

## CURRICULUM VITAE

**Matthew David Howe, M.D., Ph.D.**
**Assistant Professor, Research Scholar Track  
Staff Psychiatrist, VA Providence**

 Department of Psychiatry and Human Behavior  
 The Warren Alpert Medical School  
 Brown University

 THE WARREN ALPERT  
**Medical School**  
BROWN UNIVERSITY

| Address  | Phone          | Preferred Email        | Alternate Email      |
|--|----------------|------------------------|----------------------|
| 830 Chalkstone Avenue,<br>Providence, RI 02906 | (401) 678-2978 | matthew_howe@brown.edu | matthew.howe1@va.gov |

EDUCATION

|                 |   |
|-----------------|---|
| Undergraduate   | B.S. 2012, Physiology/Neurobiology, Psychology, <i>summa cum laude</i> .<br>University of Connecticut. Storrs, CT.      |
| Graduate School | Ph.D. 2018, Neuroscience. The M.D. Anderson Cancer Center UTHealth Graduate School of Biomedical Sciences. Houston, TX. |
| Medical School  | M.D. 2020, Medical Scientist Training Program. McGovern Medical School. Houston, TX.                                    |

POSTGRADUATE TRAININGResidency

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| 2020-2024 | Resident, Adult Psychiatry, Department of Psychiatry and Human Behavior, Brown University. Providence, RI. |
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Research

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| 2020-2024    | Trainee, NIMH R25 Research Training Program, Department of Psychiatry and Human Behavior, Brown University. Providence, RI.   |
| 2021         | Trainee, NIA-AA Institute on Methods and Protocols for Advancement of Clinical Trials in Alzheimer's Disease and Related Disorders (IMPACT-AD). La Jolla, CA (Virtual). |
| 2024-2025    | Trainee, Advance-K Scholar Career Development Program. Brown University. Providence, RI.  |
| 2025-Present | Trainee, Qualitative Science and Methods Training Program. Brown University. Providence, RI.  |

## ACADEMIC HONORS AND AWARDS

### Undergraduate

2008 Inducted, Alpha Lambda Delta National Honor Society, University of Connecticut.

2008 Appointed, Honors Scholar, University of Connecticut.

2008 Academic Excellence Scholarship (\$51,000), University of Connecticut.

2010 Recipient, Suzannah Bliss Tieman Poster Award, NEURON Conference, Quinnipiac University.

2011 Appointed, University Scholar, University of Connecticut.

2012 Graduated *summa cum laude*, University of Connecticut.

### Graduate

2015 Second Prize (\$300), Research Retreat Poster Competition, McGovern Medical School, UT Houston.

2016 TL-1 Pre-Doctoral Fellowship, Center for Clinical Translational Sciences at UTHealth.

2016 The Dee S. & Patricia Osborne Endowed Scholarship (\$2,000), GSBS, UT Houston.

2016 First Prize (\$500), Research Retreat Poster Competition, McGovern Medical School, UT Houston.

2017 Dean's Research Scholarship Award (\$2,500), McGovern Medical School, UT Houston.

2017 AHA Pre-Doctoral Fellowship, American Heart Association.

2018 Ralph B. Arlinghaus, Ph.D. Scholarship (\$2,000), GSBS, UT Houston.

2019 Physician/Scientist Fellowship (\$79,500), The Cullen Trust for Higher Education.

### Postgraduate

2021 First Prize (Psychiatry Trainee), Mind-Brain Research Day Academic Presentations, Brown University.

2022 Recipient, Outstanding Resident Award, National Institute of Mental Health.

2023 BH Starfish Award for Clinical Care, Butler Hospital.

2024 Chair's Choice Travel Award (\$2,000), Society of Biological Psychiatry Conference.

## PROFESSIONAL LICENSURE

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|--------------|---|
| 2011-2015    | Rhode Island Emergency Medical Technician.                                    |
| 2020-2023    | Rhode Island Medical License (Limited Physician).                             |
| 2020-Present | Certification, BLS, American Heart Association.                               |
| 2023-Present | Rhode Island Medical License (Allopathic Physician).                          |
| 2023-Present | Rhode Island Controlled Substance Registration, U.S. Drug Enforcement Agency. |

