

CURRICULUM VITAE

The Johns Hopkins University School of Medicine



Jeffrey M. Ellenbogen, MMSc, MD

October 25, 2014

DEMOGRAPHIC INFORMATION**Current Appointments**

2013 - present: The Johns Hopkins University School of Medicine
Assistant Professor of Neurology

Personal Data

Sleep Division
Department of Neurology

600 N. Wolfe Street
Meyer 6-119a
Baltimore, MD 21287

410-955-3730 (phone)
410 955 0672 (fax)

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Education and Training

- Undergraduate
 - 1994 University of Michigan, Ann Arbor, MI
B.A., History of Art
- Doctoral/graduate
 - 2000 Tufts University School of Medicine, Boston, MA
M.D.
 - 2007 Harvard Medical School, Boston, MA
M.M.Sc. (Masters in Medical Science)
- Postdoctoral
 - 2000-2001 University of Pennsylvania, Philadelphia, PA
Intern, Internal Medicine
 - 2001-2004 University of Pennsylvania, Philadelphia, PA
Resident, Neurology
 - 2004-2005 University of Pennsylvania, Philadelphia, PA
Fellow, Clinical Electrophysiology

2005-2007 Harvard Medical School, Boston, MA
Postdoctoral Fellow in Sleep, Circadian and Respiratory Neurobiology

Professional Experience

2007-2012 Massachusetts General Hospital, Boston, MA
Chief, Sleep Division
Director, Sleep Laboratory

2007-2009 Harvard Medical School, Boston, MA
Instructor, Neurology

2007-2009 Harvard Medical School, Boston, MA
Assistant Professor, Neurology,

RESEARCH ACTIVITIES

• Peer Reviewed Original Science Publications

1. Soutter AD, **Ellenbogen J**, Folkman J. Splenosis is regulated by a circulating factor. *Journal of Pediatric Surgery*. 1994;29:1076-9.
2. Wolfe J, Grier HE, Klar N, Levin SB, **Ellenbogen JM**, Salem-Schatz S, Emanuel EJ, Weeks JC. Symptoms and suffering at the end of life in children with cancer. *New England Journal of Medicine*. 2000;342:326-33.
3. Kolb SJ, Costello F, Lee AG, White M, Wong S, Schwartz ED, Messe SR, **Ellenbogen J**, Kasner SE, Galetta SL. Distinguishing ischemic stroke from the stroke-like lesions of MELAS using apparent diffusion coefficient mapping. *Journal of Neurological Sciences*. 2003;216:11-15.
4. **Ellenbogen JM**, Hulbert JC, Stickgold R, Dinges DF, Stickgold R, Thompson-Schill SL. Interfering with theories of sleep and memory: Sleep, declarative memory and associative interference. *Current Biology*. 2006;16:1290-1294
5. **Ellenbogen JM**, Hu PT, Payne JD, Titone D, Walker MP. Human relational memory requires time and sleep. *Proceedings of the National Academy of Science, U S A (PNAS)*. 2007;104:7723-8.
6. **Ellenbogen JM**, Hulbert JC, Jiang Y, Stickgold R. The Sleeping Brain's Influence on Verbal Memory: Boosting Resistance to Interference. *PLoS One*. 2009;4:e4117.
7. Dang-Vu TT, McKinney SM, Buxton OM, Solet JM, **Ellenbogen JM**. Spontaneous brain rhythms predict sleep stability in the face of noise. *Current Biology*. 2010;20:R626-R627.
8. McKinney SM, Dang-Vu TT, Buxton OM, Solet JM, **Ellenbogen JM**. Covert waking brain activity reveals instantaneous sleep depth. *PLoS One*. 2011;6:e17351.
9. Babadi B, McKinney SM, Tarokh V, **Ellenbogen JM**. Data-Driven Bayesian Algorithm for Sleep Spindle Detection (DiBa). *IEEE Transactions in Biomedical Engineering*. 2012;59(2):483-93.
10. Payne JD, Tucker MA, **Ellenbogen JM**, Wamsley EJ, Walker MP, Schacter DL, Stickgold R. Memory for Semantically Related and Unrelated Declarative Information: The Benefit of Sleep, the Cost of Wake. *PLoS One*. 2012;7:e33079
11. Buxton OM*, **Ellenbogen JM*** (co-first author), Wang W, Carballeira A, O'Connor S, Cooper D, Gordhandas AJ, McKinney SM, Solet JM. Sleep Disruption Due to Hospital Noises: A Prospective Evaluation. *Annals of*

Internal Medicine. 2012; 157:170-179.

