

BIOGRAPHICAL SKETCH

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NAME: Johnson, Karin

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

POSITION TITLE: Professor

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)	END DATE MM/YYYY	FIELD OF STUDY
Harvard University, Cambridge, MA	AB	06/1999	Biochemistry
University of Chicago Pritzker School of Medicine, Chicago, IL	MD	06/2003	Medicine
Rhode Island Hospital, Providence, RI	Resident	06/2004	Internal Medicine Internship
Rhode Island Hospital, Providence, RI	Resident	06/2007	Neurology Residency
Beth Israel Deaconess Medical Center, Boston, MA	Fellow	06/2008	Sleep Medicine Fellowship
Baystate Medical Center, Springfield, MA	Other training	04/2015	Physician Leadership Academy

A. Personal Statement

As a sleep medicine physician, researcher and educator my goal has been to advance sleep health both for my patients and for the community. Locally, I have been active with media to increase recognition of sleep disorders and educating colleagues in other specialties to understand how sleep health affects overall health. On a national level, I have engaged in projects that support the sleep field. On the AASM payer policy committee and the multi-society ONMAP technical expert panel I worked to improve insurance coverage for testing and treatment of sleep disordered breathing. As a writer of the response to the AHRQ draft CPAP technology assessment, I helped justify the importance of treating patients with CPAP. As the chair of the American Academy of Neurology Sleep Section, I have worked to increase intra-society collaboration and organized and led discussions on the response of sleep laboratories to COVID-19. I initially became involved in permanent standard time advocacy in my role in AAN and have taken part in several Neurology on the Hill days, but have since joined the American Academy of Sleep Medicine Advocacy committee, taken part in Project Sleep Advocacy Day, joined the Board of Directors of Save Standard Time, a volunteer run non-profit advocating for permanent standard time. I received Community Health Grant funding from the AASM Foundation and led the creation of a video series on [permanent standard time](#). I led the effort for the Mass Medical Society to endorse permanent Standard Time which subsequently supported the successful endorsement by the American Medical Association. I have worked with MA legislators to propose a bill for permanent standard time. I have been very active with national media and with meeting with legislators, the Department of Transportation, National Conference of State Legislators and others. I organized courses and educational programs on Permanent Standard Time for AAN and SLEEP. We are working on establishing a multisociety workgroup to coordinate ongoing advocacy for permanent Standard Time led by SRS and AASM.

1. Johnson K, Malow B. Daylight Saving Time: Neurological and Neuropsychological Implications. Current Sleep Medicine Reports. 2022 September 30. Available from: <https://doi.org/10.1007/s40675-022-00229-2> DOI: 10.1007/s40675-022-00229-2
2. Gay PC, Owens RL. Executive Summary: Optimal NIV Medicare Access Promotion: A Technical Expert Panel Report From the American College of Chest Physicians, the American Association for Respiratory Care, the American Academy of Sleep Medicine, and the American Thoracic Society. Chest. 2021 Nov;160(5):1808-1821. PubMed Central PMCID: PMC8828933.
3. Patil,Susheel,, Kimoff,R. John,, Gay,Peter,, Pack,Allan,, Johnson,Karin,G. Comment Letter in Response to AHRQ CPAP Technology Assessment. [Internet]. AASM; 2021 April. Available from:

<https://j2vjt3dnbra3ps7ll1clb4q2-wpengine.netdna-ssl.com/wp-content/uploads/2021/04/ahrq-cpap-sleep-apnea-report-comment-letter.pdf>

4. Kaplish N, D'Andrea L, Auger RR, Gay P, Jacobowitz O, Johnson K, Lance C, Licis A, Patil S, Summers M, Vohra KP, Abbasi-Feinberg F. Addressing gaps between payer policies and AASM clinical practice guidelines using scorecards. *J Clin Sleep Med*. 2020 May 15;16(5):811-815. PubMed Central PMCID: PMC7849807.

B. Positions, Scientific Appointments and Honors

Positions and Scientific Appointments

2022-	Professor, Department of Neurology, UMass Chan School of Medicine-Baystate, Springfield, MA
2022 -	Professor, Department of Healthcare Delivery and Population Science, UMass Chan School of Medicine-Baystate, Springfield, MA
2021 -	Board of Directors, Save Standard Time, San Francisco, CA
2018 - 2022	Fellow, Institute for Healthcare Delivery and Population Science, University of Massachusetts Medical School- Baystate, Springfield, MA
2017 - 2022	Associate Professor of Neurology, UMass Chan Medical School- Baystate, Springfield, MA
2017 - 2021	Medical Director, Mary Lane Sleep Laboratory, Mary Lane Hospital, Ware, MA
2016 -	Medical Director, Baystate Medical Center Sleep Laboratory, Baystate Medical Center, Springfield, MA
2016 -	Vice Chair of Academic Affairs, Department of Neurology, University of Massachusetts Medical School-Baystate, Springfield, MA
2016 - 2022	Adjunct Assistant Professor of Neurology, Tufts University School of Medicine, Boston, MA
2016 - 2017	Assistant Professor of Neurology, University of Massachusetts Medical Center- Baystate, Springfield, MA
2015 -	Medical Director, Baystate Regional Sleep Program, Baystate Medical Center, Springfield, MA
2012 - 2022	Elective Director- Sleep Medicine, UMass Chan Medical School Baystate (Formerly Tufts University School of Medicine- Baystate, Springfield, MA
2008 - 2017	Assistant Professor of Neurology, Tufts University School of Medicine, Boston, MA
2008 - 2015	Sleep Clinical Director, Baystate Medical Center, Springfield, MA
2007 - 2008	Sleep Medicine Fellow, Beth Israel Deaconess Medical Center, Boston, MA
2003 - 2007	Neurology Resident, Rhode Island Hospital, Providence, RI

