

<input type="checkbox"/> Travel Fellowship Applicant (see no. 6 from front page)
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Title of paper:
 Functional MRI in Patients with Epilepsy

Topic Choice Epilepsy

First author (address and phone number):
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Type of Presentation <input checked="" type="checkbox"/> Platform Preferred <input type="checkbox"/> Poster Preferred

List all author's names, cities, and states:
 WM Mueller, ZF Yetkin, V Haughton, L Estkowski, GL Morris,
 P Bandettini, J Binder, S Rao, J Hyde - Milwaukee, Wisconsin

Video Equipment Needed <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

(200-Word Abstract for Program—Type Double Spaced—Do Not Use Continuation Pages, Illustrations, or Tables—Do Not Exceed 200 Words)

The objective is to examine Functional MRI (fMRI) in chronic epilepsy patients. fMRI is a new imaging technique which detects regional changes in MRI signal related to tasks. These MRI signal changes are believed related to local decreases in deoxyhemoglobin concentrations during these tasks. The availability of MRI makes fMRI a potentially useful tool in clinical neurosciences. Three patients with chronic epilepsy were scanned using a 26.5 cm local three-axis gradient coil and blipped echo-planar sequence (TE=40 msec). Tasks included: single digit tapping, sequential digit tapping, sensory stimulation, counting, and word generation. Each task was performed with multiple on-off conditions and 100 consecutive sagittal images obtained bilaterally during each task. MR signal changes were derived by Fourier transform and superimposed on anatomical images. Local MRI signal changes were seen with each of the tasks. Correspondence of these signal changes was seen with known functional organization. fMRI is capable of producing functional images in chronic epilepsy patients and responses to direct cortical stimulation could be made.

Deadline snuck up on
 me (only 28 days in Febr
 -oops)
 Hope there are no
 glaring omissions

Chip

If accepted, it is understood (1) that this material has not
 (2) that it will be offered to the Editor of *Annals of Ne*

meeting and