primary brain tumor (PBT) patients: Clinical characteristics & Co-occurrence with tumor-related & psychological symptoms",

Society of NeuroOncology SNO 2019; Phoenix, AZ

**11/2019** Vera E, Gilbert M, **Aboud O**, Antony R, Boris L, Bryla C, Burton E, Cordova C,

Crandon S, Leggiero N, Penas-Prado M, Reyes J, Siegel C, Theeler BJ, Wall K, Wu

J, and Armstrong T. "Evaluating clinical impact utilizing the RANO-PRO

Collaborative's standardized priority constructs". Society of NeuroOncology SNO

2019; Phoenix, AZ

**11/2019 Aboud O.** "Lost in Mutation, Diffuse Midline and Histone-Mutated Gliomas", UC

Davis Neurology Grand Round, Department of Neurology, University of

California Davis

**9/2021** Aboud O. "Ultrastructural Pathology of High-Grade Glioma IDH1 Mutant &

Wildtype", Society of Neuro Oncology Young Investigator meeting, virtual

meeting

**12/2021 Aboud O.** "Challenges and Opportunities in Glioblastoma", UC Davis Cancer

Therapeutic Program, UCD Cancer Center, University of California Davis

#### **GRANTS AND CLINICAL TRIALS**

### **Active/Awarded Grants**

8/2020 – 7/2025 Title: Startup Funding, UC Davis

Total Award: \$90,000.00

Role: PI

8/2021 – 7/2024 Paul Calabresi K12 Career Development Award, NIH/NCI K12CA138464

Title: "Exploiting tumor metabolomic remodeling to predict treatment response

and tumor recurrence in glioblastoma patients". Total Award: \$115,500.00 per year X3 years

Role: PI

3/2022 Title: Travel award to Neuro-Oncology meeting in Seoul, South Korea, UC Davis

Total Award: \$800.00

Role: PI

3/2023 Title: Open access publication grant, UC Davis

Total Award: \$707.00

Role: PI

3/2023 Title: Open access publication grant, UC Davis

Total Award: \$1000.00

Role: PI

6/2023 Title: Open access publication grant, UC Davis

Total Award: \$1000.00

Role: PI

6/2023 Title: Open access publication grant, UC Davis

Total Award: \$1000.00

Role: PI

6/2023 – 7/2024 UC Davis Interdepartmental Seed Grant/Diagnostic Innovation

Total Award: \$10,000.00

Role: Co-PI

11/2023 Title: Travel award to Neuro-Oncology meeting in Vancouver, Canada, UC Davis

Total Award: \$800.00

Role: PI

1/2024 Title: Open access publication grant, UC Davis

Total Award: \$1000.00

Role: PI

2/2024 Title: Open access publication grant, UC Davis

Total Award: \$1000.00

Role: PI

10/2024 Title: Open access publication grant, UC Davis

Total Award: \$1000.00

Role: PI

11/2024 Title: Open access publication grant, UC Davis

Total Award: \$1000.00

Role: PI

### **Submitted Grants**

### **Active Clinical Trials/Protocols**

UCD 1681273 N0577 (NCI/Alliance): Phase III Intergroup Study of Radiotherapy with

Concomitant and Adjuvant Temozolomide versus Radiotherapy with Adjuvant

PCV Chemotherapy in Patients with 1p/19q Co-deleted Anaplastic Glioma or Low-Grade Glioma. Site Principal Investigator (PI)

UCD 1723215 A071702 (Alliance): A Phase II Study of Checkpoint Blockade Immunotherapy in Patients with Somatically Hypermutated Recurrent. Site Investigator

UCD 2033499 Metabolic Risk Factors in Glioblastoma patients, longitudinal study looking into metabolic risk factors in patients with glioblastoma. PI

UCD 1412052 Longitudinal immune profiling of patient with glioblastoma. Investigator

UCD 2064324 NCI#10505: Phase I/II Trail of Selinexor and Temozolomide in Recurrent Glioblastoma. Site PI

### **Pending Clinical Trials/Protocols**

JHH00242129 Safety of converting Glioma patients with Venous Thromboembolism from Low

Molecular Weight Heparin to Apixaban. Site PI

### **Closed Clinical Trials/Protocols**

UCD 1680992	NRG-BN007: A Randomized Phase II/III Open-Label Study of Ipilimumab and Nivolumab Versus Temozolomide in Patients with Newly Diagnosed MGMT (Tumor O-6-Methylguanine DNA Methyltransferase) Unmethylated Glioblastoma. Site PI
UCD 1887335	A071401 (Alliance): Phase II Trail of SMO/AKT/NF2/CDK Inhibitor in Progressive Meningiomas with SMO/AKT/NF2/CDK pathway Mutations. <b>Site (PI)</b>
UCD 1684318	Ultrastructureal Implication of IDH Mutation in Glioblastoma. PI
UCD 2001013	Sustainable Response to Vemurafenib and Cobimetinib treatment for BRAF V600E Mutated Craniopharyngioma: A case report and a literature review. <b>PI</b>
UCD 1952343	H3G34-Mutant diffuse hemispheric glioma with osseous metastases: A case report and a literature review. <b>PI</b>
UCD 1706241	Apolipoprotein E genotype and neuro-ophthalmic characteristics as indicators for treatment-associated cognitive dysfunction in long-term survivors of low-grade gliomas. <b>Investigator</b>