CURRICULUM VITAE 11/19
JONATHAN RICKEL WOLPAW

PERSONAL DATA

Name: Jonathan Rickel Wolpaw
Citizenship: US

EDUCATION

1966, B.A., Biology, Amherst College
1970, M.D., Case Western Reserve University School of Medicine

POSTDOCTORAL TRAINING

1970-1971 Medical Intern, Mt. Sinai Hospital, Cleveland, Ohio 44106.
1971-1972 Neurology Resident, First Year, Department of Neurology (Dr. Charles M. Poser), University of Vermont College of Medicine and Med Ctr Hosp of Vermont, Burlington, Vermont 05405.
1972-1974 Staff Associate, Applied Neurology Research Branch (Dr. J. Kiffin Penry), National Institute of Neurological and Communicative Disorders and Stroke, National Institutes of Health, Bethesda, Maryland 20205.
1974-1976 Instructor in Neurology and Neurology Resident, Department of Neurology (Dr. Charles M. Poser), University of Vermont College of Medicine and Medical Center Hospital of Vermont, Burlington, Vermont 05405.
1976-1978 Staff Fellow, Laboratory of Neurophysiology (Dr. Edward V. Evarts), National Institute of Mental Health, Bethesda, Maryland 20205.

MD INFORMATION

Medical Licensure: Vermont: 1971-2016
New York: 2010-Present
Board Certification: American Board of Psychiatry and Neurology (Neurology), 1978

MILITARY SERVICE

Major, Medical Corps, Army of the United States, 1978-1980

PROFESSIONAL ORGANIZATIONS AND SOCIETIES

American Neurological Association
American Academy of Neurology
American Clinical Neurophysiology Society
New York Academy of Sciences
Society for Neuroscience
Hudson/Mohawk Clinical Neuroscience Society
American Spinal Injury Association

ACADEMIC APPOINTMENTS

1978-1980 Neurologist, Neurobiol Dept, Armed Forces Radiobiol Research Institute; Adjunct Assistant & Associate Professor (79-80), Depts of Neurology & Physiology, Uniformed Services University of the Health Sciences.
1980-Present Chief - Laboratory of Nervous System Disorders (now Neural Injury and Repair) (98-), Head - Central Nervous System Studies Section (80-), Wadsworth Center,

New York State Department of Health; Professor of Biomedical Sciences (88-), School of Public Health, State Univ of New York at Albany; Research Professor, Dept of Neurology (85-) & Adjunct Professor, Dept of Pharmacology and Neuroscience (95-), Albany Medical College; Adjunct Prof., Dept of Physiol and Cell Biology, Ohio State University (2004-).

HOSPITAL APPOINTMENTS

2010-Present Research Attending Physician, Helen Hayes Hospital, West Haverstraw, NY
2014-Present Investigator, Stratton VA Medical Center, Albany, NY

HONORS

Hans Berger Award, American Electroencephalographic Society, 1977
Election to American Neurological Association, 1987
Knight Visiting Professor, University of Miami School of Medicine, 1991
Howard Hughes Lecturer, Amherst College, 1993
Claude Bernard Speaker, Association for Applied Psychophysiology and Biofeedback, 1994
Congressional Briefing, National Center for Medical Rehabilitation Research, NIH, 1994
Matchette Foundation Lecture, Rensselaer Polytechnic Institute, 1998
Computerworld Smithsonian Laureate (Medicine), 1998
Pangborn Award, Wadsworth Center, 1999
DFG Visiting Professorship, Inst Med Psychol & Behav Neurobiol, Univ Tübingen, 1999-2000
Plenary Lecture, International Conference on Spatial Cognition, University of Rome, 2000
Plenary Lecture, Third World Conference in Neurological Rehabilitation, Venice, 2002
Plenary Lecture, Houston Conference on Biomedical Engineering Research, Houston, 2003
James S. McDonnell Foundation 21st Century Research Award, 2003-2008
Servier Lecture, Univ. of Montreal, 2004
Plenary Lecture, Brain-Computer Interface Workshop and Training Course, Graz, Austria, 2004
Altran Foundation Innovation Award, 2005
Pirelli INTERNETional Award, 2005
American Paraplegia Society Jayanthi Charitable Foundation Award, 2006
World Technology Network Fellow, 2006
NY State Department of Health, Commissioner's Recognition Award, 2006
Keynote Address, American Paraplegia Society Symposium, Las Vegas, 2006
Plenary Lecture, Neuromuscular Plasticity Symposium, University of Florida, Gainesville, 2006
BEST Lecture, Clarkson University, 2007
Beach Memorial Lecture, Univ. of Miami, 2007
Keynote address, 9th International ACM Conf on Computers and Accessibility, Tempe, AZ, 2007
Excellence in Research Award, University at Albany, State University of New York, 2007
Plenary Lecture, Rehabilitation Engineers Society of North America, Washington, DC, 2008
Keynote Lecture, Army Res Off Comput & Inform Scis Strateg Planning Mtg, Chapel Hill, 2008
Keynote Speaker, Workshop for Neural Engineering, Redmond, WA, October 2008
Grass Traveling Scientist, University of Manitoba, 2008
Saatchi and Saatchi Award for World Changing Ideas - Finalist, 2008
Engin in Med & Biol Soc Outstanding Paper Award, IEEE Trans Biomed Engin, 2008
G. Heiner Sell Memorial Lecture, American Spinal Cord Injury Association, Dallas, 2009
Pioneer in Medicine Award, IBMISPS, 2010
Mary Notter Lecture, Dept Neurobiology and Anatomy, University of Rochester, 2010
Emerging Concepts in Medicine Lecture, SUNY-Downstate Medical Center, Brooklyn, 2011

Keynote Speaker, Fifth International Graz BCI Conference, Graz, Austria, 2011
Keynote Speaker, Myoelectric Controls Symposium, University of New Brunswick, 2011
Keynote Speaker, ACM SIGHIT International Health Informatics Symposium, Miami, 2012
Keynote Speaker, BrainGain Project, Nijmegen, The Netherlands, March 2013
Keynote Speaker, UNYTE Translational Research Network, Univ of Rochester, NY, May 2014
Lawrence S. Sturman Excellence in Research Award, 2015
Keynote Speaker, UWM College of Health Sciences Spring Research Symposium, 2015
First President, Brain-Computer Interface Society, 2015
SPIE Pioneer Award for Brain-Computer Interface Research, 2016
Keynote Lecture, University of Miami Neural Engineering Research Symposium, 2016
Most Innovative Rehabilitation Technology Award, Am Congress Rehab Med Conference, 2017
Distinguished Scholar Lecture Series, University of Delaware, 2017
Fletcher McDowell Award, Burke Neurol Research Inst, Weill-Cornell Sch Medicine, 2018

GRANT SUPPORT

Current Grants as Principal Investigator

NIH/NIBIB P41EB018783 (Biomedical Technology Resource Center), "Center for Adaptive Neurotechnologies." PI, 2014-2024. The goal of this NIBIB Biomedical Technology Resource Center is to build a unique technological infrastructure and to use it to guide beneficial plasticity in the nervous system, to replace lost neuromuscular functions, and to characterize and localize brain processes both spatially and temporally.

NIH/NICHD R25 HD088157, "Short Course in Adaptive Neurotechnologies." Joint-PI with G Schalk, 2016-2020. The goal of this project is to develop and conduct a three-week course in adaptive neurotechnologies.

NIH/NICHD R01 NS110577, "Spinal Effects of Cortical Stimulation: Mechanisms and Functional Impact." Joint-PI with Y Wang and JS Carp, 2019-2024. The goal of this project is to determine in rats how electrocortical stimulation produces beneficial spinal plasticity effects and to characterize them on physiological, anatomical, and transcriptional levels.

Dept Veterans Affairs I01 CX001812-01, "Corticospinal Control of Spinal Reflex Plasticity." PI, 2018-2024. The goal is to gain new understanding of the corticospinal activity that guides operantly conditioned spinal reflex change and to use this new understanding to improve the efficacy of reflex conditioning in Veterans with stroke.

New York State Spinal Cord Injury Research Board DOH01-C33279GG-3450000, "A Reflex Conditioning System for Clinical Use." PI, 2018-2022. The goal is to translate the current complex laboratory operant conditioning system into an automated, easy-to-use, and robust system that therapists can use in clinical research and practice.

