Diana K. Sarko, Ph.D.
Vanderbilt University
Department of Hearing & Speech Sciences
465 21st Avenue South
Nashville, TN 37232

April 1, 2012

David Sheinberg, Ph.D.
Search Committee Chair
Department of Neuroscience
Brown University
Providence, RI
02912

Dear Search Committee:

I would like to be considered for the position of Assistant Professor in the Department of Neuroscience at Brown University. It is my hope and belief that my teaching experience, together with my extensive coursework in neuroscience and neuroanatomy as well as my research interests, make me well-suited to fulfill the roles of this position.

While reviewing my attached CV, Research Statement, representative publications, and Teaching Statement please also note my previous experience in teaching both undergraduate and graduate coursework in Neuroanatomy, Sensory Systems, and Embryology, both at the University of Florida and at Vanderbilt University. In addition, I have enjoyed the opportunity to mentor undergraduate and graduate students in technical skills, data analysis, and research projects.

My research interests involve understanding sensory processing in specialized mammalian systems using a broad spectrum of techniques including electrophysiology, behavioral analyses, histology, immunolabeling, and electron microscopy. My present focus is on the neural mechanisms underlying multisensory processing of audiovisual stimuli; perceptual enhancements resulting from effective multisensory integration; and deficits due to ineffective multisensory processing. This work utilizes a combined approach of neurophysiological and perceptual testing that links multisensory neural integration to perceptual gain and offers translational implications for neurological disorders involving ineffective multisensory integration such as autism, dyslexia, and schizophrenia. In addition to my research interests, I have a strong record of securing both intramural and extramural funding. With respect to the computational focus of the position within your department, my most recent studies involving analyses of response variability and reliability with respect to multisensory information encoding might be most germane (within my CV, please particularly note the first 5 abstracts, as well as the first 3 Manuscripts Submitted or in Preparation). Current extensions of my research further involve the use of multielectrode arrays and cross-correlation analyses to assess multisensory interactions.

Thank you for considering me for the position, and please feel free to contact me if you would like any further information.

Sincerely,

Diana Sarko

Diana K. Sarko, Ph.D.
Postdoctoral Fellow
Department of Hearing & Speech Sciences
Vanderbilt University

VANDERBILT UNIVERSITY, DEPT. OF HEARING & SPEECH SCIENCES
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DIANA K. SARKO

DEGREES

Fall, 2002 - Dec. 2006 University of Florida Gainesville, Florida
Ph.D., Neuroscience

Fall, 1999- May, 2002 Emory University Atlanta, Georgia
B.S., Neuroscience and Behavioral Biology, magna cum laude

RESEARCH EXPERIENCE

Jan., 2010-present Position: Postdoctoral fellow, Vanderbilt University
Mentor: Dr. Mark T. Wallace, Ph.D.
Research: Single-unit electrophysiological recordings of multisensory processing of complex audiovisual stimuli in awake cats

Feb., 2007-Jan., 2010 Position: Postdoctoral fellow, Vanderbilt University
Mentor: Dr. Kenneth C. Catania, Ph.D.
Research: Multiunit electrophysiological recordings in unusual rodent species to assess somatosensory specializations

Fall, 2002 - Dec. 2006 Position: Ph.D. candidate, University of Florida
Mentor: Dr. Roger L. Reep, Ph.D.
Research: Histological and immunolabeling analyses of somatosensory regions and vibrissae, respectively, associated with the specialized tactile system of the Florida manatee

Fall, 1999- May, 2002 Position: Undergraduate, Emory University
Mentor: Lori Marino, Ph.D.
Research: Behavioral analyses of mirror self-recognition behavior in bottlenose dolphins

TEACHING EXPERIENCE

2010-2012 Lecturer on single-unit electrophysiological methods for Vanderbilt University graduate course, "Electrophysiology for Biologists" – class sessions involving lecture, paper discussion, and laboratory recording

demonstration

2010 Lecturer on Multisensory Processing for Vanderbilt University graduate course, Systems Neuroscience

2009 Lecturer on "Specialized Senses" and "Star-nosed Moles" for Vanderbilt University undergraduate course, Animal Behavior

