

**Friday, February 8, 2008**

**8:00 to 9:00 AM**

**Onstead Auditorium**

**Mitchell Basic Science Research Building**

## **Studying neurodegenerative diseases using *Drosophila* as a model**

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**Brain Research Institute**

**UCLA School of Medicine**

### **Objectives:**

At the end of this program, participants should be able to:

- Understand why *Drosophila* is a good system to study human disease
- Understand how familial Parkinson's disease genes, pink1 and parkin, function.
- Understand the role of ubiquitin implicated in Alzheimer's disease

### **References:**

1. Ganguly, A. \*, Feldman, R.M. \*, and Guo, M. (2007) ubiquitin antagonizes presenilin and promotes neurodegeneration. *Hum. Mol. Genet.*, in press. (\*equal contribution)
2. Dodson, M.W. and Guo, M. (2007) Pink1, Parkin, DJ-1 and Mitochondrial Dysfunction in Parkinson's Disease. *Curr. Opin. Neurobiol.* 17: 331-337.
3. Clark I.E. \*, Dodson M.W. \*, Jiang C. \*, Cao J.H., Huh J.R., Seol J., Yoo S., Hay, B.A. and Guo, M. (2006) *Drosophila* pink1 is required for mitochondrial function and interacts genetically with parkin. *Nature*, 441: 1162-1166. [pdf] (\*equal contribution)
4. Hay, B.A. and Guo, M. (2006) Caspase-Dependent Cell Death in *Drosophila*. *Annu. Rev. Cell Dev. Biol.*, 22: 623-650. [pdf]
5. Hay B.A., Huh J.R. And Guo M. (2004) The genetics of cell death: approaches, insights and opportunities in *Drosophila*. *Nat. Rev. Genet.* 5: 911-922. [pdf]
6. Guo, M. \*, Hong, E., Fernandes, J., Zipursky, S.L., and Hay, B. (2003) A reporter for amyloid precursor protein gamma-secretase activity in *Drosophila*. *Hum. Mol. Genet.* 12:2669-2678. (\*Corresponding author)

### **Target Audience, Needs, Educational Methods, Activity Evaluation:**

Physicians, residents, fellows, and other healthcare professionals need to be updated about new advances in the clinical and research areas for the diagnosis, treatment, and management of patients with neurological disorders. Educational methods will include lectures, case presentations, audio/video presentations, and questions & answer sessions. Participants will be asked to complete an activity evaluation.

### **Accreditation/Credit Designation**

Baylor College of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

Baylor College of Medicine designates this educational activity for a maximum of *1.0 AMA PRA Category 1 Credit(s)*<sup>™</sup>. Physicians should only claim credit commensurate with the extent of their participation in the activity.