Review of: "Impending role of hippocampal neurogenesis in the development of chronic epilepsy following seizures after Kainic acid and Pentylenetetrazol treatment"

Gary W. Mathern[1]

1 University of California, Los Angeles

Potential competing interests: No potential competing interests to declare.

This is not a very original or novel study on the role of hippocampal neurogenesis after seizures as a cause of spontaneous recurrent mesial temporal lobe seizures as a model of human disease. The results have been described in rodents in numerous previously published studies, so there is nothing new in this presented report. There are other problems as noted below:

Introduction: The authors should better describe the differences in the existing literature between rodent models and human studies of mesial temporal lobe epilepsy, and specifically present a hypothesis the current study is designed to address.

Methods: The authors should provide the specific methods used for the numerous staining methods in their study, how the animals were perfused, and whether the hippocampal sections were vertical or horizontal. There should be enough information so that other investigators could repeat the presented studies.

Results: The authors should present as much quantitative data as possible.

Discussion: The authors do not discuss the many limitations of their study. A major limitation is that all the recorded seizures were by observation alone without any EEG correlate, and the chronic seizures were over only a one-hour period per day. That is inadequate to record SRS.