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Biostatistician 2, Multispecialty Anesthesiology

Publications

PUBLICATIONS

- **Apolipoprotein E Mimetic Peptide CN-105 and Postoperative Delirium in Older Patients: The Phase 2 MARBLE Randomized Clinical Trial.** *JAMA network open*
Timko, N. J., Cooter Wright, M., Smith, M. R., Boykin, P. C., Emerson, J. M., Woldorff, M. G., Eleswarpu, S., Herbert, J. T., Moretti, E. W., Devinney, M. J., Ayoub, C. M., Rockhold, F. W., Ryu, et al
2026; 9 (4): e262289
- **Developing Topics.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*
Smith, M. R., Roberts, K. C., Browndyke, J. N., Wright, M. C., Reekes, T. H., Devinney, M. J., Cohen, H. J., Mathew, J. P., Whitson, H., Woldorff, M. G., Berger, M.
2025; 21 Suppl 7 (Suppl 7): e108129
- **Prediction of postoperative delirium in older adults from preoperative cognition and occipital alpha power from resting-state electroencephalogram.** *Age and ageing*
Ning, M. H., Rodionov, A., Ross, J. M., Ozdemir, R. A., Burch, M., Lian, S. J., Alsop, D., Cavallari, M., Dickerson, B., Fong, T., Jones, R. N., Libermann, T., Marcantonio, et al
2025; 54 (11)
- **ROC Analysis of Biomarker Combinations in Fragile X Syndrome-Specific Clinical Trials: Evaluating Treatment Efficacy via Exploratory Biomarkers.** *Translational psychiatry*
Norris, J. E., Berry-Kravis, E. M., Harnett, M. D., Reines, S. A., Smith, M. R., Auger, E. K., Outterson, A. H., Furman, J., Gurney, M. E., Ethridge, L. E.
2025; 15 (1): 323
- **Phenotypic variation in neural sensory processing by deletion size, age, and sex in Phelan-McDermid syndrome.** *Journal of neurodevelopmental disorders*
Smith, M. R., Berry-Kravis, E., Thaliath, A., Isenstein, E. L., Durkin, A. R., Foss-Feig, J., Siper, P. M., Nelson, C. A., Baczewski, L., Levin, A. R., Powell, C. M., Pulver, S. L., Mosconi, et al
2025; 17 (1): 51
- **Associations between anaesthetic dose-adjusted intraoperative EEG alpha power, processing speed, and postoperative delirium: analysis of data from three prospective studies.** *British journal of anaesthesia*
Reese, M., Wright, M. C., Roberts, K. C., Browndyke, J. N., Bennett, M., Acker, L., Devinney, M. J., Reekes, T. H., Waligorska, T., Shaw, L. M., Blennow, K., Zetterberg, H., Cohen, et al
2025
- **Predilection for Perplexion: Preoperative microstructural damage is linked to postoperative delirium.** *medRxiv : the preprint server for health sciences*
Reekes, T. H., Upadhyaya, V. R., Merenstein, J. L., Cooter-Wright, M., Madden, D. J., Reese, M. A., Boykin, P. C., Timko, N. J., Moul, J. W., Garrigues, G. E., Martucci, K. T., Cohen, H. J., Whitson, et al
2025
- **Biomarkers.** *Alzheimer's & dementia : the journal of the Alzheimer's Association*
Reese, M., Cooter, M., Roberts, K. C., Woldorff, M. G., Browndyke, J. N., Shaw, L. M., Waligorska, T., Zetterberg, H., Blennow, K., Berger, M.