Past Major Grants as Principal Investigator

United Cerebral Palsy Research and Educational Foundation, "Long-term modification of segmental reflex function," PI, 1982-1986.

New York State Dept of Health, Overhead Power Lines Project, "Chronic effects of 60-Hz electric and magnetic fields on primate central nervous system function," PI, 1982-1985.

NIH/NINDS R01, "Electrophysiologic evaluation of human auditory cortex," PI, 1984-1989.

NIH/NINDS R01, "Adaptive plasticity in the spinal stretch reflex." PI, 1985-2015.

IBM Corporation, "Cursor control through an EEG-based brain-computer interface," PI, 1988-1990.

New York State Science and Technology Foundation, "EEG-based brain-computer interface for communication and control," PI, 1991-1992.

NIH/NICHD R01, "EEG-based brain-computer interface," PI, 1992-2007.

International Spinal Research Trust, "Assessment of corticospinal tract function in mammals," PI, 1998-2002.

NIH, "Neurotrophins and transplants in spinal cord injury," Subcontract PI, 1998-2003.

NIH/NIBIB, “General purpose brain-computer interface (BCI) system” (Bioengineering Research Partnership). PI, 2002-2008; Joint PI with G Schalk, 2008-2014.

James S. McDonnell Foundation, “A non-invasive brain-computer interface for prosthesis control,” PI, 2003-2008.

NIH/NINDS R01, “Spinal reflex conditioning and locomotion.” Joint PI with XY Chen, 2008-2014.

US Dept of Veterans Affairs, Cooperative Studies Program VA258P0417 #567, “A clinical demonstration of an EEG brain-computer interface for ALS patients.” Joint PI with RL Ruff and RS Bedlack, 2010-2013.

NIH P01 Program Project, “Spinal circuits and the musculoskeletal system: Project IV (Regulation of Spinal-Musculoskeletal Interactions).” Project IV Joint PI with XY Chen (Program-Project PI: AW English), 2007-2018.

US Dept of Veterans Affairs, BXI01BX002550-01, “Operant Conditioning of Spinal Reflexes to Improve Function after Nerve Injury.” PI, 2014-2018.

DEPARTMENTAL AND UNIVERSITY COMMITTEES

Institutional Animal Care and Use Committee, Wadsworth Center (1981-1999)
Institutional Review Board, New York State Department of Health (1990-2000)
Institutional Review Board, Helen Hayes Hospital (1996-2000)
Recruitment Committee, Department of Biomedical Sciences, SUNY (1991-1993)
Research Committee, School of Public Health (ca. 1987-1990)
Personnel Committee, Dept of Environ Health and Toxicology, SUNY (1993-1997)
Personnel Committee, Dept of Biomedical Sciences, SUNY (1997-2002)
Institutional Animal Care and Use Committee, Stratton VA Medical Center (2014-2015)

Chairman, Institutional Review Board, Stratton VA Medical Center (2015-)

TEACHING EXPERIENCE AND RESPONSIBILITIES

Lectures

Neuroanatomy and Nervous System Disorders (Biomed Sci 612/Neu 605) 1996-present
Introduction to Biomedical Sciences (Biomedical Sciences 601A) 2000
Topical lectures to Neurology and Neurosurgery Residents at Albany Medical Center
Ohio State University Spinal Cord Injury Research Training Program 2005-2014
Summer School on Neurorehabilitation, Spain 2011-present
Co-Director, NIH-sponsored NCAN Short Course on Adaptive Neurotechnologies, 2016-present

Master's Thesis Advisor/Committee

Cathy Forneris, Master of Science, School of Public Health (1988-1990)
Christopher Angiello, Master of Science, School of Public Health, (1993-1994)
Laurie Miner SUNY Albany (1995-1997)
Herbert Ramoser, Graz Tech Univ/SUNYAlbany (1996-1997)
Gerwin Schalk, Graz Tech Univ/SUNYAlbany (1997)
Juergen Meltzer, Graz Tech Univ/SUNYAlbany (1997-1998)
Georg Fabiani, Graz Tech Univ/SUNYAlbany (1998-1999)
Gregor Malischnig, Graz Tech Univ/SUNYAlbany (1999-2000)
Andreas Dantele, Graz Tech Univ/SUNYAlbany (2000-2001)
Peter Mandl, Graz Tech Univ/SUNYAlbany (2001-2002)
Ursula Mochty, University of Graz (2005-2006)
Juergen Mellinger, University of Tübingen (2005-2007)
Peter Brunner, Graz Technical University (2005-2007)
Elizabeth Fredericks, University of Graz (2007-2008)
Daniella Klobassa, University of Graz (2007-2008)

Doctoral Thesis Advisor/Committee

Hyeon Son, Ph.D., School of Public Health, 1995
Rifat Hussain, Ph.D., School of Public Health, 1998
Mark Polack, Ph.D., University of Alberta, 2000
Richard Lauer, Ph.D., Case Western Reserve University, 2001
Yi Chen, Ph.D., Ohio State University, 2006
Shreejith Pillai, Ph.D., School of Public Health, 2009
Yukiko Makihara, Ph.D., University of North Carolina, 2011
Natalie Dowell-Mesfin, Ph.D., School of Public Health, 2011
Chadwick Boulay, Ph.D., School of Public Health, 2011
Alexander Sutton, Ph.D. Candidate, Albany Medical College, 2013
Brandon LaPallo, Ph.D. Candidate, School of Public Health, 2014
Jennifer Barnes, Ph.D. Candidate, University of Delaware, Present
Timothy Fake, Ph.D. Candidate, School of Public Health, Present
James Swift, Ph.D. Candidate, School of Public Health, Present
Ladan Moheimanian, Ph.D. Candidate, School of Public Health, Present
Jennifer Barnes, Ph.D. Candidate, University of Delaware, Present

Postdoctoral Fellows

Dr. Aiko K. Thompson

Dr. Anthony Cacace
Dr. Chenyou Sun
Dr. Chong Lam Lee
Dr. Dean Krusienski
Dr. Eric Sellers
Dr. Irina Goncharova
Dr. Jonathan Carp
Dr. Joseph Mak
Dr. Kathy Starr
Dr. Robert Dowman
Dr. Shreejith Pillai
Dr. Xiang Yang Chen
Dr. Yi Chen
Dr. Yu Wang
Dr. Ren Diao
Dr. William Haug
Dr. Amir Eftekhar
Dr. James Norton

Graduate, Undergraduate, and High School Student Interns
Timothea Jarrell, Siena College, Student Intern, (1987-1990)
Stephen David, Harvard University, Student Intern, (1993-1994)
Leah Platenik, SUNY Albany, Master's Program (Rotation) (1996-1997)
Cynthia Spilker, Russell Sage College, Senior Thesis (1996-1997)
Jatin Roper, Bethlehem Senior High, Student Intern (1996)
Jennifer Besze, Russell Sage College, Senior Thesis (1997-1998)
Kristy Collins, Barry College, REU Program (1997)
Brigid Mack, University of Rochester, REU Program (1997-1999)
Alois Schlogl, Graz Technical University, Ph.D. Program (Extended visit) (1998)
Sheritia Faulcon, Morgan State University, REU Program (1998)
Venanesha Williams, William Patterson University, REU Program (1999)
Thilo Hinterberger, University of Tübingen, Ph.D. Program (Extended visit) (2000)
Daniel Kennedy, SUNY Binghamton, REU Program (2000)
Loretta Malta, SUNY Albany, Student Intern (2000-2001)
Lindsey Robinson, Russell Sage College, Student Intern (2000-2001)
Adrianne Davis, Georgia Tech Student, Student Intern (2002)
Cynthia Robinson, Russell Sage College, Senior Thesis (2002)
Nicholas Schwartz, Johns Hopkins University, Student Intern (2003-2006)
Jennifer Williams, Union College, Student Intern (2003)
Neelima Katragunta, SUNY Albany, Student Intern (2003)
Yaw Gyamfi, SUNY Albany, Student Intern (2003)
Sabri Bayoudh, University of Rennes, Student Intern (2005)
Femke Nijboer, University of Tübingen Ph.D. Program, Student Intern (2005)
Tamara Matuz, University of Tübingen, Student Intern (2006)
Sarah Anderson, Columbia High School, Student Intern (2006)
Adrian Furdea, University of Tübingen Student Intern (2006)
Markus Neuper, Graz Technical University, Student Intern (2006)
Nathaniel Elkins, Livingston High School, Student Intern (2006)
Roberto Andreoni, University of Tor Vegia, Student Intern (2007)