## BOARD CERTIFICATION

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| 2025-Present | Board Certified in Adult Psychiatry, American Board of Psychiatry and Neurology (ABPN). |
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## ACADEMIC APPOINTMENTS

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|--------------|---|
| 2012-2015    | Graduate Research Assistant, UConn Health.                              |
| 2015-2020    | Graduate Research Assistant, McGovern Medical School.                   |
| 2020-2024    | R25 Research Trainee, Brown University.                                 |
| 2024-Present | Assistant Professor of Psychiatry and Human Behavior, Brown University. |

## HOSPITAL APPOINTMENTS

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| 2020-2024    | Psychiatry Resident, Butler Hospital.  |
| 2024-Present | Staff Psychiatrist, Home-Based Primary Care, Mental Health and Behavioral Sciences Service, VA Providence. |

## OTHER APPOINTMENTS

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| 2010      | Patient Advocate, Volunteer Office, Miriam Hospital. |
| 2022-2023 | Volunteer, Rhode Island Free Clinic.                 |

## UNIVERSITY COMMITTEES

|           |  |
|-----------|--|
| 2011-2012 | Member, Premedical Society, University of Connecticut.                               |
| 2013      | Member, Student Interest Group in Neurology, UConn Health.                           |
| 2014      | Officer, Student Interest Group in Neurology, UConn Health.                          |
| 2018-2020 | Member, Student Interest Group in Neurology and Psychiatry, McGovern Medical School. |
| 2022-2024 | Bear in Mind Podcast Committee, Brown University.                                    |

## HOSPITAL COMMITTEES

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| 2024-Present | Champion, National FLOW Initiative, VA Providence. |
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## MEMBERSHIP IN SOCIETIES

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| 2014-2018    | Member, Stroke Council. American Heart Association.   |
| 2019-Present | Member, American Psychiatric Association.   |
| 2021-2024    | The International Society to Advance Alzheimer's Research and Treatment (ISTAART), Alzheimer's Association. |

## PUBLICATIONS LIST

### Original Publications in Peer-Reviewed Journals

1. Jacobson TK, **Howe MD**, Schmidt BS, Hinman JR, Escabi MA & Markus EJ (2013). Hippocampal theta, gamma, and theta-gamma coupling: Effects of aging, environmental change, and cholinergic activation. *J Neurophysiol*, 109(7):1852-65.
2. **Howe MD**, Atadja LA, Furr JW, Maniskas ME, Zhu L, McCullough LD & Urayama A (2018). Fibronectin induces the perivascular deposition of cerebrospinal fluid-derived amyloid- $\beta$  in aging and after stroke. *Neurobiol Aging*, 72:1-13.
3. **Howe MD**, Zhu L, Sansing LH, Gonzales NR, McCullough LD & Edwards NJ (2018). Serum markers of blood-brain barrier remodeling and fibrosis as predictors of clinicoradiologic outcome in intracerebral hemorrhage. *Front Neurol*, 9:746.
4. **Howe MD**, Furr JW, Munshi Y, Roy-O'Reilly MA, Maniskas ME, Koellhoffer EC, d'Aigle J, Sansing LH, McCullough LD, Urayama A (2019). Transforming growth factor- $\beta$  promotes basement membrane fibrosis, alters perivascular cerebrospinal fluid distribution and worsens neurological recovery in the aged brain after stroke. *Geroscience*, 41(5):543-559.
5. **Howe MD**, Furr JW, Zhu L, Edwards NJ, McCullough LD & Gonzales NR (2019). Sex-specific association of matrix metalloproteinases with secondary injury and outcomes after intracerebral hemorrhage. *J Stroke Cerebrovasc Dis*, 28(6):1718-1725.
6. Sun P, Fu B, Min JW, Munshi Y, **Howe MD**, Liu L, Koellhoffer EC, Qi L, McCullough LD & Li J (2019). Inhibition of calcium/calmodulin-dependent protein kinase kinase (CaMKK) exacerbates impairment of endothelial cell and blood-brain barrier after stroke. *Eur J Neurosci*, 49(1):27-39.
7. Patrizz A, El Hamamy A, Maniskas ME, Munshi Y, Atadja L, Ahnstedt H, **Howe MD**, Bu F, Mulkey D & McCullough LD (2023). Stroke-induced respiratory dysfunction is associated with cognitive decline. *Stroke*, 54(7), 1863-1874.
8. **Howe MD**, Britton KJ, Joyce HE, Pappas GJ, Faust MA, Dawson BC, Riddle MC & Salloway SP (2023). Initial experiences with amyloid-related imaging abnormalities in patients receiving aducanumab following accelerated approval. *J Prev Alz Dis*, 10(4):765-770
9. **Howe MD**, Britton KJ, Joyce HE, Menard W, Emrani S, Kunicki ZJ, Faust MA, Dawson BC, Riddle MC, Huey ED, Janelidze S, Hansson O & Salloway SP (2024). Clinical application of plasma P-tau217 to assess eligibility for amyloid-lowering immunotherapy in memory clinic patients with early Alzheimer's disease. *Alz Res Ther*, 16(1):154.
10. **Howe MD**, Caruso MR, Manoochehri M, Kunicki ZJ, Emrani S, Rudolph JL, Huey ED, Salloway SP & Oh H (2024). Utility of cerebrovascular imaging biomarkers to detect cerebral amyloidosis. *Alzheimer Dement*, 20(10):7220-7231.