12. Shaw ND, Butler JP, McKinney SM, Nelson SA, **Ellenbogen JM**, Hall JE. Insights into Puberty: The Relationship Between Sleep Stages and Pulsatile LH Secretion. *The Journal of Clinical Endocrinology and Metabolism.* 2012;97:E2055-62.
13. Fellin T, **Ellenbogen JM**, De Pitta M, Ben-Jacob E, Halassa M. Astrocyte Regulation of Sleep Circuits: Experimental and Modeling Perspectives. *Frontiers in Computational Neuroscience.* 2012;6:65.
14. Eiseman NA, Westover MB, **Ellenbogen JM**, Bianchi MT. The impact of body posture and sleep stages on sleep apnea severity in adults. *Journal of Clinical Sleep Medicine.* 2012;8:655-6.
15. Bianchi MT, Williams KL, McKinney SM, **Ellenbogen JM**. The subjective-objective mismatch (SOM) in sleep perception among those with insomnia and sleep apnea. *The Journal of Sleep Research.* 2013;22(5):557-568.
16. Marino, M, Li Y, Rueschman MD, Winkelman JW, **Ellenbogen JM**, Solet JM, Dulin H, Berkman LF, Buxton OM. Measuring Sleep: Accuracy, Sensitivity, and Specificity of Wrist Actigraphy Compared to Polysomnography. *Sleep.* 2013;36(11):1147-1155.
17. Pace-Schott EF, Tracy LE, Rubin Z, Mollica AM, **Ellenbogen JM**, Bianchi MT, Milad MR, Pitman RK, Orr SP. Interactions of time of day and sleep with between-session habituation and extinction memory in young adult males. *Experimental Brain Research.* 2014.
18. Prerau MJ, Hartnack KE, Obregon-Henao G, Sampson A, Merlino M, Gannon K, Bianchi MT, **Ellenbogen JM**, Purdon PL. Tracking the Sleep Onset Process: An Empirical Model of Behavioral and Physiological Dynamics. *PLOS Computational Biology.* 2014
19. Alameddine Y, **Ellenbogen JM**, Bianchi MT. Sleep-Wake Time Perception Varies by Direct or Indirect Query. *Journal of Clinical Sleep Medicine.* *In press.*

Inventions, Patents, Copyrights

None

Extramural Sponsorship

Current Grants

12/31/2013 – 12/31/2014

Protecting Sound Sleep on Noisy Nights: Non-Invasive Biomarkers of Sleep Stability

Margaret Q. Landenberger Research Foundation

PI: Ellenbogen, JM

The major goal of this project is to discover and validate biomarkers that predict the ability to maintain sleep in the face of potential disruption (e.g., noises)

Role: Principal Investigator

Pending Grants

none

Previous Grants

01/01/2012 – 12/31/2012

Sleep and the generalization extinction of conditioned fear

R21 MH090357-01A1

NIH/NIMH

PI: Pace-Schott, E

Co-Investigator

The major goal of this project is to better understand mechanisms involved in posttraumatic stress disorder (PTSD) by investigating the role of sleep in generalizing memory for the extinction of conditioned fear.

Role: Co-Investigator, 10% effort (1.2 calendar months)

Research Program Building / Leadership

7/13 - present Director, The Sounds Sleep Project and The Sleeping Brain Laboratory, Johns Hopkins University School of Medicine. In my capacity, I am the principal investigator of this research group aimed and understanding the interface between sleep, behavior and cognition.

EDUCATIONAL ACTIVITIES

Educational Publications

Peer-reviewed, original, educational publications

Invited Reviews

1. **Ellenbogen JM**, Payne JD, Stickgold R. The role of sleep in declarative memory consolidation: passive, permissive or active or none? *Current Opinion in Neurobiology*. 2006;16:716-22.
2. **Ellenbogen JM**, Grace S, Heiger-Bernays WJ, Manwell JF, Mills DA, Sullivan KA, Weisskopf MG. Wind Turbine Health Impact Study: Report of Independent Expert Panel. *Report for the Massachusetts Department of Environmental Protection*. 2012.
3. **Ellenbogen JM**, Pace-Schott EF. Drug-induced sleep: Theoretical and practical considerations. *Pflugers Archiv – European Journal of Physiology*. 2012;463(1):177-186.
4. **Ellenbogen JM**. Noise-induced sleep disruption among hospitalized patients: Brain-based approaches toward sleeping soundly on noisy nights. *Noise-Con*. 2013.

