DIVISION OF BIOKINESIOLOGY & PHYSICAL THERAPY
UNIVERSITY OF SOUTHERN CALIFORNIA

CURRICULUM VITAE

Nina S. Bradley, Ph.D., P.T
January 2021

I. Personal Information

Home Address	575 S. Barrington Ave., #401 Los Angeles, CA 90049
University Address	Department of Biokinesiology & Physical Therapy University of Southern California 1540 E. Alcazar St., CHP155 Los Angeles, California 90089-9006
	California registration # TB 007457

Education	University of Colorado Boulder, CO Postdoctoral fellow, Developmental Psychobiology, 1986-1988
	University of California Los Angeles, CA Ph.D., Kinesiology, 1986
	University of California Los Angeles, CA M.S., Kinesiology, 1983
	University of Southern California Los Angeles, CA B.S., Physical Therapy, 1975

Academic Appointments & Administrative Positions

2006 – present	Faculty member, Program in Biomedical and Biological Sciences, Keck School of Medicine University of Southern California
2002 – 2017	Associate Professor of Cell and Neurobiology University of Southern California Los Angeles, CA
1997 - present	Faculty member, Graduate Program in Neuroscience University of Southern California Los Angeles, CA

1996 - present	Associate Professor of Biokinesiology and Physical Therapy University of Southern California Los Angeles, CA
1992-1996	Assistant Professor of Biokinesiology and Physical Therapy University of Southern California Los Angeles, CA
1992-1994	Adjunct Professor of Physical and Occupational Therapy McGill University Montreal, Quebec, Canada
1988-1992	Assistant Professor of Physical and Occupational Therapy McGill University Montreal, Quebec, Canada
1986-1988	Postdoctoral Fellow Departments of Psychology and EPO Biology University of Colorado Boulder, CO
1986	Postdoctoral Scholar Department of Kinesiology University of California Los Angeles, CA
1983-1984	Postgraduate Teaching Assistant Department of Kinesiology University of California Los Angeles, CA
1980-1986	Postgraduate Research Assistant Neuromotor Control Laboratory Department of Kinesiology University of California Los Angeles, CA

Other Previous Employment

1984-1985	Staff Physical Therapist Department of Physical Therapy Saint John's Medical Center Santa Monica, CA
1981-1984	Staff Physical Therapist Department of Physical Therapy Westside Rehabilitation and Home Health Services Culver City, CA

1980-1981	Staff Physical Therapist Department of Physical Therapy Sherman Oaks Community Hospital Van Nuys, CA
1977-1980	Staff Physical Therapist Department of Physical Therapy Glendale Adventist Medical Center Glendale, CA
1976-1977	Staff Physical Therapist Department of Physical Therapy Children's Hospital of Los Angeles Los Angeles, CA

Honors, Awards & Fellowships

2016	Outstanding Teacher Award for Academic Faculty, DPT Students, Division of Biokinesiology & Physical Therapy University of Southern California
2013	Research Teacher Host Fellowship Award Frontiers in Physiology American Physiological Society
2013	Outstanding Teacher Award for Academic Faculty, DPT Students, Division of Biokinesiology & Physical Therapy University of Southern California
2013	Outstanding Teacher Award , Academic Faculty, Division of Biokinesiology & Physical Therapy University of Southern California
1996	1995 Pediatric Section Research Award For providing foundation knowledge for pediatric physical therapy American Physical Therapy Association
1986-1988	NIH Postdoctoral Traineeship in Developmental Psychobiology University of Colorado, Boulder, CO
1986	Postdoctoral Scholar University of California, Los Angeles, CA
1986	Graduate Women of the Year UCLA Academic Women's Association University of California, Los Angeles, CA
1985	Graduate Division Research Grant (PATENT FUND) University of California, Los Angeles, CA

1982-1983	Department of Health Education and Welfare BEOH-OEG Fellowship Graduate Division Research Grant University of California, Los Angeles, CA
1982	Hazel Cubberly Award Department of Kinesiology University of California, Los Angeles, CA

Professional Memberships

2003 to 2014	Society for the Neural Control of Movement
1997 to 2016	American Physiological Society
1996 to 2016	American Association for the Advancement of Science
1995 to 1998	Research Section of the American Physical Therapy Association
1993 to 2001	Neurology Section of the American Physical Therapy Association
1990 to 2001	Pediatrics Section of the American Physical Therapy Association
1990 to 1999	North American Society for Psychology of Sport and Physical Activity
1989 to 1993	Canadian Society for Behavioral Neuroscience
1982 to present	Society for Neuroscience
1972 to 2001	American Physical Therapy Association

Licenses & Certifications

Physical Therapist	California registration # TB 007457
HIPAA	Certificate number 31867 (4/09/2014)
Human Subjects	Basic Course 1, Reference ID 12754353 / Learner ID 4108139 Renewed 06/29/2017 (expires 06/28/2020) Renewed 05/14/2020 (expires 05/14/2023)
IRB	CHLA-17-00292 Protocol HS-15-00142 Protocol HS-14-00911 Protocol HS-11-00370 Protocol HS-08- 00659

II. Scholarly Activity

Current Grant Support

Previous Grant Support

2010-2012	Research Grant PI: Holschneider, D. National Institutes of Health – National Institute of Child Health and Human development R01HD060630-01A1 “Functional Adaptation of Neural Circuits after Exercise and Basal Ganglia Injury” $1,613,520 **Role: Collaborator**
2006-2011	Research Grant PI: **Bradley, N.S**. National Institutes of Health – National Institute of Child Health and Human Development, 1 R01 HD053367-1 “Development and control of repetitive leg movements during embryonic development” $405,870
2003-2005	Interdisciplinary Research Grant PIs: Shih, J.C. (Pharmacy), Miller, J.D. (Keck), **Bradley, N.S.** Zumberge Faculty Research and Innovation Fund “The Effects of Elevated Serotonergic Neurotransmission on the Development of Ingestive and Locomotor Behavior in the Mouse” $49,805
2003-2005	Individual Grant Zumberge Faculty Research and Innovation Fund “Control and importance of ballistic limb movements in the chick embryo” $25,000
1997-2000	Research Grant National Science Foundation Research Award "Embryonic foundations of motor control development" $131,918
1995-1997	Research Grant National Science Foundation Research Award "Embryonic foundations of motor control development" $100,880
1993-1995	Start-up Research Operating Grant Zumberge Faculty Research and Innovation Fund "Are neural instructions for spontaneous motility in chick embryos influenced by the environment?" $24,580
1990-1993	Research Operating Grant For New Investigators Fonds Pour la Formation de Chercheurs et L'aide a la Recherche "Developpement de la coordination des mouvements des pattes et des profils musculaires chez les embryons de poulets" $42,000

1990-1991	Equipment Grant for New Investigators Fonds Pour la Formation de Chercheurs et L'aide a la Recherche "Developpement de la coordination des mouvements des pattes et des profils musculaires chez les embryons de poulets" $8,000
1990-1993	Research Operating Grant Natural Science and Engineering Research Council of Canada "Development of coordinated leg movements and muscle patterns in chick embryos" $60,000
1990-1991	Research Equipment Grant Natural Science and Engineering Research Council of Canada "Development of coordinated leg movements and muscle patterns in chick embryos" $11,957
1988	Dean's Start-up Funds, Faculty of Medicine, McGill University "Ontogeny of coordinated movements in chick embryos" $73,500
1988	Research Equipment Grant McGill Faculty of Graduate Studies & Research Equipment Grants "Ontogeny of coordinated movements in chick embryos", $8,000
1988	Research Operating Starter Grant McGill, Faculty of Graduate Studies & Research Executive "Ontogeny of coordinated movements in chick embryos"$5,000

Papers in review

Deng W, Sargent B, **Bradley NS**, Rosales MR, Pulido JC, Mataric M, Smith BA. Can Infants Adjust Leg Movements to Fall Within a Target Acceleration Range? submitted to Journal of Motor Learning and Development.

Published Papers in Peer-Reviewed Journals

Deng,, W., Rosales, M., Bradley, N.S., Pulido, J.C., Matari´c, M.J., Smith, B.A., Toward an Understanding of Infant Behavior Changes During Contingent Learning with a Socially Assistive Humanoid Robot. The IEEE Robotics and Automation Magazine, Aug 2019.

Fitter NT, Funke R, Pulido JC, Eisenman LE, Deng W, Rosales MR, Bradley NS, Sargent B, Smith BA, Matarić M. Using a Socially Assistive Humanoid Robot to Encourage Infant Leg Motion Training. IEEE Robotics and Automation Magazine. Special issue on Socially Assistive Robotics. Cover Photo. 2019; 26(2):12-23. Impact factor 4.250. DOI: 10.1109/MRA.2019.2905644.

Funke, R., Fitter, N.T., de Armendi, J.T., **Bradley, N.S.**, Sargent, B., Matarić, M.J., Smith, B.A. (2018) A Data Collection of Infants' Visual, Physical, and Behavioral Reactions to a Small Humanoid Robot. 2018 IEEE Workshop on Advanced Robotics and its Social Impacts. Genoa, Italy. pp 99-104. DOI: 10.1109/ARSO.2018.8625800

Sun, S., Baker, L.L., **Bradley, N.S.** (2018) Ankle Muscle Tenotomy Does Not Alter Ankle Flexor Muscle Recruitment Bias During Locomotor-related Repetitive Limb Movement in Late-stage Chick Embryos. *Developmental Psychobiology* : 60: 150-164. DOI: 10.1002/dev.21594.

Sun, S., **Bradley, N.S.** (2017) Differences in Flexor and Extensor Activity During Locomotor-Related Leg Movements in Chick Embryos. *Developmental Psychobiology* 59:357–366, DOI:10.1002/dev.21500.

Porterfield, J.H, Sindhurakar, A., Finley, J.M., **Bradley, N.S.** (2015) Drift during overground locomotion in newly hatched chicks varies with light exposure during embryogenesis. *Developmental Psychobiology* 57:459-469, doi:10.1002/dev.21306.

Bradley, N.S., Ryu,Y.U., Yeseta, M.C. (2014) Spontaneous Locomotor Activity in Late-Stage Chicken Embryos Is Modified by Stretch of Leg Muscles. *Journal of Experimental Biology* 217:896-907. doi:10.1242/jeb.093567.

Sindhurakar, A., **Bradley, N.S.** (2012) Light Accelerates Morphogenesis and Acquisition of Interlimb Stepping in Chick Embryos. PLoS ONE 7(12): e51348. doi:10.1371/journal.pone.0051348.