11. **Howe MD**, Jiang L, Browne JW, Bayer TA, Kunicki ZJ, De Vito AN, McGahey JE, Wu W, Lind JD, Kelso CM & Rudolph JL (2025). Discharge disposition in veterans with heart failure: Impact of dementia and severe mental illness. *J Am Med Dir Assoc*. Published online March 10, 2025. doi: 10.1016/j.jamda.2025.105533
12. Browne J, Wu WC, Jiang L, Bayer TA, Kunicki ZJ, Thompson M, Bozzay ML, De Vito AN, **Howe MD**, Singh M, Primack JM, McGahey JE, Maharaj R, Kelso CM, Philip NS, Greenberg BD & Rudolph JL (2025). Weight loss in veterans with schizophrenia and multimorbidity prescribed semaglutide: Results from a national retrospective cohort study. *Schizophr Bull*. Published Online August 17, 2025. doi: 10.1093/schbul/sbab143.
13. De Vito AN, Jiang L, Kunicki ZJ, Bozzay ML, Browne J, Bayer TA, **Howe MD**, Singh M, Primack J, Kelso CM, McGahey JE, Wu WC & Rudolph JL (*In Press*). Associations of comorbid depression and anxiety with Alzheimer's disease and Alzheimer's disease related dementias among veterans with heart failure. *Alzheimer Dement DADM*.
14. Chen AI, Chen B, Jiang L, **Howe MD**, Thompson M, Browne J, Kunicki ZJ, Bayer TA, McGahey K, Wu WC & Rudolph JL (*In Press*). Social connectedness and skilled nursing facility outcomes after heart failure hospitalization. *JAMDA*.

#### Other Peer-Reviewed Publications

1. **Howe MD** & McCullough LD (2015). Immunologic modulations to enhance post-stroke recovery. *Curr Immunol Rev*, 11(2):107-124.
2. **Howe MD** & McCullough LD (2015). Prevention and management of stroke in women. *Expert Rev Cardiovasc Ther*, 13(4):403-15.
3. **Howe MD**, McCullough LD, Urayama A (2020). The role of basement membranes in cerebral amyloid angiopathy. *Front Physiol*, 11:601320.
4. Georgakas JE\*, **Howe MD\***, Thompson LI, Riera NM & Riddle MC (2023). Biomarkers of Alzheimer's disease: Past, present and future clinical use. *Biomarkers in Neuropsychiatry*, 8(100063). \*Equal Contribution.
5. **Howe MD**, Rabinovici G & Salloway SP (2023). Untangling eligibility: real-world application of anti-beta amyloid monoclonal antibodies. *Neurology*, 101(19):811-812.
6. **Howe MD**, Riddle MC, & Salloway SP (2024). Reply to the Letter to the Editor: Response to Concerns Raised on MRI Surveillance and Clinical Implications of ARIA in Disease Modifying Treatment. *J Prev Alz Dis*, 11(1):261-262.