Editorials

1. **Ellenbogen JM**. Cognitive benefits of sleep, and their loss due to sleep deprivation. *Neurology*. 2005;64:E25-7.
2. Bianchi MT, Thomas RJ, **Ellenbogen JM**. Hypnotics and Mortality Risk. *The Journal of Clinical Sleep Medicine*. 2012;8(4):351-352

Case Reports

1. Aguirre GK, **Ellenbogen JM**, Pollard J, Stolzenberg ED, Galetta SL. Amyloid angiopathy. *Neurology*. 2002;59:1656.
2. Ances BM, **Ellenbogen JM**, Herman ST, Jacobs D, Liebeskind DS, Chatterjee A, Galetta SL. Balint's syndrome due to Creutzfeldt-Jakob disease. *Neurology*. 2004;63:395.
3. Roy S, **Ellenbogen JM**. Pathologic quiz case: seizures, frontal lobe mass and remote history of periodontal abscess. *Archives of Pathology & Laboratory Medicine*. 2005;129:805-6.
4. **Ellenbogen JM**, Hurford MO, Liebeskind DS, Neimark GB, Weiss D. Ventromedial frontal lobe trauma. *Neurology* 2005;64:757.

5. **Ellenbogen JM.** Sleep-Specific Atrioventricular Block. *Neurology*. 2010;74:90

Letters, correspondence

1. **Ellenbogen JM.** Letter (to the science editor). “Waking to the possibilities.” The New York Times 15 Nov., 2005.
2. **Ellenbogen JM.** Letter. “Unsafe highways.” The New York Times, 17 Dec., 2006.
3. **Ellenbogen JM.** Letter. “A key teen lesson: Don’t drive drowsy.” The Boston Globe, 2 Jan., 2007.
4. **Ellenbogen, JM.** Letter. “Sleepless in New York.” The New York Times, 11 Oct., 2007.
5. **Ellenbogen JM.** Letter. “The sleep-industrial complex.” The New York Times Sunday Magazine 2 Dec., 2007.

Book Chapters, Monographs

1. **Ellenbogen JM.** The interaction of sleep and memory. In: Chebykin OY, Bedny GB, Karwowski W, eds. *Ergonomics and Psychology: Developments in Theory and Practice*. Taylor and Francis Group; 2008.
2. Dang-Vu TT, Foulkes D, Cartwright RD, **Ellenbogen JM.** Sleep. *Encyclopaedia Britannica*. 2010.
3. **Ellenbogen JM.** Noise-induced sleep deprivation: Toward sleeping soundly on noisy nights. In: Bianchi MT. *Sleep Deprivation: Effects on Mind, Body, and Disease*. Springer New York Heidelberg Dordrecht London; 2013.
4. Geyer MB, **Ellenbogen JM.** Insomnia and Sleep Disorders. In: Kiefer MM, Chong CR, eds. *Pocket Primary Care: A Massachusetts General Hospital Handbook*. Philadelphia: Lippincott Williams & Wilkins; 2014.

Teaching

Classroom instruction

- | | |
|-------------|--|
| 1999 - 2000 | “Problem-Based Learning,” Instructor, Tufts University School of Medicine (Boston, MA) |
| 2007 - 2012 | “The Sleeping Brain” (Neurobiology 95hf), Instructor, Harvard University (Cambridge, MA) |

Clinical instruction

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|----------------|--|
| 2013 - present | Inpatient neurology service. Attending physician, 4-6 weeks each year, Johns Hopkins |
| 2013 - present | Outpatient sleep medicine service. Attending physician, ½ day per week Johns Hopkins |

CME instruction

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| 2008 - 2012 | Annual Psychiatry Course, lecturer, “Psychopharmacology of Sleep,” Mass General Hospital |
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Mentoring

Advisees

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| 2009 - 2011 | Scott M. McKinney, BS, currently a graduate student in applied mathematics, Stanford
Role: Scott was the lab manager / research assistant in my laboratory |
| 2012 - 2013 | Michael Halassa, MD, PhD, currently postdoctoral fellow, MIT (Cambridge, MA)
Role: Michael was an informal advisee of mine during his psychiatry residency at MGH |

