Research

Publications, projects, and academic work

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1 Publications



Topic Color Legend: Military/Defense Medical/Clinical Technical/Neuroimaging Healthcare/Pandemic General Research

1.1 2024

Cory McEvoy, Adam Crabtree, John Case, Gary E. Means, Peter Muench, Ronald G. Thomas, Rebecca A. Ivory, Jason Mihalik, and James S. Meabon, "Cumulative blast impulse is predictive for changes in chronic neurobehavioral symptoms following low level blast exposure during military training," *Military Medicine* (2024): e2069-e2077, doi: 10.1093/milmed/usae206

Military health Traumatic brain injury Biomarkers Longitudinal studies

Article • PDF

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Douglas Galasko, Martin R. Farlow, Brendan P. Lucey, Lawrence S. Honig, Donald Elbert, Randall Bateman, Jeremiah Momper, **Ronald G. Thomas**, Robert A. Rissman, Judy Pa, et al., "A multicenter, randomized, double-blind, placebo-controlled ascending dose study to evaluate the safety, tolerability, pharmacokinetics (PK) and pharmacodynamic (PD) effects of Posiphen in subjects with Early Alzheimer's Disease," *Alzheimer's Research & Therapy* 16, no. 1 (2024): 151, doi: 10.1186/s13195-024-01540-z

Alzheimer's disease Clinical trials Drug development Pharmacokinetics

Article • PDF

Garth Terry, Kathleen F. Pagulayan, Mark Muzi, Cynthia Mayer, Daniel R. Murray, Abigail G. Schindler, Todd L. Richards, Cory McEvoy, Adam Crabtree, Chris McNamara, **Ronald G. Thomas**, et al., "Increased [18F] Fluorodeoxyglucose Uptake in the Left Pallidum in Military Veterans with Blast-Related Mild Traumatic Brain Injury: Potential as an Imaging Biomarker and Mediation with Executive Dysfunction and Cognitive Impairment," *Journal of Neurotrauma* (2024), doi: 10.1089/neu.2024.0142

Neuroimaging PET imaging Military health Brain injury

Article • PDF

1.2 2023

Rebecca C. Hendrickson, Catherine A. McCall, Aaron F. Rosser, Kathleen F. Pagulayan, Bernard P. Chang, Ellen D. Sano, **Ronald G. Thomas**, and Murray A. Raskind, "The relative contribution of COVID-19 infection versus COVID-19 related occupational stressors to insomnia in healthcare workers," *Sleep Medicine:* X 5 (2023): 100067, doi: 10.1016/j.sleepx.2022.100067

COVID-19 Healthcare workers Sleep disorders Occupational health

Article • PDF

Samantha A. Keil, Abigail G. Schindler, Marie X. Wang, Juan Piantino, Lisa C. Silbert, Jonathan E. Elliott, Madeleine L. Werhane, **Ronald G. Thomas**, Sherry Willis, Miranda M. Lim, et al., "Longitudinal Sleep Patterns and Cognitive Impairment in Older Adults," *JAMA Network Open* 6, no. 12 (2023): e2346006, doi: 10.1001/jamanetworkopen.2023.46006

Sleep patterns Cognitive decline Aging Longitudinal studies

Article • PDF

Murray A. Raskind, Tammy Williams, Hollie Holmes, Kim Hart, Laura Crews, Eileen L. Poupore, Ronald G. Thomas, Jolee Darnell, Colin Daniels, Kevin Goke, et al., "A randomized controlled clinical trial of prazosin for alcohol use disorder in active duty soldiers: Predictive effects of elevated cardiovascular parameters," *Alcoholism: Clinical and Experimental Research* 47, no. 2 (2023): 348-360, doi: 10.1111/acer.15008

Clinical trials Military health Substance abuse Cardiovascular risk

Article • PDF

Eric M. Reiman, Jeremy J. Pruzin, Silvia Rios-Romenets, Chris Brown, Margarita Giraldo, Natalia Acosta-Baena, Carlos Tobon, Nan Hu, Yinghua Chen, Valentina Ghisays, **Ronald G. Thomas**,

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et al., "A public resource of baseline data from the Alzheimer's Prevention Initiative Autosomal-Dominant Alzheimer's Disease Trial," *Alzheimer's & Dementia* 19, no. 5 (2023): 1938-1946, doi: 10.1002/alz.12923

Alzheimer's disease Prevention trials Open data Genetic risk

Article • PDF • Data

1.3 2022

Rebecca C. Hendrickson, Roisín A. Slevin, Katherine D. Hoerster, Bernard P. Chang, Ellen Sano, Catherine A. McCall, Gillian R. Monty, **Ronald G. Thomas**, and Murray A. Raskind, "The impact of the COVID-19 pandemic on mental health, occupational functioning, and professional retention among health care workers and first responders," *Journal of General Internal Medicine* 37, no. 2 (2022): 397-408, doi: 10.1007/s11606-021-07252-z

COVID-19 Healthcare workers Mental health Occupational stress

Article • PDF

Clara Vila-Castelar, Pierre N. Tariot, Kaycee M. Sink, David Clayton, Jessica B. Langbaum, Ronald G. Thomas, Yinghua Chen, Yi Su, Kewei Chen, Nan Hu, et al., "Sex differences in cognitive resilience in preclinical autosomal-dominant Alzheimer's disease carriers and non-carriers: baseline findings from the API ADAD Colombia Trial," *Alzheimer's & Dementia* 18, no. 11 (2022): 2272-2282, doi: 10.1002/alz.12571

Alzheimer's disease Sex differences Cognitive resilience Prevention trials

Article • PDF

Aladdin H. Shadyab, Andrea Z. LaCroix, Genevieve Matthews, Daniel Bennett, Alexandre A. Shadyab, Donna Tan, **Ronald G. Thomas**, Jennifer Mason, Alex Lopez, Brianna Askew, et al., "T2 Protect AD: Achieving a rapid recruitment timeline in a multisite clinical trial for individuals with mild to moderate Alzheimer's disease," *Alzheimer's & Dementia: Translational Research & Clinical Interventions* 8, no. 1 (2022): e12265, doi: 10.1002/trc2.12265

Clinical trials Recruitment strategies Alzheimer's disease Study design

Article • PDF

1.4 Working Papers & Preprints

Coming soon: Links to preprints, working papers, and manuscripts under review

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2 White Papers & Technical Reports

In-depth technical analyses, methodological frameworks, and implementation guides covering research workflows, statistical computing environments, and data science applications.

View All White Papers \rightarrow

3 Current Projects

3.1 Statistical Methods Development

- Novel approaches to clinical trial design
- Bayesian methods for biomarker analysis
- Reproducible research workflows

3.2 Collaborative Research

- Multi-institutional studies
- Open science initiatives
- Methodological consulting

4 Data and Code

Reproducible research materials, datasets, and computational resources supporting published work.

4.1 Open Science Contributions

- R packages for statistical analysis
- Data analysis pipelines
- Methodology implementations