

Materials List for

A Randomized, Sham-Controlled Trial of Cranial Electrical Stimulation for Fibromyalgia Pain and Physical Function, Using Brain Imaging Biomarkers

Anna Ree¹, Benjamin Rapsas², Chanse Denmon¹, Mark Vernon¹, Sheila AM Rauch^{1,2}, Ying Guo³, Xiangqin Cui^{1,3}, Jennifer S Stevens^{1,2}, Venkatagiri Krishnamurthy^{1,2}, Vitaly Napadow⁴, Jessica A Turner⁵, Anna Woodbury^{1,2}

¹Atlanta Veterans Affairs Healthcare System ²Emory University School of Medicine ³Rollins School of Public Health ⁴Spaulding Rehabilitation Hospital, Harvard Medical School ⁵The Ohio State University Wexner Medical Center

Corresponding Author	Citation		
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	Controlled Trial of Cranial Elect	rical Stimulation for Fibromyalgia Pain and Physical	
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	(2024).		
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January 5, 2024	10.3791/65790	jove.com/video/65790	

Materials

Name	Company	Catalog Number	Comments
3T Siemens MAGNETOM Prisma Scanner	Siemens Healthineers	N/A	From Emory's website: "The Siemens Magnetom Prisma 3T whole-body MR system is equipped with: a state-of-the art gradient system with a maximum (per axis) strength of 80 mT/m and slew rate of 200 T/m/sec 64 independent RF receiver channels capable of 204 receiver connections a 2-channel RF transmitter. Multiple coils are available, including: a 64-channel head/neck coil with 52 channels for imaging of the head region a 32-channel head-only coil a 20-channel head/neck coil with 16 channels for head spine array coil flexible chest coil large and small flexible coil for extremity imaging.
Alpha-Stim AID Kit	Electromedical Products International Inc.	SKU: 500KIT	A total of 50 devices ordered for research purposes. From the site: "A prescription or order from a licensed healthcare professional is required to purchase this device (within the USA). FDA cleared for anxiety, insomnia and pain only, with approval for depression outside of the United States."
CONN Toolbox v21a16 (RRID:SCR_009550)	Whitfield-Gabrieli and Nieto- Castanon	Version v21a16 (RRID:SCR_009550)	CONN is an open-source SPM- based cross-platform software for the



DSI Studio (RRID:SCR_009557)	Fang-Cheng (Frank) Yeh	RRID:SCR_009557	computation, display, and analysis of functional connectivity Magnetic Resonance Imaging (fcMRI). CONN is used to analyze resting state data (rsfMRI) as well as task-related designs. DSI Studio is a tractography software
			tool that maps brain connections and correlates findings with neuropsychological disorders. It is a collective implementation of several diffusion MRI methods, including diffusion tensor imaging (DTI), generalized q-sampling imaging (GQI), q-space diffeomorphic reconstruction (QSDR), diffusion MRI connectometry, and generalized deterministic fiber tracking.
fMRIPrep 20.2.5 (RRID:SCR_016216)	NiPreps (NeuroImaging PREProcessing tools)	Version 20.2.5. (RRID:SCR_016216)	A functional magnetic resonance imaging (fMRI) data preprocessing pipeline that is designed to provide an easily accessible, state-of-the-art interface that is robust to variations in scan acquisition protocols and that requires minimal user input, while providing easily interpretable and comprehensive error and output reporting. It performs basic processing steps (coregistration, normalization, unwarping, noise component extraction, segmentation, skull-stripping, etc.) providing outputs that can be easily submitted to a variety of group level analyses, including task-based or resting-state fMRI, graph theory measures, and surface or volume-based statistics.
MRIQC	NiPreps (NeuroImaging PREProcessing tools)		MRIQC extracts no-reference IQMs (image quality metrics) from structural (T1w and T2w) and functional MRI (magnetic resonance imaging) data. (not directly used for analyses)
Sammons Preston Jamar Hydraulic Hand Dynamometer	Alpha Med Inc.	SKU SAMP5030J1	From the website: Ideal for routine screening of grip strength and initial and ongoing evaluation of clients with hand trauma and dysfunction. Unit comes with carrying/storage case, certificate of calibration and complete instructions. Warranted for one full year. The warranty does not cover calibration. Latex free.
SPRI 5-Pound Vinyl-Coated Weight	SPRI Amazon	N/A	Color: (E) Dark Blue 5-Pound. Appears on Amazon: Dumbbells Hand Weights Set of 2 - Vinyl Coated Exercise & Fitness Dumbbell for Home Gym Equipment Workouts Strength Training Free Weights for Women, Men (1-10 Pound, 12, 15, 18, 20 lb), https://www.amazon.com/stores/ SPRI/Weights/page/9D10835A- CFAB-4DA1-BEE9-AE993C6B5BC1
SPRI 8-Pound Vinyl-Coated Weight	SPRI Amazon	N/A	Color: (H) Black 8-Pound. Appears on Amazon: Dumbbells Hand Weights Set of 2 - Vinyl Coated Exercise & Fitness Dumbbell for Home Gym Equipment Workouts Strength Training



	Free Weights for Women, Men
	(1-10 Pound, 12, 15, 18, 20 lb),
	https://www.amazon.com/stores/
	SPRI/Weights/page/9D10835A-
	CFAB-4DA1-BEE9-AE993C6B5BC1