BIOGRAPHICAL SKETCH

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NAME: David B. Arciniegas, MD

eRA COMMONS USER NAME: ARCINIEGAS.D

POSITION TITLE: Cooper Neuropsychiatry Scholar and Professor of Neurology, University of Colorado Anschutz Medical Campus; Clinical Professor of Psychiatry and Behavioral Sciences, University of New Mexico School of Medicine

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE *(if applicable)*	Completion Date MM/YYYY	FIELD OF STUDY
University of Michigan Integrated Flexible Premedical-Medical Program, Ann Arbor, MI	B.S.	1985-1992	Biomedical Sciences, Psychology
University of Michigan Integrated Flexible Premedical-Medical Program, Ann Arbor, MI	M.D.	1988-1992	Medicine
University of Colorado School of Medicine (UC-SOM), Denver, CO	Internship	1992-1993	Community Medicine
UC-SOM, Denver, CO	Residency	1993-1996	Psychiatry
UC-SOM, Denver, CO	Fellowship	1996-1999	Neuropsychiatry & Clin Neurosci Research
Special Fellowships Program, Office of Academic Affiliations, Department of Veterans Affairs/Denver Veterans Affairs Medical Center, Denver, CO	Fellowship	1996-1999	Neurosci Research & Traumatic Brain Injury

A. Personal Statement

I serve currently as Cooper Neuropsychiatry Scholar and Professor of Neurology at the University of Colorado School of Medicine (UC-SOM) and as Clinical Professor of Psychiatry and Behavioral Sciences at the University of New Mexico School of Medicine (UNM-SOM). My academic and clinical work as a subspecialist in Behavioral Neurology & Neuropsychiatry over the last 25 years has focused principally on multimodal assessment of cognitive and non-cognitive neuropsychiatric sequelae of neurological disorders, and particularly traumatic brain injury (TBI), and on the design, execution, and clinical translation of neurodiagnostic and therapeutic clinical trials in TBI, neurodegenerative diseases, and related neurological conditions.

My research is human subjects-oriented and based on the learning health systems that I have developed and implemented in integrated TBI clinical care and research programs. My work in them has also provided extensive experience in program performance assessments, outcome evaluations, continuous quality improvement, clinical-research database development and harmonization, clinical and research ethics and professionalism, and research mentoring of more than a dozen residents, fellows, and junior faculty. At these institutions, the programs that I have had the privilege of developing and/or directing have become highly productive translational research programs as well as integrated clinical-research-teaching programs.

My research in these and related areas has been supported since 1996 by more than 40 extramurally supported research projects, including 22 federally funded research grants (including six multicenter studies, four of which are multicenter randomized controlled trials of pharmacotherapies for neuropsychiatric sequelae of TBI, on which I served as National PI/PD on the most recent one) and 16 industry-supported multicenter clinical trials (including 11 clinical trials of pharmacotherapies for Alzheimer's disease, three clinical trials of treatment for TBI-related cognitive impairments, two clinical trials of pharmacotherapies for vascular cognitive impairment for which I served as site PI and a neurodiagnostic-focused study of magnetoencephalography (MEG) in Alzheimer's disease for which I served as National PI/PD). My experience also has included 19 additional educational and programmatic grants and contracts as well as several intramurally-supported

research awards, as well as service as the Medical Monitor and Medical Director for several of the aforementioned projects and others sited elsewhere.

Recent research projects to which I have contributed that are most relevant to the above considerations are:

DoD/CDMRP W81XWH-21-TBIPHRP-TRA
"A Prospective Observational Study on Therapeutic and Adverse Effects of Medical Cannabis for Chronic Traumatic Brain Injury"
10/01/2022 - 09/30/2025
Andrew Mayer, PhD (PI, Mind Research Network), Arciniegas DB (Co-Investigator)

DHHS/NIDILRR 90DP0060
"Multicenter Evaluation of Memory Remediation after Traumatic Brain Injury with Donepezil"
10/01/13 – 09/30/19
Arciniegas DB (National PI/PD)

Dept. Veterans Affairs, Office of R&D CX000239 (CCTA #0001)
"Rivastigmine patch in Veterans with cognitive impairment following TBI"
07/01/12 - 06/30/17
Olga Brawman-Mintzer, MD (PI), Arciniegas DB (Co-Investigator/Medical Monitor)

Orasi Medical, Inc. ADG-0801
03/01/08 – 04/15/09
Arciniegas DB (National PI/PD)
"Improved Diagnosis of Alzheimer's Disease Using Magnetoencephalography (MEG) and the Synchronous Neural Interaction"

