

Updated 9/14

## CURRICULUM VITAE

Linda J. Larson-Prior

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### EDUCATION

1972                      Ohio State University  
                                 B.A. in Arabic/Anthropology

1978                      Case Western Reserve University  
                                 M.A. in Physical Anthropology

1986                      Kent State University  
                                 Ph.D. in Neurobiology  
                                 Ph.D. thesis entitled "*The Red Nucleus in Ranid  
Amphibians: Cellular Organization in the Tegmental  
Fields of Potter*". Thesis Advisor: Dr. W.L.R. Cruce

### POSITIONS HELD

2011-present              Washington Univ. School of Medicine, St. Louis, MO  
                                 Department of Neurology: **Res. Associate Professor**

2004-present              Washington Univ. School of Medicine, St. Louis, MO  
                                 Department of Radiology: **Res. Associate Professor**

2003, 2004                University of Pittsburgh, Pittsburgh, PA  
                                 Office of Academic Career Development: **Intern**

2002-2003                Touro University College of Osteopathic Medicine, Vallejo CA,  
                                 Div. of Basic Sciences; **Professor**

2000-2003                Abratech, Inc., Sausalito CA: **Senior Scientist**

1998-2002                Touro University College of Osteopathic Medicine, Vallejo CA,  
                                 Div. of Basic Sciences; **Associate Professor**

1993-1997	Penn State University Milton S. Hershey Medical Center, Department of Neuroscience and Anatomy; <b>Assistant Professor</b>
1994	Medical College of Pennsylvania, Department of Anatomy; <b>Senior Scientist</b>
1992-1993	University of Chicago Medical School, Department of Organismal Biology and Anatomy; <b>Research Assistant Professor</b>
1988-1991 1985-1987	Northwestern University Medical School, Physiology Department; <b>Research Associate</b> <b>Postdoctoral Fellow</b>
1987	Physiology Institute University of Munich; <b>Visiting Scientist</b>
1981-1985 1980-1981	N.E. Ohio Univ. Coll. of Medicine, Neurobiology Program <b>Teaching Assistant in Neurobiology</b> <b>Teaching Assistant in Human Anatomy</b>
1977-1978	Instructor, Cuyahoga Community College, Cleveland OH

## TEACHING EXPERIENCE

2009	12 hours	Ethics and Research Science	(Graduate)
2007 - 2010	2 hours	Neurobiology of sleep	(Medical, OT)
1998 - 2003	118 hours	Neuroscience, Course Director	(Medical)
2000	9 hours	Primary Care Skills, lecturer	(Medical)
2000 - 2001	6 hours	Problem Based Learning Module	(Medical)
1999	12 hours	Problem Based Learning Module	(Medical)
		Co-director	
1999 - 2003	2 hours	Physiology, lecturer	(Medical)
1999	4 hours	Clinical Systems, lecturer	(Medical)
1991 - 1997	100 hours	Gross Anatomy	(Medical)
1993 - 1997	13 hours	Neuroscience	(Graduate)
1995	48 hours	Computational Neuroscience	(Graduate)
1988	8 hours	Physiology	(Nursing)
1981 - 1985	33 hours	Neuroanatomy Laboratory	(Medical)
1980 - 1981	72 hours	Gross Anatomy Laboratory	(Medical)
1978	24 hours	Physical Anthropology	(Undergraduate)
1978	24 hours	Sociocultural Anthropology	(Undergraduate)
1977	24 hours	Archaeology	(Undergraduate)

## PROFESSIONAL DEVELOPMENT AND HONORS

### Professional Affiliations

Society for Neuroscience  
American Association for the Advancement of Science  
Computational Neuroscience  
American Academy of Sleep Medicine  
Organization for Human Brain Mapping  
IEEE-EMBS

### **Professional Honors**

Invited Faculty, Professional Skills Workshop, Society for Neurosciences, 2006  
Participant, National Academy of Sciences Keck Futures Initiative Imaging Science, 2010  
Invited participant, DARPA Workshop: New Frontiers in Human Computer Interactions, 2013

### **Professional Development**

American Assn of Medical Colleges meeting, 2002  
Administrative Internship, (focus on mentoring), University of Pittsburgh, 2003, 2004  
Survival Skills and Ethics Course, Snowmass CO, 2003  
Clinical Polysomnography and Sleep Medicine, Stanford School of Sleep Medicine, 2003  
IACUC 101 Plus Shortcourse, PRIM&R, 2003