#### Other Non-Peer-Reviewed Publications

1. **Howe MD** (2012). Hippocampal theta and gamma: Effects of aging, environmental change, cholinergic activation and learning. *Open Commons, Honors Scholar Theses (Open Access)*. 272.
2. Shah S, Brown TA, **Howe MD** & O'Keefe LS (2017). Neurology. In T.A. Brown and S. Shah (Eds.), *USMLE Step 1 Secrets*, 4<sup>th</sup> Ed. Philadelphia, PA: Elsevier Saunders.

3. **Howe MD** (2018). The role of perivascular fibrosis in post-stroke glymphatic impairment and cerebral amyloid angiopathy. *Digital Commons, UT GSBS Dissertations and Theses (Open Access)*. 875.

#### Publications Submitted or In Preparation

1. **Howe MD**, Zide BS, Hayes KN, Ross D, Barker MS, Kunicki ZJ, Rudolph JL & Huey ED (*In Submission*). Symptom-guided blood biomarker testing for Alzheimer's disease. Submitted November 17, 2025.

#### ABSTRACTS

1. **Howe MD**, Jacobson TK, Schmidt BS & Markus EJ. Effects of physostigmine on hippocampal theta rhythm in rats. *NEURON Conference*. Quinnipiac University, Hamden, CT. November 6, 2010.
2. Jacobson TK, **Howe MD**, Bohannon S & Markus EJ. Hippocampal theta activity in young and aged rats: Effects of a modified environment and physostigmine. *Society for Neuroscience Conference*. San Diego, CA. November 13-17, 2010.
3. **Howe MD**, Jacobson TK, Schmidt BS & Markus EJ. Age-related changes in hippocampal theta and gamma rhythms: Effects of physostigmine. *Frontiers in Undergraduate Research*. University of Connecticut, Storrs, CT. 2011.
4. Jacobson TK, **Howe MD**, Schmidt BS, Hinman JR, Bohannon S, Mastro KJ, Escabi M & Markus EJ. Hippocampal oscillations in young and aged rats: Response to altered environments. *Society for Neuroscience Conference*. Washington, DC. November 12-16, 2011.
5. **Howe MD**, Newman G, Jacobson TK, Schmidt BS & Markus EJ. Changes in hippocampal theta rhythm during place-task learning in rats. *Frontiers in Undergraduate Research*. University of Connecticut, Storrs, CT. April 13-14, 2012.
6. Roy-O'Reilly MA, **Howe MD**, Venna V & McCullough LD. Sex differences in transforming growth factor- $\beta$  activated kinase-1 signaling following experimental stroke. *International Stroke Conference*. San Diego, CA. February 12-14, 2014.
7. **Howe MD**, Germain NS & Chamberlain SJ. Cerebral organoids – a model of Angelman Syndrome? *Neuroscience Retreat*. University of Connecticut. Farmington, CT. November 6, 2014.
8. **Howe MD**, Sun Y, Rosow R, Spychala M & McCullough LD. Chronic mild stroke alters vascular responses to systemic inflammation. *22<sup>nd</sup> Annual Neuroscience Poster Session*. UT Houston. December 5, 2015.
9. Sun Y, **Howe MD**, Spyphala M, Rosow R & McCullough LD. Systemic inflammation reverses stroke-induced changes in astrocytic aquaporin-4 expression. *International Stroke Conference*, San Diego, CA. February 17-19, 2016.
10. **Howe MD**, Spiegel GS, McCullough LD & Urayama A. Post-stroke glymphatic impairment: A novel mediator of cerebral amyloid angiopathy? *International CAA Conference*. Boston, MA. September 8-10, 2016.