In these contexts and with these and other sources of support, I have authored more than 150 peer-reviewed journal articles (collectively cited more than 11,000 times; Google Scholar h-index = 58, i10-index = 129), 42 book chapters, and more than 50 other works communicating to scientific colleagues and the general public; served as editor or associate editor on eight medical textbooks; and delivered more than 350 lectures to professional and lay audiences in the United States and abroad, including a dozen named lectureships and keynote addresses. I currently serve as Editor of the *Journal of Neuropsychiatry and Clinical Neurosciences* and on the editorial board of the *Journal of Head Trauma Rehabilitation*; and as President of the American Neuropsychiatric Association. I have been fortunate to have my research, clinical, and education endeavors recognized by multiple institutional and national awards, including (in the last 10 years) the Mitch Rosenthal Award for Scientific and Clinical Achievement in Brain Injury Rehabilitation from Virginia Commonwealth University and Brain Injury Services, Inc. (2015); the Innovative Clinical Treatment Award from the North American Brain Injury Society (2016); and the ACLP Foundation Research Professor Award from the Academy of Consultation-Liaison Psychiatry (2021).

In addition to these areas of neuroscience research, I have been actively engaged in clinical program development, service delivery, and administration; education and education administration at the local, national, and international levels, including since its inception the Behavioral Neurology & Neuropsychiatry subspecialty creation, development, and growth under United Council for Neurologic Subspecialties; research program development and administration; and neuroethics and professionalism for practitioners in the clinical neurosciences and allied neurorehabilitation disciplines, particularly in my clinical and administrative roles at the University of Colorado Hospital, Colorado Mental Health Institute at Pueblo, HealthONE Spalding Rehabilitation Hospital, Baylor College of Medicine, TIRR Memorial Hermann, Midwestern Center for Mental Health, and University of New Mexico Health Sciences Center, and the Colorado Physician Health Program.

B. Positions, Scientific Appointments, and Honors

Current Professional Positions and Scientific Appointments

2024- Cooper Neuropsychiatry Scholar, Department of Neurology, UC-SOM
2023- Professor of Neurology, Department of Neurology, UC-SOM
2023- Clinical Professor of Psychiatry and Behavioral Sciences, UNM-SOM

Other Professional Positions and Scientific Appointments (selected)

a. Current Extramural Professional Positions

2024- Member, Common Data Elements in Traumatic Brain Injury v3.0 Working Group, National Institutes of Neurological Disorders and Stroke
2024- Co-Chair, Neurobehavioral Task Force, Brain Injury Interdisciplinary Special Interest Group, American Congress of Rehabilitation Medicine

2023- President, American Neuropsychiatric Association
2022- Chair, Traumatic Brain Injury Special Interest Group, American Neuropsychiatric Association
2016- Editor, *Journal of Neuropsychiatry and Clinical Neurosciences* (APA Publishing)
2013- Editorial Board (Emeritus Member), *Journal of Head Trauma Rehabilitation* (Wolter Kluwer/LWW)
2009- Editorial Advisory Board, *Brain Injury* (Informa Healthcare)

b. Past Professional Positions and Scientific Appointments (Selected)

i) Academic Appointments

2019-2024 Director of Evaluation and Research, Marcus Institute for Brain Health, UC-AMC
2017-2018 Chief Medical Officer, Midwestern Center for Mental Health (Montrose, CO)
2017-2023 Clinical Professor of Neurology and Psychiatry, UC-SOM
2012-2017 Professor of Psychiatry, Neurology, and Physical Medicine & Rehabilitation (with tenure), BCM
2006-2012 Associate Professor of Psychiatry and Neurology (with tenure), UC-SOM
1999-2006 Assistant Professor of Psychiatry and Neurology, UC-SOM
1998-1999 Instructor/Fellow in Psychiatry and Neurology, UC-SOM
1996-1999 Instructor/Fellow in Psychiatry, UC-SOM