Sindhurakar, A., **Bradley, N.S.** (2010) Kinematic Analysis of Overground Locomotion in Chicks Incubated Under Different Light Conditions. *Developmental Psychobiology* 52:802-812, 2010.

Ryu, Y.U., **Bradley, N.S.** (2009) Precocious Locomotor Behavior Begins in the Egg: Development of Leg Muscle Patterns for Stepping in the Chick, *PLoS ONE* 4(7): e6111. doi:10.1371/journal.pone.0006111.

Bradley, N.S., Ryu Y.U., and Lin, J. (2008) Fast Locomotor Burst Generation in Late Stage Embryonic Motility. *Journal of Neurophysiology* 99:1733-1742.

Bradley, N.S., Solanki, S., and Zhao, D. (2005) Limb movements during embryonic development in the chick: evidence for a continuum in limb motor control antecedent to locomotion. *Journal of Neurophysiology* 94: 4401-4411.

Oztop, E., **Bradley, N.S.**, Arbib, M.A. (2004) Infant grasp learning: A computational model. *Experimental Brain Research* 158: 480-503, 2004

Bradley, N.S. and Jahng, D.Y. (2003) Selective Effects of Light Exposure on Distribution of Motility in the Chick Embryo at E18. *Journal of Neurophysiology* 90:1408-1417.

Bradley, N.S. (2001) Age-related changes and condition-dependent modifications in distribution of limb movements during embryonic motility. *Journal of Neurophysiology* 86:1511-1522.

Bradley, N.S. and Sebelski, C. (2000) Ankle restraint alters motility at E12 in chick embryos. *Journal of Neurophysiology* 83:431-440.

Bradley, N.S. (1999). Transformations in embryonic motility in chick: kinematic correlates of type I and II motility at E9 and E12, *Journal of Neurophysiology* 81:1486-1494, 1999.

Herman, S.I. and **Bradley, N.S.** (1999) Interlimb differences in postural responses during symmetric and asymmetric stance. *Neurology Report* 23:44-51, 1999.

Bradley, N.S. (1997). Reduction in buoyancy alters parameters of motility in E9 chick embryos, *Physiology & Behavior* 62:591-595.

Chambers, S.H., **Bradley, N.S.,** Orosz, M.D. (1995). A kinematic study of intra- and interlimb coordination during motility in chick at 9 embryonic days of age. *Experimental Brain Research* 103:218-226.

Orosz, M.D., **Bradley, N.S.,** Chambers, S.H. (1994). Correcting two-dimensional kinematic errors for chick embryonic movements *in ovo*. *Computers in Biology and Medicine* 24:305-314.

Bradley, N.S. and A. Bekoff. (1992). Development of coordinated movement in chicks: II. Temporal analysis of hindlimb muscle synergies in embryos with spinal gap transections at embryonic day 10. *Journal of Neurobiology* 23: 420-432.

Bradley, N.S. and A. Bekoff. (1990). Development of coordinated movement in chicks: I. Temporal analysis of hindlimb muscle synergies at embryonic days 9 and 10. *Developmental Psychobiology* 23: 763-782.

Bradley, N.S. (1990). Animal models offer the opportunity to acquire a new perspective on motor development. *Physical Therapy* 70: 776-787.

Bradley, N.S. and J.L. Smith. (1988). Neuromuscular patterns of stereotypic hindlimb behaviors the first two postnatal months: I. Stepping in normal kittens. *Developmental Brain Research* 38: 37-52.

Bradley, N.S. and J.L. Smith. (1988). Neuromuscular patterns of stereotypic hindlimb behaviors the first two postnatal months: II. Stepping in spinal kittens. *Developmental Brain Research* 38: 53-67.

Bradley, N.S. and J.L. Smith. (1988). Neuromuscular patterns of stereotypic hindlimb behaviors the first two postnatal months: III. The scratch reflex and paw shake response in kittens. *Developmental Brain Research* 38: 69-82.

Bradley, N.S. and J.L. Smith. (1985). Early onset of hindlimb paw-shake responses in spinal kittens: new perspective in motor development, *Developmental Brain Research* 17: 301-303.

Bradley, N.S., J.L. Smith, and J.R. Villablanca. (1983). Absence of hind limb tactile placing in spinal cats and kittens, *Experimental Neurology* 82: 73-88.

Bradley, N.S. (1986). Neuromuscular patterns of stereotypic hindlimb behaviors in kittens the first two postnatal months. Department of Kinesiology, University of California, Ph.D. Dissertation.

Bradley, N.S. (1983). Absence of hindlimb tactile placing in spinalized cats and kittens. Department of Kinesiology, University of California, M.S. Thesis.

Published Abstracts

Rosales, MR, Reed, I, Pulido, JC, **Bradley, NS**, Matarić, MJ, Smith, BA (2020, June). Visual behavior during an infant contingency learning study. Poster session presentation at the annual meeting of the North American Society for the Psychology of Sport and Physical Activity, Vancouver, British Columbia, Canada (Changed to virtual due to Covid-19 crisis).

Deng W*, Rosales M*, Bradley NS, Pulido JC, Matarić M, Smith BA (09/18). Toward an Understanding of Infant Behavior Changes During Contingent Learning with a Socially Assistive Humanoid Robot. Poster presentation, Mapping the self: infants, robots, and modeling Workshop at 9th Joint IEEE International Conference on Development and Learning and on Epigenetic Robotics. Oslo, Norway. *denotes equal contributions.

Marcelo R. Rosales MS, David Kayekjian, **Nina Bradley PhD. PT.,** & Beth A. Smith PhD. PT., Identifying predictive gaze in infants using head mounted eye tracking. USC Ostrow School of Dentistry Research Day, April 10, 2019.

S. Sun, **N.S. Bradley.** Does ankle proprioception modulate muscle recruitment during locomotor-related leg movements in chick embryos? Society for Neuroscience, Annual Meeting, San Diego, Nov 12-16, 2016.

Joyce T. de Armendi, Maja Matarić, Barbara Sargent, **Nina Bradley**, Jeongah Kim, Linda Fetters, Beth A. Smith. Influence of humanoid robot on infant engagement and movement rate. USC Ostrow School of Dentistry Research Day March 9, 2016.

S. Sun, **N.S. Bradley.** Does ankle flexor proprioception modulate muscle recruitment in chick embryos? Division of Biokinesiology and physical therapy. Herman Ostrow School of Dentistry. University of Southern California. March 9, 2016.

Kim, J. Armendi, JT, Mataric, MJ, Sargent, B, **Bradley NS**, Fetters, L, Smith, BA. Infant behavioral state during interaction with a humanoid robot. USC Ostrow School of Dentistry Research Day March 9, 2016.

Sun, S., **Bradley, N.S.** Recruitment of Ankle Flexor and Extensor Muscles during Leg Movements in Chick Embryos. Experimental Biology, Boston, MA, March 29, 2015.

Zhang, Z., Sun, S., **Bradley, N.S.** Examination of flexor bias in the late stage chick embryogenesis. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, March 25 , 2015.

Sun, S., **Bradley, N.S.** Recruitment of Ankle Flexor and Extensor Muscles during Leg Movements in Chick Embryos. Experimental Biology, Boston, MA, March 29, 2015.

Pepper, J-P., Hennes, V, Sun, S, Loeb, J., **Bradley, N**.S., Ichida, J. Transplanted human induced pluripotent stem cell-derived motor neurons prevent nerve and muscle atrophy in mouse model. Tri-Institutional Stem Cell Retreat, University of Southern California, Santa Barbara, CA, May 17-19, 2015.

Sun, S., **Bradley, N.S.** Flexor and extensor muscle recruitment during leg movements in chick embryos, ISDP meeting in San Sebastian, International Society Developmental Psychobiology, San Sebastian, Spain, July 20-23, 2015.

Andersen, M.A., DeMuth, S.K., **Bradley, N.S.** Assisting student success in a professional DPT program: a formal student mentoring program, Education Leadership Conference, National Meeting, Baltimore, MD, October 3, 2015.

Sun, S., **Bradley, N.S.** Flexor and extensor muscle recruitment during leg movements in chick embryos, Society for Neuroscience, Chicago, Il, October 17-21, 2015

Sun, S., **Bradley, N.S.** Leg flexor and extensor muscle recruitment during chick embryonic movement. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, March 25, 2015.

Sun, S., **Bradley, N.S.** Differences in recruitment of flexor and extensor muscles during stepping in chick embryos, International Society Developmental Psychobiology, Chicago, IL, November 12, 2014.

Holloway, L., **Bradley, N.S.** Inspiring High School Anatomy Students to See 'How Muscle Force Can Move You!', Experimental Biology, San Diego, CA , April 27, 2014.

Sun, S.Y., **Bradley, N.S.** Spinal control of stepping in chick embryos without supraspinal inputs. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, March 12, 2014.

Bradley, N.S., Straka, H., Vinay, L., Session 2: Cellular and electrophysiological basis of developmental plasticity, Satellite Meeting, Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 16, 2013. http://ncm-society.org/upload/docs/Programs%20-%20Annual%20Meeting/NCM%20Full%20Abstracts%202013.FINAL.pdf

Bradley, N.S. Adaptive flexibility as evidenced by adjustable timing of locomotor circuit development during embryogenesis. Satellite Meeting, Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 16, 2013. http://ncm-society.org/upload/docs/Programs%20-%20Annual%20Meeting/NCM%20Full%20Abstracts%202013.FINAL.pdf

Sun, S.Y., **Bradley, N.S.** Strychnine alters ankle flexor-extensor muscle activity pattern in chick embryos, Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 17, 2013, Soc. Abstract F56. http://ncm-society.org/upload/docs/Programs%20-%20Annual%20Meeting/NCM%20Full%20Abstracts%202013.FINAL.pdf

Porterfield, J.H., Sindhurakar, A., **Bradley, N.S.** Impact of varying light exposure during incubation on locomotor navigation. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 20, 2013.

Sun, Soo Yeon, **Bradley, N.S.** Strychnine alters ankle flexor-extensor muscle activity pattern in chick embryos. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 20, 2013.

Chen, B., **Bradley, N.S.** Contributions of L-DOPA to locomotor-related movement during embryogenesis. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 15, 2012.

Porterfield, J.H., Sindhurakar, A., **Bradley, N.S.** Effect of light during embryogenesis on locomotor navigation in hatchlings. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 15, 2012.