11. **Howe MD**, Spiegel GS, McCullough LD, Urayama A. Targeting perivascular fibrosis to enhance glymphatic flow after stroke. *Medical School Research Retreat*. UT Houston. October 18, 2016.
12. **Howe MD**, Spiegel GS, McCullough LD & Urayama A. Fibronectin impairs the flow of cerebrospinal fluid after stroke. *ISCBFM Brain/PET Conference*. Berlin, Germany. March 28–April 1, 2017.
13. **Howe MD**, Spiegel GS, McCullough LD & Urayama A. The role of transforming growth factor- $\beta$  in post-stroke glymphatic impairment. *International Stroke Conference*. Houston, TX. February 22-24, 2017.
14. Honarpisheh P, Maniskas ME, **Howe MD**, McCullough LD & Ganesh BP. The effect of age-related gut dysbiosis on microglial function in cerebral amyloid angiopathy. *International CAA Conference*. Lille, France. September 6-8, 2018.
15. Manchon F, Patrizz A, Lai YJ, **Howe MD**, McCullough LD, Tsvetkov A & Urayama A. Dynamic live imaging of macromolecule transport across the blood-brain barrier. *The Gordon Research Conference (Barriers of the Central Nervous System)*. New London, NH. June 17-22, 2018.
16. **Howe MD**, Atadja LA, Furr JW, Mohan EC, McCullough LD & Urayama A. Fibronectin increases the perivascular deposition of amyloid- $\beta$  in aging and after stroke. *International Stroke Conference*. Los Angeles, CA. January 24-26, 2018.
17. **Howe MD**, Zhu L, McCullough LD & Edwards NJ. Peripheral markers of blood-brain barrier remodeling predict intracerebral hemorrhage etiology and outcomes. *International Stroke Conference*. Los Angeles, CA. January 24-26, 2018.
18. **Howe MD**, Furr JW, Munshi Y, Roy-O'Reilly MA, Maniskas ME, McCullough LD & Urayama A. Perivascular astrocytes alter the basement membrane through TGF- $\beta$  in an aged brain post-stroke. *International Stroke Conference*. Honolulu, HI. February 6-9, 2019.
19. Furr JW, **Howe MD**, Zhu L, Edwards NJ & Gonzales NR. Matrix metalloproteinase expression as a sex-specific biomarker of secondary injury and functional outcomes after spontaneous hypertensive intracerebral hemorrhage. *International Stroke Conference*. Honolulu, HI. February 6-9, 2019.
20. **Howe MD**, Furr JW, Munshi Y, Roy-O'Reilly MA, Maniskas ME, McCullough LD & Urayama A. Transforming growth factor- $\beta$  mediates basement membrane remodeling by astrocytes and impairs perivascular glymphatic distribution of amyloid- $\beta$  in aged brain. *14<sup>th</sup> International Conference on Alzheimer's and Parkinson's Diseases*. Lisbon, Portugal. March 26-31, 2019. ADPD9-0846.
21. Maniskas ME, Mack AF, McAlister CA, Gelinas B, Furr JW, Munshi Y, Patrizz A, Morales DA, **Howe MD**, Urayama A & McCullough LD. Late effects of bilateral carotid artery stenosis in an aged mouse model. *ANA Annual Meeting 2019*. St Louis, MO. October 12-15, 2019.
22. Swain SA, **Howe MD**, Ellis DM, Chua CM, Teixeira AL & Zeni CP. Substance induced psychotic disorder in child and adolescent populations: new insights from an underserved metropolitan inpatient population. *APA Annual Meeting*. Philadelphia, PA. April 25-29, 2020.
23. **Howe MD** & Salloway SP. Plasma biomarkers for the screening and monitoring of disease-modifying immunotherapy in early Alzheimer's disease. *IMPACT-AD*. La Jolla, CA (Virtual). September 19-23, 2021.