Bridget Frowley, AMC Medical College, Rotation Advisor (2007)
Daniel Aguisky, Bethlehem High School, Student Intern (2008)
Joan Fruitet, Ecole Normale Supérieure, Student Intern (extended visit) (2008)
David Morse, University of Michigan, Student Intern (2008)
Emma Fullem,Albany High School, Student Intern (2009)
Michael Duffield, Flinders University of South Australia, Rotation Advisor (2009)
Daniel Green, SUNY Binghamton, Student Intern (2009)
Paul Markowicz, Hunter College, Student Intern (2009-2010)
Collin Stocks, Livingston High School, Student Intern (2009-2011)
Charles Rappazzo, Columbia High School, Student Intern (2009)
Sarah Morse, Bethlehem High School, Student Intern (2009)
Christian Potes, Texas A&M University, Student Intern (2009-2010)
Erhieyovbe Emore, SUNY Albany SPH, Student Intern (2009-2011)
Zoe Fullem, Macalester College, Student Intern (2009)
Angela Wang, Shaker High School, Student Intern (2010-2011)
Jacob Vogel, Hampshire College, Student Intern (2010-2011)
Aisha Moinuddin, University of Michigan, Student Intern (2011)
Andrew Wilkinson, Bethlehem High School, Student Intern (2011 – present)
Mohamed Abdelheck, University of Alexandria, Egypt, Student Intern (2011-2012)
Jennifer Barnes, University of Delaware, Student Intern (2012)
Erin Ricci, University of Rochester, Student Intern (2012)
Sameah Haider, Union College, Student Intern (2012)
MacKenzie Honikel, Albany High School, Student Intern (2012)
Jyotsna Gummadi, Pennsylvania State University, Student Intern (2012 – present)
Leila Atallah Benson, Northeastern University, Student Intern (2012)
Philip Sell, UCLA, Student Intern (2012)
Mariah Rickard, Shaker High School, Student Intern (2012)
Alexander Sokaris, Guilderland High School, Student Intern (2013)
Annemarie Pryor, Tech Valley High School, Student Intern (2013)
Maria Kahn, Russell Sage, Student Intern (2013)
Athena Muhammad, Albany High School, Student Intern (2014)
Chirag Bhatia, Shaker High School, Student Intern (2014)
Nicole Ruiz, Ossining High School, Student Intern (2014)
Maria Pena, St. Joseph's University, Student Intern (2014)
Monica Osher, University of Pennsylvania, Student Intern (2014)
Shelly Zhang, Shaker High School, Student Intern (2014)
Richard Adamovich-Zeitlin, New City High School, Student Intern (2014-2015)
Adam Starkman, Union College, Student Intern (2014-2015)
Annemarie Pryor, Siena College, Student Intern (2014)
Nikki Metzger, Washington University St. Louis, Student Intern (2015)
Alex Cannella, SUNY New Paltz, Student Intern (2015)
Brendan Fitzpatrick, Tech Valley High School, Siena College, Student Intern (2015)
Linda Li, Bethlehem High School, Student Intern (2015)
Ronald Shi, Bethlehem High School, Student Intern (2015)
Shannon Fitzpatrick, Shaker High School, Student Intern (2015-2016)
Carly Brancato, Tech Valley High School, Student Intern (2015)
Julia Foody, Mercy College, Student Intern (2015)
Kamilya Gosmanova, University of Tennessee, Student Intern (2016-2019)
Joseph Jameson, Mercy College, Student Intern (2016)

Kathleen (Kaylee) Berkun, McGill University, Student Intern (2016)
Robin Petrizzo, AMC Neurology Resident (2015-2016)
Emily Nguyen, Student Intern (2016)
Nazish Tarar, SUNYA, Student Intern (2016)
Dawn Deike, Albany Medical College Resident (2016)
Catherine Quinlan, Mercy College, Student Intern (2016)
Billy Schmitt, Harvard University, Student Intern (2015-2018)
Kelly Fitzpatrick, Shaker High School, Student Intern (2016-2018)
Michele Terry, Shaker High School, Student Intern (2016)
Denali Relles, Bethlehem High School, Student Intern (2016)
Briceida Morgan, Albany High School, Student Intern (2016)
Rachel Fields, Union College, Student Intern (2016-2017)
Rani Schoenhaus, SUNY Binghamton, Student Intern (2017)
Lauren Mance, Fordham University, Student Intern (2018)
Momna Aslam, Union College, Student Intern (2017-2018)
Deana Prochnau, Fordham University, Student Intern (2017)
Dounaille Rene, Albany High School, Student Intern (2018)
Shary Soto-Perez, Albany High School, Student Intern (2018)
Allegra Wu, Mt. Holyoke College, Student Intern (2018)
Ashtyn Kollar, SUNY Albany, Student Intern (2018)
Esteban Ceballos, SUNY Albany, Student Intern (2018)
Shivani Bansal, Columbia University, Student Intern (2018)
Grace DiRisio, Colgate University, Student Intern (2018)
Olivia Zhou, Shaker High School, Student Intern (2018)
John Courtney, Bethlehem High School, Student Intern (2018)
Ethan Webster, SUNY Albany, Student Intern (2019)
John McLinden, University of Rhode Island, Student Intern (2019)
Isabel Barats, Doane Stuart High School, Student Intern (2019)
Amanda Despart, University of Rochester, Student Intern (2019)
Kevin Luu, SUNY Stony Brook, Student Intern (2019)
Kevin Long, Lafayette College, Student Intern (2019)
Sam Chiesa, Cornell University, Student Intern (2019)
Jade Carter, Albany Academy, Student Intern (2019)
Claire Chaisson, Clarkson University, Student Intern (2019)
Brendan Fitzpatrick, University of Notre Dame, Student Intern (2019)
Stavrina Devetzoglou Toliou, University of Delft, Netherlands, Graduate Student (2019)
Rishita Nagothi, Tech Valley High School, Student Intern (2019)

OTHER PROFESSIONAL ACTIVITIES

Editorial

Senior Editor, IEEE Transactions on Neural System and Rehabilitation Eng (2002-present)
Editorial Board, Neural Plasticity (2008-2014)
Editorial Board, Journal of Neural Engineering (2011-present)
Editorial Board, IEEE Transactions on Biomedical Engineering (2012-present)

Consultative

Professional Advisory Board, Epilepsy Association of the Capital District (1982-2003)

Committee on Bioethical Issues, Medical Society of the State of New York (1987-1997)
Neurology A Study Section, National Institutes of Health (1991-1995)
Advisory Board, Spinal Circuits & Musculoskeletal Syst Program, Emory Univ (1995-1998)
New York State Spinal Cord Injury Research Board (1999-2015)
Center for Rehabilitation Eng, Sci, and Tech Advisory Board, Clarkson Univ (2007-present)
Lifeboat Foundation Scientific Advisory Board, Neuroscience (2008-present)
Scientific Advisory Board, Center for Sensorimotor Neural Engineering (2009-present)
National Advisory Board on Medical Rehabilitation Research (NICHD/NIH) (2010-2105)
Scientific Advisory Board, Burke-Blythedale Pediatric Neurosci Research Collab (2017-present)

INVITED LECTURES AND SYMPOSIA

Schumacher Symposium, University of Vermont, Burlington, VT. Nov 1973.

Visiting Professor, Department of Neurology, University of Vermont, Burlington, VT, July 1978.

Walter Reed Army Institute of Research, Washington, DC, Oct 1978.

Symposium (Chairman), "Reflexes capable of change: models for the study of memory," Federation of American Societies of Experimental Biology, Annual Meeting, April 1980.

Society for Neuroscience, Hudson Berkshire Chapter, Dec 1980.

Laboratory of Sensorimotor Control, National Eye Institute, NIH, Bethesda, MD, April 1982.

