

BIOGRAPHICAL SKETCH

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NAME: Gehrman, Philip Richard

eRA COMMONS USER NAME (credential, e.g., agency login): PGEHRMAN

POSITION TITLE: Associate Professor of Clinical Psychology in Psychiatry

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
University of Pennsylvania, Philadelphia, PA	BA	5/1994	Biological Basis of Behavior
San Diego State University, San Diego, CA	MA, PhD	5/2003	Clinical Psychology
University of California, San Diego, CA	PhD	5/2003	Clinical Psychology
University of Pennsylvania, Philadelphia, PA		7/2004	Sleep Research

A. Personal Statement

My program of research is focused on sleep and circadian rhythms and their interface with psychiatric disorders. I have an established track record in sleep research with a particular focus on insomnia. My work has investigated the mechanisms and treatment of insomnia in a range of patient populations including veterans with PTSD, patients with depression, and cancer survivors. My research program is translational in nature and examines research questions from a variety of perspectives ranging from genomics and metabolomics through to clinical trials. Some of these projects involve the application of cognitive behavioral treatment of insomnia (CBT-I), a treatment for which I have been a national trainer in the VA system. My goal is to use a variety of approaches, currently including phenotypic, genomic, and metabolomics studies to investigate the mechanisms of insomnia and its link to neuropsychiatric disorders. I pursue these goals with a team science approach, bringing together expertise in multiple domains. As such, I am ideally suited to lead this team effort to reconsider the nosology of insomnia.

B. Positions, Scientific Appointments, and Honors**Positions and Employment**

2017-present	Associate Professor, Department of Psychiatry, University of Pennsylvania School of Medicine
2009-present	Clinical Psychologist, Behavioral Health Service, Philadelphia VA Medical Center
2009-2017	Assistant Professor, Department of Psychiatry, University of Pennsylvania School of Medicine
2008-2009	Instructor, Department of Psychiatry, University of Pennsylvania School of Medicine
2004-2008	Assistant Professor, Department of Social Sciences, University of the Sciences in Philadelphia, Philadelphia, PA
2003-2004	Postdoctoral Fellowship at the Center for Sleep and Respiratory Neurobiology, Hospital of the University of Pennsylvania, Philadelphia, PA
2002-2003	Clinical Psychology Internship, Durham VA Medical Center, Durham, NC

Other Experience and Professional Memberships

2014-present	Member, European Sleep Research Society
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2013-2017	Member, American Telemedicine Association
1997-present	Member, American Academy of Sleep Medicine
1997-present	Member, Sleep Research Society
2016-2019	Chair, Pipeline Development Committee
2006-2014	Trainee Education Advisory Committee member
2001-2002	Trainee Member-at-Large to the Executive Board
2000-2001	Chair, APSS Trainee Program Committee
1997-2002	Associated Professional Sleep Societies (APSS) Trainee Program Committee

Honors

2020	Liberal and Professional Studies Award for Distinguished Teaching in Undergraduate and Post-Baccalaureate Programs
2018	Arts and Sciences Faculty Teaching Award, University of Pennsylvania Wharton School Huntsman Program
2012	Late Breaking Abstract Award – Associated Professional Sleep Societies Annual Meeting
2011	Veterans Health Administration (VHA) Clinical Systems Redesign Award
2011	Samuel Kuna Excellence in Research Mentoring Award, University of Pennsylvania School of Medicine
2006	Nominated for the USP Lindback award for outstanding teaching
2003	Associated Professional Sleep Societies merit award for trainee research
2002	Associated Professional Sleep Societies merit award for trainee research

C. Contributions to Science

1. A major focus of my work has been on the mechanisms of insomnia and its relationship with psychiatric disorders. The publications below represent a translational research program that has sought to characterize the mechanisms of insomnia at multiple levels of analysis. These studies demonstrate that insomnia is a heritable disorder and the genes that confer risk overlap with those for psychiatric disorders. With a more clinical focus, other studies have demonstrated abnormalities in a range of domains.