24. **Howe MD**, Emrani S, Arthur E, Oh H & Salloway SP (on Behalf of the Alzheimer's Disease Neuroimaging Initiative). Neuroimaging biomarkers of cerebrovascular disease predict cerebral amyloidosis across the spectrum of Alzheimer's disease. *Mind-Brain Research Day*. Brown University. Providence, RI. March 30, 2022.
25. **Howe MD**, Britton KJ, Joyce HE, Faust MA, Dawson BC, Riddle MC & Salloway SP. Initial experiences with amyloid-related imaging abnormalities in patients receiving aducanumab following accelerated approval. *Mind-Brain Research Day*. Brown University. Providence, RI. March 30, 2023.
26. **Howe MD**, Emrani S, Kunicki ZJ, Britton KJ, Salloway SP & Oh H (on Behalf of the Alzheimer's Disease Neuroimaging Initiative). Utility of accessible neuroimaging markers of cerebrovascular disease in identifying cerebral amyloidosis across the Alzheimer's disease spectrum. *Alzheimer's Association International Conference*. Amsterdam, Netherlands. July 16-20, 2023.
27. **Howe MD**, Britton KJ, Joyce HE, Faust MA, Dawson BC, Riddle MC & Salloway SP. Initial experiences with amyloid-related imaging abnormalities in patients receiving aducanumab following accelerated approval. *Alzheimer's Association International Conference*. Amsterdam, Netherlands. July 16-20, 2023.
28. **Howe MD**, Emrani S, Britton KJ, Joyce HE, Menard W & Salloway SP. Rapid and minimally invasive screening for Alzheimer's immunotherapy: A comparative analysis of plasma P-tau217 and amyloid PET/CSF testing to improve treatment access. *American College of Neuropsychopharmacology*, Tampa, FL. December 3-6, 2023.
29. Caruso MR, Manoochehri M, Kunicki ZJ, Emrani S, Huey ED, Salloway SP, Oh H & **Howe MD**. Revealing a novel cerebrovascular signature of Alzheimer's risk: A comparative cross-sectional study of structural MRI and amyloid PET. *Mind-Brain Research Day*. Brown University. Providence, RI. March 28, 2024.
30. **Howe MD**, Kunicki ZJ, Caruso MR, Manoochehri M, Huey ED, Salloway SP & Oh H. Structural neuroimaging features of cerebrovascular pathology exert atrophy-independent effects on soluble and insoluble amyloid- $\beta$  levels in Alzheimer's disease. *Society of Biological Psychiatry Conference*. Austin, TX. May 9-11, 2024.
31. Lawrence M, Thompson LI, **Howe MD**, De Vito A & Eaton C. PCP Practices and Attitudes Around Cognitive Screening in Rhode Island. Abstract No. 1793256. *Gerontological Society of America 2024 Annual Scientific Meeting*. Seattle, WA. November 13-16, 2024.
32. Zide BS, Kunicki ZJ, Hayes KN, Barker MS, Huey ED, Rudolph JL & **Howe MD**. Combining clinical symptom scales and blood biomarker testing to enhance accurate, accessible diagnosis of early Alzheimer's disease. *Mind-Brain Research Day*. Brown University. Providence, RI. March 25, 2025.
33. **Howe MD**, Zide BS, Kunicki ZJ, Huey ED & Rudolph JL. Towards precision medicine in Alzheimer disease: Integrating patient-centered approaches and blood biomarkers for accessible diagnosis. Abstract No. S155 (Late Breaking). *Society of Biological Psychiatry Conference*. Toronto, CA. April 24-26, 2025.

## INVITED PRESENTATIONS

### National

1. **Howe MD** & Salloway SP. Blood biomarkers of Alzheimer's disease: Moving the needle towards accessible screening in primary care. *NIMH Outstanding Resident Award Program 2022*. Bethesda, MD (Virtual). October 3-4, 2022.