Boston Society of Psychiatry and Neurology, Boston, MA, June 1982.

Society for Neuroscience, Hudson Berkshire Chapter, Albany, NY, Oct 1983.

Symposium, “Activity-Dependent Synaptic Changes,” State Univ of New York (Albany), April 1984.

Boule Colloquium Series, Institute for Sensory Research, Syracuse University, Oct 1984.

Department of Physiology, State University of New York (Upstate), Feb 1985.

Department of Cell Biology and Anatomy, University of Texas (Dallas), April 1985.

Seventh Biennial Conference on Regeneration in the CNS, National Spinal Cord Injury Association, May 1985.

Biofeedback Society of America, Seventeenth Annual Meeting, March 1986.

Symposium, "Approaches to the Study of Behavior," Department of Biology, Amherst College, April 1986.

Visiting Professor, Department of Rehabilitation Medicine, Emory University, August 1986.

IBM Technical Symposium, "Projects for Persons with Disabilities," Oct 1986.

Symposium, "Neural Factors in Motor Control and Performance," American College of Sports Medicine Annual Meeting, May 1987.

Conference, "Criteria for the assessment of recovery of function: behavioral methods," American Paralysis Association, June 1988.

Visiting Professor, Department of Rehabilitation Medicine, Emory University, Nov 1988.

Department of Neurology, Albany Medical College, 1989.

Visiting Professor, Department of Kinesiology, UCLA, Feb 1989.

Neurobiology Research Center, State University of New York at Albany, March 1989.

Department of Psychology, Clarkson University, April 1989.

Panel (Chairman), "Plasticity at the Ia synapse: new use for a classic model," Winter Conference on Brain Research, Jan 1990.

Symposium (Organizer), "Activity-driven CNS changes in learning and development," State University of New York at Albany, May 1990.

Workshop, "Personnel amplification systems," Center for Engineering Design, University of Utah, Sept 1990.

Symposium, "Plasticity of motoneuronal connections: peripheral and central," Bonn, West Germany, Sept 1990.

Knight Visiting Professor, University of Miami School of Medicine, April 1991.

Symposium, "Adaptive plasticity in the spinal cord," Fourth Annual Symposium on Neural Regeneration, Dec 1991.

Panel (Chairman), "The concept of memory from Saint Augustine to today," Winter Conference on Brain Research, Jan 1992.

Visiting Professor, Department of Neurobiology, The Rockefeller University, Feb 1992.

Visiting Professor, Department of Physiology, Queens University, April 1992.

Symposium, "Adaptive plasticity in spinal cord," First International Congress of the Polish Neuroscience Society, Sept 1992.

Symposium, "Spinal reflex plasticity produced by operant conditioning," American Paraplegia Society, Sept 1992.

Panel (Chairman), "Why don't simple behavioral changes have simple CNS mechanisms?," Winter Conference on Brain Research, Jan 1993.

Visiting Professor, Division of Restorative Neurology and Human Neurobiology, Baylor College of Medicine, Feb 1993.

Department of Neurobiology, Weizmann Institute of Science, March 1993.

Howard Hughes Lecturer, Amherst College, April 1993.

Workshop, "Mechanisms for recovery of function after chronic injury to the nervous system," National Center for Medical Rehabilitation, NIH, April 1993.

Visiting Professor, Department of Physiology, Ohio State University, April 1993.

Symposium, "Adaptive properties of the sensorimotor system," American College of Sports Medicine, June 1993.

Advisory Council, National Institute of Child Health and Human Development, National Institutes of Health, Bethesda, Sept 1993.

National Institute for Medical Rehabilitation Advisory Board Meeting, Bethesda, Oct 1993.

Visiting Professor, Department of Anatomy and Neurobiology, Medical College of Pennsylvania, Dec 1993.

Symposium (Co-organizer), "EEG-based brain-computer communication: prospects and problems," Carmel Series, Jan 1994.

Visiting Professor, School of Physical Therapy, McGill University, Feb 1994.

Claude Bernard Speaker, Association for Applied Psychophysiology and Biofeedback, March 1994.

Symposium, Association for Applied Psychobiology and Biofeedback, March 1994.

Congressional Briefing, National Center for Medical Rehabilitation Research, National Institutes of Health, March 1994.

Department of Neurology, Albert Einstein College of Medicine, March 1994.

Symposium, "Spinal Cord Plasticity produced by operant conditioning of the primate H-reflex," American Paralysis Association, April 1994.

Department of Neurobiology and Behavior, State University of New York, Stonybrook, Feb 1995.

Department of Neurology, Albert Einstein College of Medicine, March 1995.

Department of Medical Informatics, Institute of Biomedical Engineering, Graz University of Technology, April 1995.

Department of Anatomy and Cell Biology, University College London, April 1995.

Symposium, "Therapeutic effects of electrically-induced neural activity," Case Western Reserve University, May 1995.

Symposium, "Developments toward a direct brain interface to control assistive technologies," Rehabilitation Engineers Society of North America, Vancouver, June 1995.

MRC Sensorimotor Control Workshop, "Looking Ahead in Sensorimotor Control: Big Questions for 2001," Queens University, June 1995.

Division of Neurobiology, Barrow Neurological Institute, March 1996.

Symposium, Society for the Neural Control of Movement, April 1996.

American Association of Neuroscience Nurses, April 1996.

Visiting Professor, Institute of Medical Psychology and Behavioral Neurobiology, Eberhard-Karls-University of Tübingen, June 1996.

Department of Physiology, Ohio State University, Feb 1997.

Digital EEG Symposium, Eastern Association of Electroencephalographers, New York City, March 1997.

Department of Physiology, Queens University, May 1997.

Neural Prosthesis Seminar, Functional Electrical Stimulation Center, Case Western Reserve University, Oct 1997.

National Institutes of Health Bioengineering Symposium, Bethesda, Feb 1998.

Director's Seminar Series, Wadsworth Center, New York State Department of Health and State University of New York, April 1998.

Workshop (Chairman), "Where there's a will, there's a reflex," Neural Control of Movement Meeting, Key West, April 1998.

Traumatic Brain Injury Program, New York State Department of Health, Oct 1998.

Matchette Foundation Lecture, Rensselaer Polytechnic Institute, Nov 1998.

Symposium on Spinal Cord Plasticity (Satellite of Society for Neuroscience Annual Meeting), UCLA, Nov 1998.

Department of Pharmacology and Neuroscience, Albany Medical College, Jan 1999.

MIT Alumni/ae Club of the Capital District, Jan 1999.

Symposium, Second World Congress in Neurological Rehabilitation, Toronto, April 1999.

NIH Workshop (Organizer), Brain-Computer Interface Technology: Theory and Practice, June 1999.

Research Network Meeting, International Spinal Research Trust, London, Sept 1999.

Symposium, Society for Psychophysiological Research, Granada, Oct 1999.

Visiting Professor, Institute of Medical Psychology and Behavioral Neurobiology, Eberhard-Karls-University of Tuebingen, Sept 1999, 2000.

Department of Neurobiology, Medical College of Pennsylvania, Philadelphia, April 2000.

International Symposium on Neural Prostheses, Denmark, June 2000.

Department of Physiology, University of Edmonton, July 2000.

Symposium, Putting the Brain in Command, Mann Institute, USC, Los Angeles, July 2000.

Department of Neuroscience, Georgetown University, Oct 2000.

Plenary Lecture, Internat Conf on Spatial Cognition, University of Rome, Italy, Dec 2000.

Medical Rehabilitation Symposium, NIH, Jan 2001.

Department of Physiology and Cell Biology, Ohio State University, Jan 2001.

Institute of Medical Psychology and Behavioral Neurobiology, University of Tuebingen, Germany, Nov 2001

Fourth Workshop on Cortical Plasticity, Heidelberg, Germany, March 2002.

Institute of Movement Neuroscience, Queen Square, London, March 2002.

Plenary Lecture, Third World Conference in Neurological Rehabilitation, Venice, April 2002.

Symposium, Society for the Neural Control of Movement, Naples, April 2002.

Institute of Medical Psychology and Behavioral Neurobiology, University of Tuebingen, May 2002.

Organizer, Second International Brain-Computer Interface Workshop, Rensselaerville, NY, June 2002.