ii) Administrative, Directorial, and Leadership Positions and Appointments

2020-2023 Senior Research Neuropsychiatrist and Professor, Psychiatry & Behavioral Sciences, UNM-SOM
2022-2023 Clinical Ethics Consultant, Clinical Ethics Service, UNM Health Sciences Center
2017-2019 Director of Education, Marcus Institute for Brain Health, UC-AMC
2015-2017 Co-Chair, Ethics Committee, TIRR Memorial Hermann
2014-2022 Chairman and CEO, International Brain Injury Association
2014-2016 Vice Chair for Research, Department of Physical Medicine & Rehabilitation, BCM
2012-2019 Senior Scientist, Brain Injury Research Center and TIRR Research Council, TIRR Memorial Hermann
2012-2017 Beth K. and Stuart C. Yudofsky Chair in Brain Injury Medicine, BCM
2012-2017 Medical Director for Brain Injury Research, TIRR Memorial Hermann
2012-2017 Executive Director, Beth K. and Stuart C. Yudofsky Division of Neuropsychiatry, BCM
2008-2012 Charter Member, Adult Psychopathology and Disorders of Aging (APDA) and ZRG1 BBBP-M (60), Center for Scientific Review, National Institutes of Health
2006, 2007 and 2009 President of the Medical Staff and Chair of the Executive and Credentialing Committee, HealthONE Spalding Rehabilitation Hospital
2005 Fellow, American Neuropsychiatric Association
2001-2010 Medical Director, Brain Injury Rehabilitation Unit, HealthONE Spalding Rehabilitation Hospital
2000-2012 Director, Neuropsychiatry Service and Traumatic Brain Injury Research Program, UC-SOM

Honors (selected)

2023, 2022 iTeach Recognition for Exemplary Teaching, The Learning Environment Office, UNM-SOM
2021 ACLP Foundation Research Professor Award, Academy of Consultation-Liaison Psychiatry
2019 Mitchell Rosenthal Award for Best Scientific Publication in 2018 using the NIDILRR-Funded Traumatic Brain Injury Model Systems National Database, NIDILRR TBI Model Systems
2016 Innovative Clinical Treatment Award, North American Brain Injury Society
2015 Mitch Rosenthal Award for Scientific and Clinical Achievement in Brain Injury Rehabilitation, Virginia Commonwealth University and Brain Injury Services, Inc.
2005 Outstanding Contribution Award, Brain Injury Association of Colorado
2005 Fellow, American Neuropsychiatric Association
2003, 2001 and 1999 22^{nd}, 20^{th}, and 18^{th} Eleanor A. Steele Award in Recognition of Inspirational Teaching and Supervision, Residency Training Program, Department of Psychiatry, UC-SOM
2001 Total Learning Environment - Innovations in Education Award, Office of Education, University of Colorado Health Sciences Center
2000 Fellow, Academy of Consultation Liaison Psychiatry
2000 Young Investigator Award, Brain Injury Association of America
1998 Jay Scully, M.D. Award - Teacher, Advocate, and Friend, Residency Training Program, Department of Psychiatry, University of Colorado School of Medicine
1995-1997 Board of Directors, Colorado Physician Health Program

C. Contributions to Science

1. Phenotyping and Biotyping Cognitive and Non-Cognitive Neuropsychiatric Problems after Traumatic Brain Injury and Co-Occurring Health Conditions. Beginning with my team's investigation of the cholinergic hypothesis of cognitive impairments due to TBI and proceeding through multiple subsequent projects employing multimodal clinical, neuroimaging, and electrophysiologic methods, I have been a National Principal Investigator, Principal Investigator, Co-Investigator, and Consultant on multiple single-site and multicenter studies seeking to improve clinical and research of TBI and its neuropsychiatric sequelae and to understand their functional sequelae. My work in this area represents the scholarship of discovery, integration, and application. My peer-reviewed articles in this area have been cited collectively more than 4,500 times, examples of which include:

a. **Arciniegas DB**, Adler LE, Topkoff J, Cawthra E, Filley CM, Reite ML. Attention and memory dysfunction after traumatic brain injury: cholinergic mechanisms, sensory gating, and a hypothesis for further investigation. Brain Injury 13(1):1-13, 1999. PMID: 9972437

b. Kim E, Lauterbach EC, Reeve A, **Arciniegas DB**, et al. Neuropsychiatric complications of traumatic brain injury: a critical review of the literature (a report by the ANPA Committee on Research). Journal of Neuropsychiatry & Clinical Neurosciences 19(2):106-127, 2007. PMID: 17431056

c. Amyot F, **Arciniegas DB**, Brazaitis MP, Curley KC, Diaz-Arrastia R, Gandjbakhche A, Herscovitch P, Hinds SR II, Manley G, Pacifico A, Razumovsky A, Riley J, Salzer W, Shih R, Smirniotopoulos JG, Stocker D. A Review of the Effectiveness of Neuroimaging Modalities for the Detection of Traumatic Brain Injury. Journal of Neurotrauma 32(22):1639-1721, 2015. PMID: 26176603