Sindhurakar, A., **Bradley, N.S** . Development of symmetric alternating steps in the chick embryo. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 15, 2012.

Sun, Soo Yeon, **Bradley, N.S.** Strychnine alters ankle muscle activity patterns in chick embryos. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 15, 2012.

Chen, B., **Bradley, N.S.** Contributions of L-DOPA to locomotor-related movement during embryogenesis. 14th Annual Undergraduate Symposium for Scholarly and Creative Work, University of Southern California, April 11, 2012.

Porterfield, J.H., Sindhurakar, A., **Bradley, N.S.** Effect of light on veering during over ground walking in hatchlings. 14th Annual Undergraduate Symposium for Scholarly and Creative Work, University of Southern California, April 11, 2012.

Thompson, K **Bradley, N.S.** Impact of light exposure during embryogenesis on development of ankle muscle activity during stepping in the chick embryo.14th Annual Undergraduate Symposium for Scholarly and Creative Work, University of Southern California, April 11, 2012.

Rácz, K., Sindurakar, A., **Bradley, N.S.**, Valero-Cuevas, F.J. Prenatal motor development affects observed motor behavior for different incubation periods in domestic chick. Amer Soc. Biomech. Annual Meeting, Long Beach, CA, August 11, 2011. http://www.asbweb.org/conferences/2011/pdf/327.pdf

Sindurakar, A., Rácz, K., Valero-Cuevas, F.J., **Bradley, N.S.** Prenatal motor development for different incubation periods affects postural control but not early gait. Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 28, 2011, Soc. 16: Abstract 1-E-29. http://www.ncm-society.org/upload/docs/Programs%20-%20Annual%20Meeting/NCM_2011_full_poster_abstracts.pdf

Bradley, N.S. Ankle Restraint Provides Support for Separate Control of Rhythm and Pattern during Locomotor Activity in Chick Embryos, Soc. Neuromotor Control Movement Annual Meeting, Naples, Florida, April 21, 2010, Soc. Abstract 15: D17. http://ncm-society.org/upload/docs/Programs%20-%20Annual%

Sindurakar, A., **Bradley, N.S.** Light accelerates the onset of locomotor performance in chicks. Ostrow School of Dentistry Research Day, Los Angeles, CA, February 10, 2010.

Sindhurakar A., **Bradley N.** Precocious walking competency is not compromised by light-induced variations in time to hatch in chicks. International Society Developmental Psychobiology, Chicago, IL, October 14, 2009.

Bradley, N.S. Repetitive Limb Movements in the Late-Stage Chicken Embryo, the Missing Link Between Embryonic Motility and Precocious Locomotion, Soc. Neuromotor Control Movement Annual Meeting, Peer reviewed - Accepted for Platform Presentation, Waikoloa, Hi May 2009. 14: http://ncm-society.org/upload/docs/Programs%20-%20Annual%

Ryu, Y.U. and **Bradley, N.S.** EMG Evidence for Separate Control of Rhythm and Pattern Generation During Repetitive Limb Movements in Chick Embryos. 2nd SFN Satellite Symposium on Motor Systems, NIH, Bethesda, MD, November 14, 2008.

Bradley, N.S., Ryu, Y.U. and Lin, J. Evidence of a Fast Locomotor Burst Generator during Embryonic Motility in Chick, Soc. Neuromotor Control Movement Annual Meeting, Naples, Florida, April 30, 2008, Soc. Abstract 13: D17. http://ncm-society.org/upload/docs/Programs%20-%20Annual%

Sindurakar, A. and **Bradley, N.S.** Incubating Light Conditions Impact Precocious Locomotor Skill in Neonatal Chick, Soc. Neuromotor Control Movement Annual Meeting, Naples, Florida, April 30, 2008, Soc. Abstract 13: D26. http://ncm-society.org/upload/docs/Programs%20-%20Annual%

Ryu, Y.U. and **Bradley, N.S.** Immutability and Flexibility of Muscle Activity Patterns during Rhythmic Leg Movements in Late Stage Chick Embryos, Soc. Neuromotor Control Movement Annual Meeting, Naples, Florida, April 30, 2008, Soc. Abstract 13: D24. http://ncm-society.org/upload/docs/Programs%20-%20Annual%

Ryu, Y.U. and **Bradley, N.S.** Impact of Postural Constraints on Muscle Activity during Rhythmic Leg Movements in Late Stage Chick Embryos, Soc. Neuromotor Control Movement Annual Meeting, Naples,

Florida, April 30, 2008, Soc. 13: Abstract 13: D25. http://ncm-society.org/upload/docs/Programs%20-%20Annual%

Sindurakar, A., and **Bradley, N.S.** Effect of Light on Locomotor Control in Neonatal Chick. University of Southern California Dental Research Day, February 13, 2008.

Case, M.J., Quinn, K.E., Dini, A.A., Tsando, T., Neuner, C.M., Chen K., van Praag, H., Shih, J.C., **Bradley, N.S.**, Gage, F.H., Miller, J.D. Hippocampal neurogenesis and the develoment of circadian rhythmics in locomotor and ingestive behavior in MAO knockout mice. Soc. Neurosci. Abstr.195.19, 2004.

Bradley, N.S. Development of embryonic motility. Workshop in honor of Prof. Masao Ito. Health Science Campus, University of Southern California, January 29, 2004.

Bradley, N.S. and Jahng, D.Y. (invited). Distribution of motility in the chick embryo at E18 with variation in light exposure. 4th Graz Symposium on Developmental Neurology, Graz, Austria, May 24, 2003.

Bradley, N.S. (invited). Repetitive Limb Movements During Embryonic Development: Are They Produced by the Locomotor Pattern Generator? Neural Control of Movement, Santa Barabara, CA, April 23, 2003. http://ncm-society.org/upload/docs/Programs%20-%20Annual%20Meeting/2003.pdf

Bradley, N.S. (2001) Movement repertoire of the E18 chick embryo: a 24-hour force recording. *Society for Neuroscience Abstracts* 27:937.1.

Bradley, N.S. (2000) Distribution of motility sequences in the chick embryo. *Society for Neuroscience Abstracts* 26:460.13.

Bradley, N.S. and Sebelski, C. (1999) Age-related effects of motion-dependent feedback on type I motility in chick. *Society for Neuroscience Abstracts* 25: 2177.

Ganley, K.J. and **Bradley, N.S.** (1999) Transformations in embryonic motility in chick: e9 to E18. Society for Neuroscience Abstracts 25: 2177.

Bradley, N.S. (1998) Establishment of coordinated movements during normal embryonic development. *Revista Brasileira de Fisioterapia, Supplemento*, 3: 19-21.

Bradley, N.S. (1998) Transformations in embryonic motility in chick: E9 to E12. *Society for Neuroscience Abstracts* 24: 1153.

Rose, D., Ganley, K., and **Bradley, N.S.** (1998) Transformations in embryonic motility in chick: E9 to E15. *Society for Neuroscience Abstracts* 24: 1153.

Herman, S.I. and **Bradley, N.S.** (1995) Interlimb differences in muscle response patterns following postural perturbations in stance. Combined Sections, American Physical Therapy Association, (Extended abstract) *Neurology Report* 19: 39-41.

Chambers, S.H. and **Bradley, N.S.** (1994) Coordinated movement in the chick embryo during buoyant and reduced-buoyant conditions. Combined Sections, American Physical Therapy Association, *Pediatric Physical Therapy* 6: 209.

Herman, S.I. and **Bradley, N.S.** (1994) Interlimb differences in muscle response patterns following postural perturbations in stance. *Neurology Report* 18: 26.

Orosz, M.D., **Bradley, N.S.** and Chambers, S.H. (1993) An algorithm to correct errors in 2D kinematic data due to movement out-of-plane. *Society for Neuroscience Abstracts* 19: 550.

Bradley, N.S. (1992) Postural requirements for limb action as rate limiting variables in kitten motor development. *Engineering in Medicine and Biology* 11: 94-95.

Bradley, N.S. and Chambers, S. H. (1992) Chronic spinal gap transection in chick embryos: a kinematic analysis. *Society for Neuroscience Abstracts* 18: 962

Chambers, S.H. and **Bradley, N.S.** (1992) Does buoyancy mask the potential for coordinated motility *in ovo*? *Society for Neuroscience Abstracts* 18: 962.

Chambers, S. and **Bradley, N.S.** (1991) Intra- and interlimb coordination during motility in chick embryos. *Society for Neuroscience Abstracts* 17: 937.

Bradley, N.S. and Chambers, S. H. (1991) Tactile placing in normal cats is directionally discrete: a view from down under. *Society for Neuroscience Abstracts* 17: 1579.

Chambers, S. and **Bradley, N.S.** (1991) Kinematic analysis of wing movements in chick embryos *in ovo* at embryonic day 9. *Third IBRO World Congress of Neuroscience Abstracts,* 310.

Woolley, S.M., **Bradley, N.S.** and Bekoff, A. (1990) An EMG study comparing foot shaking and walking in chicks. *Society for Neuroscience Abstracts* 16: 118.

Bradley, N.S. and Bekoff, A. (1988) Hindlimb synergies in spinal chick embryos. *Society for Neuroscience Abstracts* 14: 1003.

Bradley, N.S. and Bekoff, A. (1987) Emergence of flexion and extension muscle synergies in the hindlimb of chick embryos. *Society for Neuroscience Abstracts* 13:1504.

Smith, M.B., **Bradley, N.S.** and Bekoff, A. (1987) An EMG study of scratching in chicks. *Society for Neuroscience Abstracts* 13: 355.

Bradley, N.S. and Smith, J.L. (1986) Development of hindlimb neuromuscular patterns in kittens: scratching in normals, paw shaking in normals and spinals. *Society for Neuroscience Abstracts* 12: 1117.

Bradley, N.S. and Smith, J.L. (1985) Development of hindlimb stepping behaviors: neuromuscular patterns in normal and spinal neonatal kittens, *Society for Neuroscience Abstracts* 11: 1286.

Bradley, N.S., Smith, J.L. and Giuliani, C.A. (1984) Recovery of rhythmical movements in spinal kittens and cats, International Symposium on Development and Plasticity of the Mammalian Spinal Cord, Spoleto (Perugia), Italy, *Symposium Abstracts:* 61.

Bradley, N.S. and Smith, J.L. (1984) Onset of paw-shake response: a new perspective in development, *Physical Therapy* 64: 709.

