Current Topics in Cerebrovascular Diseases. Jonathan D. Bui,

Department of Neurosciences, University of California, San Diego, 9500 Gilman Drive MC 0608, La Jolla California, 92093.

Stroke is the 2nd leading cause of death worldwide and in the United States alone there are 700,000 new cases a year. There has been significant progress in the acute evaluation and management of stroke in the last 10 years. Clinical MR imaging can now rapidly identify areas of ischemic injury and medical therapy significantly reduces morbidity and mortality. However, despite these advances, important challenges remain. The only FDA approved thrombolytic agent cannot routinely be given beyond 3 hours of symptom onset because a significant number of patients treated after this window will have catastrophic hemorrhagic transformation. The challenge, therefore, is to determine which factors contribute to the likelihood of hemorrhagic transformation, and whether there remains stunned but salvageable tissue within the ischemic area.

This talk will:

- 1. Review the current diagnosis and management of cerebral infarction.
- 2. Describe the recent advances in stroke neuroimaging.
- 3. Discuss future challenges.