d. Silverberg ND, Iverson GL; ACRM Brain Injury Special Interest Group Mild TBI Task Force and the ACRM Mild TBI Definition Expert Consensus Group (Anderson V, **Arciniegas DB**, Bayley MT, et al.), ACRM Brain Injury Special Interest Group Mild TBI Task Force Members. The American Congress of Rehabilitation Medicine Diagnostic Criteria for Mild Traumatic Brain Injury. Archives of Physical Medicine & Rehabilitation (Arch Phys Med Rehabil S0003-9993(23)00297-6, 2023. PMID: 37211140

2. Clinical Trials of Pharmacotherapies and Psychosocial Interventions for the Neuropsychiatric Sequelae of Traumatic Brain Injury and Co-Occurring Health Conditions. My work in this area focused on the development of pharmacotherapies (e.g., cerebral cholinergic augmentation with acetylcholinesterase inhibitors, cerebral catecholarminergic augmentation with dopamine and norepinephrine reuptake inhibitors) as well as psychological and psychosocial treatments of cognitive and non-cognitive sequelae of traumatic brain injury. My work in this area includes service as a clinical trialist (i.e., study designer) on federally-funded and industry-supported single-site and multicenter clinical trials, including leadership as the National PI/PD for the recently completed "Multicenter Evaluation of Memory Remediation after Traumatic Brain Injury with Donepezil" (HHS/NIDILRR 90DP0060), "Randomized Controlled Trial of Acceptance and Commitment Therapy for Psychological Distress among Persons with Traumatic Brain Injury" (NIDILRR 90DP0028), and as Co-Investigator and Executive Steering Committee Member on "Rivastigmine Patch in Veterans with Cognitive Impairment following TBI" (VHA CX000239, CCTA#0001), among others, as well as leadership of and contributions to related systematic reviews, meta-analyses, and clinical guidelines/practice parameters. My peer-reviewed articles in this area have been cited collectively more than 1,000 times, examples of which include:

a. McDonald BC, Flashman LA, **Arciniegas DB**, et al. Methylphenidate and *Memory and Attention Adaptation Training* for persistent cognitive symptoms after traumatic brain injury: a randomized, placebo-controlled trial. Neuropsychopharmacology 42(9):1766-1775, 2017. PMID: 27874023

b. Brawman-Mintzer O, Tang XC, Bizien M, Reda D, Harvey PD, Horner MD, **Arciniegas DB**, et al. Rivastigmine Transdermal Patch Treatment for Moderate to Severe Cognitive Impairment in Veterans with Traumatic Brain Injury (RiVET Study): A Randomized Clinical Trial. Journal of Neurotrauma 38(14):1943-1952, 2021. PMID: 33514274

c. Beresford T, Schmidt B, Ronan PJ, Thumm B, Temple B, Wortzel H, Weitzenkamp D, Emrick C, Kelly J, **Arciniegas DB**. A Double-blind, Placebo-Controlled, Randomized Trial of Divalproex Sodium for Posttraumatic Irritability greater than 1 Year after Mild to Moderate Traumatic Brain injury. Journal of Neuropsychiatry and Clinical Neurosciences 34(3):224-232, 2022. PMID: 35272494

d. **Arciniegas DB**, Almeida E, Sander AM, et al. Multicenter Evaluation of Memory Remediation after Traumatic Brain Injury with Donepezil: the MEMRI-TBI-D Study. Journal of Neuropsychiatry and Clinical Neurosciences (in press).

3. Forensic Aspects of Traumatic Brain Injury and Co-Occurring Conditions. While I do not engage in medicolegal work, I have developed scholarly works evaluating the forensic implications of findings from the studies in which I have performed and/or participated as well as those from like-kind studies and related works in the extant literature. Collectively cited more than 1200 times, examples of my work in this area include:

a. Wortzel HS, **Arciniegas DB**. Amnesia and crime: a neuropsychiatric response. Journal of the American Academy of Psychiatry and the Law 36:218-223, 2008. PMID: 18583698

b. Wortzel HS, **Arciniegas DB**. A forensic neuropsychiatric approach to traumatic brain injury, aggression, and suicide. Journal of the American Academy of Psychiatry and the Law 41(2):274-286, 2013. PMID: 23771941

c. Wortzel HS, Brenner LA, **Arciniegas DB**. Traumatic brain injury and chronic traumatic encephalopathy: a forensic neuropsychiatric perspective. Behavioral Sciences & the Law 31(6):721-738, 2013. PMID: 24019038

d. Schneider B, **Arciniegas DB**, Harenski C, Clark GJB, Kiehl KA, Koenigs M. The prevalence, characteristics, and psychiatric correlates of traumatic brain injury in incarcerated individuals: an examination in two independent samples. Brain Injury 35(14):1690-1701, 2022. PMID: 35067151