### **Service to Professional Organizations**

Executive Committee and Treasurer, Computational Neuroscience 2002-2008  
Steering Committee, Computational Neuroscience 2000-2002  
Program Committee, Computational Neuroscience 1996-1999  
Councillor, Susquehanna Valley Chapter of the Society for Neuroscience 1994-1997

### **Service to Community**

Brain Awareness Week: Stroke and the brain. St. Louis Science Center, St. Louis MO, 2007.  
Presenter, MIT Elementary School, Vallejo CA, 2001  
Presenter, Hillside Elementary School, San Mateo CA, 2001  
Mentor, High School Science Teachers, Society for Neurosciences, October, 1998  
Community Lecture, Hershey Pennsylvania Library on "Migraine", March 1997  
Judge, Nye Elementary School Science Fair, March 1997  
Presenter, North Side Elementary School's Night of Scientific Discovery, February 1996

### **Institutional Service**

#### Washington University in St. Louis

Member, Program for Ethical and Responsible Conduct in Science & Scholarship Task Force II (2007-2010)  
Pre-Clinical Counselor, Academic Women's Network (2008-2009)  
Treasurer, Academic Women's Network (2009-2012)  
Secretary, Academic Women's Network (2013-present)

Reviewer, ICTS Intramural grant program (2010-present)

Clinical Research Training Center *Grantsmanship* mock study panel (12/2010)

Touro University College of Osteopathic Medicine

Chair, Institutional Animal Care and Use Committee (2001-2003)

Chair, Faculty Senate (1999-2003)

Member, Admissions Committee (2001-2003)

Member, Faculty Rank, Promotions and Retention Committee (2001-2002)

Chair, Faculty Rank, Promotions and Retention Committee (1999 - 2001)

Member, Institutional Safety Committee (2000-2002)

Member, Institutional Grant Review Panel (2000)

Co-chair, Faculty Development Committee (1998)

Penn State University College of Medicine

Parliamentarian, Faculty Organization (1997-1998)

Medical Student Selection Committee (1996-1998)

Medical Student Research Committee (1996-1998)

Medical Student Interviewer (1993-1998)

Networking and Telecommunications Committee (1993-1998)

Elements of Neuroscience Curriculum Committee (1993-1998)

Co-organizer, Computational Neurosciences Journal Club

Faculty Recruitment Committee (1993-1995)

System Administrator, Departmental DNS server

**Grants and Fellowships**

1985-1988	Postdoctoral Fellow, NINCDS Institutional Training Grant
1982-1985	Graduate Research Award
1981-1982	Sigma Xi Grant-in-Aid of Research
1981-1982	Biomedical Research Development Award

**Other Grant Support**

**CURRENT**

NIH R44-NS067726-03 (PI: Turovets) 4/01/14-3/31/17 2.4 calendar months \$753,000

Pediatric head models for improved imaging of neurological development, Phase 2

SBIR Business Partner:: Electrical Geodesics, Inc

Role: Subcontract PI

DOD (PI: Mun) 9/20/2011-8/31/2014 3.2 calendar months \$384,682

Neuroperformance Imaging

Role: Subcontract PI responsible for conducting and analyzing sleep studies at Washington University and coordinating studies with collaborators at Gachon University Neuroscience Research Institute in Incheon South Korea.

This international, multi-center collaborative project will use both neuroimaging (7T and 3T MRI and high resolution PET) in human subjects to study sleep as a major influence on performance under stressful conditions.

McDonnell Foundation (PI: Larson-Prior) 7/1/09-6/30/11 1.8 calendar months \$80,000

Motor learning and sleep: an ECoG study (in no-cost extension)

Role: PI

This project will examine the electrical changes in the brain, assessed by electrocorticography in epilepsy patients undergoing invasive monitoring for pre-surgical resection, associated with overnight consolidation of motor memories.

U54 MH091657 (PI: Van Essen, D) 09/01/10 - 08-31/15 0.6 calendar months \$5,130,713

Mapping the Human Connectome: Structure, Function and Heritability

Role: Investigator

This project will use structural and functional imaging methods to characterize human brain circuitry in a large population of healthy adult humans and will relate connectional variability to behavior and genetics.

