

Emily Anne Bates  
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### Education

**Harvard Medical School/Harvard University Ph.D.** in Genetics, Boston, MA, May 2005  
Dissertation: Genetic analysis of neurodegeneration in *Caenorhabditis elegans*

**University of Utah**, B. S. in Biology, Chemistry minor, (GPA 3.85), Salt Lake City, UT, 1994-97

### Research Experience

**UCSF School of Medicine, Howard Hughes Medical Institute**, Laboratory of Louis Ptacek, M.D., Professor of Neurology: Mouse models of neurodegeneration and episodic neurological disorders, 2006-2008

**Harvard Medical School/MGH Cancer Center**, Laboratory of Anne Hart, Ph.D. Assistant Professor of Pathology: *C. elegans* neurogenetics, 1999-2006

**University of Utah**, Laboratory of Anthea Letsou, PhD, Associate Professor of Human Genetics: *Drosophila* developmental genetics, 1994-97

**Sandia National Laboratory**, Albuquerque, NM: Ion Mobility Spectrometry, summer 1995

### Publications

**Bates, EA**; Nikai, T, Brennan KC; Charles, A., Basbaum A, Ptacek, LJ; Ahn, A. Sumatriptan alleviates mechanical and thermal allodynia in an animal behavioral model of nitroglycerin-induced headache. *Cephalalgia*, 2009

**Bates, EA\***, Brennan, KC\*; Charles A.; Louis J. Ptacek; Functional consequences of a mutation of Casein Kinase I delta: migraine with aura. In preparation

**Bates, EA**, Jones, A., Victor, M., Shi, Y, Hart, AC. Differential contributions of *C. elegans* histone deacetylases to Huntingtin polyglutamine toxicity. *Journal of Neuroscience*. 2006 Mar 8;26(10):2830-8

C. Voisine, H.Varma, N. Walker, **E.A. Bates**, B.R. Stockwell and A.C. Hart (2007) Identification of Potential Therapeutic Drugs for Huntington's Disease using *Caenorhabditis elegans* *PLoS ONE*. 2007 Jun 6:2:e504

Faber PW, Voisine C, King DC, **Bates EA**, Hart AC. Glutamine/proline-rich PQE-1 proteins protect *Caenorhabditis elegans* neurons from huntingtin polyglutamine neurotoxicity. *Proc Natl Acad Sci U S A*. 2002 Dec 24;99(26):17131-6.

Simin, K., **E. A. Bates**, M, A. Horner, A. Letsou. (1998) Genetic analysis of Punt, a type II Dpp receptor that functions throughout the *Drosophila melanogaster* life cycle. *Genetics* **148**: 801-813.

### Teaching/Advising Experience

Teaching fellow, Biochemistry and Pharmacology, UCSF Medical School, September 2006

Assistant Resident Dean, Quincy House, Harvard College, September 2005-2006

Teaching Fellow, Cellular Biology (BS54), Harvard College, Spring 2006

Teaching Fellow, Molecular Biology (BS52), Harvard College, Autumn 2005

Teaching Fellow, Bio-anthropology 1310, Harvard College, Autumn 2005

Resident Tutor in Biology/Biochemistry, Fellowships, Quincy House, Harvard College, 2000-2006

Fellowships Advisor, Quincy House, Harvard College, 2004-present

Crimson Summer Academy for minority high school students, July-August 2005

Harvard Medical School: Science in the News scientific lectures for the Boston community, 2001-03

Cambridge School Volunteers: Mathematics tutor in Bilingual program for Haitian immigrants, 2000  
University of Utah: Teaching Assistant, Molecular Biology techniques course, 1996

### **Selected Presentations**

American Headache Society: slide presentation, Defining the role of  $CKI\delta$  in migraine with aura, June 2008  
Society For Neuroscience Meeting: poster presentation, Sumatriptan alleviates NTG-induced hypersensitivity to mechanical and thermal stimuli, November 2007  
15th International *C. elegans* Conference: slide presentation, Differential contributions of *C. elegans* histone deacetylases to huntingtin polyglutamine toxicity, June 2005  
Boston Area Worm Meeting: slide presentation, Polyglutamine disease and transcriptional regulation: Not all HDACs are created equal, 2005  
Society For Neuroscience Meeting: slide presentation, *C. elegans* HDACs, CBP, and CREB play roles in polyglutamine neurotoxicity 2004  
Huntington's Disease Foundation: Changes, Advances, and Good News (CAG)n: poster, *C. elegans* HDACs, CBP, and CREB play roles in polyglutamine neurotoxicity, 2004  
East Coast *C. elegans* Meeting: poster, *C. elegans* HDACs, CBP, and CREB play roles in polyglutamine neurotoxicity 2004  
International *C. elegans* Conference: poster, Candidate modifiers of Polyglutamine disease, 2003  
Gordon Conference: CAG Triplet Repeat Disorders: poster, Potential roles of *C. elegans* CBP, CREB and HDACs in Polyglutamine Toxicity, 2003  
Society for Neuroscience Meeting: poster, Defining the roles of transcriptional regulation elements in polyglutamine toxicity, 2003  
Huntington's Disease Foundation, Changes, Advances and Good News (CAG)n: poster, 2002  
Society For Neuroscience Meeting: poster, Potential Roles of CBP, CREB, and HDAC in Polyglutamine Neurodegeneration in *C. elegans* 2002  
International Worm Meeting: poster, Neurodegeneration in *C. elegans*: Analysis and cloning of a new degeneration gene, 2001  
Society For Neuroscience Meeting: poster, A Genetic Analysis of Necrotic Neurodegeneration in *C. elegans*, 2001  
National Conference of Undergraduate Research: slide presentation, Genetic analysis of Punt, a type II Dpp receptor that functions throughout the *Drosophila melanogaster* life cycle, 1997

### **Selected Academic Awards and Honors**

A.P. Giannini Foundation Postdoctoral Fellowship recipient, 2008  
American Headache Society 50<sup>th</sup> Annual Scientific Meeting Scholarship Award, 2008  
Nominee for a teaching award for UCSF Section leaders, Autumn 2006  
Travel Fellowship for 15<sup>th</sup> International *C. elegans* Conference, 2005  
Gordon Conference Young Investigator Travel Fellowship-CAG Triplet Repeat Disorders, 2003  
National Science Foundation Graduate Research Fellowship, Honorable Mention, 1999 and 2000  
Kennecott Scholarship for the College of Science, 1997  
President's Award for Outstanding Academic Achievement, 1997  
Undergraduate Research Opportunities Fellowship, 1997  
Undergraduate Research Program Fellowship, 1996  
Howard Hughes Medical Institute Undergraduate Research Fellowship, 1995  
ACCESS Fellowship and Research Program, University of Utah, 1994  
Seville Flowers Biological Sciences Scholarship, University of Utah, full tuition, 1994  
D.O.E. Honors Research Fellowship representing the state of Utah, Sandia National Laboratory, 1994