CURRICULUM VITAE
OF
JOHN J. STEIN

1. John J. Stein
Distinguished Senior 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 Physiology, Brown University, Providence, RI, 1995.

4. APPOINTMENTS

2021 – present: Distinguished Senior Lecturer – Brown University Department of Neuroscience

***2008 - 2021*: Senior Lecturer**- Brown University Department of Neuroscience

***2005 - 2008*: Lecturer**- Brown University Department of Neuroscience

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

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

5a. Teaching

Fall
NEUR0010 – Neuroscience Exploring the Brain (1995–present; co-taught; ~300 students per year)
BIOL0800 – Principles of Physiology (1997–present; ~350 students per year)
BIOL0140C - Communicating Science Through Visual Media (2014 – 2017; 2020; 2022 co-taught Brown/RISD collaborative course with 8 Brown undergraduate and graduate students and 8 RISD animation students)
NEUR1650 – Neuroanatomy (1995 – present; ~45 students per year; I teach laboratory sections of this course)

Winter
BIOL3650 – First Year Medical School (2016 – 2017 guest lectures; 2018 – present Neurobiology Course Leader; 144 medical students per year)

Spring
NEUR1600 – Experimental Neurobiology (1995 – present; ~15 students per year)
BIOL0200 – Foundation of Living Systems (1999 – present; 250 students per year)

Summer (N.B. This is not part of my 10 month appointment but these courses impact the Neuroscience Concentration.)
NEUR1600 – Experimental Neurobiology (2009-2019; 10 students, mostly Neuroscience undergraduates and occasional graduate student)
CEBN0900 – Brain Basics: From Biology to Behavior (2008 – 2019; 2022 - present; 18 precollege students, two students are from a HUG, local and participating in summer research at Brown.)
CEBN0470 – (2022; Fully online course taught in place of CEBN0900)

Excluding the summer Precollege course, if you multiply the number of years times the average enrollments for each course and add them together I estimate around 23,371 undergraduate, graduate and medical students taught over my career at Brown. (N.B. Since a number of students take more than one of the above courses this number reflects "student course units".) My course load has increased over the past 5 years. In the current year I have taught 1,256 undergraduate students out of a total of 7,133 students, or 17.6%, but there are a number of students who take more than one course with me each year so this percentage is inflated.

5b. PUBLICATIONS

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 (2007) A microscale photovoltaic neurostimulator for fiber optic delivery of functional electrical stimulation. Journal of Neural Engineering, 4:213-218.

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.

Non-Refereed Journal Articles (Educational Software)

Stein, J.J.; Roth, R.; Suttle, D.; Yang, N. CardioVis (2003)
*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/

Communicating Science Through Visual Media Educational Animations
These are a collection of 26 animations submitted as final projects in BIOL0140C which involve substantial collaboration between students, science faculty and the co-instructors for this course, Steven Subotnick and myself.
http://cstvm.blogspot.com/

Abstracts

2009 Project arise: advancing rhode island science education promotes sustained scientist/teacher partnerships to develop inquiry-based high school science instruction. Society for Neuroscience Abstract, 2009

2008: Aizenman, J., Stein, J., Wakeford, L. The role of Project ARISE: Advancing Rhode Island Science Education in producing future scientists and an appreciation for science in RI. Rhode Island Research Alliance Symposium.

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 Abstract Viewer/Itinerary Planner (Online) 651.11/X23

1994: Stein, J.J., Johnson, S.A. and Berson, D.M. Distribution and coverage of beta cells in the cat retina. 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.

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

Invited Lectures/Academic Events

ADOCH – A Day On College Hill (20016 – 2020)
Faculty Lecture on topics in Neuroscience presented to accepted students and their parents.

Brown Staff Development Day (2016; 2022)
Featured speaker delivering a talk on the Neuroscience of Learning and Memory

Society for Neuroscience Workshop "A Practical Guide to Science Communication" (November 2017)
I served as a facilitator at the annual SFN Conference in a workshop for scientists who wanted to communicate their research to a broader, non-scientist audience. The participants consisted of tenured faculty, post-docs and graduate students.

ComSciCon (Cambridge June 2016)
"Communicating Through Creative Outlets and Storytelling" ComSciCon Panelist and workshop facilitator for Communicating Science workshop for graduate students.