CLINICAL ACTIVITIES

Certification

Medical

2004 - 2008 Pennsylvania # 424784
2005 - 2014 Massachusetts # 226436
2013 - present Maryland # D0075375

Boards

2005 - present Neurology (American Board of Psychiatry and Neurology);
2009 - present Sleep Medicine (American Board of Psychiatry and Neurology)

Clinical (Service) Responsibilities

2013 - present Sleep Medicine, outpatient clinic, attending, 1/2 day/ week
2013 - present Neurology, inpatient consult service, attending, 4 weeks/year

ORGANIZATIONAL ACTIVITIES

Editorial Activities

- Editorial Board appointments

2012 - present *Sleep*
2013-2015 *National Science Foundation (NSF), College of Reviewers*

- Journal Reviewer

2007 - present *Neurology*
2008 - present *Journal of Clinical Sleep Medicine*
2008 - present *Journal of Sleep Research*
2008 - present *Sleep*
2008 - present *CNS: Neuroscience and Therapeutics*
2008 - present *PLoS One*
2009 - present *Journal of Cognitive Neuroscience*
2010 - present *Current Biology*
2013 - present *Transactions in Biomedical Engineering (TBME)*

Professional Societies

2001 - present Member, American Academy of Neurology
2004 - present Fellow, American Academy of Sleep Medicine
2013 - present Member, American Neurological Association

Consultantships

2012 Department of Public Health (DPH) and Environmental Protection Agency (EPA) of Massachusetts, consultant
Role: I was one of a panel of 10 experts advising the Commonwealth of Massachusetts about the potential health effects of wind turbines. My focus was on neurology and sleep.

RECOGNITION

Awards, Honors

1991	Branstrom Prize for Academic Excellence, University of Michigan
2007	Outstanding Abstract, Sleep Research Society
2006 - 2011	Certificate of Distinction in Teaching, Harvard University
2011	Fellow, American Academy of Sleep Medicine
2011	John E. Dowling Teaching Award in Neurobiology, Harvard University
2012	Wayne A. Hening Sleep Medicine Investigator Award, American Academy of Neurology
2013	International Award for Publishing Excellence (Journal of Clinical Endocrinology and Metabolism, JCEM) for authoring one of the top 14 best clinical research papers in JCEM in 2012.

Invited Talks

- Regional

- 2013
 - Invited Speaker
 - Research Leadership for Postocs (seminar)
 - “Dollars and Science: Managing Research Resources” (11/06/13)

 - Reza Shadmehr’s lab meeting

 - Invited Speaker (09/30/2013)
 - Clinical Neuroscience Seminar
 - Johns Hopkins University

- National

- 2008
 - Invited Speaker: Learn While Awake – Remember While Sleep
 - Dement Fellow’s Retreat
 - Brown University
 - Providence, RI

 - Invited Speaker: The Sleeping Brain’s Influence on Memory
 - American Epilepsy Society (annual meeting)
 - Boston, MA
- 2009
 - Invited Speaker: Sleep and Memory
 - Pediatric Sleep Medicine (annual meeting)
 - Boulder, CO
- 2010
 - Grand Rounds (neurology, 07/15/2010)
 - Cleveland Clinic
 - Cleveland, OH
- 2011
 - Grand Rounds (neurology)
 - Vanderbilt University
 - Nashville, TN

- 2012

Grand Rounds (neurology)
Columbia University
New York, NY

Seminar: The Intersection of Sleep and Dementia
American Academy Neurology, annual meeting
New Orleans, LA

- 2013

Grand Rounds (sleep)
University of Pennsylvania
Philadelphia, PA

- International

- 2011

Sleep Disruption Due to Noise
International Congress on the Biological Effects of Noise (ICBEN)
London, UK

Brain Oscillations in Sleep (03/05/2011)
Donders Institute for Brain, Cognition, and Behaviour
Nijmegen, Netherlands

- 2012

Towards Mathematical Modeling of Neurological Diseases from Cellular Perspectives
(06/05/2012)
Fields Institute for Research in Mathematical Sciences, University of Toronto
Toronto, Canada

OTHER PROFESSIONAL ACCOMPLISHMENTS

2009 - 2010 Physician Leadership Development Program, Massachusetts General Hospital