Human Cortical Physiology Section, NINDS, National Institutes of Health, Bethesda, Oct 2002.

Symposium, American Academy of Physical Medicine and Rehabilitation, Orlando, Nov 2002.

Translating Promising Strategies for Spinal Cord Injury Therapy Workshop, NIH, Feb 2003.

First International IEEE EMBS Conference on Neural Engineering, Capri, Italy, March 2003.

Plenary Lecture, Houston Conference on Biomedical Engineering Research, Houston, April 2003.

Department of Psychology, Program in Behavioral Neuroscience, Rutgers University, May 2003.

Brain-Mind Symposium, Capital District Psychiatric Center, Albany, June 2003.

Grand Rounds, Physical Disabilities Branch, NIH, Bethesda, June 2003.

IBM - T.J. Watson Research Center, Yorktown Heights, July 2003.

Spinal Cord Injury Techniques Course, Ohio State University, July 2003.

Brain-Computer Interface Symposium, AAEM/IFCN Meeting, San Francisco, Sept 2003.

NIMH Dynamical Neuroscience Satellite Symposium, New Orleans, Nov 2003.

Society for Neuroscience Brain-Computer Interface Symposium, New Orleans, Nov 2003.

International Society for Brain Electromagnetic Topography, Sante Fe, Nov 2003.

Albany Medical Center Psychiatry Grand Rounds, Albany, February 2004.

Servier Lecture, University of Montreal, February 2004.

Bionics Symposium, GE Global Research Center, Schenectady, March 2004.

College of St. Rose, Albany, NY, April 2004.

Lab. di Neurofisiopatologia, Fondazione Santa Lucia Rome, Italy, April 2004.

AFaR and CRCCS Ospedale Fatebenefratelli, Rome, Italy, April 2004.

James S. McDonnell Foundation - 21st Century Science Initiative, Palisades, NJ, June 2004.

Dept. of Neurology, University of Rome "La Sapienza," Rome, Italy, June 2004.

Functional Electrical Stimulation Program, Case Western Reserve University, Cleveland, July 2004.

Plenary Lecture, Brain-Computer Interface Workshop and Training Course, Graz, Austria, Sept 2004.

Albany Medical Center Grand Rounds, February 2005.

Medical Rehabilitation Research Infrastructure, NIH/NICHD, Washington, DC April 2005.

Altran Foundation for Innovation, Paris, France, April 2005.

Third International Brain-Computer Interface Meeting, Rensselaerville, NY, June 2005.

James S. McDonnell Foundation - Program Meeting, Palisades, June 2005.

Ohio State University Spinal Cord Injury Research Training Program. Columbus, Ohio, July 2005.

Baltic Summer School, Univs of Copenhagen/Kiel/Lund, Copenhagen, Denmark, August 2005.

Venice Summer School on Neuroengineering, Venice, Italy, June 2005.

Organizer, Third International Brain-Computer Interface Meeting, Rensselaerville, NY, June 2005.

Wadsworth Center-Alden-March Bioethics Institute Colloquy, Albany, NY, Jan 2006.

RIKEN Brain Science Institute, Toyko, Japan, Jan 2006.

National Institute of Information and Communications Technology Symposium, Tokyo, Jan 2006.

Kanazawa Institute of Technology, Kanazawa, Japan, Jan 006.

Department of Physical Therapy, University of Delaware, Newark DE, March 2006.

Biomedical Engineering Dept. Northwestern Univ, Evanston, IL, April 2006.

Rehabilitation Institute of Chicago, Sensory Motor Performance Program, Chicago IL, April 2006.

Satellite Symposium, Neural Control of Abnormal Movement Meeting, Key Biscayne, April 2006.

Society for Neural Control of Movement Meeting, Key Biscayne, May 2006.

Altran Foundation for Innovation, Paris, France, June 2006.

Symposium: New Frontiers in Spinal Cord Injury Research, Ohio State University, Columbus, Aug 2006.

Workshop on Applied Neural Computing at the IEEE Engineering in Medicine and Biology Society Conference, New York NY, Aug 2006.

Keynote Address, American Paraplegia Society Symposium, Las Vegas NV, Sept 2006.

Symposium, American Paraplegia Society Symposium, Las Vegas NV, Sept 2006.

Burke Rehabilitation Hospital, White Plains NY, Sept 2006.

Physiology of Brain-Computer Interfaces Symposium, Society for Neuroscience, Atlanta, Oct 2006.

American Clinical Neurophysiology Society Meeting in Chicago, Nov 2006.

Plenary Lecture, Neuromuscular Plasticity Symposium, University of Florida, Gainesville, Nov 2006.

MNI/Killam Seminar Series, Montreal Neurological Institute, Montreal, Nov 2006.

Institute of Movement Science, University College, Queen Square, London, Dec 2006.

Quebec Neuroscience Group, Quebec City, Canada, March 2007.

Neurology Grand Rounds, University Hospitals, Case Western Reserve University, April 2007.

The Pennsylvania State Neural Engineering Seminar, University Park, Pa, April 2007.

Wallace H. Coulter School of Engineering, Clarkson University, Potsdam, NY April 2007

Brain-Computer Interface Symposium. American Academy of Neurology Annual Meeting, Boston, April 2007.

Brain-Computer Interface Symposium, El Colegio Nacional, Mexico City, Mexico. June 2007.

Brain-Computer Interface Forum, American Physical Therapy Association Annual Meeting, Denver, June 2007.

Ohio State University Spinal Cord Injury Research Training Program, Columbus OH, July 2007.

The Miami Project & University of Miami Miller School of Medicine, Miami, Florida, Oct 2007.

Ipsen Foundaton and Institut pour la Récherche sur la Moelle épinière et l'Encéphale (IRME), Paris, France, Sept 2007.

American Society of Neurorehabilitation/American Congress of Rehabilitation Medicine, Washington DC, Oct 2007.

Keynote address, 9th International ACM Conference on Computers and Accessibility (ASSETS), Tempe, AZ, Oct 2007.

Center for Sensory-Motor Interaction, Aalborg University, Aalborg, Denmark, Nov 2007.

Symposium on Neuroplasticity and Neurorehabilitation, Faculty of Health, University of Copenhagen, Denmark, Nov 2007.

Stratton Veterans Administration Hospital Research Seminar, Albany, NY, January 2008.

New York State Spinal Cord Injury Research Board Conference, New York Academy of Sciences, New York, NY. January 2008.

Pediatric Neurology Grand Rounds, Columbia University School of Medicine, February 2008.

Dept. of Mechanical and Aeronautical Engineering, University of California, Davis, CA, April 2008.

American Academy of Neurology Annual Meeting, Chicago, IL, April 2008.

DARPA Workshop on Foundations of Neurally Enabled Human Machine Interfaces, Arlington VA. April 2008.

James J. Peters Veterans Administration Hospital, Bronx, NY, May 2008

Plenary Lecture, Rehabilitation Engineers Society of North America, Washington, DC, June 2008.

Keynote Lecture, Army Research Office Computing & Information Sciences Strategic Planning Meeting, Chapel Hill, NC, August 2008.

Helen Hayes Hospital, West Haverstraw, NY, September 2008.

International Functional Electrical Stimulation Society Conference, Freiburg, Germany, September 2008.

Keynote Speaker, Workshop for Neural Engineering, Redmond, WA, October 2008.

Vienna Summer School for Biological Therapy of Spinal Cord Injury. Vienna, Austria. October 2008.

Grass Traveling Scientist/Lecturer, University of Manitoba, Winnipeg, Manitoba, Canada, October 2008.

Dept. Psychological & Brain Sciences, Indiana University, Bloomington. IN, February 2009.

Science, Program Evaluation, Epidemiology, Data (SPEED) Meeting, Wadsworth Center Albany, NY, March 2009**.**

Grand Rounds, Mt. Sinai Hospital, New York City, NY, March 2009.

Kentucky Spinal Cord Injury Research Center, Louisville, Kentucky, March 2009.

Neural Control of Movement Meeting Waikoloa, Hawaii. April 2009.

Ohio State University Spinal Cord Injury Research Training Program, Columbus, OH, July 2009.