## **PENDING**

## **PAST**

NIH R21-MH098223 (PI: Shannon) 7/26/2012-4/3/2014 1.2 calendar months \$418,000

Biostatistics for Connectomes

Role: Investigator

Developing statistical methods for hypothesis testing, regression, and principal component analysis of sets of connectomes without loss of information, new insights into neurology and medicine may be achieved. We propose to develop statistical methods within the framework of object oriented data analysis (OODA) which do not require a reduction of the connectome to features, and therefore avoid loss of information. This proposal will help bridge the translation of connectome to clinical applications.

Michael J. Foxx Foundation (PI: Galvin) 1 cal month 10/1/2011-9/30/2013 \$30,000

Bioanatomical phenotypes of Parkinson's Disease with and without cognitive impairment

Role: Subcontract PI responsible for processing high-density EEG and resting state fMRI data for global connectivity and providing graph theoretical analyses on those datasets

NIH R43-NS67726 (PI: Turovets) 3/01/10-2/29/12 2.4 calendar months \$350,000

Pediatric head models for improved imaging of neurological development

SBIR Business Partner:: Electrical Geodesics, Inc

Role: Subcontract PI

This project will develop pediatric head models based on age-specific MRI and CT data. Head models will be validated on high density electroencephalographic data in both computer modeling and, in phase 2, in subject derived task-based data collection.

McDonnell Center for Systems Neuroscience (PI: Larson-Prior) 27,000

A one-time equipment grant to cover needed equipment for high density EEG/fMRI studies

P20-MH077967 (PI: Tononi) 07/01/07 – 06/30/11

NIH: Sleep Function and Synaptic Homeostasis

Subcontract: Brain Plasticity and Local Sleep Homeostasis (PI: Raichle)

Role: Investigator

Cephalon, Inc. (PI: Duntley) 10/1/08- 06/30/09

Contract: Functional Neuroimaging of the Effects of Armodafinil Treatment on Prefrontal.  
Role: Imaging Specialist, Investigator

NIH R44-NS041776 (PI: Jewett) 10/05-9/07  
Error Reduction in Dipole Source Localization Models  
Role: Subcontract PI

NSF IBN-9514844 (PI: Larson-Prior) 2/96-1/2000  
Role of serotonin in cerebellar cortical processing

NIH R29-NS30759 (PI: Larson-Prior) 9/91-8/97  
Slow Synaptic Transmission in the Cerebellum

### **Review Panels, Service to the Field**

Magnetic Resonance Materials in Physics, Biology and Medicine  
Proceedings of the National Academy of Science  
Cerebral Cortex  
Human Brain Mapping  
Neuroimage  
Current Biology  
Journal of Psychophysiology  
Journal of Comparative Neurology  
Neuroscience  
Journal of Neurophysiology  
Neuroscience Letters  
Journal of Biological Physics  
Journal of Biomedical Graphics and Computing

Submissions Review Board, Computational Neuroscience Meeting (1996 – 2003)  
Reviewer, Human Brain Mapping meeting abstracts (2006-present)  
Reviewer, Computational Neurosciences meeting abstracts (2004-2008)  
Reviewer, LSSA meeting abstracts (2006)  
Reviewer, IEEE EMB Conference (2011-present)

National Institutes of Health/CSR BDCN Fellowship SEP panel (2006 - present)  
Washington University ICTS review panel (2010-present)  
Research Grants Council, University Grants Committee, Hong Kong (2014)  
START Program, FWF, Austrian Science Fund (2010)  
National Institutes of Health/ZRG1-ETTN-A Special Emphasis panel (2009)  
National Institutes of Health (NIA) Ad Hoc (2004)  
National Science Foundation Ad Hoc (2004)  
National Science Foundation Special Panel (CRCNS, 2002)  
National Science Foundation Review Panel, Beh. and Comp. Neuroscience (1997-2000)  
National Science Foundation (NSF) Ad hoc reviewer (1996)  
National Institutes of Health (NIDCD) Site Visit Team (1994)  
National Institutes of Health Special Review (NEUROLAB)

**Editorial Positions**

Editorial Board, *Human Computation*

Invited Associate Editor, *Frontiers in Sleep and Chronobiology* Research Topic (2011):

Functional brain network changes in human sleep in health and disease: the role of neuroimaging. (M. Czeisler and S. Drummond, co-editors)

