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Philip A. Starr, MD, PhD

Community Outreach
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Jeffrey Yablon, MD

Fresno Affiliates
Margaret Verees, MD
Daniel Miller, MD

RESEARCH LABORATORIES

Brain Tumor Research Center
Arturo Alvarez-Buylla, PhD
Krystof Bankiewicz, MD, PhD
Gabriele Bergers, PhD
Joseph F. Costello, PhD
John Forsayeth, PhD
Jeanette Hyer, PhD
C. David James, PhD
Kathleen R. Lamborn, PhD
Arie Perry, MD
Claudia Petritsch, PhD
Joanna Phillips, MD, PhD
Russell O. Pieper, PhD
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Brain and Spinal Injury Center
Michael S. Beattie, PhD
Jacqueline C. Bresnahan, PhD
Adam Ferguson, PhD
John R. Fike, PhD
Linda J. Noble-Haeusslein, PhD

Cerebrovascular Research
Jialing Liu, PhD
S. Scott Panter, PhD

Epilepsy Research
Scott C. Baraban, PhD

University of California
San Francisco

UCSF

Department of Neurological Surgery

October 6, 2011

Re: Nomination of David Ouyang for Dean's Research Prize

Dear Student Research Committee,

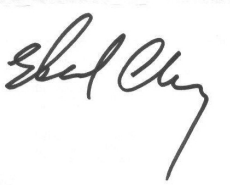
I had the pleasure of advising David Ouyang this past year on a project examining national time trends in the utilization of anterior temporal lobectomy for the treatment of intractable epilepsy. In this project, we obtained access to a national database of hospital admissions over the last twenty years (the National Inpatient Survey) to evaluate whether the utilization of surgery changed in response to new class I data published in 2003. The results of this project have convincing shown that despite clear evidence and related guidelines, epilepsy surgery continues to be extremely underutilized in the United States. The results of this project have been accepted to *Neurology* and have already been hailed as "rallying call" for the field of epilepsy.

David was responsible for the data extraction, processing, and the majority of data analysis. David wrote a program to identify patients in the national database by ICD-9 codes, allowing us extract relevant patient outcomes and demographics. David has a background in programming and statistics, and wrote over 1000 lines of code in Python and R. This was a quite a task, as over the span of twenty years, the national database changed file specifications multiple times and the relevant information was scattered across multiple files each year. Each year had a multiple files identifying hospital variables, patient variables, and secondary procedures and comorbidities. **David played an integral role in the project, and without his key contribution, this would have been extremely difficult to pursue.**

David was also supervised by a neurosurgery resident under my mentorship, Dr. Dario Englot. Dario was instrumental in guiding David and provided the big picture perspective to the analysis, while David was responsible for the analysis and data extraction. This was a synergistic relationship, much like the guidance of a postdoc provides a graduate student researcher in a basic science setting – David was responsible for the hands on analysis, while Dario was able to provide much direction and suggestion. For the publication, Dario was did the majority of the writing of manuscript, while both David and Dario worked on tables. David also created the figures.

Overall, David played a critical role in this project. Because of his outstanding efforts, we were able to greatly accelerate the pace with which we took this project from concept to publication. He is highly creative, technically capable, and a hard worker. I strongly recommend David Ouyang for the Dean's Prize for Research.

Sincerely,



Edward F. Chang MD

Assistant Professor in Residence of Neurological Surgery and Physiology

Co-Director, Center for Neural Engineering at UC Berkeley and San Francisco

NEUROSURGERY/NEURO-ONCOLOGY CLINICS
400 Parnassus Avenue, 8th Floor
Box 0350 (Neurosurgery)
Box 0372 (Neuro-oncology)
San Francisco, CA 94143
Phone: 415/353-7500 (Neurosurgery)
415/353-2966 (Neuro-oncology)
Fax: 415/353-2889
415/353-2167

ADMINISTRATIVE OFFICE
505 Parnassus Avenue
Room M-779, Box 0112
San Francisco, CA 94143
Phone: 415/353-3933
Fax: 415/353-3910

RESEARCH LABORATORIES
1450 Third Street, Mission Bay
Helen Diller Family Cancer Research Building
Mail Code 0520; P.O. Box 5859001
San Francisco, CA 94158-9001
Phone: 415/476-2876
Fax: 415/514-9792

UCSF FRESNO
2823 Fresno Street
Dept. of Surgery, 1st Floor
Fresno, CA 93721
Phone: 559/459-3770
Fax: 559/459-3553