### Regional

1. **Howe MD** & McCullough LD. Animal models of vascular dementia. *Joint Seminar, Center on Aging/Neuroscience. Department of Neuroscience*, University of Connecticut. Farmington, CT. March 24, 2015.
2. **Howe MD** & McCullough LD. Chronic inflammation and the post-stroke syndrome. *UT Neurology-Psychiatry Joint Meeting*. McGovern Medical School. Houston, TX. November 30, 2015.
3. **Howe MD**, Gibbs D & Salloway SP. Severe ARIA-E in an APOE-4 homozygous neurologist. *Resident Case Conference*. Department of Neurology, Brown University. Providence, RI. September 2, 2020.
4. **Howe MD**, Arboleda-Velasquez JF & Salloway SP. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy. *Resident Case Conference*. Department of Neurology, Brown University. Providence, RI. January 27, 2021.
5. **Howe MD** & Salloway SP. Lobar intracerebral hemorrhage in a patient treated with lecanemab. *Neuropathology Grand Rounds*. Department of Neurology, Brown University. Providence, RI. September 28, 2022.
6. **Howe MD**, Bach AK & Harrington CJ. Community resources for psychiatric outpatients in Rhode Island. *Resident Seminar*. Division of General Internal Medicine Residency, Department of Medicine, Brown University. Providence, RI. May 26, 2023.
7. **Howe MD**. Healthy vessels: Targeting Alzheimer's disease at its roots. *Center of Innovation Lunch Hour, Providence VA*. Providence, RI. January 22, 2024.
8. **Howe MD** & Thompson LI. Advancing towards breakthroughs for Alzheimer's disease screening in primary care. *ADRD Advisory Council Meeting, Rhode Island Department of Health*. Providence, RI. January 24, 2024.
9. **Howe MD**, Thompson LI & Rosenbaum J. Importance of early detection and its impact on patient and care partner needs. *ECHO Learning Series, Rhode Island Geriatric Education Center, University of Rhode Island*. South Kingstown, RI. May 16, 2024.
10. **Howe MD**, Thompson LI & Split M. Importance of early detection and its impact on patient and care partner needs (Updated). *ECHO Learning Series, Rhode Island Geriatric Education Center, University of Rhode Island*. South Kingstown, RI. March 21, 2025.
11. **Howe MD**. From Blood-Brain Barrier to Biomarker: Advancing Alzheimer's Detection in Veterans. *VISN 1 Neurology Monday Noon Conference*. Boston, MA (Virtual). June 9, 2025.

## SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

### Non-Peer-Reviewed

1. **Howe MD**, Huda Z, Rengifo JR, Guthrie TG, Cosmo C & Riddle MC. “Alzheimer’s disease with Meghan Riddle, M.D.” *Bear in Mind*. Podcast audio, June 27, 2023. <https://bearinmindpodcast.com/episodes/>.

## GRANTS

### Current or Pending:

1. **Department of Veterans Affairs, VISN 1 Career Development Award (V1CDA2025-82), Towards an Accessible Diagnostic Algorithm for Alzheimer's Disease: A Mixed Methods Study of Aging Veterans.** PI: Howe. Total award: \$521,685. 10/01/2025–09/30/2027.

### Completed:

1. **University of Connecticut, Psychology Undergraduate Research Grant, Effects of Physostigmine on Hippocampal Theta Rhythms in Young and Aged Rats.** PI: Howe. Total award: \$1,400. 01/31/2010–05/15/2010.
2. **University of Connecticut, Life Sciences Honors Thesis Research Grant, Hippocampal Theta and Gamma: Effects of Learning.** PI: Howe. Total award: \$1,000. 01/31/2011–05/15/2011.
3. **Center for Clinical and Translational Sciences at UTHealth, TL1 Pre-Doctoral Fellowship (4TL1TR369-10), The Role of Perivascular Fibrosis in Post-Stroke Glymphatic Impairment.** PI: Howe. Total award: \$46,000. 09/01/2016–12/31/2016.
4. **American Heart Association, Pre-Doctoral Fellowship (17PRE33410369), The Role of Perivascular Fibrosis in Post-Stroke Glymphatic Impairment.** PI: Howe. Total award: \$52,000. 01/01/2017–09/01/2018.
5. **Department of Psychiatry and Human Behavior, Brown University, Research Training Program (2R25MH101076-06A1), Promoting Research Training During Psychiatry Residency.** PI: Tyrka. Role: Trainee (Howe). 07/01/2020–06/30/2024.