4. Neuroethics and Professionalism. In parallel and as a complement to my clinical and neurodiagnostic studies of TBI, my scholarly work over the last 25 years has included work on neuroethics (i.e., the ethical, legal, and societal implications of neuroscience as well as the neuroscience of ethical thought and behavior) as well as the implications of such work on professionalism in clinical practice, medical education and research, forensic matters, healthcare systems administration, and public policy in relation to acquired and degenerative brain disorders and idiopathic psychiatric disorders. Collectively cited more than 150 times, examples of my work in this area include:

a. **Arciniegas DB**. Hypoxic-ischemic brain injury: addressing the disconnect between pathophysiology and public policy. NeuroRehabilitation 26(1):1-4, 2010. PMID: 20130350

b. **Arciniegas DB**, Beresford TP. Managing difficult interactions with patients in neurology practices: a practical approach. Neurology 75(18 Suppl 1):S39-S44, 2010. PMID: 21041770

c. Giacino JT, Whyte J, Nakase-Richardson R, Katz DI, **Arciniegas DB**, et al. Minimal Competency Recommendations for Programs that Provide Rehabilitation Services for Persons with Disorders of Consciousness: A Position Statement of the American Congress of Rehabilitation Medicine and the National Institute on Disability, Independent Living, and Rehabilitation Research Traumatic Brain Injury Model System. Archives of Physical Medicine & Rehabilitation 101(6):1072-1089, 2020. PMID: 32087109

d. Wylie W, Coleman MJ, Gephardt C, **Arciniegas DB**, Whiton JK, Quinn D. C-L Case Conference: Assessment of dispositional capacity in medically complex patients. Journal of the Academy of Consultation-Liaison Psychiatry 2024; S2667-2960(24)00041-7. doi: 10.1016/j.jaclp.2024.03.006 (online ahead of print). PMID: 38548229

5. Assessment and Treatment of Alzheimer's Disease and Other Neurodegenerative Disorders. In parallel and as a complement to my studies of TBI, my research has focused on cognitive disorders due to neurodegenerative diseases (e.g., Alzheimer's disease, frontotemporal lobar degeneration) and other acquired neurological conditions, including six federally-funded grants (2 R03, 2 R21, and 2 R01s), 16 industry-sponsored clinical trials, and the Orasi Medical., Inc. study "Improved Diagnosis of Alzheimer's Disease Using Magnetoencephalography (MEG) and the Synchronous Neural Interaction" (ADG-0801) on which I served as National PI. Cited collectively more than 1100 times, examples of my work in this area include:

a. Filley CM, Rollins YD, Anderson CA, **Arciniegas DB**, Howard KL, Murrell JR, Boyer PJ, Kleinschmidt-DeMasters BK, Ghetti B. The genetics of very early onset Alzheimer's disease. Cognitive and Behavioral Neurology 20(3):149-156, 2007. PMID: 17846513

b. **Arciniegas DB**, Tregellas JR, Rojas DC, Hewitt B, Anderson CA. Functional imaging of hippocampal dysfunction among persons with Alzheimer's disease: a proof-of-concept study. Neuropsychiatric Disease and Treatment 6:779-783, 2010. PMID: 21173885

c. Verdoorn TA, McCarten JR, **Arciniegas DB**, Golden R, Moldauer L, Georgopoulos A, Lewis S, Cassano M, Hemmy L, Orr W, Rojas D. Evaluation and tracking of Alzheimer's disease severity using resting-state magnetoencephalography. Journal of Alzheimer's Disease Journal of Alzheimer's Disease 26 Suppl 3:239-55, 2011. PMID: 21971464

d. Pressman PS, Molden J, Wortzel HS, Plys E, Woodcock JH, Filley CM, **Arciniegas DB**. Psychiatric screening measures in behavioral variant frontotemporal dementia. Journal of Neuropsychiatry and Clinical 2024; 36(2):160-165. PMID: 37981780