Associate Editor, *Frontiers in Sleep and Chronobiology*

Associate Editor, *Human Computation*

Associate Editor, *Journal of Biomedical Graphics and Computing*

**Invited Lectures**

1. "*Synaptic Physiology of the Turtle Cerebellum*" Presented by L.J. Larson-Prior to the Reptile Social, Society for Neuroscience, Toronto, Canada. (Coauthor: N.T. Slater) November 1988.
2. "*The Role of Hippocampus in Learning and Memory*" Presented by L.J. Larson-Prior at the University of Illinois. February 1990.
3. "*NMDA-mediated Synaptic Transmission in the Turtle Hippocampus*" Presented by L.J. Larson-Prior to the Midwestern Hippocampal Meeting, Evanston, Illinois. June 1990.
4. "*Slow but Sure: Novel Synaptic Potentials in Turtle Cerebellum*". Presented by L.J. Larson-Prior at The University of Oklahoma Health Sciences Center. October 1990.
5. "*NMDA-mediated Synaptic Transmission in the Turtle Hippocampus*" Presented by L.J. Larson-Prior at Northeast Ohio Universities College of Medicine. December 1990.
6. "*Slow Excitatory Synaptic Transmission in the Cerebellum*" Presented by L.J. Larson-Prior at the University of California, Riverside. January 1991.
7. "*Frequency dependent modulation of slow EPSPs in turtle cerebellum*" Presented by L.J. Larson-Prior at the University of Chicago. March 1991.
8. "*Short-term plasticity at the parallel fiber/Purkinje cell synapse and the regulation of pacemaker activity*" Presented by L.J. Larson-Prior at the American Association of Anatomists Satellite Conference on Synaptic Plasticity. April 1991.
9. "*The regulation of pacemaker discharges in cerebellar Purkinje cells*" Presented by L. J. Larson-Prior at the University of Oklahoma Health Sciences Center. May 1991.
10. "*The regulation of cerebellar Purkinje cell discharge by defined afferent systems*" Presented by L. J. Larson-Prior at Northwestern University Medical School. May 1991.

11. *"Frequency dependent expression of a slow NMDA-dependent EPSP in cerebellar Purkinje cells evoked by defined afferent systems"* Presented by L.J. Larson-Prior at the University of Arkansas. January 1992.
12. *"Neurophysiology of vestibular neurons in non-mammalian vertebrates"* Presented by L.J. Larson-Prior at Neural Control of Movement Conference. April 1992.
13. *"The role of excitatory amino acids in synaptic transmission in the cerebellar cortex"* Presented by L.J. Larson-Prior at the Department of Pharmacology, Penn State University College of Medicine. September 1993.
14. *"The physiologic basis for information processing in the cerebellar cortex"* Presented by L.J. Larson-Prior at Johns Hopkins University School of Medicine. September 1994.
15. *"Short-term plasticity in the cerebellar cortex: regulation of pacemaker activity in Purkinje cells"* Presented by L.J. Larson-Prior at Neuroscience Day, Penn State University College of Medicine. September 1995.
16. *"The physiologic basis for information processing in the cerebellar cortex"* Presented by L.J. Larson-Prior at the Department of Biochemistry and Molecular Biology, Penn State University College of Medicine. December 1995.
17. *"The role of serotonin in synaptic transmission in the cerebellar cortex"* Presented by L.J. Larson-Prior at the Department of Cell Biology, Neurobiology and Anatomy, Loyola University College of Medicine. September 1996.
18. *"Serotonergic modulation of cerebellar signal processing"* Presented by L.J. Larson-Prior at the Department of Anatomy and Structural Biology, University of South Dakota School of Medicine. September 1996.
19. *"Mechanisms of cerebellar processing of sensory information"* Presented by L.J. Larson-Prior at the San Francisco College of Osteopathic Medicine. March 1997.
20. *"Serotonergic modulation of cerebellar cortical processing"* Presented by L.J. Larson-Prior at the Department of Cell and Neurobiology at the University of Southern California. January 1998.
21. *"The role of serotonin in cerebellar processing"* Presented by L.J. Larson-Prior at the National Science Foundation. June 2000.
22. *"Integration across imaging modalities"* Presented by L.J. Larson-Prior at the Neuroimaging Laboratory at Washington University in St. Louis. February, 2005.
23. *"Imaging neural function across scale: the promise of multi-modal integration"* Presented by L.J. Larson-Prior at the Department of Physics and Astronomy at the University of Missouri St. Louis. March 2006.