Bradley, N.S. and Smith, J.L. (1984) Postnatal development of rapid limb movements in normal and spinal kittens, *Society for Neuroscience Abstracts* 10: 913.

Bradley, N.S. and Smith, J.L. (1983) Neuromuscular oscillations about the ankle joint in the chronic spinalized cat, *Society for Neuroscience Abstracts* 9: 526.

Bradley, N.S., Smith, J.L. and Villablanca, J.R. (1982) Tactile placing in forelimb and hindlimb of normal and spinalized kittens, *Society for Neuroscience Abstracts* 8: 537.

Published Books, Chapters & Monographs

Oztop, E., Arbib, M., and **Bradley, N.S.** (2006) The Development of Grasping and the Mirror System. In: *Action to Language via the Mirror Neuron System*. Arbib, M.A. (Ed.) Cambridge Press, pages 397-423.

Bradley, N.S. and Westcott, S.L. (2006). Motor Control: Developmental aspects of motor control in skill acquisition. In: *Physical Therapy for Children. 3nd Edition.* Campbell, S. (Ed.), W.B. Saunders, Philadelphia.

Bradley, N.S. (2000). Motor Control: Developmental aspects of motor control in skill acquisition. In: *Physical Therapy for Children. A Comprehensive Reference for Pediatric Practice, 2nd Edition.* Campbell, S. (Ed.), W.B. Saunders, Philadelphia, pages 45-87.

Bradley, N.S. (1994). Motor Control: Developmental aspects of motor control in skill acquisition. In: *Physical Therapy for Children. A Comprehensive Reference for Pediatric Practice.* Campbell, S. (Ed.), W.B. Saunders, Philadelphia, pages 39-77.

Bradley, N.S. (1992). What are the principles of motor development? In: *Movement Disorders in Children, Medicine and Sport Science.* Forssberg H., Hirschfeld H (Eds.) Proceedings of the International Sven Jerring Symposium, Stockholm, Sweden, August 1991, vol. 36, pages 41-49.

Bradley, N.S. and A. Bekoff. (1989). Development of locomotion: animal models. In: *The Development of Posture and Gait Across the Lifespan*. Woollacott, M. and Shumway-Cook, A. (Eds.), University of South Carolina Press, Columbia, pages 48 to 73.

Thelen, E. and **Bradley, N.S.** (1988). Motor development: posture and locomotion. In:*Handbook of Human Growth and Developmental Biology Vol. 1.* Timaras, P. and Meisami, E. (Eds.), CRC Press, Boca Raton, pages 221 to 236.

Smith, J.L., **Bradley, N.S.**, Carter, M.C., Giuliani, C.A., Hoy, M.G., Koshland, G.F., and Zernicke, R.F. (1986). Rhythmical movements of the hindlimbs in spinal cat: considerations for a controlling network. In: *Development and Plasticity of the Mammalian Spinal Cord.* Goldberger, M., Gorio,A. and Murray, M. (Eds.), Liviana Press, Padova, pages 347 to 361. [Invited]

Invited Commentaries & Editorials

Bradley, N.S. (2003) Editorial focus: Connecting the dots between animal and human studies of locomotion. *Journal of Neurophysiology* 90:2088–2089.

Scientific Presentations

71. Fitter, N.T., Funke, R., Pulido, J.C., Eisenma,n L.E., Deng, W., Rosales, M.R., Bradley, N.S., Sargent, B., Smith, B.A., Matarić, M. Using a Socially Assistive Humanoid Robot to Encourage Infant Leg Motion Training. *IEEE Robotics and Automation Magazine. Special issue on Socially Assistive Robotics. Cover Photo.* 2019; 26(2):12-23. Invited presentation at 2020 International Conference on Robotics and Automation (ICRA). Paris, France May 23, 2020 (online, virtual conference).

70. Funke, R., Fitter, N.T., de Armendi,J., **Bradley, N.**, Sargent, B., Mataric, M., Smith, B. A Data Collection of Infants' Visual, Physical, and Behavioral Reactions to a Small Humanoid Robot. 2018 IEEE Workshop on Advanced Robotics and its Social Impacts (ARSO), Genoa, Italy, Sept 27-29, 2018.

69. Sun, S. **Bradley, N.S.** Does ankle proprioception modulate muscle recruitment during locomotor-related leg movements in chick embryos? Society for Neuroscience, Annual Meeting, San Diego, Nov 12-16, 2016.

68. de Armendi, J. T., Matarić, M., Sargent, B. **Bradley, N.S.**, Jeongah Kim, Linda Fetters, Beth A. Smith. Influence of humanoid robot on infant engagement and movement rate. USC Ostrow School of Dentistry Research Day March 9, 2016.

67. Sun, S., **Bradley, N.S..** Does ankle flexor proprioception modulate muscle recruitment in chick embryos? Division of Biokinesiology and physical therapy. Herman Ostrow School of Dentistry. University of Southern California. March 9, 2016.

66. Kim, J. Armendi, JT, Mataric, MJ, Sargent, B, **Bradley NS**, Fetters, L, Smith, BA. Infant behavioral state during interaction with a humanoid robot. USC Ostrow School of Dentistry Research Day March 9, 2016.

65. Sun, S., **Bradley, N.S.** Flexor and extensor muscle recruitment during leg movements in chick embryos, ISDP meeting in San Sebastian, Society for Neuroscience, Chicago, Il, October 17-21, 2015.

64. Andersen, M.A., DeMuth, S.K., **Bradley, N.S**. Assisting student success in a professional DPT program: a formal student mentoring program, Education Leadership Conference, National Meeting, Baltimore, MD, October 3, 2015 (Poster)

63. Sun, S., **Bradley, N.S.** Flexor and extensor muscle recruitment during leg movements in chick embryos, ISDP meeting in San Sebastian, International Society Developmental Psychobiology, San Sebastian, Spain, July 20-23, 2015.

62. Pepper, J-P., Hennes, V., Sun, S.Y., **Bradley, N.**, Ichida, J., Transplanted human induced pluripotent stem cell-derived motor neurons prevent nerve and muscle atrophy in mouse model. Stem Cell Retreat, USC, May 2015.

61. Sun, S., **Bradley, N.S.** Recruitment of Ankle Flexor and Extensor Muscles during Leg Movements in Chick Embryos. Experimental Biology, Boston, MA, March 29, 2015.

60. Zhang, Z., Sun, S., **Bradley, N.S.** Examination of flexor bias in the late stage chick embryogenesis. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, March 25 , 2015.

59. Sun, S., **Bradley, N.S.** Leg flexor and extensor muscle recruitment during chick embryonic movement. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, March 25, 2015.

58. Holloway, L., Bradley, N.S. Inspiring High School Anatomy Students to See 'How Muscle Force Can Move You!', Innovations in Classroom Teaching, Experimental Biology, San Diego, CA, April 27, 2014.

57. Sun, S.Y., **Bradley, N.S.** Differences in Recruitment of Flexor and Extensor Muscles during Stepping in Chick Embryos International Society of Developmental Psychobiology, Washington D.C., November 12, 2014.

56. Sun, S.Y., **Bradley, N.S.** Dental School Research Day and Division Research day
Poster title: Spinal control of stepping in chick embryos without supraspinal inputs. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, March 12, 2014.

55. **Bradley, N.S.**, Straka, H., Vinay, L., Session 2: Cellular and electrophysiological basis of developmental plasticity, Satellite Meeting, Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 16, 2013.

54. **Bradley, N.S**. Adaptive flexibility as evidenced by adjustable timing of locomotor circuit development during embryogenesis. Satellite Meeting, Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 16, 2013.

53. Sun, S.Y., **Bradley, N.S.** Strychnine alters ankle flexor-extensor muscle activity pattern in chick embryos, Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 17, 2013, Soc. Abstract F56.

52. Porterfield, J.H., Sindhurakar, A., **Bradley, N.S.** Impact of varying light exposure during incubation on locomotor navigation. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 20, 2013.

51. Sun, Soo Yeon, **Bradley, N.S.** Strychnine alters ankle flexor-extensor muscle activity pattern in chick embryos. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 20, 2013.

50. Chen, B., **Bradley, N.S.** Contributions of L-DOPA to locomotor-related movement during embryogenesis. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 15, 2012.

49. Porterfield, J.H., Sindhurakar, A., **Bradley, N.S.** Effect of light during embryogenesis on locomotor navigation in hatchlings. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 15, 2012.

48. Sindhurakar, A., **Bradley, N.S** . Development of symmetric alternating steps in the chick embryo. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 15, 2012.

47. Sun, Soo Yeon, **Bradley, N.S.** Strychnine alters ankle muscle activity patterns in chick embryos. Ostrow School of Dentistry Research Day, University of Southern California, Los Angeles, CA, February 15, 2012.

46. Chen, B., **Bradley, N.S.** Contributions of L-DOPA to locomotor-related movement during embryogenesis. 14th Annual Undergraduate Symposium for Scholarly and Creative Work, University of Southern California, April 11, 2012.

45. Porterfield, J.H., Sindhurakar, A., **Bradley, N.S.** Effect of light on veering during over ground walking in hatchlings. 14th Annual Undergraduate Symposium for Scholarly and Creative Work, University of Southern California, April 11, 2012.

44. Thompson, K **Bradley, N.S.** Impact of light exposure during embryogenesis on development of ankle muscle activity during stepping in the chick embryo.14th Annual Undergraduate Symposium for Scholarly and Creative Work, University of Southern California, April 11, 2012.

43. Rácz, K., Sindurakar, A., **Bradley, N.S.**, Valero-Cuevas, F.J. Prenatal motor development affects observed motor behavior for different incubation periods in domestic chick. Amer Soc. Biomech. Annual Meeting, Long Beach, CA, August 11, 2011.

42. Sindurakar, A., Rácz, K., Valero-Cuevas, F.J., **Bradley, N.S.** Prenatal motor development for different incubation periods affects postural control but not early gait. Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 28, 2011,

41. **Bradley, N.S.** Ankle restraint provides support for separate control of rhythm and pattern during locomotor activity in chick embryos, Soc. Neuromotor Control Movement Annual Meeting, Naples, FL, April 21, 2010.

40. Sindurakar, A., **Bradley, N.S.** Light accelerates the onset of locomotor performance in chicks. Ostrow School of Dentistry Research Day, Los Angeles, CA, February 10, 2010.

39. Sindhurakar A., **Bradley N.** Precocious walking competency is not compromised by light-induced variations in time to hatch in chicks. ISDP, Chicago, IL, October 14, 2009.