2024; 20 Suppl 2: e089088

- **Auditory N1 event-related potential amplitude is predictive of serum concentration of BPN14770 in fragile X syndrome** *MOLECULAR AUTISM*
Norris, J. E., Berry-Kravis, E. M., Harnett, M. D., Reines, S. A., Reese, M. A., Outterson, A. H., Michalak, C., Furman, J., Gurney, M. E., Ethridge, L. E.
2024; 15 (1): 47
- **Corrigendum to "A real-time neurophysiologic stress test for the aging brain: Novel perioperative and ICU applications of EEG in older surgical patients"** *Neurotherapeutics* 20 (4) (2023) 975-1000. *Neurotherapeutics : the journal of the American Society for Experimental Neurotherapeutics*
Berger, M., Ryu, D., Reese, M., McGuigan, S., Evered, L. A., Price, C. C., Scott, D. A., Westover, M. B., Eckenhoff, R., Bonanni, L., Sweeney, A., Babiloni, C.
2024: e00473
- **Prediction of Post-Operative Delirium in Older Adults from Preoperative Cognition and Alpha Power from Resting-State EEG.** *medRxiv : the preprint server for health sciences*
Ning, M., Rodionov, A., Ross, J. M., Ozdemir, R. A., Burch, M., Lian, S. J., Alsop, D., Cavallari, M., Dickerson, B. C., Fong, T. G., Jones, R. N., Libermann, T. A., Marcantonio, et al
2024
- **Auditory N1 event-related potential amplitude is predictive of serum concentration of BPN14770 in fragile x syndrome.** *Research square*
Norris, J. E., Berry-Kravis, E. M., Harnett, M. D., Reines, S. A., Reese, M. A., Outterson, A. H., Michalak, C., Furman, J., Gurney, M. E., Ethridge, L. E.
2024
- **Cognitive and Cerebrospinal Fluid Alzheimer's Disease-related Biomarker Trajectories in Older Surgical Patients and Matched Nonsurgical Controls** *ANESTHESIOLOGY*
Reese, M., Wong, M. K., Cheong, V., Ha, C. I., Wright, M., Browndyke, J., Moretti, E., Devinney, M. J., Habib, A. S., Moul, J. W., Shaw, L. M., Waligorska, T., Whitson, et al
2024; 140 (5): 963-978
- **Preoperative electroencephalographic alpha-power changes with eyes opening are associated with postoperative attention impairment and inattention-related delirium severity** *BRITISH JOURNAL OF ANAESTHESIA*
Acker, L., Wong, M. K., Wright, M. C., Reese, M., Giattino, C. M., Roberts, K. C., Au, S., Colon-Emeric, C., Lipsitz, L. A., Devinney, M. J., Browndyke, J., Eleswarpu, S., Moretti, et al
2024; 132 (1): 154-163
- **Changes in Brain Activity Immediately Post-Exercise Indicate a Role for Central Fatigue in the Volitional Termination of Exercise.** *International journal of exercise science*
Chesbro, G. A., Owens, C., Reese, M., DE Stefano, L., Kellawan, J. M., Larson, D. J., Wenger, M. J., Larson, R. D.
2024; 17 (1): 220-234
- **EEG pre-burst suppression: characterization and inverse association with preoperative cognitive function in older adults** *FRONTIERS IN AGING NEUROSCIENCE*
Reese, M., Christensen, S., Anolick, H., Roberts, K. C., Wong, M. K., Wright, M., Acker, L., Browndyke, J. N., Woldorff, M. G., Berger, M., MADCO-PC & INTUIT Investigators
2023; 15: 1229081
- **Perioperative changes in neurocognitive and Alzheimer's disease-related cerebrospinal fluid biomarkers in older patients randomised to isoflurane or propofol for anaesthetic maintenance** *BRITISH JOURNAL OF ANAESTHESIA*
Villalobos, D., Reese, M., Wright, M., Wong, M., Syed, A., Park, J., Hall, A., Browndyke, J. N., Martucci, K. T., Devinney, M. J., Acker, L., Moretti, E. W., Talbot, et al
2023; 131 (2): 328-337
- **A Real-Time Neurophysiologic Stress Test for the Aging Brain: Novel Perioperative and ICU Applications of EEG in Older Surgical Patients** *NEUROTHERAPEUTICS*
Berger, M., Ryu, D., Reese, M., McGuigan, S., Evered, L. A., Price, C. C., Scott, D. A., Westover, M., Eckenhoff, R., Bonanni, L., Sweeney, A., Babiloni, C.
2023; 20 (4): 975-1000
- **Intraoperative Anesthetic Probes of Brain Health: Ketamine as a Canary in the Coal Mine?** *Anesthesia and analgesia*
Reese, M., Heifets, B. D., Berger, M.

2022; 135 (4): 679-682

- **Machine learning XGBoost classification of postoperative delirium by intraoperative EEG metrics**
Reese, M., Roberts, K., Woldorff, M. G., Cooter, M., Acker, L., Wu, S., Whitson, H. E., Berger, M.
LIPPINCOTT WILLIAMS & WILKINS.2022: 609-611
- **Cognitive and cerebrospinal fluid Alzheimer's Disease biomarker changes over time in older surgical patients and matched nonsurgical controls**
Wong, M., Reese, M., Cooter, M., Browndyke, J. N., Mathew, J. P., Cohen, H. J., Whitson, H. E., Berger, M.
LIPPINCOTT WILLIAMS & WILKINS.2022: 954-956
- **Preoperative EEG Inattention Signatures and Postoperative Delirium**
Acker, L., Au, S., Roberts, K., Giattino, C., Moretti, E., Devinney, M., Reese, M., Cohen, H. J., Mathew, J. P., Woldorff, M. G., Whitson, H. E., Berger, M.
LIPPINCOTT WILLIAMS & WILKINS.2022: 496
- **Postoperative changes in cognition and cerebrospinal fluid neurodegenerative disease biomarkers** *ANNALS OF CLINICAL AND TRANSLATIONAL NEUROLOGY*
Berger, M., Browndyke, J. N., Wright, M., Nobuhara, C., Reese, M., Acker, L., Bullock, W., Colin, B. J., Devinney, M. J., Moretti, E. W., Moul, J. W., Ohlendorf, B., Laskowitz, et al
2022; 9 (2): 155-170
- **Inhibition of phosphodiesterase-4D in adults with fragile X syndrome: a randomized, placebo-controlled, phase 2 clinical trial** *NATURE MEDICINE*
Berry-Kravis, E. M., Harnett, M. D., Reines, S. A., Reese, M. A., Ethridge, L. E., Outterson, A. H., Michalak, C., Furman, J., Gurney, M. E.
2021; 27 (5): 862-+
- **Biomarkers for moral cognition: Current status and future prospects for neurotransmitters and neuropeptides** *NEUROSCIENCE AND BIOBEHAVIORAL REVIEWS*
Reese, M., Bryant, D., Ethridge, L.
2020; 113: 88-97
- **Cognitive and Cerebrospinal fluid Alzheimer's Disease biomarker changes over time in older surgical patients and matched nonsurgical controls**
Ha, C., Cheong, V., Cooter, M., Browndyke, J. N., Moretti, E., Bullock, W. M., Colin, B. J., Devinney, M., Whittle, J., Ferrandino, M., Gadsden, J., Habib, A. S., Lemm, et al
LIPPINCOTT WILLIAMS & WILKINS.2020: 502