24. "*Imaging across scale: the promise of multi-modal imaging*" Presented by L.J. Larson-Prior at the IEEE/NLM Life Science Systems & Applications Workshop. July 2006.
25. "*Imaging the resting brain: studies of state changes in the brain at rest*" Presented by L.J. Larson-Prior at the NINDS Center Core for Brain Imaging (NCCBI) Symposium Series, Washington University. December 2006.
26. "*Functional connectivity in the sleeping brain*" Presented by L.J. Larson-Prior at SLEEP2007, Minneapolis, MN. June 2007.
27. "*Neuroimaging of Human Sleep*" Presented by L.J. Larson-Prior at the Sleep Research Society's 13<sup>th</sup> Annual Trainee Symposia Series, Baltimore, MD. June 2008.
28. "*Imaging pathologies of sleep and their consequences*" Presented by L.J. Larson-Prior at Neurology Grand Rounds, Washington University Medical School, St. Louis. MO. January 2009.
29. "*Imaging the role of sleep in human cognitive function*" Presented by L.J. Larson-Prior at Virginia Tech, Blacksburg VA. April 2009.
30. "*Brain network connectivity following sleep-related consolidation of motor learning*" Presented by L.J. Larson-Prior at the NINDS Lecture Series, Washington University Medical School. October 2009.
31. "*Can we read your mind with fMRI?*" Presented by L.J. Larson-Prior at SciFest 2009, St. Louis Science Center. October 2009.
32. "*Assessing the function of human sleep with neuroimaging*" Presented by L.J. Larson-Prior, University of North Texas. October 2009.
33. "*Resting state functional connectivity of chronic pain: migraine headache*" Presented by L.J. Larson-Prior, Neuroscience Research Institute, Gachon University of Medicine and Sciences, Seoul, South Korea. March 2010.
34. "*Modulation of functional neural networks in the transition from wake to sleep*" Presented by L.J. Larson-Prior, 29<sup>th</sup> International Summer School of Brain Research "Slow Brain Oscillations of Sleep, Resting State and Vigilance" in Amsterdam, The Netherlands. July 2010.
35. "*Modulation of functional neural networks in the transition from wake to sleep*" Presented by L.J. Larson-Prior, Samsung Medical Center, Seoul, South Korea. July 2010.
36. "*The promise of neuroimaging in human sleep research*" Presented by L.J. Larson-Prior, Neuroscience Research Institute, Gachon University of Medicine and Sciences, Incheon, South Korea. September 2010.

37. *“Imaging neural state changes of sleep and pathologies of attention”* Presented by L.J. Larson-Prior, Neuroimaging Technologies for Optimizing Performance Workshop, Alexandria, VA. September 2010.
38. *“Accurate head modeling: defining the right parameters”* Presented by L.J. Larson-Prior (Smith, K, Politte, D, Nolan T, Prior F, co-authors). Electrical Geodesics Inc Workshop on Anatomical Constraints for Dense Array EEG Research at Human Brain Mapping, June 2011.
39. *“Functional neural network modulation in wake, sleep and learning”* Presented by L.J. Larson-Prior, Neuroscience Research Institute, Gachon University of Medicine and Sciences, Inchon, South Korea. July 2011
40. *“Introduction to Macro-Connectomics: Future Prospects”* Presented by L.J. Larson-Prior at the International Workshop on the Study of Neuro-Stress with MRI Tractography and PET Imaging, Inchon, South Korea. February 2012
41. *“The Role of Sleep in Motor Performance”* Presented by L.J. Larson-Prior, Department of Physical Therapy at Washington University School of Medicine. October 2012
42. *“Imaging the human brain in action: the promise of simultaneous EEG/fMRI”* Presented by L.J. Larson-Prior at the Neuroscience Lecture Series, Southern Illinois University Carbondale, October 2012
43. *“Adding dynamics to human brain connectomics with MEG”* Presented by L.J. Larson-Prior at the Biomedical Engineering Senior Seminar Series, Illinois Institute of Technology. Chicago. May 2013

## STUDENT MENTORING

### Postgraduate Mentoring

Yo-El Ju, MD (Neurology) Co-mentor on Physician Scientist Training Award from the American Sleep Medicine Foundation, “Preclinical executive dysfunction in idiopathic REM sleep behavior disorder”