2007-2011 Brain Blast at the Adventure Science Center (part of brain awareness month education outreach at Vanderbilt University) - Presentation of naked mole-rat behavioral, physiological, and sensory specializations; hands-on demonstrations involving multisensory plasticity

2006 "Comparative Neurobiology – Where's the Brainpower?" lecture on research and comparative neuroanatomy, Palm Beach Day School grades 1-9

2003-2005 Visit to Jacksonville Middle School – lectures to 5th graders on comparative neurobiology

2004-2005 Teaching Assistant in Embryology at the University of Florida for graduate students of the College of Veterinary Medicine (lectures on case studies: hydrocephalus, cerebellar hypoplasia)

2003-2004 Teaching Assistant in Neuroanatomy at the University of Florida for graduate students of the College of Veterinary Medicine

REVIEWER OF MANUSCRIPTS FOR

Annals of the New York Academy of Sciences – Ad hoc reviewer

Brain, Behavior & Evolution – Ad hoc reviewer

Neuroscience – Ad hoc reviewer

Anatomical Record – Ad hoc reviewer

FUNDING, AWARDS & HONORS RECEIVED

2010-present Departmental representative for Hearing & Speech Sciences, Vanderbilt University Postdoctoral Association (PDA)

2010 Awarded, but declined, an F32 Ruth L. Kirschstein National Research Service Award (NRSA) Fellowship (grant# 1F32DE019993) from the National Institute of Dental and Craniofacial Research (NIDCR); entitled "The Neural Circuitry of Tooth Sensation;" score of 18 (scale of 10-90)

2002-2006 Alumni fellowship, University of Florida (4 year full tuition & stipend award)

2005-2006 Major seed grant recipient for the College of Veterinary Medicine Fall Consolidated Faculty Research Development Award Grant

Competition, (project title, "Hyrax Functional Anatomy as a Window into Mammalian Evolution")

2004-2006 Student Board Member of the Save the Manatee Club – development of the Campus Conservation Advisory and Advocacy Committee

2002-2006 Department of Neuroscience Travel Award, University of Florida

2002-2005 Grinter fellowship, University of Florida (3 year supplementary award)

2005 "Excellence in Science" award recipient from AAAS

2002-2005 University of Florida Graduate Student Council Travel Award

2004, 2006 South East Nerve Net (SENN) Travel Award with support from NIH and Georgia State University

REFEREED PUBLICATIONS

Sarko DK, Rice FL, Reep RL. 2011. Mammalian tactile hair: divergence from a limited distribution. Annals of the NYAS. 1225(1):90-100.

Reep RL, Gaspard JC III, **Sarko DK**, Rice FL, Mann DA, Bauer GB. 2011. The manatee "lateral line." Annals of the NYAS. 1225(1):101-9.

Leitch DB, Gauthier D, **Sarko DK**, Catania KC. 2011. Chemoarchitecture of Layer 4 Isocortex in the American Water Shrew (Sorex palustris). Brain Behav Evol, 78(4):261-71.

Marzban H, Hoy N, Aavani T, **Sarko DK**, Catania KC, Hawkes R. 2011. Compartmentation in the cerebellar cortex of the naked mole-rat (*Heterocephalus glaber*). Cerebellum. 10(3):435-48.

Sarko DK, Leitch DB, Girard I, Sikes RS, Catania KC. 2010. Organization of somatosensory cortex in the northern grasshopper mouse (*Onychomys leucogaster*), a predatory rodent. J Comp Neurol. 519(1): 64-74.

Sarko DK, Domning DP, Marino L, Reep RL. 2010. Estimating body size of fossil sirenians. Marine Mammal Science. 26(4): 937-959.

Sarko DK, Catania KC, Leitch DB, Kaas JH, Herculano-Houzel S. 2009. Cellular scaling rules of insectivore brains. Front Neuroanat. 3:8.

Henry EC, **Sarko DK**, Catania KC. 2008. Central projections of trigeminal afferents innervating the face in naked mole-rats (*Heterocephalus glaber*). Anat Rec 291(8):988-998.