- a) Boland EM, Rao H, Dinges DF, Smith RV, Goel N, Detre JA, Basner M, Sheline YI, Thase ME & Gehrman PR: Meta-analysis of the antidepressant effects of acute sleep deprivation. Journal of Clinical Psychiatry 78(8):e1020-e1034, 2017.
- b) Gehrman P, Sengupta A, Harders E, Ubeydullah E, Pack AI, Weljie A. Altered diurnal states in insomnia reflect peripheral hyperarousal and metabolic desynchrony: a preliminary study. Sleep 41(5):1-12, 2018.
- c) Mithani S, Yun S, Leete JJ, Guedes VA, Fink AM, Pattinson CL, Kim H, Weljie A, Gill JM, Gehrman P. Whole blood transcriptome analysis using RNA sequencing in individuals with insomnia disorder and good sleepers: a pilot study. Sleep Medicine In Press, 2021.
- d) Palermo J*, Chesi A*, Zimmerman A*, Sonti S, Pahl MC, Lasconi C, Brown EB, Pippin Ja, Wells AD, Doldur-Balli F, Mazzotti DR, Pack AI, Gehrman PR#, Grant SFA#, Keene AC#. Variant-to-gene mapping followed by cross-species genetic screening identifies GPI-anchor biosynthesis as novel regulator of sleep. Science Advances, 9(1), eabq0844, 2023.

2. A second focus of my research has been on the cognitive behavioral treatment of insomnia (CBT-I) and other sleep disorders in a wide range of clinical populations. While CBT-I has long been known to be effective in primary insomnia, the overwhelming majority of patients (>80%) have one or more comorbid conditions. The studies below all found evidence that cognitive behavioral treatments for insomnia and nightmares are effective in both primary insomnia and in the context of comorbidities, in particular PTSD. They also shown that CBT-I is as or more effective than pharmacotherapy and can also be delivered in a group format.

- a) Koffel E, Koffel J, Gehrman P. (2015) A meta-analysis of group cognitive behavioral therapy for insomnia. Sleep Medicine Reviews, 19:6-16.
- b) Harb GC, Cook JM, Phelps AJ, Gehrman PR, Forbes, D, Localio R, Harpaz-Rotem I, Gur RC, Ross RJ. Randomized controlled trial of imagery rehearsal for posttraumatic nightmares in combat veterans. Journal of Clinical Sleep Medicine 15(5):757-767, 2019.

- c) Gehrman P, Barilla H, Medvedeva E, Bellamy S, O'Brien E, Kuna ST. Randomized trial of telehealth delivery of cognitive behavioral treatment for insomnia vs. in-person treatment in veterans with PTSD. Journal of Affective Disorders Reports 1:100018, 2020.
- d) Gehrman P, Gunter P, Findley J, Frasso R, Weljie AM, Kuna ST, Kayser MS. Randomized non-inferiority trial of telehealth delivery of cognitive behavioral treatment of insomnia compared to in-person care. Journal of Clinical Psychiatry 82(5), 2021.

3. Third, a particular patient population with which I have worked is veterans with and without PTSD. Disturbed sleep in the form of insomnia and nightmares is prevalent in patients with PTSD. The publications below show a combination of basic, clinical and epidemiologic studies on this topic. Of note, much of my work in this area has involved mentoring junior investigators who have often been the first authors of the publications.

- a) Klingaman EA, Brownlow JA, Boland EM, Mosti C, Gehrman PR. Prevalence, predictors, and correlates of insomnia in U.S. Army soldiers. Journal of Sleep Research 27(3):1-13, 2017.
- b) Lind MJ, Brick LA, Gehrman PR, Duncan LE, Gelaye B, Maihofer AX, Nievergelt CM, Nugent NR, Stein MB, Psychiatric Genomics Consortium Posttraumatic Stress Disorder Workgroup, Amstadter AB. Molecular genetic overlap between posttraumatic stress disorder and sleep phenotypes. Sleep Apr 15;43(4):zsz257, 2020.
- c) Miller KE, Ramsey CM, Boland EM, Klingaman EA, Gehrman PR. Identifying and characterizing longitudinal patterns of insomnia across the deployment cycle in active duty Army Soldiers. Sleep 44(7):zsab004, 2021.
- d) Brownlow JA, Miller KE, Ross RJ, Barilla H, Kling MA, Bhatnagar S, Mellman TA, Gehrman PR. The association of polysomnographic sleep on Posttraumatic Stress Disorder symptom clusters in trauma-exposed civilians and veterans. Sleep Advances, 3(1):zpac024, 2022.

Complete List of Published Work in MyBibliography:

<https://www.ncbi.nlm.nih.gov/myncbi/1VocrFt7496Qr/bibliography/public/>