38. **Bradley, N.S.** Repetitive Limb Movements in the Late-Stage Chicken Embryo, the Missing Link Between Embryonic Motility and Precocious Locomotion, Soc. Neuromotor Control Movement Annual Meeting, Platform Presentation, Waikoloa, Hi May 2009.

37. Ryu, Y.U. and **Bradley, N.S.** EMG Evidence for Separate Control of Rhythm and Pattern Generation During Repetitive Limb Movements in Chick Embryos. 2nd SFN Satellite Symposium on Motor Systems, NIH, Bethesda, MD, November 14, 2008.

36. **Bradley, N.S.,** Ryu, Y.U. and Lin, J. Evidence of a Fast Locomotor Burst Generator during Embryonic Motility in Chick, Soc. Neuromotor Control Movement Annual Meeting, Naples, Florida, April 30, 2008.

35. Sindurakar, A. and **Bradley, N.S.** Incubating Light Conditions Impact Precocious Locomotor Skill in Neonatal Chick, Soc. Neuromotor Control Movement Annual Meeting, Naples, Florida, April 30, 2008.

34. Ryu, Y.U. and **Bradley, N.S.** Immutability and Flexibility of Muscle Activity Patterns during Rhythmic Leg Movements in Late Stage Chick Embryos, Soc. Neuromotor Control Movement Annual Meeting, Naples, Florida, April 30, 2008.

33. Ryu, Y.U. and **Bradley, N.S.** Impact of Postural Constraints on Muscle Activity during Rhythmic Leg Movements in Late Stage Chick Embryos, Soc. Neuromotor Control Movement Annual Meeting, Naples, Florida, April 30, 2008

32. Sindurakar, A., and **Bradley, N.S.** Effect of Light on Locomotor Control in Neonatal Chick. University of Southern California Dental Research Day, February 13, 2008.

31. Case, M.J., Quinn, K.E., Dini, A.A., Tsando, T., Neuner, C.M., Chen K., van Praag, H., Shih, J.C., **Bradley, N.S.**, Gage, F.H., Miller, J.D. Hippocampal neurogenesis and the develoment of circadian

rhythmics in locomotor and ingestive behavior in MAO knockout mice. Soc. Neurosci. Annual Meeting San Diego, CA, November 2004.

30. **Bradley, N.S.** Development of embryonic motility. Workshop in honor of Prof. Masao Ito. Health Science Campus, University of Southern California, January 29, 2004.

29. **Bradley, N.S.** and Jahng, D.Y. (invited). Distribution of motility in the chick embryo at E18 with variation in light exposure. 4th Graz Symposium on Developmental Neurology, Graz, Austria, May 24, 2003.

28. **Bradley, N.S.** Repetitive Limb Movements During Embryonic Development: Are They Produced by the Locomotor Pattern Generator? Neural Control of Movement, Santa Barabara, CA., April 23, 2003.

27. **Bradley, N.S.** Movement repertoire of the E18 chick embryo: a 24-hour force recording. Society for Neuroscience Annual Meeting, San Diego, CA 2001.

26. **Bradley, N.S.** Distribution of motility sequences in the chick embryo. Society for Neuroscience Annual Meeting, New Orleans, LA 2000.

25. **Bradley, N.S.** and Sebelski, C. Age-related effects of motion-dependent feedback on type I motility in chick. Society for Neuroscience Annual Meeting, Miami, FL 1999.

24. Ganley, K.J. and **Bradley, N.S.** Transformations in embryonic motility in chick: e9 to E18. Society for Neuroscience Annual Meeting, Miami, FL 1999.

23. **Bradley, N.S.** Establishment of coordinated movements during normal embryonic development. III International Congress of Motor Rehavior, Aguas de Lindoia, SP, Brazil, October 6, 1998.

22. **Bradley, N.S.** Transformations in embryonic motility in chick: E9 to E12. Society for Neuroscience Annual Meeting, Los Angeles, CA 1998.

21. Rose, D., Ganley, K., and **Bradley, N.S.** Transformations in embryonic motility in chick: E9 to E15. Society for Neuroscience Annual Meeting, Los Angeles, CA 1998.

20. Chambers, S.H. and **Bradley, N.S.** Coordinated movement in the chick embryo during buoyant and reduced-buoyant conditions. Combined Sections, American Physical Therapy Association, San Antonio, TX 1994.

19. Herman, S.I. and **Bradley, N.S.** (1994) Interlimb differences in muscle response patterns following postural perturbations in stance. Combined Sections, American Physical Therapy Association, San Antonio, TX, 1994.

18. Orosz, M.D., **Bradley, N.S.** and Chambers, S.H. An algorithm to correct errors in 2D kinematic data due to movement out-of-plane. Society for Neuroscience Annual Meeting, Washington, DC, 1993.

17. **Bradley, N.S.** Postural requirements for limb action as rate limiting variables in kitten motor development. Biomechanics and Neural Control of Movement, Ventura, CA, July 28, 1992.

16. **Bradley, N.S.** and Chambers, S. H. Chronic spinal gap transection in chick embryos: a kinematic analysis. Society for Neuroscience Annual Meeting, Anaheim, CA, 1992.

15. Chambers, S.H. and **Bradley, N.S.** Does buoyancy mask the potential for coordinated motility *in ovo*? Society for Neuroscience Annual Meeting, Anaheim, CA, 1992.

14. Chambers, S. and **Bradley, N.S.** Intra- and interlimb coordination during motility in chick embryos. Society for Neuroscience Annual Meeting, New Orleans, LA 1991.

13. **Bradley, N.S.** and Chambers, S. H. Tactile placing in normal cats is directionally discrete: a view from down under. Society for Neuroscience Annual Meeting, New Orleans, LA 1991.

12. Chambers, S. and **Bradley, N.S.** Kinematic analysis of wing movements in chick embryos *in ovo* at embryonic day 9. Third IBRO World Congress of Neuroscience, Montreal, Quebec, CA, 1991.

11. Woolley, S.M., **Bradley, N.S.** and Bekoff, A. An EMG study comparing foot shaking and walking in chicks. Society for Neuroscience Annual Meeting, St. Louis, MO, 1990.

10. **Bradley, N.S.** and Bekoff, A. Hindlimb synergies in spinal chick embryos. Society for Neuroscience Annual Meeting, Toronto, Ontario, CA, 1988.

9. **Bradley, N.S.** and Bekoff, A. Emergence of flexion and extension muscle synergies in the hindlimb of chick embryos. Society for Neuroscience Annual Meeting, New Orleans, LA, 1987.

8. Smith, M.B., **Bradley, N.S.** and Bekoff, A. An EMG study of scratching in chicks. Society for Neuroscience Annual Meeting, New Orleans, LA, 1987.

7. **Bradley, N.S.** and Smith, J.L. Development of hindlimb neuromuscular patterns in kittens: scratching in normals, paw shaking in normals and spinals. Society for Neuroscience Annual Meeting, Washington, DC, 1986.

6. **Bradley, N.S.** and Smith, J.L. Development of hindlimb stepping behaviors: neuromuscular patterns in normal and spinal neonatal kittens, Society for Neuroscience Annual Meeting, Dallas, TX, 1985.

5. **Bradley, N.S.**, Smith, J.L. and Giuliani, C.A. Recovery of rhythmical movements in spinal kittens and cats, International Symposium on Development and Plasticity of the Mammalian Spinal Cord, Spoleto (Perugia), Italy, 1984.

4. **Bradley, N.S.** and Smith, J.L. Onset of paw-shake response: a new perspective in development, Combined Sessions, American Physical Therapy Assoc., Reno, NV, 1984.

3. **Bradley, N.S.** and Smith, J.L. Postnatal development of rapid limb movements in normal and spinal kittens, Society for Neuroscience Annual Meeting, Anaheim, CA, 1984.

2. **Bradley, N.S.** and Smith, J.L. Neuromuscular oscillations about the ankle joint in the chronic spinalized cat, Society for Neuroscience Annual Meeting, Boston, MA,1983.

1. **Bradley, N.S.**, Smith, J.L. and Villablanca, J.R. Tactile placing in forelimb and hindlimb of normal and spinalized kittens, Society for Neuroscience Annual Meeting, Minneapolis, MN,1982.

Invited Lectures & Keynote Addresses

Bradley, N.S., Straka, H., Vinay, L., Session 2: Cellular and electrophysiological basis of developmental plasticity, Satellite Meeting, Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 16, 2013.

Bradley, N.S. Adaptive flexibility as evidenced by adjustable timing of locomotor circuit development during embryogenesis. Satellite Meeting, Soc. Neuromotor Control Movement Annual Meeting, San Juan, Puerto Rico, April 16, 2013.

Bradley, N.S. Probing the impact of environment on embryonic motor development, University of Nebraska Medical Center & University of Southern California Joint Symposium on Exploring the Neighborhoods of Preterm Infants, September 18, 2010.

Bradley, N.S. Those repetitive kicks during embryogenesis are the beginning of locomotor development, Pediatric Grand Rounds LAC+USC Medical Center, September 14, 2010

Bradley, N.S. Studies of embryonic motor development and establishment of pre-locomotor. Program in Biological and Biomedical Sciences (PIBBS), University of Southern California, January 15, 2009.

Bradley, N.S. Late-stage chick embryonic motility is produced by the '*fast'* locomotor burst generator. Neuroscience Graduate Program Annual Retreat, University of Southern California, September 6, 2008.

Bradley, N.S. Embryonic foundations for locomotor development. Department of Physical Therapy, College of Rehabilitation Science, Daegu University, South Korea, May 13, 2008.

Bradley, N.S. Fundamentals of early motor development. Department of Physical Therapy, College of Rehabilitation Science, Daegu University, South Korea, May 13, 2008.

Bradley, N.S., What is it? Why you may want to know more about it. USC Spinal NeuroMuscular Working Group, University of Southern California, February 29, 2008.

Bradley, N.S. Why did the chicken cross the road? Maybe because he'd been rehearsing for that moment during embryogenesis. Engineering, Neuroscience and Health Seminars, University of Southern California, Los Angeles, CA, January 28, 2008.

Bradley, N.S. Repetitive leg movements in the chicken embryo: Preparation to cross the road, Children's Hospital of Los Angeles, Children's Brain Center Neuroscience Conference, Keck School of Medicine, University of Southern California, Los Angeles, CA, June 26, 2007.