Reep RL, **Sarko DK**. 2008. http://www.scholarpedia.org/article/Tactile_hair_in_Manatees

Marshall CD, Vaughn SD, **Sarko DK**, Reep RL. 2007. Tophographical organization of the facial motor nucleus in Florida manatees (*Trichechus manatus latirostris*). Brain Behav Evol, 70(3): 164-173.

Sarko DK, Johnson JI, Switzer RC, Welker WI, Reep RL. 2007. Somatosensory nuclei of the manatee brainstem and thalamus. Anat Rec, 290(9):1138-1165.

Sarko DK, Reep RL. 2007. Somatosensory areas of manatee cerebral cortex: histochemical characterization and functional implications. Brain Behav Evol, 69(1): 20-36.

Sarko DK, Reep RL, Mazurkiewicz JE, Rice FL. 2007. Adaptations in the structure and innervation of follcle-sinus complexes to an aquatic environment as seen in the Florida manatee. J Comp Neurol, 504(3):217-237.

Marino L, Sudheimer K, **Sarko D,** Sirpenski G, Johnson J. 2003. Neuroanatomy of the harbor porpoise (*Phocoena phocoena*) from magnetic resonance images. J Morph 257:308-347.

Sarko D, Marino L, Reiss D. 2002. A bottlenose dolphin's (*Tursiops truncatus*) responses to its mirror image: Further analysis. IJCP 15(1):69-76.

MANUSCRIPTS SUBMITTED OR IN PREPARATION

Sarko DK, Ghose D, Wallace MT. (submitted to J Neurosci) Developmental plasticity of multisensory circuitry: how early experience dictates cross-modal interactions.

Sarko DK, Ghose D, Wallace MT. (in preparation, intended for Trends in Cog Sci) Novel techniques for analysis of multisensory integration.

Ghose D, **Sarko DK**, Barnett ZP, Wallace MT. (in preparation, intended for J Neurophys) The role of temporal coding and response variability in multisensory integration.

Sarko DK, Leitch DB, Catania KC. (in preparation, intended for Anatomical Record). Cutaneous inputs to the cerebellum of the naked mole-rat (*Heterocephalus glaber*): the neural circuitry of dentition.

Sarko DK, Rice FL, Reep RL. (in preparation; intended for Journal of Comparative Neurology) Rock hyrax (*Procavia capensis*) postfacial body vibrissae.

Reep RL, **Sarko DK**, Welker WI, Johnson JI, Marshall CD, Switzer RC. (in preparation; intended for BioMed Central Neuroscience) The brain of the Florida manatee (*Trichechus manatus*): external morphology and nuclear architecture in relation to behavior.

Sarko DK, Bedenbaugh PH, Roth HL. (accepted by Transactions on Audio, Speech and Language Processing). Prosody – Preserving voice transformation to evaluate brain representations of speech sounds.

BOOK CHAPTERS

Sarko DK, Nidiffer AR, Powers AR III, Ghose D, Fister MC, Hillock A, Krueger J, Wallace MT. (accepted) Spatiotemporal receptive fields and their impact on multisensory interactions. In: Frontiers in the Neural Bases of Multisensory Processes. (Eds. Murray MM and Wallace MT), Taylor and Francis, Oxford.

Reep RL, **Sarko DK.** 2006. Somatosensory specializations in the nervous systems of manatees. In: Evolution of Nervous Systems (Ed. Kaas J), vol. 3, 207-214. Elsevier, Oxford.

ABSTRACTS

Sarko DK, Nidiffer AR, Wallace MT. 2012. The nature of multisensory integration is related to changes in neuronal response reliability in awake animals. Vanderbilt Annual Postdoctoral Research & Shared Resources Symposium Abstract. May 2, 2012.

Sarko DK, Nidiffer AR, Wallace MT. 2012. The nature of multisensory integration is related to changes in neuronal response reliability in awake animals. Vanderbilt Bill Wilkerson Center Symposium Abstract. April 2, 2012.

Sarko DK, Fister MC, Ghose D, Wallace MT. 2011. Changes in neuronal response variability of cortical multisensory processing following visual deprivation. Soc Neurosci Abstr. 481.10.