University of the Arts (Philadelphia February 4, 2016)
Delivered keynote presentation on Memory, Learning and the Brain to the UArts community in association with a UACC Collaborative Studio Course, Responsive Memory

DNA Day (Narragansett High School April 14, 2015)
Delivered keynote presentation highlighting genetic research within the field of Neuroscience

Rhode Island Science Teacher Association annual conference (March 2015)
Co-resented a workshop on Project ARISE and the Next Generation Science Standards with Audrey Kampper, science teacher at Cranston East High School

Harvard School of Mental Health (2014); "Treating Students K-12"
Presented the opening talk titled "From Biology to Behavior: Understanding Thinking, Learning and Memory."

Knowles Science Teacher Foundation (2012, 2013)
Served as content area specialist on interview team to select pre-service teachers for Knowles Scholarship.

One Day University (2007-present)
Invited on numerous occasions as one of "the country's brightest professors from the world's finest universities" to instruct as part of this continuing studies program. Featured in NY Times; Providence Journal.

Brown Staff Development Day (2013, 2015, 2016, 2018)

Learning and the Brain Conference (Boston 2011)

Brain Café/Everett Dance Theater Group (2011)
Collaborated with local performance artist group on a presentation/performance based on the brain.

Science Café at the Bookstore
Hosted a Triple Helix-sponsored Science Café event at the Brown Bookstore on the topic of good vs. bad science in the media.

Brown University Science Center Events (2011-present)

Host an annual public event on The Neuroscience of Miracleberries. Occasionally participate in trivia contests.

Brown Alumni Events (2008-present)
Brown University Alumni Events in various regions of the country

"Food for Thought" Faculty Lecture Series (2006-2007)
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.

Rhode Island Children's Crusade for Higher Education (2006 – 2009)
Presented a series of talks to middle school and high school students about college science education and careers in research

A Day On College Hill (2005, 2008, 2015, 2016, 2017, 2018)
Public lecture to parents of prospective students on faculty perspectives of undergraduate education at Brown

Presenter for Sheridan Center Educational Seminars (2004; 2013)
Co-presented a workshop on science lab courses to graduate students/faculty and presented a workshop entitled "Teaching in the Digital Age Faculty Showcase"
Weaving Multimedia into Your Course

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. GRANTS

Completed grants

Judith H. Zern 1964 Endowed Teaching Fund (7/2012)
Course development grant used to bring updated content to introductory and upper level Neuroscience and Biology courses. ($4,000)

Rhode Island Office Higher Education Partnership Title II (2013)
Continuation/supplement for maintaining and expanding Project ARISE program in the state of RI. ($270,000 over 3 years)

NIH ARRA Administrative Supplement (9/2009)
ARRA supplement to NIH SEPA grant (1 year - $200,000)

Served as co-PI on this supplement to develop an online resource/community for science inquiry instruction and form curriculum refinement teams to develop more inquiry-based science lesson/unit plans for high school students.

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). This program provided 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 (2003-2007)
Received a $2000 grant and obtained $3000 matching funds to purchase Neurophysiology Lab equipment to be used for classroom demonstrations in K-12 classes.

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.

Proposals submitted

Motorolla Foundation - Sustaining, Expanding and Improving the ARISE Program (submitted 2015)
$11,288 was requested to support laboratory supplies, fund graduate students Science Consultants and sponsor the Nature of Discovery Symposium.

RI EPSCoR White Paper for upcoming proposal
Submitted proposal and budget for consideration in multi-institutional NSF grant proposal. Collaborated with Steven Subotnick, a Rhode Island School of Design professor, to develop a program to extend science communication activity to the PIs within the RI EPSCoR NSF grant.

Rhode Island Office Higher Education Partnership Title II
Establishment of best practices for sustaining a long-term professional development program through the ARISE community (2010) (submitted) ($270,000 over 3 years) Co-Principle Investigator on a grant to improve sustainability of Project ARISE to current cohort, extend this program to pre-service science teachers and develop ESL educational components.

National Science Foundation Math Science Partnership Award
PRISM: Partnership for Rhode Island Science Mastery. (2008) (submitted) ($4,990,621 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 Cranston, East Providence and Pawtucket School Systems and the Rhode Island Department of Elementary and Secondary Education to produce a long-term professional development program that addresses the need for high school science reform in Rhode Island.