Honors

2023	Public Service Award, Sleep Research Society
2021-2023	Neurology on the Hill, American Academy of Neurology
2021	Fellow, American Academy of Neurology
2021	Fellow, American Academy of Sleep Medicine
2020	Mid-Career Faculty Development Program, Association of American Medical Colleges
2017-2019	Empowering Professional Women for Executive Roles, UMMS
2017	Young Investigators Research Forum, American Academy of Sleep Medicine
2017	Babinski award for Achievement in Research, Baystate Medical Center, Department of Neurology
2015	Mid-Career Women in Leadership Program, American Academy of Neurology
2014 - 2015	Physician Leadership Academy, Baystate Health

C. Contribution to Science

1. My advocacy and sleep leadership work has led to a reviews and research in varying areas including neuropsychological implications of Daylight Saving Time, Optimal NIV Medicare Access program technical expert panel recommendations, response to AHRQ CPAP technology assessment, and the effects of the COVID-19 pandemic on sleep services.

- a. Johnson KG, Malow B. Daylight Saving Time: Neurological and Neuropsychological Implications. *Current Sleep Medicine Reports*. 2022 September 30. Available from: <https://doi.org/10.1007/s40675-022-00229-2> DOI: 10.1007/s40675-022-00229-2
 - b. Gay PC, Owens RL. Executive Summary: Optimal NIV Medicare Access Promotion: A Technical Expert Panel Report From the American College of Chest Physicians, the American Association for Respiratory Care, the American Academy of Sleep Medicine, and the American Thoracic Society. *Chest*. 2021 Nov;160(5):1808-1821. PubMed Central PMCID: PMC8828933.
 - c. Patil S, Kimoff RJ, Gay P, Pack A, Johnson, KG. Comment Letter in Response to AHRQ CPAP Technology Assessment. [Internet]. AASM; 2021 April. Available from: <https://j2vjt3dnbra3ps7ll1clb4q2-wpengine.netdna-ssl.com/wp-content/uploads/2021/04/ahrq-cpap-sleep-apnea-report-comment-letter.pdf>
 - d. Johnson KG, Sullivan SS, Nti A, Rastegar V, Gurubhagavatula I. The impact of the COVID-19 pandemic on sleep medicine practices. *J Clin Sleep Med*. 2021 Jan 1;17(1):79-87. PubMed Central PMCID: PMC7849634.
2. My contributions to science have been driven by my clinical experience working with patients and interest in how positive airway pressure technology works. In 2005, I published one of the first articles describing treatment emergent central apneas. More recently I reviewed algorithms of the different positive airway pressure (PAP devices) and clinical implications related to those differences and wrote a book chapter on the future of PAP therapy and expanded Kryger's Principle and Practice of Sleep Medicine Chapter on Treatment of Obstructive Sleep Apnea for the 7th Edition. I present on the use of advanced PAP therapy nationally leading to change in practices at several labs to allow for treatment of complex patients.
- a. Johnson KG. APAP, BPAP, CPAP, and New Modes of Positive Airway Pressure Therapy. *Adv Exp Med Biol*. 2022;1384:297-330. PubMed PMID: 36217092.
 - b. Freedman N, Johnson KG. Principles and Practice of Sleep Medicine. 7th ed. Kryger M, editor. United States: Elsevier, Inc; 2022. Chapter 132, Positive Airway Pressure Treatment for Obstructive Sleep Apnea; p.1260-1283.e7.
 - c. Johnson KG, Rapoport DM. Future of Positive Airway Pressure Technology. *Sleep Med Clin*. 2017 Dec;12(4):617-622. PubMed PMID: 29108616.
 - d. Johnson KG, Johnson DC. Bilevel positive airway pressure worsens central apneas during sleep. *Chest*. 2005 Oct;128(4):2141-50. PubMed PMID: 16236867.
3. My other area of published research has been the overlap of obstructive sleep apnea (OSA) and neurological and medical disorders. I published a highly cited meta-analysis of the prevalence of obstructive sleep apnea in stroke patients. I also reported improvement in headache control using CPAP in headache patients. I have collaborated with researchers at my institution using large billing databases to look at the connection between obstructive sleep apnea and hospitalizations for pneumonia. I have performed literature searches and given grand rounds talks on perioperative issues in OSA patients, effects of OSA on hospitalized patients, OSA and dementia, and OSA in women and pregnancy.
- a. Johnson KG, Johnson DC. Cognitive dysfunction: another reason to treat obstructive sleep apnea in stroke patients. *Sleep Med*. 2017 May;33:191-192. PubMed PMID: 28109745.
 - b. Lindenauer PK, Stefan MS, Johnson KG, Priya A, Pekow PS, Rothberg MB. Prevalence, treatment, and outcomes associated with OSA among patients hospitalized with pneumonia. *Chest*. 2014 May;145(5):1032-1038. PubMed Central PMCID: PMC4011652.
 - c. Johnson KG, Ziemba AM, Garb JL. Improvement in headaches with continuous positive airway pressure for obstructive sleep apnea: a retrospective analysis. *Headache*. 2013 Feb;53(2):333-43. PubMed PMID: 22963547.
 - d. Johnson KG, Johnson DC. Frequency of sleep apnea in stroke and TIA patients: a meta-analysis. *J Clin Sleep Med*. 2010 Apr 15;6(2):131-7. PubMed Central PMCID: PMC2854698.