Ghose D, **Sarko DK**, Wallace MT. 2011. Response variability and its role in multisensory processing. Soc Neurosci Abstr. 481.08.

Reep RL, **Sarko DK**, Johnson JI, Gaspard JC, Mann DA, Bauer GB. 2011. Auditory architecture in the manatee brain. Soc Neurosci Abstr. 734.08.

Sarko DK, Ghose D, Wallace MT. 2011. Changes in Response Variability According to Degree of Multisensory Interaction. International Multisensory Research Forum (IMRF) Abstract.

Krueger J, **Sarko DK,** Hackett TA, Wallace MT. 2011. Differential multisensory connectivity of the anterior ectosylvian sulcus to insula and auditory cortex. International Multisensory Research Forum (IMRF) Abstract.

Sarko DK, Ghose D, Wallace MT. Utility of reliability measures in multisensory information encoding. Vanderbilt Annual Postdoctoral Research & Shared Resources Symposium Abstract. April 26, 2011.

Sarko DK, Ghose D, Wallace MT. Reliability measures in multisensory information encoding. Vanderbilt Bill Wilkerson Center Symposium Abstract. March 23, 2011.

Sarko DK, Rice FL, Reep RL. 2010. Somatosensory specializations of the rock hyrax (*Procavia capensis*). New Studies of Neurobehavioral Evolution Abstr.

Reep RL, **Sarko DK**, Gaspard JC III, Mann DA, Bauer GB. 2010. The manatee lateral line. New Studies of Neurobehavioral Evolution Abstr.

Sarko DK, Leitch DB, Catania KC. 2009. Cutaneous inputs to the cerebellum of the naked mole-rat (Heterocephalus glaber): the neural circuitry of dentition. Soc Neurosci Abstr. 83.18.

Leitch DB, **Sarko DK**, Catania KC. 2009. Primary sensory areas in the neocortex of the grasshopper mouse (*Onychomys leucogaster*). Soc Neurosci Abstr. 83.22.

Reep RL, **Sarko DK**. 2009. The neural basis for tactile hair sensation in manatees. International Sirenian Conservation Conference Abstr.

Leitch DB, **Sarko DK**, Catania KC. 2008. Cortical organization and sensory pathways in the water shrew. Soc Neurosci Abstr. 78.10.

Reep RL, **Sarko DK**, Rice FL. 2007. Rock hyraxes (*Procavia capensis*) possess vibrissae over their entire postfacial body. Soc Neurosci Abstr. 830.7.

Sarko DK, Collins CE, Herculano-Houzel S, Kaas JH, Catania KC. 2007. The smokey shrew brain contains more cells than predicted by size scaling alone. Soc Neurosci Abstr. 193.1.

Sarko DK, Rice FL, Reep RL. 2006. Immunofluorescence analysis of sensory innervation of manatee follicle sinus complexes. Soc Neurosci Abstr 149.5.

Bauer GB, Gaspard JC, Colbert DE, Leach JB, Stamper SA, **Sarko DK,** Hammelman JD, Schmieg A, Mann D, Reep RL. 2005. Tactile discrimination by Florida manatees, *Trichechus manatus latirostris*. Society for Marine Mammalogy Abstract.

Sarko DK, Reep RL. 2005. Differential cytochrome oxidase staining between neonatal and juvenile manatee cerebral cortex reveals uniquely organized somatosensory areas. Soc Neurosci Abstr 182.16.

Sarko DK., Reep RL. 2005. Delineation of cortical primary sensory areas of the Florida manatee. Brain Behav Evol – JBJC Abstract.

Bedenbaugh P, Martin E, **Sarko D.** 2004. Segmented representation of speech in the auditory thalamus. Southeast Nerve Net Abstract.

Sarko DK, Reep RL. 2004. Cytochrome oxidase staining reveals topographical organization of manatee cerebral cortex. Soc Neurosci Abstr

44.21.

Sarko DK, Reep RL. 2004. Functional localization in manatee cerebral cortex as revealed by cytochrome oxidase. Southeast Nerve Net Abstract.