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.

7. SERVICE

To the University

Advising (Official advisor for ~20 students per year total)
Freshman Advising – 6 students via CAP course BN01
Sophomore Advising – 6 students
Transfer Student Advising – 3 students
Neuroscience Concentration Advising – 10 students
Concentration Advisor –Neuroscience – I am one of several faculty who are regular first-contacts to answer inquiries about the Neuroscience concentration at Brown

Anchor Course Design Institute Faculty Facilitator (summer 2020)
Took and subsequently facilitated a week long faculty development course developing best teaching practice with an emphasis on effective online teaching pedagogy.

Faculty Executive Committee (2013-2015)

College Curriculum Committee (2009-2012; 2017 - 2020)

Faculty Advisor for Non-academic Code Violations (2006-Present)

Faculty Advising Fellow (2009-2012)

TEAM – Team Enhanced Advising and Mentoring. (2009-2012)

Wayland Collegium Study Group: Premedical Education (2009-2010)

Campus Planning Advisory Board (2007-2009)

Science Resource Center Planning Board (2008-2018)

Neuroscience Department Liaison to the Sheridan Center for Teaching (2005-2014; 2018-present)

Faculty Liaison for the Gymnastics Team (2005-Present)

UTRA Advisor and Royce Fellowship Advisor (2004, 2005)

Recommendations (written)
Faculty appointments outside of Brown: I have written recommendations for colleagues (Post docs) who are applying for faculty positions that feature a significant amount of teaching (4-year college appointments).

Faculty appointments within Brown: I have reviewed and commented on teaching and professional practice of Lecturers pursuing appointments to Senior Lecturer for TPAC.

Letters of recommendation for students entering medical school, graduate school, Fulbright Scholarships, summer research, study abroad and others. (Six to twelve medical school recommendations per year; zero to one graduate school/Fulbright, ten to twenty summer internship recommendations/study abroad)

Brown Cycling Club Faculty Advisor/Coach (1998-2007)

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 Cicilline formed to assess current and prospective programs and relationships between Brown University and Providence Public Schools.

Service to the Profession and Community

Brown Brain Bee (2013 – present)
I have served as an advisor to the undergraduate organizers for the Brain Bee and I have been the host for the culminating Brain Bee event.

Brain Awareness Week (1998-Present)
I am very proud to be the first faculty member at Brown to organize events for Brain Awareness Week when this Dana Foundation/Society for Neuroscience initiative began to expand. Throughout the years annual events have typically included 70 Brown faculty, graduate and undergraduate student volunteers participating in school visits throughout Rhode Island in classes ranging from Kindergarten to 12th grade. We also have presented to Boy Scout, Girl Scout, and City Brothers Programs bringing the total audience to approximately 1000 students and teachers per year within the first few years. In 2016, Brain Awareness Week expanded significantly due to the efforts of Victoria Heimer-McGinn who was at Brown at this time and organizers at the Cure Alliance. I coordinated with them and continued the school outreach components under the umbrella of a much larger range of activities to celebrate and educate about Brain Awareness.

8. ACADEMIC HONORS

President's Award for Excellence in Faculty Governance, 2020 This award was given for "sustained and excellent contributions in faculty committee service." One of the biggest accomplishments was playing a key role in establishing a new faculty rank of Distinguished Senior Lecturer at Brown university while I was a member of the Faculty Executive Committee. This was a collaborative effort with many individuals coordinated through the FEC.

Barrett Hazeltine Teaching Citation for Outstanding Teaching (2004, 2006, 2007, 2011)
This honor is given out to 2 faculty members a year by graduating seniors as favorite professor among all Brown University faculty.

Sheridan Center Teaching with Technology Award (2010)

This award was given for efforts to incorporate online course content into an introductory biology course.

Harriet W. Sheridan Award for Distinguished Contributions to Teaching and Learning (2008)
This university-wide award is given to 2 faculty members a year based on faculty-nominated candidates.

Brown Undergraduate Student Council Excellence in Teaching Award (Lecturer) (2003, 2005)
UCS run student award for teaching in one of two categories: Lecture and Small Class format.

Karen T. Romer Award for Excellence in Advising (nominated) (2003)
Finalist in annual award for excellence in advising