Symposium on Advs in Neural Rehabilitation Engineering, Aalborg, Denmark, August, 2009

Keynote Address, University of Rome "La Sapienza" International Conference on Space Cognition (ICSC): Space Cognition and Action, Rome, Italy, September 2009.

G. Heiner Sell Memorial Lectureship, American Spinal Cord Injury Association, Dallas, TX, September 2009.

5th BCI2000 Workshop, International Workshop on Advances with Electrocorticography, Bolton Landing, NY. October 2009.

Biomedical Engineering Society Annual Meeting, Pittsburgh, PA, October 2009.

Robert Wood Johnson Foundation/Monitor Institute Forum, Princeton, NJ, November 2009.

Dept. of Neurobiology & Anatomy, University of Rochester, Rochester, NY, January 2010.

Grand Rounds, Dept of Neurology, Mt. Sinai Medical Center, NYC, NY, March 2010.

American Academy of Neurology Annual Meeting, Toronto, CA, April 2010.

Neural Control of Movement Meeting, Naples, FL, April 2010.

IEEE-EMBS Grand Challenges Forum on Grand Challenges in Neuroengineering ,Bethesda MD, May 2010.

World Congress for Brain, Spinal Cord Mapping and Image Guided Therapy, Bethesda, MD, May 2010.

Organizer, Fourth International Brain-Computer Interface Technology Meeting, Pacific Grove, CA. May 2010.

Ohio State University Spinal Cord Injury Research Training Program, Columbus OH, July 2010.
Computational Neuroscience Meeting, San Antonio, TX, July 2010.

Dept. of Neurobiology and Anatomy, Drexel University College of Medicine, Philadelphia, PA, September 2010.

Aspen Brain Forum, New York Academy of Sciences, Aspen, CO, September 2010.

Emerging Concepts in Medicine Lecture, SUNY-Downstate Medical Center, Brooklyn, NY, March 2011.

Symposium, Brain Computer Interfacing in 2011, Utrecht, The Netherlands, May 2011.

Neurology Grand Rounds, Albany Medical Center, Albany, NY, June 2011

Ohio State University Spinal Cord Injury Research Training Program, Columbus, OH, July 2011.

Veterans Administration Amyotrophic Lateral Sclerosis Conference, Cleveland, OH, August 2011.

Keynote Speaker, MEC Symposium, University of New Brunswick, Fredericton, New Brunswick, August 2011.

Neuroscience and Cognitive Sciences Symposium Speaker, University of Maryland, College Park, MD, September 2011.

Plenary Speaker, HYPER 2011 Summer School, Salamanca, Spain, September 2011.

Keynote Speaker, Graz BCI Workshop, Graz, Austria, September 2011.

Keynote Speaker, ACM SIGHIT Intern Health Informatics Sympos, Miami, FL, January 2012.

Dept of Molecular Physiology and Pharmacology, Tufts University School of Medicine, Boston, MA, April 2012.

Ohio State University Spinal Cord Injury Research Training Program, Columbus, OH, July 2012.

FENS Satellite Symposium on Motor Learning, Barcelona, Spain, July 2012.

Summer School on Neurorehabilitation, Zaragoza, Spain, September 2012.

Frontiers in Neuromuscular Disease and Neuro-Rehabilitation, Cleveland, OH, October 2012.

Symposium Speaker, American Physical Therapy Association, Los Angeles, CA, January, 2013.

Speaker, "Progress in Spinal Cord Injury Research," Albany, NY, February, 2013.

Speaker, Multimodal Neuroimaging Workshop, IPAM, UCLA, Los Angeles, CA, March 2013.

Integrative Biology and Physiology, UCLA, Los Angeles, CA, March 2013.

Institute of Neuroscience, Newcastle University, Newcastle-on-Tyne, UK, March 2013.

Institute of Neurology, University College London, London, UK, March 2013.

Keynote Speaker, BrainGain Project, Nijmegen, The Netherlands, March 2013.

Burke Medical Research Institute, White Plains, NY, April, 2013.

Symposium Chair, American Association of Anatomists, Boston, MA, April 2013.

Rehabilitation Engineering Center, Univ of North Carolina, Chapel Hill, NC, April 2013.

Dept of Physical Medicine and Rehabilitation, University of Pittsburgh, PA, May 2013.

Ohio State Univ Spinal Cord Injury Research Training Program, Columbus, OH, May 2013.

Summer School on Neurorehabilitation, Elche, Spain, September 2013.

Symposium, Motor Development Research, Temple Univ, Philadelphia, PA, September, 2013.

Department of Psychology, Tulane University, New Orleans, LA, October 2013.

Symposium Speaker, American Congress Rehab Med, Orlando, FL, November 2013.

HASS Inquiry Lecture, Rensselaer Polytechnic University, Troy, NY, November 2013.

Sunnyview Rehabilitation Hospital, Schenectady, NY, December 2013.

Speaker, NCMRR Advisory Committee, NICHD, NIH, Bethesda, MD, December 2013.

Brain Research Institute, ETH, Zurich, Switzerland, March, 2014.

EPFL, Distinguished Lectures in Biological Engineering, Lausanne, Switzerland, March 2014.

Neurology Grand Rounds, Penn State University, Hershey, PA, April 2014.

International Collaboration on Repair Discoveries (ICORD), Vancouver, BC, April 2014.

Symposium, Sensorimotor Rehabilitation, University of Montreal, Canada, May 2014.

Keynote Speaker, UNYTE Translational Research Network, Univ of Rochester, NY, May 2014.

C. Warren Olanow Lecture, Mt. Sinai School of Medicine, New York, NY, June 2014.

Symposium, International Conference on NeuroRehabilitation, Aalborg, Denmark, June, 2014.

Invited Lecture, American Psychological Association Ann Mtg, Washington, DC, August, 2014.

Summer School on Neurorehabilitation, Baiona, Spain, September 2014.

Symposium, American Society of Neurorehabilitation, Washington, DC, November 2014.

Satellite Symposium, Spinal Cord Plasticity in Motor Control, Washington, DC, November 2014.

Lecture, Biomedical Technology Research Centers Principal Investigator Annual Meeting, Rockville, MD, March 2015.

Spinal Cord Injury Grand Rounds, Medical University of South Carolina, Charleston, SC, April 2015.

Panel (Chairman), "How the CNS operates as a multi-user system," Neural Control of Movement Meeting, Charleston, SC, April 2015.

Kavli Seminar, Center for Sensorimotor Neural Engineering, Seattle, WA, April 2015.

Keynote Address, College of Health Sciences Spring Research Symposium, University of Wisconsin, Milwaukee, WI, May 2015.

Summer School on Neurorehabilitation, Valencia, Spain, September 2015.

Symposium, Annual Meeting of the Society for Neuroscience, Chicago, IL, October 2015.

Symposium, American Congress of Rehabilitation Medicine, Dallas, TX, October 2015.

Keynote Speaker, Neuromodulation for Rehabilitation Workshop, Medical University of South Carolina, Charleston, SC, March 2016.

Guest Speaker, Departments of Rehabilitation and Biomedical Engineering, Emory University and Georgia Institute of Technology, Atlanta, GA, March 2016.

Grand Rounds, Department of Neurology, Columbia University, New York, NY, April 2016.

Department of Cognitive Science, Rensselaer Polytechnic Institute, Troy, NY, April 2016.

Pioneer Award Lecture, SPIE Conference, Baltimore, MD, April, 2016.

Atlantic Health Symposium, Atlantic Neuroscience Institute, Overlook Med Center, Summit, NJ, April 2016.

Presidential Lecture, Sixth Annual International Brain-Computer Interface Meeting, Asilomar, CA, May 2016.

Speaker, 50th Anniversary Symposium, Spinal Cord Injury Center, Heidelberg University Hospital, Heidelberg, Germany, June 2016.

Session Chair, Neural Interfaces Conference, Baltimore, MD, June, 2016.

Symposium, International Society of Electrophysiology and Kinesiology, Chicago, IL, July, 2016

Speaker, NIH Short Course in Adaptive Neurotechnologies, Wadsworth Center, Albany, NY, July, 2016.

Keynote Lecture, Neural Engineering Research Symposium, University of Miami, Miami, FL, October, 2016.