Bradley, N.S. Control of repetitive leg movements during embryonic development or how the chicken learns to cross the road! Department of Neurology, Keck School of Medicine, University of Southern California, Los Angeles, CA, June 5, 2007.

Bradley, N.S. Development and control of repetitive leg movements during embryonic development. University of Southern California, Neuroscience Graduate Program Annual Retreat, Laguna Beach, CA, September 8-9, 2006.

Bradley, N.S. To consider afresh the principles and issues of perinatal motor development: a look inside the egg. University of Southern California, Division of Biokinesiology & Physical Therapy 60th Anniversary Symposium, Pasadena, CA February 25, 2006.

Bradley, N.S. Clinical testing tools: questions of their strengths and weaknesses, University of Southern California Workshop for Pediatric Clinical Instructors and Faculty Teaching USC Entry-Level DPT Students, April 8, 2005.

Bradley, N.S. Does embryonic movement experience shape precocious locomotion in the chick?, NIH-Sponsored Symposium: Variability and Plasticity in Perinatal Motor Development, 37th Annual Meeting of the International Society for Developmental Psychology, Aix en Provence, France June 26, 2004.

Bradley, N.S. Importance of embryonic movement experience. 2nd Annual Psi Beta Psychobiology Honor Society Research Forum, University of Southern California, April 3, 2003.

Bradley, N.S. Repetitive limb movements during embryonic development: are they produced by the locomotor pattern generator. Neuroscience Seminar, University of California, Riverside, March 18, 2003.

Bradley, N.S. Nurturing new ideas about reach to graps by challenging commonly held views. AR&L Retreat, University of Southern California, January 7, 2003.

Bradley, N.S. Variability in embryonic motility: artifact or substrate for development of posthatching motor behaviors. Doings Motor Control Seminar, Department of Physiology, University of Arizona, Tucson, Arizona, March 30, 2001.

Bradley, N.S. Embryonic Motility: Probing the Flexible and Inflexible Foundations for Motor Control. Independent Health Professions Chairs Meeting, University of Southern California, October 14, 2000.

Bradley, N.S. Keynote: In search of the foundations for motor control established during embryonic development using the chick as a model. Motor Development Section, North American Society for Psychology of Sport and Physical Activity (NASPSPA) Annual Conference, San Diego, California, June 8, 2000.

Bradley, N.S., Evidence for two loosely coupled clocks producing periodic features of motility in chick embryos, Department of Biomedical Engineering, University of Southern California, Los Angeles, California, March 6, 2000.

Bradley, N.S., Methods for studying embryonic motility *in ovo*, Vice President's Office for Health Affairs, Independent Health Professions, University of Southern California, February 16, 2000.

Bradley, N.S., Does the environment exert an instructive role on the development of motor control in the embryonic period? Program in Neuroscience, University of Southern California, January 12, 2000.

Bradley, N.S., Overview of 4 CPG systems, USC Motor- and locomotion control meetings, Biomedical Engineering, University of Southern California, Los Angeles, California, November 8, 1999.

Bradley, N.S., Establishment of coordinated movements during normal embryonic development. Sensorimotor Neuroscience Symposium, Department of Biokinesiology & Physical Therapy, University of Southern California, Los Angeles, California, November 13, 1998.

Bradley, N.S., Establishment of coordinated movements during normal embryonic development. III International Congress of Motor Rehabilit, Àguas de Lindóia, Sãn Paolo, Brazil, October 8, 1998.

Bradley, N.S., Embracing basic motor control research: grabbing for justification, grasping for direction, or reaching for inspiration? Combined Sections Meeting of the American Physical Therapy Association, Dallas, Texas, February 16, 1997.

Bradley, N.S., Reduction in buoyancy alters parameters of motility in E9 chick embryos, Department of Biokinesiology & Physical Therapy, University of Southern California, Los Angeles, California, October 17, 1996.

Bradley, N.S., Embryonic Foundations of Motor, Neurolunch Seminar, Neuroscience Program, University of Southern California, Los Angeles, California, April 1, 1996.

Bradley, N.S., Embryonic Foundations of Motor Control: the Proposal and Process of Obtaining Funding From the National Science Foundation, Faculty Council of Nursing, Occupational Therapy and Physical Therapy, University of Southern California, Los Angeles, California, May 1, 1995.

Bradley, N.S., Embryonic motility in chicks: kinematic and EMG analyses of embryonic movements *in ovo*, Department of Biomedical Engineering, University of Southern California, Los Angeles, California, March 10, 1993.

Bradley, N.S., Developmental Motor Control," Section on Pediatrics, American Physical Therapy Association Combined Sections Meeting, San Antonio, Texas, February 4, 1993.

Bradley, N.S., Postural requirements for limb action as rate limiting variables in kitten motor development, Eighth Engineering Foundation Conference, Biomechanics and Neural Control of Movement, Doubletree Hotel, Ventura, California, July 28, 1992.

Bradley, N.S., Ontogeny of coordinated movement; implications for rehabilitation science, Course REA-6002: Théories sensorimotrices en réadaptation, École de Réadaptation, Faculté de médecine, Université de Montréal, November 7, 1991.

Bradley, N.S., A developmental approach to treatment, but do we have a sound basis? Department of Biokinesiology and Physical Therapy, University of Southern California, Los Angeles, October 17, 1991.

Bradley, N.S., What are the principles of motor development? International Sven Jerring Symposium, Treatment of Children with Movement Disorders: Theory and Practice, Karolinska Hospital, Stockholm, Sweden, August 27, 1991.

Bradley, N.S., Reexamining traditional notions regarding early motor development: insight from studies in animal neurobiology, Ecole de réadaptation, Faculté de médecine, Université de Montréal, Montréal, April 3, 1991.

Bradley, N.S., The study of motor development in chick embryos, Seminaires de recherche groupe de neurocinetique, Departmente Kinanthropologie, Université de Quebec, Montréal, December 8, 1990.
Bradley, N.S., Early potential for coordinated movement and some factors contributing to and/or detracting from expression of this potential, Biology Department, Université de Montréal, Montréal, March 15, 1990.

Bradley, N.S., Rhythmical limb movements and what they may tell us about mechanisms underlying plasticity, Anatomy and Program in Neuroscience, State University of New York, Syracuse, May 17, 1989.

Bradley, N.S., Neuromuscular patterns of stereotypic limb movements. Department of Biology, SUNY Syracuse, New York, May 16, 1989

Bradley, N.S., Early presence of muscle synergies in the chick embryo, Kinesiology Department, University of California, Los Angeles, March 11, 1988.

Bradley, N.S., Emergence of hindlimb muscle synergies in kittens and chick embryos, EPO Biology, University of Colorado, Boulder, October 28, 1987.

Bradley, N.S., Emergence of rhythmical limb movements in kittens and chick embryos, Division of Physical Therapy, University of North Carolina, Chapel Hill, October 15, 1987.

Bradley, N.S., Emergence of rhythmical limb movements in kittens, Physical Therapy Department, Boston University, Boston, October 6, 1987.

Bradley, N.S., Development of rhythmical limb movements in kittens, Physical Therapy Department, Kansas University, Kansas City, September 10, 1987.

Bradley, N.S., Development of rhythmical limb movements in kittens, School of Physical and Occupational Therapy, McGill University, Montreal, May 21, 1987.

Bradley, N.S., The ontogeny of coordinated movement in the hind limbs of vertebrates, Physical Therapy Department, University of Southern California, Los Angeles, April 3, 1986.

III. Academic, Administrative & Service Activities

Committee Activities

Departmental:

2018- present. Research, Teaching and Practice (RTPC) Promotions Committee. Division of Biokinesiology & Physical Therapy

2018 – present. Administrator for DPT I Tutoring Program. Division of Biokinesiology & Physical Therapy

2018-2020. Full-time Faculty Merit Review Committee. Division of Biokinesiology & Physical Therapy

2018 - Tenure Review Committee, Division of Biokinesiology & Physical Therapy

2017 - 2019. Chair, Search Committee, Sykes Family Chair the Sykes Family Chair in Pediatric Physical Therapy, Pediatric Health and Development, Division of Biokinesiology & Physical Therapy

2015- 2018. Co-Chair, Curriculum Committee, USC Neuroscience Graduate Program

2015. Mid-tenure Review Committee, Division of Biokinesiology & Physical Therapy

2013-present. Director, DPT Student Mentoring Committee, Division of Biokinesiology & Physical Therapy

20012-2013. Search Committee, Anatomy position, Division of Biokinesiology & Physical Therapy

2008. Chair, 3rd-Year Pre-tenure Review, Division of Biokinesiology & Physical Therapy

2007-2009. Chair, Advisement Committee, Neuroscience Graduate Program

2007-2009. Executive & Steering Committee, Neuroscience Graduate Program

2006-2010. Admissions Committee, Programs in Biomedical and Biological Sciences

2006-2009. Editor, *In Motion*, Newsletter, Division of Biokinesiology & Physical Therapy

2006-2008. Executive Committee, Division of Biokinesiology & Physical Therapy

2006-2008. Merit Committee (Chair 2007/2008), Division of Biokinesiology & Physical Therapy

2005-2009. Curriculum Committee, Graduate Program in Neuroscience

2005-2006. Chair, Search Committee, Pediatrics Position, Department of Biokinesiology & Physical Therapy; candidate's dossier preparation for academic appointment

2004-present. DPT Admissions Committee, Doctor of Physical Therapy Program, Biokinesiology & Physical Therapy

2004-2008. Advisory Committee, Interdisciplinary Undergraduate Major in Neuroscience

2004-2008. Admissions Committee, Graduate Program in Neurosciences

2004-2005. Bill Trusten Award Committee (Department of Biology)

2003. Torrance Memorial Medical Center Scholarship Awards, Torrance, California

2000-2002. Culver City High School Career Day. Culver City, California.