Ben Palanca, MD (Anesthesiology) Collaborator and mentor on FAER award “Neural correlates of Anesthetic-induced unconsciousness in fMRI and EEG signals”

Andrei Vedeniapin, MD (Psychiatry and Behavioral Science, Medical University of South Carolina). External advisor on K23 proposal “Neuronal Networks Associated with insomnia in PTSD”

### Graduate Mentoring Thesis Advisor

Huo Lu 1994 - 1998 Associate Professor, Philadelphia College of Osteopathic Medicine, Atlanta, GA

### **Thesis Committees**

Ashish Dugar, Pharmacology, Pennsylvania State University College of Medicine, awarded 1999

Thomas Coates, Neuroscience Program, Pennsylvania State University College of Medicine, awarded 2001

Stephane Roy, Neuroscience Program, Pennsylvania State University College of Medicine 1997-1998, awarded 2001

Nannan Cao, Dept. of Electrical and Systems Engineering, Washington University, awarded 2007.

Nathan Dees, Physics and Astronomy Dept, Center for Neurodynamics, University of Missouri at St. Louis 2005-2009, awarded 2009.

Mrinal Pahwa, Dept. of Biomedical Engineering, Washington University in St. Louis

### **Undergraduate and other student mentees**

Jennifer Randall, Millersville University, 1997-1998

Carissa Ferguson, Ferring Scholar, Washington University, 2006-2008

Bryan Cummiskey, Southern Illinois University Edwardsville Biology, 2008

Ryan Verner, Washington University Biomedical Engineering, 2011-2012

Alicia Boyd, MS (Physics, UMSL), Reading course in EEG, 2013

Christina Ge, Washington University Biology/Pre-medical, 2013-2015

Jenny Liu, Washington University PNP/Pre-medical, 2013-2015

Serena Fang, Washington University PNP/Pre-medical, 2013-2015

### **PUBLICATIONS**

#### **Refereed Journal Articles**

1. Larson-Prior, L.J. and Slater, N.T. (1988) GABAergic inhibition and epileptiform discharges in the turtle hippocampus. *Brain Research*, 460:369-375. PMID 3224268
2. Larson-Prior, L.J. and Slater, N.T. (1989) Excitatory amino acid receptor mediated slow synaptic transmission in turtle cerebellum. *Neuroscience Letters*, 104:286-291. PMID 2554224
3. Larson-Prior, L.J., McCrimmon, D.R., and Slater, N.T. (1990) Slow excitatory amino acid-mediated synaptic transmission in turtle cerebellar Purkinje cells. *J. Neurophysiol.*, 63:637-650. PMID 1970354
4. Larson-Prior, L.J., Ulinski, P.S., and Slater, N.T. (1991) Excitatory amino acid receptor-mediated transmission in geniculocortical and intracortical pathways within visual cortex. *J. Neurophysiol.*, 66:293-306. PMID 1681038

