

# James D. Frost, Jr., M.D.

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## CONTACT INFORMATION

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## EDUCATION

- M.D., Baylor College of Medicine, Houston, Texas
- Internship, , The Methodist Hospital, Houston, Texas
- Fellowship, Clinical Neurophysiology, Baylor College of Medicine, Houston, Texas

## CLINICAL INTERESTS

Clinical neurophysiology. electroencephalography, epilepsy, infantile spasms, sleep disorders

## RESEARCH INTERESTS

- Etiology, pathophysiology and treatment of infantile spasms
- Development of automated electrophysiological and video techniques for the detection and characterization of epileptic seizures
- Sleep disorders

## JOURNAL PUBLICATIONS

1. Ballester-Rosado CJ, Le JT, Lam TT, Mohila CA, Lam S, Anderson AE, et al. A role for insulin-like growth factor 1 in the generation of epileptic spasms. *Ann Neurol.* 2022;92(1):45-60. PMID: 35467038.
2. Le JT, Ballester-Rosado CJ, Frost JD, Jr, Swann JW. Neurobehavioral deficits and a progressive ictogenesis in the tetrodotoxin model of epileptic spasms. *Epilepsia.* 2022;63(12):3078-89. PMID: 36179064.
3. Le JT, Frost JD, Jr, Swann JW. Acthar(R) Gel (repository corticotropin injection) dose-response relationships in an animal model of epileptic spasms. *Epilepsy Behav.* 2021;116:107786. PMID: 33548914.
4. Frost JD, Jr, Le JT, Lee CL, Ballester-Rosado C, Hrachovy RA, et al. Vigabatrin therapy implicates neocortical high frequency oscillations in an animal model of infantile spasms. *Neurobiol Dis.* 2015;82:1-11. PMID: 26026423.
5. Haneef Z, Levin HS, Frost JD, Jr, Mizrahi EM. Electroencephalography and quantitative electroencephalography in mild traumatic brain injury. *J Neurotrauma.* 2013;30(8):653-6. PMID: 23249295.
6. Hrachovy RA, Frost JD, Jr. Infantile spasms. *Handb Clin Neurol.* 2013;111:611-8. PMID: 23622208.
7. Frost JD, Jr, Lee CL, Le JT, Hrachovy RA, Swann JW. Interictal high frequency oscillations in an animal model of infantile spasms. *Neurobiol Dis.* 2012;46(2):377-88. PMID: 22342513.
8. Frost JD, Jr, Lee CL, Hrachovy RA, Swann JW. High frequency EEG activity associated with ictal events in an animal model of infantile spasms. *Epilepsia.* 2011;52(1):53-62. PMID: 21204817.
9. Mitra J, Glover JR, Ktonas PY, Thitai Kumar A, Mukherjee A, Karayiannis NB, et al. A multistage system for the automated detection of epileptic seizures in neonatal electroencephalography. *J Clin Neurophysiol.* 2009;26(4):218-26. PMID: 19602985.
10. Price MG, Yoo JW, Burgess DL, Deng F, Hrachovy RA, Frost JD, et al. A triplet repeat expansion genetic mouse model of infantile spasms syndrome, Arx(GCG)10+7, with interneuronopathy, spasms in infancy, persistent seizures, and adult cognitive and behavioral impairment. *J Neurosci.* 2009;29(27):8752-63. PMID: 19587282.

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13. Hrachovy RA, Frost JD, Jr. The EEG in selected generalized seizures. *J Clin Neurophysiol.* 2006;23(4):312-32. PMID: 16885706.
14. Karayiannis NB, Mukherjee A, Glover JR, Ktonas PY, Frost JD, Jr, et al. Detection of pseudosinusoidal epileptic seizure segments in the neonatal EEG by cascading a rule-based algorithm with a neural network. *IEEE Trans Biomed Eng.* 2006;53(4):633-41. PMID: 16602569.
15. Karayiannis NB, Tao G, Frost JD, Jr, Wise MS, Hrachovy RA, et al. Automated detection of videotaped neonatal seizures based on motion segmentation methods. *Clin Neurophysiol.* 2006;117(7):1585-94. PMID: 16684619.
16. Karayiannis NB, Xiong Y, Frost JD, Jr, Wise MS, Hrachovy RA, et al. Automated detection of videotaped neonatal seizures based on motion tracking methods. *J Clin Neurophysiol.* 2006;23(6):521-31. PMID: 17143140.
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- therapy: Implications for future cognitive performance. *J Clin Neurophysiol.* 1995;12(1):57-63. PMID: 7896910.
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## BOOKS and VOLUMES

1. Frost JD, Jr, Hrachovy RA. Infantile spasms: diagnosis, management, and prognosis. Boston: Kluwer Academic Publishers; 2003.

## BOOK CHAPTERS and OTHER PUBLICATIONS

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2. Hrachovy RA, Frost JD, Jr. Severe encephalopathic epilepsy in infants: Infantile spasms (West syndrome). In: Pellock JM, Bourgeois BFD, Dodson WE, editors. *Pediatric epilepsy: diagnosis and therapy.* 3rd ed. New York: Demos; 2008. p. 249-268.
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4. Frost JD, Jr. EEG in aviation, space exploration, and diving. In: Niedermeyer E, Lopes da Silva F, editors. *Electroencephalography: basic principles, clinical applications and related fields*. 5th ed. Baltimore: Williams and Wilkins; 2005. p. 683-688.
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