Invited Lecture, The Miami Project, University of Miami, Miami, FL, October, 2016.

Speaker, Neuromodulation for Rehabilitation Workshop, Medical University of South Carolina, Charleston, SC, October, 2016.

Symposium, International Conference on Neurorehabilitation, Segovia, Spain, October, 2016.

Plenary Speaker, International Conference on Neurorehabilitation, Segovia, Spain, October, 2016.

Invited Lecture, Department of Rehabilitation Medicine, Emory University School of Medicine, Atlanta, GA, April, 2017.

Demystifying Medicine Lecture, National Institutes of Health, Bethesda, MD, April, 2017

Lecture, NeuroRehabilitation CME Course, Harvard Medical School, Waltham, MA, June, 2017.

Speaker, NIH Short Course in Adaptive Neurotechnologies, Wadsworth Center, Albany, NY, July, 2017.

Speaker, Progress in Motor Control IX, University of Miami, Miami, FL, July, 2017.

Plenary Speaker, Summer School on Neurorehabilitation, Baiona, Spain, September, 2017.

Lectures, Nat Ctr Neuromod for Rehab (NM4R) Workshop, Charleston, SC, October, 2017.

Distinguished Scholar Lecture Series, University of Delaware, Newark, DE, November, 2017.

Speaker, Center for Brain Plasticity and Recovery, Georgetown Univ. Med. Ctr., Washington, DC, November, 2017.

Speaker, 7th Operant Conditioning Meeting, Charleston, SC, March, 2018.

McDowell Award Lecture, Burke Neurological Research Inst, Weill-Cornell Sch Med, White Plains, NY, May, 2018.

Organizer and Speaker, Neuroethics Symposium, Seventh International Brain-Computer Interface Meeting, Asilomar, CA, May, 2018.

Lecture, NeuroRehabilitation CME Course, Harvard Medical School, Waltham, MA, June, 2018.

Symposium, Progress in Clinical Motor Control, Penn State Univ, State College, PA, July, 2018.

NANS Summer Series: Neuromodulation for Rehabilitation after Spinal Cord Injury, New York City, NY, August, 2018.

NANS Summer Series: Brain-Computer Interfaces For Communication And Control, New York City, NY, August, 2018.

New York State Spinal Cord Injury Research Board Symposium, New York, NY, October, 2018.

Lecture, Department of Kinesiology, Penn State University, State College, PA, October, 2018.

Spinal Cord Plasticity in Motor Control Symposium, San Diego, CA, November, 2018.

Speaker, National Center for Neuromodulation for Rehabilitation Workshop, Medical University of South Carolina, Charleston, SC, November, 2018.

Lectures, Nat Ctr Neuromod for Rehab (NM4R) Workshop, Charleston, SC, March, 2019.

Speaker, NIH Short Course in Adaptive Neurotechnologies, Wadsworth Center, Albany, NY, July, 2019.

Lectures, Nat Ctr Neuromod for Rehab (NM4R) Workshop, Charleston, SC, November, 2019.

Symposium, American Society for Neurorehabilitation, Chicago, IL, November, 2019.

BIBLIOGRAPHY

BOOKS

Wolpaw, J.R., Schmidt, J.T. and Vaughan, T.M. (Editors). Activity-Driven CNS Changes in Learning and Development, Annals of the New York Academy of Sciences Vol. 627, 1991.

Wolpaw, J.R. and Wolpaw, E.W. (Eds.) Brain-Computer Interfaces: Principles and Practice. Oxford University Press, 2012.

Wolpaw, J.R. The Complex Structure of Simple Memory. Cambridge University Press, monograph under contract.

ARTICLES AND CHAPTERS

Wolpaw, J.R. The aetiology of retrograde amnesia. Lancet 2:356-358, 1971.

Wolpaw, J.R., Brottem, J.L. and Martin, H.L. Tongue necrosis attributed to ergotamine in temporal arteritis. Journal of the American Medical Association 225:514-515, 1973.

Nygaard, O.F., Brewer, E.N., Evans, T.E. and Wolpaw, J.R. Correlation between sensitivity to ionizing radiation and DNA replication in Physarum polycephalum. In: Advances in Radiation Research: Biology and Medicine Vol. 2, (Eds. J.F. Duplan & A. Chapiro), Gordon & Breach, NY, 989-995, 1973.

Wolpaw, J.R. and Penry, J.K. A temporal component of the auditory evoked response. Electroencephalography and Clinical Neurophysiology 39:609-620, 1975.

Wolpaw, J.R. and Penry, J.K. Hemispheric differences in the auditory evoked response. Electroencephalography and Clinical Neurophysiology 43:99-102, 1977.

Wolpaw, J.R. and Colburn, T.R. Electromagnetic stretch of individual muscles in behaving primates. Brain Research 141:193-196, 1978.

Wolpaw, J.R. and Penry, J.K. Acute and chronic antiepileptic drug effect on the T complex interhemispheric latency difference. Epilepsia 19:99-107, 1978.

Wolpaw, J.R. and Penry, J.K. Effects of ethanol, caffeine, and placebo on the auditory evoked response. Electroencephalography and Clinical Neurophysiology 44:568-574, 1978.

Wolpaw, J.R. Gyral impressions in the skull as a guide to cortical topography in chronic transdural unit recording. Brain Research 160:505-508, 1979.

Wolpaw, J.R. Electromagnetic muscle stretch strongly excites sensorimotor cortex neurons in behaving primates. Science 203:465-467, 1979.

Wolpaw, J.R. Single unit activity vs epidural evoked response amplitude in primary auditory cortex of awake cats. Electroencephalography and Clinical Neurophysiology 47:372-376, 1979.

Colburn, T.R., Wolpaw, J.R., Vaughn, W. and Christensen, J.L. An electromagnetic method for in situ stretch of individual muscles. Medical and Biological Engineering and Computing 18:145-152, 1980.

Wolpaw, J.R. Correlations between task-related activity and responses to perturbation in primate sensorimotor cortex. Journal of Neurophysiology 44:1122-1138, 1980.

Wolpaw, J.R. Amplitude of responses to perturbation in primate sensorimotor cortex as a function of task. Journal of Neurophysiology 44:1139-1147, 1980.

Wolpaw, J.R. and Wood, C.C. Scalp topography of human auditory evoked potentials: I. Evaluation of reference electrode sites. Electroencephalography and Clinical Neurophysiology 54:15-24, 1982.

Wood, C.C. and Wolpaw, J.R. Scalp topography of human auditory evoked potentials: II. Evidence for overlapping sources and involvement of auditory cortex. Electroencephalography and Clinical Neurophysiology 54:25-38, 1982.

Wolpaw, J.R. and Seegal, R.F. Diurnal rhythm in the spinal stretch reflex. Brain Research 244:365-369, 1982.

Wolpaw, J.R. Change in short-latency response to limb displacement in primates. Federation Proceedings 41:2156-2159, 1982.

Wolpaw, J.R. Reflexes capable of change: Models for the study of memory. Federation Proceedings 41:2146, 1982.

Wolpaw, J.R. Tremor: Extrinsic and intrinsic origins. In: Cellular Pacemakers, Volume 2, Function in Normal and Disease States, (Ed. D.O. Carpenter), John Wiley and Sons, New York, 299-321, 1982.

Wolpaw, J.R., Kieffer, V.A., Seegal, R.F., Braitman, D.J. and Sanders, M.G. Adaptive plasticity in the spinal stretch reflex. Brain Research 267:196-200, 1983.

Wolpaw, J.R., Braitman, D.J. and Seegal, R.F. Adaptive plasticity in the primate spinal stretch reflex: Initial development. Journal of Neurophysiology 50:1296-1311, 1983.

Wolpaw, J.R., Seegal, R.F. and O'Keefe, J.A. Adaptive plasticity in the primate spinal stretch reflex: Behavior of synergist and antagonist muscles. Journal of Neurophysiology 50:1312-1319, 1983.

Satya-Murti, S., Wolpaw, J.R., Cacace, A.T. and Schaffer, C.A. Late auditory evoked potentials can occur without brainstem potentials. Electroencephalography and Clinical Neurophysiology 56:304-308, 1983.

Wolpaw, J.R. Adaptive plasticity in the primate spinal stretch reflex: reversal and re-development. Brain Research 278:299-304, 1983.