2001. Divisional Committee for Tenure Review, Division of Independent Health Professions, University of Southern California

2001. Merit Review Committee, Department of Biokinesiology & Physical Therapy, University of Southern California

2001. Self-Study Committee, University Academic Review, Biokinesiology and Physical Therapy

2000. Tenure Review Committee, Division of Independent Health Professions, University of Southern California

1999-2000. Executive Committee, Department of Biokinesiology & Physical Therapy, University of Southern California

1998-1999. Chair, DPT Curriculum Review Committee, Department of Biokinesiology & Physical Therapy, University of Southern California

1996-1997. Chair, Advanced Studies Committee, Department of Biokinesiology & Physical Therapy, University of Southern California

1995-1998. Web master, Department of Biokinesiology & Physical Therapy, University of Southern California

1995-1996. Faculty Merit Committee, Department of Biokinesiology & Physical Therapy, University of Southern California

1995-1996. Co-chair, Advanced Studies Committee, Department of Biokinesiology & Physical Therapy, University of Southern California

1993-1998. Search Committee Chair, Department of Biokinesiology & Physical Therapy, University of Southern California

1993-1998. Departmental liaison to Francisco Bravo Medical Magnet High School, and Science Fair Judge, Department of Biokinesiology & Physical Therapy, University of Southern California

1993-1996. Chairman, Semester I Committee, Department of Biokinesiology & Physical Therapy, University of Southern California

1993-1995. DPT Planning Committee, Department of Biokinesiology & Physical Therapy

1992-2000. Admissions Committee, Department of Biokinesiology & Physical Therapy, University of Southern California

1992-2004. Semester I Committee, Department of Biokinesiology & Physical Therapy, University of Southern California

1989-1992. Graduate Committee, School of Physical and Occupational Therapy, McGill University, committee member

1988-1992. Search Committee (Chair 1990 to 1992), School of Physical and Occupational Therapy, McGill University, committee member

University:

2016-2019. University Academic Review Committee, University of Southern California

2008-2015. University Committee on Academic Policies and Procedures, University of Southern California

2006-present. Faculty member, Program in Biomedical and Biological Sciences (PIBBS), University of Southern California.

2005. Institutional Repository Focus Group, Norris Medical Library

2004-2008. Institutional Animal Care and Use Committee, University of Southern California

2004. University Research Committee and Zumberge proposal reviewer

2003-2004. Faculty Senate, University of Southern California

2002-2003. Development of the undergraduate major in Neuroscience Committee, College of Letters and Sciences, University of Southern California

2001-2002. Search Committee, Vice-President for Health Affairs Committee for Director of Norris Medical Library, University of Southern California

1998-2003. Division Committee for Pre-Tenure Review of Probationary Faculty,
Division of Independent Health Professions, University of Southern California

1997-present. Faculty member, Graduate Program in Neuroscience, University of Southern California

1997-2000. WEB Master, Medical Faculty Women's Association, University of Southern California

1997-1999. Chair, Membership Committee, Medical Faculty Women's Association, University of Southern California

1996-1997. Vice Provost's Research Council, University of Southern California

1995-1999. Member, Health Science Campus Web Team, University of Southern California

1995. Chair, MPT Research Colloquium, Department of Biokinesiology & Physical Therapy, University of Southern California

1994-1995. Program Committee, Medical Faculty Women's Association

1993-1999. Member of Medical Faculty Women's Association, University of Southern California

1993-1994. Building Committee for Tele-Communications and Computers, Allied Health Sciences, University of Southern California

1989-1991. Faculty Council, Faculty of Graduate Studies and Research, McGill University, council member

Regional, National, International:

2019

2016-2017. External Reviewer, Tenure and Promotions Committee, Department of Physical Therapy Seoul University, Seoul, South Korea.

2004. External Reviewer, Tenure and Promotions Committee, Department of Medical Allied Health Professions, School of Medicine, University of North Caroline, Chapel Hill

2002, 2003. External Reviewer for Promotions and Tenure Committee, University of Miami School of Medicine, Miami, Florida

2000. External Reviewer, Promotions and Tenure Committee, Physical Therapy, Faculty of Health Sciences, University of Western Ontario, Canada

1990. External Reviewer, Promotions and Tenure Committee, Division of Physical Therapy, Department of Medical Allied Health Professions, School of Medicine, University of North Carolina, Chapel Hill

1990. External Reviewer, Promotions and Tenure Committee, Department of Kinesiology, University of California, Los Angeles

1990. External Reviewer, Promotions and Tenure Committee, Department of Physical Therapy, Sargent College of Allied Health Professions, Boston University

1989. External Reviewer, Promotions and Tenure Committee, Department of Psychiatry and Behavioral Sciences, School of Medicine, University of California, Los Angeles.

1995-1997. USC Med-COR sponsor

Courses Developed & Taught

2020	Course Lecturer BKN 550: Neurobehavioral Basis of Movements Biokinesiology & Physical Therapy Ostrow School of Dentistry, University of Southern California
2019	Lab Instructor PT650: Integrated Patient Management Clinical Skills Biokinesiology & Physical Therapy Ostrow School of Dentistry, University of Southern California
2019	Lab Instructor PT 529: Life Span Motor Control Biokinesiology & Physical Therapy Ostrow School of Dentistry, University of Southern California
2015-2020	Course Lecturer NEUR 525: Advanced Overview of Neurosciences II Neuroscience Graduate Program University of Southern California
2013-present	Course Director BKN557L: Functional Neuroanatomy with Lab Dissection Biokinesiology & Physical Therapy Ostrow School of Dentistry, University of Southern California
2012	Course Director BKN599: Special Topics: Neuroanatomy Biokinesiology & Physical Therapy Ostrow School of Dentistry, University of Southern California
2010-present	Course Director PT534L: Neuroanatomy (3 units/graduate) Biokinesiology & Physical Therapy Ostrow School of Dentistry, University of Southern California
2008-2014	Course Instructor INTD 573: Systems Physiology and Disease II (4 units/graduate) Programs in Biomedical and Biological Sciences Keck School of Medicine, University of Southern California
2008	Course Lecturer NEUR 599: Neurobiology of Disease I (4 units/graduate), Neuroscience Graduate Program University of Southern California
2007-2009	Course Instructor

PT534L: Neuroanatomy (3 units/graduate)
Biokinesiology & Physical Therapy
Ostrow School of Dentistry, University of Southern California

2006-2009 Course Instructor
NEUR 524: Advanced Neuroscience (4 units/graduate),
Neuroscience Graduate Program
University of Southern California

2006-2017 Course Instructor
BKN 550: Neurobehavioral Basis of Movement (4 units/graduate)
Biokinesiology & Physical Therapy
Ostrow School of Dentistry, University of Southern California

2004-2007 Course Lecturer
IEB510A: Seminar on Evolutionary Biology (4 units/graduate)
Department of Biology
University of Southern California

2001-2003 Course Instructor
PT534L. Neuroanatomy (3 units/graduate)
Biokinesiology & Physical Therapy
Ostrow School of Dentistry, University of Southern California

2001 Course Lecturer
PSIO 695A: Motor Control Colloquium: Motor Learning,
Department of Physiology
School of Medicine
University of Arizona

2000-2005 Course Instructor, Course Coordinator (2002, 2003)
BISC 525/NEUR 525: Advanced Neurosciences II (4 units/graduate)
Program in Neuroscience
University of Southern California

1997 -1999 Course Director and Instructor
BKN 566: Neurobiology of Locomotion (4 units/graduate)
Department of Biokinesiology & Physical Therapy
University of Southern California

1997-2002 Course Instructor
PT681B/BKN610: Movement: From Molecules to Behavior (3 units/ graduate)
Department of Biokinesiology & Physical Therapy
University of Southern California

1997 Course Instructor
BKN 599: Neurobiology of Locomotion (3 units/graduate),
Department of Biokinesiology & Physical Therapy
University of Southern California

1995	Course Instructor BKN 599: Developmental Aspects of Motor Control in Skill Acquisition (4 units/graduate) Department of Biokinesiology & Physical Therapy University of Southern California
1994-2009	Course Instructor (Course Director 1997) PT531/PT569: Fundamentals of Neuroscience (4 units/graduate) Department of Biokinesiology & Physical Therapy University of Southern California
1992-2008	Course Director PT 515/PT529: Lifespan Motor Control (3 units/graduate) Department of Biokinesiology & Physical Therapy University of Southern California
1992-present	Course Instructor BKN 559: Readings in Biokinesiology (1-4 units/graduate) Department of Biokinesiology & Physical Therapy University of Southern California
1992-present	Course Instructor BKN 590: Directed Research (1-4 units/graduate) Department of Biokinesiology & Physical Therapy University of Southern California
1993-1995	Course Director BKN 576: Seminars in Biokinesiology (1 unit/graduate) Department of Biokinesiology & Physical Therapy University of Southern California
1991	Course Lecturer PHYT 380: Special Topics: Developmental and Control of Human Locomotion (1-2 units/graduate) Division of Physical Therapy University of North Carolina, Chapel Hill
1989-1992	Course Director 582-614A: Selected Topics in Rehabilitation Science (4 units/graduate), School of Physical and Occupational Therapy School of Medicine, McGill University
1988-1992	Course Director 582-403B: Pediatrics (3 units/undergraduate) School of Physical and Occupational Therapy School of Medicine, McGill University
1988-1992	Course Instructor 582-455B: Neurophysiology (4 units/undergraduate), School of Physical and Occupational Therapy School of Medicine, McGill University

1988-1992 Course Instructor
581-318B: Applied Neurology, Pediatrics Section (4 units/undergraduate)
School of Physical and Occupational Therapy
School of Medicine, McGill University

1988-1992 Course Instructor
582-608B: Neurophysiological Basis of Rehabilitation (4 units/graduate)
School of Physical and Occupational Therapy
School of Medicine, McGill University

1988-1992 Course Instructor
582-610B: Measurements in Rehabilitation (4 units/graduate)
School of Physical and Occupational Therapy
School of Medicine, McGill University

1988-1992 Course Instructor
582-614A: Selected Topics in Rehabilitation Science (4 units/graduate),
School of Physical and Occupational Therapy
School of Medicine, McGill University

1983-1984 Teaching Assistant
K.126: Neuromuscular Control (4 units/undergraduate)
Department of Kinesiology
University of California, Los Angeles

Student Mentoring

Postdoctoral Fellows

2007-2009 Young U. Ryu, Ph.D., University of Southern California

MS & PhD Students

2020- Present Marcelo Rosales, PhD Student
Dissertation Committee member
Biokinesiology & Physical Therapy
University of Southern California

2017 – 2020 Artemis Zavaliangos-Petropulu, PhD student
Chair of examination and Dissertation Committee member
Neuroscience Graduate Program
University of Southern California

2017 – 2019 Rita Barakat, PhD student
Dissertation Committee - external member
Neuroscience Graduate Program
University of Southern California

2017 – 2020 Alexandra Donovan, PhD student
Dissertation Committee - external member