5. Larson-Prior, L.J. and Cruce, W.L.R. (1992) The red nucleus and mesencephalic tegmentum in a ranid amphibian: a cytoarchitectonic and HRP connectional study. *Brain, Behav. and Evol.*, 40:273-286. PMID 1472987
6. Larson-Prior, L.J., Morrison, P.D., Bushey, R.M. and Slater, N.T. (1995) Frequency dependent activation of a slow *N*-methyl-D-aspartate dependent EPSP in turtle cerebellum by mossy fibre afferents. *Neuroscience*, 67:867-879. PMID 7675211
7. Larson-Prior, L.J., Siuciak, J.A. and Dubocovich, M.L. (1996) Localization of 2-[<sup>125</sup>I]iodomelatonin binding sites in visual areas of the turtle brain. *Eur. J. Pharmacol.*, 297:181-185. PMID 8851181
8. Larson-Prior, L.J., Bushey, R.M., Maines, L.W. and Lakoski, J.M. (1996) Identification of central 5-HT and 5-HT<sub>1A</sub> receptors in the turtle brain (*Chrysemys picta*). *Neurosci. Letts.*, 212:79-82. PMID 8832643
9. Lu, H. and Larson-Prior, L.J. (1996) Serotonergic modulation of evoked responses in turtle cerebellar Purkinje cells. *J. Neurophysiol.*, 76:3102-3113.
10. Larson-Prior, L.J., and Lu, H. (1999) Serotonergic modulation of the cerebellar granule cell network. *Neurocomputing*, 26-27:419-426.
11. Coates, T.D., Larson-Prior L., Wolpert S., Prior F. (2003) An Interface and Signal Processing Methodology for Classification of Simple Stimuli Based on Detected Nerve Activity. *IEEE Engineering in Medicine and Biology*, 22:64-76.
12. Jewett, D.L., Caplovitz, G., Baird, B., Trumpis, M., Olson, M.P. and Larson-Prior, L.J. (2004) The use of QSD (q-sequence deconvolution) to recover superposed, transient evoked-responses. *Clin. Neurophysiol.*, 115(12):2754-2775. PMID: 15546784
13. Larson-Prior, L.J., Hart, T. and Jewett, D.L. (2004) Neural processing of high-rate auditory stimulation under conditions of increased sensory load. *Neurocomputing*, 58-60:993-998
14. Jewett, D.L., Hart, T., Larson-Prior, L.J., Baird, B., Olson, M., Trumpis, M., Makayad, K., and Bavafa, P. (2006) Human sensory-evoked responses differ coincident with either "fusion-memory" or "flash-memory", as shown by stimulus repetition-rate effects. *BMC Neuroscience*, 7:18-35. PMID: 16504094
15. Vincent, J.L., Larson-Prior, L.J., Zempel, J., and Snyder, A.Z. (2007) Moving GLM ballistocardiogram artifact reduction for EEG acquired simultaneously with fMRI. *Clin. Neurophysiol.*, 118:981-998. PMID: 17368972
16. McAvoy, M., Larson-Prior, L.J., Nolan, T.S., Vaishnavi S.N., Raichle, M.E. and d'Avossa, G. (2008) Resting states affect spontaneous BOLD oscillations in sensory and paralimbic cortex. *J. Neurophysiol.*, 100:922-931. PMID: 18509068

17. Prior, F., Brunsdon, B., Hildebolt, C., Nolan, T., Pringle, M., Vaishnavi, S.N., and Larson-Prior, L.J. (2009) Facial recognition from volume rendered magnetic resonance imaging data. *IEEE Trans. Information Tech. in Biomedicine.*, 13:5-9. PMID:19129018
18. Larson-Prior, L.J., Zempel, J., Nolan, T.S., Prior, F.W., Snyder, A.Z. and Raichle, M.E. (2009) Cortical network functional connectivity is maintained in the descent to sleep. *PNAS*, 106:4489-4494. PMID: PMC2657465
19. Ju, Y-E., Larson-Prior, L.J. and Duntley, S.D. (2011) Changing demographics in REM sleep behavior disorder: possible effect of autoimmunity and antidepressants. *Sleep Med*, 12:278-283. PMID:21317035
20. Larson-Prior, L.J., Power, J.D., Vincent, J.L., Nolan, T.S., Coalson, R.S., Zempel, J., Snyder, A.Z., Schlaggar, B.L., Raichle, M.E., Petersen, S.E. (2011) Modulation of the brain's functional network architecture in the transition from wake to sleep. *Prog. Br. Res.*, 193:277-294. PMID 21854969.
21. Van Essen, D.C., Ugurbil, K., Auerback, D., Barch, D., Behrens, T.E., Bucholz, R., Chang A., Chen, L., Corbetta, M., Curtiss SW, Della Penna S., Feingberg, D., Glasser, MF, Harel N., Heath, A.C., Larson-Prior, L.J., Marcus, D., Michalareas, G., Moerller, S., Oostenveld R., Petersen, S.E., Prior, F., Schlaggar, B., Smith, S., Snyder, AZ, Xu, J.G., and Yacoub, E. for the WU-Minn HCP Consortium (2012) The human connectome project: a data acquisition perspective. *Neuroimage*, 62:2222-2231 PMID 22366334
22. Zempel, J.M., Politte, D., Kelsey, M., Verner, R., Nolan, T.S., Babajani-Feremi, A., Prior, F. Larson-Prior, L.J. (2012) Characterization of scale-free properties of human electrocorticography in awake and slow-wave sleep states. *Front Neurol*, 3:76 PMID 22701446
23. McAvoy, M., Larson-Prior, L.J., Ludwikow, M., Zhang, D., Snyder, A.Z., Gusnard, D., Raichle, M.E., d'Avossa, G. (2012) Dissociated mean and functional connectivity BOLD signals in visual cortex during eyes closed and fixation. *J. Neurophysiol*, 108:2363-2372. PMID 22875902
24. Shannon, B., Dosenbach, R., Su, Y., Vlassenko, A., Larson-Prior, L.J., Nolan, T., Snyder, A., Raichle, M.E. (2012) Morning-evening variation in human brain metabolism and memory circuits. *J. Neurophysiol.*, 109:1444-1456. PMID 23197455
25. Schwedt, T.J., Mar,S., Nolan, T., Benzinger, T., Schlaggar, B., Larson-Prior, L.J. (2013) Atypical resting state functional connectivity of affective pain regions in chronic migraine. *Headache*, 53:737-751. PMID 23551164
26. Larson-Prior, L.J., Oostenveld, R., Della Penna, S., Michalareas, G., Prior, F., Babajani-Feremi, A., Schoffelen, J.M., Marzetti, L., de Pasquale, F., Di Pompeo, F., Stout, J., Woolrich, M., Luo, Q., Bucholz, R., Fries, P., Pizzella, V., Romani, G.L., Corbetta, M., Snyder, A.Z. (2013) Adding dynamics to the Human Connectome Project with MEG. *Neuroimage*. 80:190-201 PMID 23702419