Wolpaw, J.R., Noonan, P.A. and O'Keefe, J.A. Adaptive plasticity and diurnal rhythm in the primate spinal stretch reflex are independent phenomena. Brain Research 300:385-391, 1984.

Cacace, A.T., Goldstein, J.C., Parnes, S.M., Satya-Murti, S. and Wolpaw, J.R. Psychoacoustic and electrophysiologic effects of partial eighth nerve damage. American Journal of Otolaryngology 5:43-48, 1984.

Wolpaw, J.R. and O'Keefe, J.A. Adaptive plasticity in the primate spinal stretch reflex: evidence for a two-phase process. Journal of Neuroscience 4:2718-2724, 1984.

Wolpaw, J.R., O'Keefe, J.A., Kieffer, V.A. and Sanders, M.G. Reduced day-to-day variation accompanies adaptive plasticity in the primate spinal stretch reflex. Neuroscience Letters 54:165-171, 1985.

Wolpaw, J.R. Adaptive plasticity in the spinal stretch reflex: An accessible substrate of memory? Cellular and Molecular Neurobiology 5:147-165, 1985.

Wolpaw, J.R., Seegal, R.F. and Dowman, R.I. Effects of extremely low frequency electric fields on the nervous system. In: Assessments and Viewpoints on the Biological and Human Health Effects of Extremely Low Frequency (ELF) Electromagnetic Fields, American Institute of Biological Sciences, Washington, D.C., 433-461, 1985.

Wolpaw, J.R., O'Keefe, J.A., Noonan, P.A. and Sanders, M.G. Adaptive plasticity in the primate spinal stretch reflex: Persistence. Journal of Neurophysiology 55:272-279, 1986.

Wolpaw, J.R. Operant conditioning of primate spinal reflexes: the H reflex. Journal of Neurophysiology 57:443-458, 1987.

Wolpaw, J.R., McFarland, D.J. and Cacace, A.T. Preliminary studies for a direct brain-to-computer parallel interface. In: Projects for Persons with Disabilities, IBM Technical Symposium, 11-20, 1986.

Wolpaw, J.R. and Lee, C.L. Motoneuron response to dorsal root stimulation in anesthetized monkeys after spinal cord transection. Experimental Brain Research 68:428-433, 1987.

Lee, C.L., McFarland, D.J., and Wolpaw, J.R. Retrograde transport of the lectin Phaseolus vulgaris leucoagglutinin (PHA-L) by rat spinal motoneurons. Neuroscience Letters 86:133-138, 1988.

Dowman, R. and Wolpaw, J.R. Jendrassik maneuver facilitates soleus H-reflex without change in average soleus motoneuron pool membrane potential. Experimental Neurology 101:288-302, 1988.

Wolpaw, J.R. and Dowman, R. Operant conditioning of primate spinal reflexes: effects on cortical SEPs. Electroencephalography and Clinical Neurology 69:398-401, 1988.

Wolpaw, J.R. and Dowman, R. Spinal stretch reflex and cortical evoked potential amplitudes versus muscle stretch amplitude in the monkey arm. Electroencephalography and Clinical Neurology 69:394-397, 1988.

Cacace, A.T., Dowman, R. and Wolpaw, J.R. T complex hemispheric asymmetries: effects on stimulus intensity. Hearing Research 34:225-232, 1988.

Wolpaw, J.R., Seegal, R.F. and Dowman, R. Chronic exposure of primates to 60-Hz electric and magnetic fields: I. Exposure system and measurements of general health and performance. Bioelectromagnetics 10:277-288, 1989.

Seegal, R.F., Wolpaw, J.R. and Dowman, R. Chronic exposure of primates to 60-Hz electric and magnetic fields: II. Neurochemical effects. Bioelectromagnetics 10:289-301, 1989.

Dowman, R.I., Satya-Murti, S., Wolpaw, J.R. and Seegal, R.F. Chronic exposure of primates to 60-Hz electric and magnetic fields: III. Neurophysiologic effects. Bioelectromagnetics 10:303-317, 1989.

Dowman, R. and Wolpaw, J.R. Diurnal rhythms in primate spinal reflexes and accompanying cortical somatosensory evoked potentials. Electroencephalography and Clinical Neurology 72:69-80, 1989.

Wolpaw, J.R. and Lee, C.L. Memory traces in primate spinal cord produced by operant conditioning of H-reflex. Journal of Neurophysiology 61:563-572, 1989.

Wolpaw, J.R., Lee, C.L. and Calaitges, J.G. Operant conditioning of primate triceps surae H-reflex produces reflex asymmetry. Experimental Brain Research 75:35-39, 1989.

Wolpaw, J.R. Modification of spinal reflexes by operant conditioning: assessment of effects and evaluation of mechanisms. Criteria for Assessing Recovery of Function: Behavioral Methods American Paralysis Association, 75-80, 1989.

Wolpaw, J.R., Carp, J.S. and Lee, C.L. Memory traces in spinal cord produced by H-reflex conditioning: effects of posttetanic potentiation. Neuroscience Letters 103:113-119, 1989.

Rosner, F., Bennett, A.J., Cassell, E.J., Farnsworth, P.B., Halpern, A.L., Landolt, A.B., Loeb, L., Numann, P.J., Ona, F.V., Risemberg, H.M., Sechzer, P.H., Sordillo, P.P. and Wolpaw, J.R. Animal experimentation for medical research. New York State Journal of Medicine 89:671-676, 1989.

Cacace, A.T., Satya-Murti, S. and Wolpaw, J.R. Human middle latency auditory evoked potentials: vertex and temporal components. Electroencephalography and Clinical Neurophysiology 77:6-18, 1990.

Rosner, F., Sordillo, P.P., Sechzer, P.H., Risemberg, H.M. Ona, F.V., Numann, P.J., Loeb, L.,Farnsworth, P.B., Bennett, A.J., Wolpaw, J.R., Rogatz, P., Landolt, A.B., Kark, P.R., Kanick, V., Henry, J.B., Halpern, A.L. and Cassell, E.J. The allocation of scarce medical resources. New York State Journal of Medicine 90:552-558, 1990.

Wolpaw, J.R. and Herchenroder, P.A. Operant conditioning of H-reflex in freely moving monkeys. Journal of Neuroscience Methods 31:145-152, 1990.

Wolpaw, J.R. and Carp, J.S. Memory traces in spinal cord. Trends in Neurosciences 13:137-142, 1990.

Rosner, F., Halpern, A.B., Kark, P.R., Rogatz, P., Bennett, A.J., Cassell, E.J., Farnsworth, P.B., Henry, J.B., Kanick, V., Landolt, A.B., Loeb, L., Numann, P.J., Ona, F.V., Risemberg. H.M., Sechzer, P.H., Sordillo, P.P. and Wolpaw, J.R. Physician involvement in capital punishment. New York State Journal of Medicine 91:15-18,1991.

Rosner, F., Bennett, A.J., Cassell, E.J., Farnsworth, P.B., Halpern, A.L., Henrym J.B., Kanick, V., Kark, P.R., Landolt, A.B., Loeb, L., Numann, P.J., Ona, F.V., Risemberg, H.M., Rogatz, P., Sechzer, P.H., Sordillo, P.P. and Wolpaw, J.R. The ethics of using scientific data obtained by immoral means. New York State Journal of Medicine 91:54-59, 1991.

Wolpaw, J.R., McFarland, D.J., Neat, G.W. and Forneris, C.A. An EEG-based brain-computer interface for cursor control. Electroencephalography and Clinical Neurophysiology 78:252-259, 1991.

Wolpaw, J.R., Lee, C.L. and Carp, J.S. Memory traces in spinal cord produced by operant conditioning of H-reflex. In: Activity-Driven CNS Changes in Learning and Development Vol 627 (Eds. J.R. Wolpaw, J.T. Schmidt and T.M. Vaughan), Annals of the New York Academy of Sciences, 338-348, 1991.

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Wolpaw, J.R. and Carp, J.S. Adaptive plasticity in spinal cord. In: Fourth International Neural Regeneration Symposium, (Ed: FJ Seil), Advances in Neurology, Raven Press 163-174, 1993.

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ABSTRACTS

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