

CURRICULUM VITAE  
OF  
**JOHN J. STEIN**

**1.** John J. Stein  
Lecturer  
Department of Neuroscience

**2.** 28 Shales Landing  
Attleboro, MA 02703

### **3. EDUCATION**

B.A., Biology, Saint Anselm College, Manchester, NH, 1988.

Ph.D., Division of Biology and Medicine, program in Neurophysiology, Brown University, Providence, RI, 1995.

### **4. APPOINTMENTS**

**2005 - present:** Lecturer- Brown University Neuroscience Department

**July 1998 - 2004:** Assistant Professor (Research) - Brown University Neuroscience Department

**1995 - 1998:** Preceptor - Brown University Neuroscience Department

### **5. PUBLICATIONS**

#### **c. Refereed Journal Articles**

Yoon-Kyu Song, John Stein, William R. Patterson, Christopher W. Bull, Kristina M. Davitt, Jiayi Zhang, Arto V. Nurmikko, Mijail D. Serruya, and John P. Donoghue (2006) A microscale photovoltaic neurostimulator for fiber optic delivery of functional electrical stimulation. *Journal of Neural Engineering*, (submitted)

Stein, J.J., Johnson, S.A. & Berson, D.M. (1996) The distribution and coverage of beta cells in the cat retina. *Journal of Comparative Neurology*, 372:597-617.

Berson, D.M. & Stein, J.J. (1995) Retinotopic organization of the superior colliculus in relation to the retinal distribution of afferent ganglion cells. *Visual Neuroscience*, 12:671-686.

Stein, J.J. & Berson, D.M. (1995) On the distribution of gamma cells in the cat retina. *Visual Neuroscience*, 12:687-700.

Berson, D.M., Lu, J. & Stein, J.J. (1990) Topographic variations in W-cell input to the cat superior colliculus. *Experimental Brain Research*, 79;459-466.

**d. Non-Refereed Journal Articles (Educational Software)**

Stein, J.J.; Roth, R.; Suttle, D.; Yang, N. CardioVis

\*mathematical and animated model of cardiovascular function developed with the assistance of Brown mathematics and computer science undergraduates.

<http://www.cs.brown.edu/courses/cs092/2003/cardioviz/>

**f. Abstracts**

2006: J.J. Stein, Y.-K. Song, M.D. Serruya, W.R. Patterson, C.W. Bull, K.M. Davitt, A. V. Nurmikko, and J.P. Donoghue (2006) An ultra compact photovoltaic neurostimulator for optically activated functional electrical stimulation. *Society for Neuroscience*

1989: Berson, D.M., Lu, J. and Stein, J.J. The retinotectal W-cell projection in the cat: evidence for topographic variations in density. *Society for Neuroscience*.

1990: Berson, D.M. and Stein, J.J. Collicular magnification is not scaled to the intraretinal density of afferent ganglion cells. *Society for Neuroscience*.

1993: Stein, J.J. and Berson, D.M. Is geniculate magnification scaled to ganglion-cell density in the cat? *Society for Neuroscience*.

1994: Stein, J.J., Johnson, S.A. and Berson, D.M. Distribution and coverage of beta

**g. Invited Lectures**

**“Food for Thought” Faculty Lecture Series**

Brown University Alumni Event covering topics from the basic biology of the brain to current models of psychiatric disorders and addiction.

**“Biology of Behavior” - Meeting of the Minds (2006-2007)**

Brown University Alumni Event covering topics from the basic biology of the brain to current research on learning and memory.

**A Day On College Hill**

Address to parents of prospective students on faculty perspectives of undergraduate education at Brown

**Presenter for Sheridan Center Educational Seminars**

Presented a workshop entitled “Teaching in the Digital Age Faculty Showcase”

*Weaving Multimedia into Your Course*

**Rhode Island Children’s Crusade for Higher Education (2006)**

Presented a series of talks to middle school and high school students about college science education and careers in research

**National Alliance for the Mentally Ill (NAMI) (2000-2003)**

Invited to speak to professionals and lay people at the NAMI Rhode Island annual conference 3 years straight. Executive Director of NAMI RI, Nickie Sahlin, Ph.D. stated in a letter of thanks to me that she has, “Never seen such enthusiastic comments about a workshop as those yours received!”

**NAMI Westerly/Chariho (2001, 2002)**

Presented a talk entitled, “Inside the Brain: From Molecules to Behavior.” to local community

**Science Education and Outreach Innovations Faculty Luncheon (2001)**

Invited to speak at Brown faculty luncheon about my experiences with outreach models developed as part of Brain Awareness Week activities.