## UNIVERSITY TEACHING, ADVISING AND MENTORING ROLES

### Teaching

|           |  |  |
|-----------|--|--|
| 2010-2011 | “Laboratory in Anatomy and Physiology I – II.”         | <ul style="list-style-type: none"><li>• Role: Teaching Assistant.</li><li>• Director(s): Xinnian Chen, Ph.D. and Daniel K. Mulkey, Ph.D.</li><li>• Institution: University of Connecticut.</li></ul> |
| 2013-2015 | “Organ Systems I – III, Mechanisms of Disease I – IV.” | <ul style="list-style-type: none"><li>• Role: Peer Tutor.</li><li>• Supervisor(s): Yvonne G. Grimm-Jorgensen, Ph.D.</li></ul>  |

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| 2016         | <ul style="list-style-type: none"> <li>• Institution: UConn Health School of Medicine.</li> </ul> <p>“Neuroanatomy Laboratory.”</p> <ul style="list-style-type: none"> <li>• Role: Teaching Assistant.</li> <li>• Director(s): Cameron B. Jeter, Ph.D.</li> <li>• Institution: UTHealth School of Dentistry.</li> </ul> |
| 2020-2024    | <p>“Psychiatry Clerkship”</p> <ul style="list-style-type: none"> <li>• Role: Resident Instructor.</li> <li>• Director(s): Caitlin S. Lawrence, M.D.</li> <li>• Institution: The Warren Alpert Medical School of Brown University.</li> </ul>  |
| 2024-Present | <p>“Aging Health &amp; Health Services Research Training”</p> <ul style="list-style-type: none"> <li>• Role: Guest Lecturer.</li> <li>• Director(s): Vincent Mor, Ph.D.</li> <li>• Institution: The Brown University School of Public Health.</li> </ul>  |
| 2025-Present | <p>“Consultation-Liaison Psychiatry Fellowship Training Program”</p> <ul style="list-style-type: none"> <li>• Role: Site Director &amp; Supervising Faculty</li> <li>• Director(s): Paul Baker, MD &amp; Colin J. Harrington, MD</li> <li>• Institution(s): Brown University, Butler Hospital, VA Providence</li> </ul> |
| 2025-Present | <p>“Brown University Geriatric Psychiatry Fellowship Training Program”</p> <ul style="list-style-type: none"> <li>• Role: Site Director &amp; Supervising Faculty</li> <li>• Director(s): Laura A. Stanton, MD</li> <li>• Institution(s): Brown University, Butler Hospital, VA Providence</li> </ul>                   |

### Mentoring

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| 2024-2025    | Dean Chung, M.D. <ul style="list-style-type: none"> <li>• Current Position: Psychiatry Resident (Brown University)</li> <li>• Description: Formal career mentor during first year of psychiatry training. Regular meetings to discuss professional goals.</li> <li>• Outcomes: Successfully completed first year of training, now a PGY-2.</li> </ul>   |
| 2025-Present | Benjamin Zide, MSt <ul style="list-style-type: none"> <li>• Current Position: Medical Student (Brown University)</li> <li>• Description: Research mentor during first year of medical school. Currently meeting as needed to check-in on progress towards completing a data analysis in the Alzheimer’s Disease Neuroimaging Initiative (ADNI) dataset.</li> <li>• Outcomes: Received first-prize for his poster presentation sharing our preliminary findings at Brown University Mind-Brain Research Day 2025.</li> </ul> |
| 2025-Present | Samuel I. Dunham, MD <ul style="list-style-type: none"> <li>• Current Position: Psychiatry C-L Fellow (Brown University)</li> <li>• Description: Clinical supervisor for the Home-Based Primary Care longitudinal rotation (twice monthly).</li> <li>• Outcomes: Currently completing his fellowship training with anticipated graduation in June 2026.</li> </ul>  |

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## Matthew David Howe, M.D., Ph.D.

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### Online Profiles

[LinkTree](#)

[ORCiD](#)

[MyBibliography](#)

### Affiliations

[Brown University](#)

[Memory and Aging Program](#)

[THRIVE-COIN](#)



THE WARREN ALPERT  
Medical School  
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*- References Available Upon Request -*

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