

**Materials List for:****Cortical Source Analysis of High-Density EEG Recordings in Children**Joe Bathelt<sup>1</sup>, Helen O'Reilly<sup>2</sup>, Michelle de Haan<sup>1</sup><sup>1</sup>Cognitive Neuroscience & Neuropsychiatry Section, UCL Institute of Child Health<sup>2</sup>Academic Division of Neonatology, Institute for Women's Health, University College LondonCorrespondence to: Joe Bathelt at [johannes.bathelt.10@ucl.ac.uk](mailto:johannes.bathelt.10@ucl.ac.uk)URL: <https://www.jove.com/video/51705>

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**Materials**

Name	Company	Catalog Number	Comments
High-density EEG sensor net (128 or 256 channels)	HydroCel Geodesic Sensor Net 128	Electrical Geodesic Inc., Oregon, US	
EEG high impedance amplifier	NetAmps 200	Electrical Geodesic Inc., Oregon, US	
Data Acquisition Computer	PowerMac G4	Apple Inc, California, US	
Stimulus Presentation Computer	Optiplex 745	Dell Computers Inc., Texas, US	
Stimulus Presentation Software	MATLAB R2012b with PsychToolBox	Brainard <i>et al.</i> 1997	
EEG recording software	NetStation 4.5.1	Electrical Geodesic Inc., Oregon, US	
EEG analysis software	MATLAB R2012b	The Mathworks Inc.	
	EEGLAB	Delorme <i>et al.</i> 2004	
	BrainStorm	Sylvain <i>et al.</i> 2001	
MRI processing software	FreeSurfer	Fischl <i>et al.</i> 2004	
	OpenMEEG	Gramfort <i>et. al.</i> 2010	
Delorme, A., & Makeig, S. EEGLAB: an open source toolbox for analysis of single trial EEG dynamics including independent component analysis. <i>Journal of Neuroscience Methods</i> , <b>134</b> (1), 9–21, (2004).			
Sylvain, B., John, C., Dimitrios, P., & Richard, M. Brainstorm: A User Friendly Application for MEG/EEG Analysis. <i>Computational Intelligence and Neuroscience</i> , 1–13, (2011).			
Fischl, B. <i>et al.</i> Automatically parcellating the human cerebral cortex. <i>Cerebral Cortex</i> , <b>14</b> (1), 11–22, (2004).			
Gramfort, A., Papadopoulou, T., Olivi, E., & Clerc, M. OpenMEEG: opensource software for quasistatic bioelectromagnetics. <i>BioMedical Engineering OnLine</i> , <b>9</b> (1), 45, (2010).			
Brainard, D. H. The psychophysics toolbox. <i>Spatial vision</i> , (1997).			