**Westerly School District Faculty Education (2000)**

As part of a faculty development program, presented material covering basic brain function through mental illness to 20 educators spanning elementary through high school level

**Westerly School District Parent Education (2000)**

Guest lecturer – evening workshop for parents in the Westerly School District

**Institute for the Academic Advancement of Youth Discovering Biotechnology Seminar – Presenter (1999)**

Organized and led Workshop on “Biological Electricity”

## **6. RESEARCH GRANTS**

### **a. CURRENT GRANTS**

**NIH Science Education Partnership Award (SEPA)(9/2006)**

Project A.R.I.S.E. Advancing Rhode Island Science Education.  
3 years-\$636,131 (\$589,380 Direct Costs; \$46,751 Indirect Costs)

As the principal investigator in collaboration with Jennifer Aizenman (Summer and Continuing Studies), Lawrence Wakeford (Education). The program will provide intensive science and pedagogical education for High School science teachers in Rhode Island along with traveling laboratory footlockers covering Neuroscience, Physiology, and Molecular Biology.

**National Institutes of Health SEPA (supplement) (2/2007)**

Project A.R.I.S.E. Advancing Rhode Island Science Education.  
3 years-\$97,200 (\$90,000 Direct Costs; \$7,200 Indirect Costs)

This supplement was obtained to add stipend funding for participants in the ARISE program.

**Society For Neuroscience Chapters Grant for K-12 outreach education (2003)**

Received a \$2000 grant and obtained \$3000 matching funds to purchase Neurophysiology Lab equipment to be used for classroom demonstrations in K-12 classes.

**b. COMPLETED GRANTS**

**McCune Foundation funded Neuroengineering Program (2002-2003)**

Worked with Engineering faculty member to develop new Engineering lab experiments with the nervous system as a topic of study.

**c. Proposals submitted**

**National Science Foundation Math Science Partnership Award**

**The ARISE Collaboratory: Advancing Rhode Island Science Education. (2006) (submitted/not funded)**

**(\$4,804,992 grant over 5 years)**

Principal Investigator on a grant to develop and sustain a partnership that will provide high school science teachers with the content knowledge, tools and skills they need to prepare students to think, read, write and speak as scientists. This project will involve the Brown University Departments of Neuroscience, Education, Summer and Continuing Studies and the Technology Division of The Education Alliance at Brown in partnership with the Providence Public School District, the East Bay Educational Collaborative and the Rhode Island Department of Elementary and Secondary Education and produce a long-term professional development program that addresses the need for high school science reform in Rhode Island.

**Howard Hughes Medical Institute Grant (2002) (submitted/not funded)**

Multidepartmental grant proposal to design and administrate science education classes for local high school science teachers.

## **7. SERVICE**

**a. To the University**

**Advising (Official advisor for 30 students total)**

Freshman Advising – 10 students via CAP course BN01

Sophomore Advising – 13 students

Neuroscience Concentration Advising – 7 students

Concentration Advisor –Neuroscience – faculty contact to answer inquiries about the Neuroscience concentration at Brown

**Neuroscience Department Liaison to the Sheridan Center for Teaching**

**Faculty Liaison for the Gymnastics Team**

**UTRA Advisor and Royce Fellowship Advisor**

**Brown / Providence Public Schools Wayland Collegium Study Group (2003-2004)**

Member of a study group consisting of individuals from Brown University, Providence Public School Officials and representatives from the Office of Mayor Cicillini formed to assess current and prospective programs and relationships between Brown University and Providence Public Schools.

**b. & c. Service to the Profession and Community**

**Brain Awareness Week Faculty Coordinator (1998-2007)**

Organized 70 Brown faculty, graduate and undergraduate student volunteers  
Participated in school visits in the Providence, East Providence, Cranston, Lincoln, Barrington and Westerly school districts in classes ranging from 1<sup>st</sup> to 12<sup>th</sup> grade  
Presented to Boy Scout, Girl Scout, and City Brothers Programs  
Total audience of approximately 1000 students and teachers

## **8. ACADEMIC HONORS**

**Barrett Hazeltine Teaching Citation for Outstanding Teaching (2004, 2006, 2007)**

Honored by graduating seniors for teaching/mentoring

**Brown Undergraduate Student Council Excellence in Teaching Award (Lecturer) (2003, 2005)**

Honored by undergraduate students in category of "Best Lecturer"

**Karen T. Romer Award for Excellence in Advising (nominated) (2003)**

Finalist in annual award for excellence in advising

## 9. TEACHING

**The following is a list of courses that I am involved with each year amounting to a total enrollment of 1,206 students/year. This annual list represents what my teaching responsibilities have been for the past 3 years. Course evaluation reports are available upon request.**

BN080 *Principles of Physiology* (enrollment 160)

BN160 *Experimental Neurobiology* (enrollment 24 and Summer – enrollment 12)

BN001 *Introduction to Neuroscience* (enrollment 450 Fall) with Professor Paradiso

BN001 *Introduction to Neuroscience* (enrollment 30 Summer)

BI020 *The Foundation of Living Systems* (enrollment 450) with Professor Miller

BN165 *Neuroanatomy* (enrollment 65) Lab section

BN102 *Cellular and Molecular Neurobiology* – guest lecturer

BI095 *Independent Study in Science Writing* – (mentor to one student)

BN903 *Brain Basics: From Biology to Behavior* (enrollment 15 Summer) Intensive 3-week Precollege course

2001-2007 – Organized MAT student projects associated with the teaching of BN01, creating lesson plans for Brain Awareness Week to be used by undergrads/grads/faculty.