Neuroscience Graduate Program
University of Southern California

2017 – 2020 Nicole Marcioni, PhD student
Dissertation Committee member
Biokinesiology & Physical Therapy
University of Southern California

2017 Daniel Rinker PhD student
Dissertation Committee - external member
Neuroscience Graduate Program
University of Southern California

2017 – 2020 Jeongah Kim, PhD student
Dissertation Committee member
Biokinesiology & Physical Therapy
University of Southern California

2017 – Present Jonathan Lee, PhD student
Dissertation Committee member
Biokinesiology & Physical Therapy
University of Southern California

2016 – 2018 Ivan Trujillo-Priego, PhD student
Dissertation Co-advisor
Biokinesiology & Physical Therapy
University of Southern California

2014-2017 Katherine Wallin, PhD Student
Neuroscience
Dissertation Committee member
University of Southern California

2014-2015 Zhixin Zhang, MS student
Biokinesiology & Physical Therapy
University of Southern California

2012-2014 Yi Yu, MS student
Biokinesiology & Physical Therapy
University of Southern California

2011-2013 Lindsay Anderson, PhD student
Qualifying Exam Committee member
Biokinesiology
University of Southern California

2011-2114 Sarah Vargas, PhD student
Systems Biology & Disease
Dissertation Committee Member
University of Southern California

2010-2016 Soo Yeon Sun, MS, PhD student
Biokinesiology & Physical Therapy
Sponsor and Chair of Dissertation Committee
University of Southern California

2009-2014	Barbara Sargent, PhD student Biokinesiology & Physical Therapy Dissertation Committee Member University of Southern California
2008-2012	Cornelius Rath, PhD student Neuroscience Graduate Program Dissertation Committee Member University of Southern California
2008-2010	Jingying Xu, PhD student Neuroscience Graduate Program Dissertation Committee Member University of Southern California
2007-2012	Anil Sindurakar, PhD student Systems Biology & Disease Sponsor and Chair of Dissertation Committee University of Southern California
2006-2010	James Bonaiuto, PhD student Neuroscience Graduate Program Dissertation Committee Member University of Southern California
2006-2007	John Lin, M.S. student Biomedical Engineering Research sponsor University of Southern California
2005-2006	Neha Kulkarni, M.S. student Biokinesiology & Physical Therapy Advisor University of Southern California
2004-2006	Susan Matthews, Ph.D. student Cell & Neurobiology Research Sponsor University of Southern California
2002-2004	Dhara Solanki, M.S. student Department of Biokinesiology & Physical Therapy University of Southern California
2002-2004	Michael A. Nili, Program in Neuroscience Dissertation Committee Member University of Southern California.

2000-2002 Ehhan Oztop, Ph D student
Neuroscience Graduate Program
Dissertation Committee Member
University of Southern California

2001-2002 Anne Sperling, PhD student
Neuroscience Graduate Program
Dissertation Committee Member
University of Southern California

1999-2001 Pan Onla-Or, PhD student
Biokinesiology
Dissertation Committee Member
University of Southern California

1997-1999 Kathleen Ganley, Ph.D. student
Department of Biokinesiology & Physical Therapy
Research sponsor
University of Southern California

1997-1998 Dorian Rose, Ph.D. student
Biokinesiology & Physical Therapy
University of Southern California

1997-2000 Beth Fisher, PhD student
Biokinesiology
Dissertation Committee Member
University of Southern California

1996-1998 Kathleen Sullivan, PhD student
Biokinesiology
Dissertation Committee Member
University of Southern California

1995-1997 Afrooz Afghani, Ph.D. student
Biokinesiology & Physical Therapy
Research sponsor
University of Southern California

1994-1996 Jody McCormick, M.S. student
Biokinesiology
Dissertation Committee Member
University of Southern California

1993-1995 Patricia Pohl, M.S. student
Biokinesiology
Dissertation Committee Member
University of Southern California

1993 Bruce Blomeyer, M.S. student
Biomedical Engineering
Research sponsor
University of Southern California

1993-1995 Fernando Villar, Ph D student
Biokinesiology
Dissertation Committee Member
University of Southern California

1992-1995 Suzanne Herman, P.T., M.S. student
Biokinesiology & Physical Therapy
Thesis advisor
University of Southern California

1990-1994 Sandra H. Chambers P.T., M.Sc. student
Rehabilitation Science
School of Physical and Occupational Therapy
McGill University

1988-1989 Lucy Pelland, Ph.D. student
Rehabilitation Science
Dissertation Committee Member
McGill University

1988-1989 Connie Chau, Ph.D. student
Rehabilitation Science
Dissertation Committee Member
McGill University

1988 Maureen Marcenko, PhD student
Social Work
Dissertation Committee Member
McGill University

DPT Students (Research)

2009- 2011 Patricia Armentrout
Jonathan Lu
Brittney Wheeler
Marie Yeseta
Biokinesiology & Physical Therapy
University of Southern California

2008 – 2010 Termeh Toufanian
Biokinesiology & Physical Therapy
University of Southern California

2007-2008 Shon Carney
Hilary Genise
Victoria Hayes
Kristen Kimoto,
Biokinesiology & Physical Therapy
University of Southern California

2005-2007 Rebecca Farley
Hilary Genise
Bryan Strople
Ann VerSteeg
Biokinesiology & Physical Therapy
University of Southern California

2003-2004 Trisha Sando
The Effects of Elevated Serotonergic Neurotransmission on the Development of Ingestive and Locomotor Behavior in the Mouse
Biokinesiology & Physical Therapy
University of Southern California

2003-2004 Heather Schumacher
Biokinesiology & Physical Therapy
University of Southern California

2002-2004 Dawn Zhao
Biokinesiology & Physical Therapy
University of Southern California

2001-2003 Dongwon Jahng
Biokinesiology & Physical Therapy
University of Southern California

1997-2000 Chris Sebelski
Biokinesiology & Physical Therapy
University of Southern California

MPT Student Research Projects

1995-1996 Danielle Han, Carolyn Kostic, Daniel Park
Transitions in embryonic motility: A comparison of E9 and E12 kinematic patterns
Biokinesiology & Physical Therapy
University of Southern California

1994-1995 Elana Bear, Carolyn Howard, Jennifer Richards, Julie Wookdrik.
A kinematic analysis of embryonic chick motility at E9: The effects of reduced buoyancy on spontaneous motility
Department of Biokinesiology & Physical Therapy
University of Southern California

1993-1994 Andrea Chiocetti, Jennifer Gleim and Janene Izatt
Kinematic analysis of the chick embryo at E12: The effects of chronic tactile and proprioceptive stimuli on spontaneous motility patterns
Department of Biokinesiology & Physical Therapy
University of Southern California

MPT Student Research Proposals

1995-1996 Gary Konecne, Rita Lumeng, Barry Shafer, Melanie Weller
Effects of sports training (soccer) on postural synergies in 4 to 6 year-old children
Biokinesiology & Physical Therapy
University of Southern California

1995-1996 Robin Breznock
Effects of conditioning on prevention of falls in the elderly
Biokinesiology & Physical Therapy
University of Southern California

1993-1995 Jennifer Chia, Paula Nakamura, Lucinda Weaver, Katie Wong
Infant Hands: Visual and tactual contribution to pre-grasp strategy
Biokinesiology & Physical Therapy
University of Southern California

Undergraduate Students (Research)

2012-2014 Margaux Johnson, Neuroscience
Genesee Villalta, Neuroscience

2011-2013 Jay Porterfield, Biomedical Engineering
Kelly Thompson, Neuroscience
University of Southern California

2011-2012 Iyesha Robinson, Health Promotions
University of Southern California

2009-2012 Bonnie Chen, Neuroscience, Global Health
University of Southern California

2009 Reshmitha Radhakrishnan, Biology
Cornell University

2003 Arami Kim, Psychobiology
University of Southern California

2000-2001 Maynell Dora, Mcnair Scholar, Biology
University of Southern California

1996-1997 Jeffrey Fairley, NSF REU Award, Exercise Science
University of Southern California

1990-1991 Sonali Bera, Faculty of Medicine Student Summer Bursary Award, Physical Therapy, McGill University

HIGH SCHOOL STUDENTS SPONSORED

2002-2004 Joanne Siu, Alhambra High School Biology Program
Southern California Academy of Sciences Research Training Program

1996 Edgar Gonzales, University of Southern California Medcore Program

1995 Leisa McKenzie, University of Southern California Medcore Program

ACTIVITIES IN PROFESSIONAL ORGANIZATIONS

2013 Summer Research Teacher Sponsor, Explorations in Biomedicine, American Physiological Society program for Elementary to High School Science Teachers, Lorenita Holloway (Compton, California).

2000. Summer Research Teacher Sponsor, Explorations in Biomedicine, American Physiological Society program for Elementary to High School Science Teachers, Kaye Simons (Frazer, Montana).

1999-2000. Chair, Awards Committee, Neurology Section, American Physical Therapy Association

1999. Explorations in Biomedical Science Teacher and Faculty Summer Research Program, American Physiological Society, Sponsored Kaye Simons, science teacher, Frazer Montana (2 Indian Reservations).

1993-1994. Consultant to Child Development Clinic, UCLA Outpatient Clinics

1997-2000. Awards Committee, Neurology Section, American Physical Therapy Association

1990 -1992. National Examination Committee, Canadian Alliance of Physiotherapy Regulatory Boards, committee member.

1990 – 1992. Search Committee, Rehabilitation Department, Montreal Children's Hospital, committee member.

REFEREE FOR PROFESSIONAL JOURNALS

Behavioral Brain Research
Brain Research
Brain Research Bulletin
Child Development
Developmental Psychobiology
Journal of Applied Physiology
Journal of Motor Behavior
Journal of Neurophysiology
Journal of Neuroscience Methods
Journal of Photobiology
Journal of Physiology (London)
Journal of the Royal Society Interface
Journal of Theoretical Biology
Motor Control
Neuroscience
Pharmacology Biochemistry and Behavior
Physiology & Behavior
Physical Therapy
Physiotherapy Canada
Transactions of the American Society of Agricultural and Biological Engineers, Journal of Agricultural Safety and Health, and Biological Engineering Transactions

GRANTS REVIEWED FOR FUNDING AGENCIES

National Science Foundation, Program for Behavioral Neuroscience
National Science Foundation, Program for Neural Mechanisms of Behavior
National Science Foundation, Neural Systems Activation Program
Southern California Clinical and Translational Science Institute, Grant Review Panels: Technology, Innovation, Clinical Science