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## Professional Workshops and Courses

- Strategies to Ensure Successful Mentoring. J.M. Lakoski and **L.J. Larson-Prior**. Presented at: Southern Regional Women in Medicine and Science Leadership Conference. 2003.
- Maximizing Your Effectiveness as a Mentor. **L.J. Larson-Prior** and J.M. Lakoski. Presented at: University of Pittsburgh Schools of the Health Sciences, 2004.
- Empowering Academic Career Success: Building and Sustaining Mentoring Relationships. **L.J. Larson-Prior**. Presented at: Washington University Postdoctoral Seminar Series, 2005.



Empowering Academic Career Success. **L.J. Larson-Prior**. Presented at: Washington University Professional Development Series, 2006.

Managing Your Mentor: Tips for Being a Successful Mentee. Office of Academic Career Development Postdoctoral Professionalism Series. J.M. Lakoski and **L. J. Larson-Prior**. University of Pittsburgh Schools of the Health Sciences. 2007.

Maximizing Mentoring Relationships. Office of Academic Career Development Health Science Faculty Professional Development Series. J.M. Lakoski and **L. J. Larson-Prior**. University of Pittsburgh Schools of the Health Sciences. 2007.

Empowering Academic Career Success. **L.J. Larson-Prior**. Panel discussion following lecture: L.J. Larson-Prior, PhD (moderator); L. Cottler, PhD, MPH; E. Majerus MD, PhD; J. Kauwe, PhD. Presented at: Washington University Professional Development Series, 2008.

Building Career Success: finding and sustaining dynamic mentoring relationships. **L.J. Larson-Prior**. Panel discussion following lecture: L.J. Larson-Prior, PhD (moderator); K. O'Malley, PhD; K. Kornfeld, MD, PhD; S. Imai, MD, PhD; A. Stowe, PhD. Presented at: Washington University Professional Development Series, 2009.

Mentor-Trainee Relationships. L.J. Larson-Prior. Washington University School of Medicine PERCSS-RCR Event. 2013

### **Organized Symposia, Conferences, Meetings**

Mini-symposium on Oscillations and Networks. A. Assadi, M. Banks, **L. Larson-Prior**, and Erwin Montgomery (co-organizers). Computational Neurosciences, 2005.

Frontiers in Imaging Brain Energetics and Electrical Activity. **L.J. Larson-Prior** and J. Culver, (co-organizers). Speakers: L.J. Larson-Prior, Washington University; T. Holy, Washington University; E. Hillman, Cornell University, J. Culver, Washington University. Presented at: IEEE/NLM Life Science Systems & Applications Workshop, Washington DC, 2006.

Frontiers in the Neuroimaging of Human Sleep. **L.J. Larson-Prior** (organizer). Speakers: L.J. Larson-Prior, Washington University; M. Massimini, Univ. of Milan; R. Huber, Univ. of Zurich; M. Chee, Singapore Univ. Presented at SLEEP 2007, Minneapolis, MN, 2007.

Neuroimaging Technologies for Optimizing Performance. S.K. Mun, K. Friedl, S. Cardin, L.J. Larson-Prior, K.H. Wong (organizing committee). Presented at VT-TATRIC workshop on Neuroperformance, Alexandria, VA 2010