Sarko DK, Reep RL. 2003. Functional localization in manatee cerebral cortex as revealed by cytochrome oxidase. Soc Neurosci Abstr 596.20.

Sarko D, Roth H., Bedenbaugh P. 2003. Decoding emotional prosody requires fine acoustic frequency resolution. Association for Research in Otolaryngology Meeting Abstract.

Sarko DK, Marino L, Sudheimer K, Johnson JI, Serpenski G. 2002. Neuroanatomy of the harbor porpoise (*Phocoena phocoena*) from magnetic resonance images. Soc Neurosci Abstr 877.11.

SELECTED CAREER DEVELOPMENT WORKSHOPS ATTENDED

Women on Track program at Vanderbilt University, special lecture by Dr. Stephan Heckers, "What is a good publication record?" Sept. 15, 2010

Career Opportunities in the Biomedical and Biological Sciences Symposium held at Vanderbilt University; July 27-28, 2010

Transitioning to Faculty, Part II: Achieving tenure: Myth, reality, and strategy; lecture given by Dr. Maureen Gannon at Vanderbilt University, April 27, 2010

Transitioning to Faculty, Part I: Setting up a laboratory; lecture given by Dr. Maureen Gannon at Vanderbilt University, March 24, 2010

Engaging Students in Large Lecture Classes, lecture given by Derek Bruff, Assistant Director of the Center for Teaching at Vanderbilt University, February 17, 2010

Responsible Conduct in Research course offered by the Biomedical Research Education and Training (BRET) office, Vanderbilt, May 11, 2009

Reference Contact Information

Diana K. Sarko, Ph.D.

Mark. T. Wallace, Ph.D. - postdoctoral advisor
Vanderbilt University, Professor of Hearing & Speech Sciences, Professor of Psychiatry, Professor of Psychology; Director of the Vanderbilt Brain Institute (VBI)
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Roger L. Reep, Ph.D. – graduate school advisor
University of Florida, Professor of Physiological Sciences
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Research Statement

Diana K. Sarko, Ph.D.

My enthusiasm for neurobiology, sensory systems and perception developed in the laboratory of Dr. Roger Reep (Dept. of Physiological Sciences, University of Florida). My graduate research involved a neuroanatomical focus, creating the first brain atlas of the brainstem and thalamus of the Florida manatee - an endangered marine mammal with unique somatosensory adaptations to an aquatic niche – as well as delineating and analyzing the principal somatosensory areas. I also performed a detailed histological analysis of primary sensory areas in the Florida manatee neocortex. Finally, I used functional immunolabeling to characterize the sensory innervation and mechanoreceptors present in the tactile hairs that cover the manatee body and face, a study that revealed two novel types of mechanoreceptors that were previously undiscovered and are thought to be adaptations optimized for detection of underwater stimuli.

I subsequently accepted a postdoctoral position with Dr. Ken Catania (Dept. of Biological Sciences, Vanderbilt University) that allowed me to examine the somatosensory systems of small mammals (insectivores, grasshopper mice, and naked mole-rats) using a comparative neurobiological approach as well as a focus on electrophysiology, plasticity, evolutionary adaptations, behavior, and perception. This research resulted in the funding of an F32 NRSA award; 5 peer-reviewed publications (with 1 additional publication in preparation) including studies that I initiated with international collaborators (Dr. Richard Hawkes and Dr. Suzana Herculano-Houzel); and new collaborations with 2 additional researchers (Dr. Robert Sikes and Dr. Isabelle Girard). However, I found a unisensory focus to be too limited in scope when addressing larger questions such as: what are the mechanisms by which environmental stimuli can be accurately perceived? How do sensory stimuli allow us to navigate our surroundings? 3) How does integration of multiple sensory modalities provide a more reliable percept of environmental stimuli (facilitating detection, identification, and categorization of objects and events)? And finally, what happens in the case of ineffective processing of sensory stimuli from multiple modalities?

I therefore accepted a second postdoctoral position in the laboratory of Dr. Mark Wallace in the Department of Hearing & Speech Sciences at Vanderbilt University. My current research combines my expertise in sensory systems, neurobiology, neuroethology, plasticity, and perception with my interest in elucidating the cortical mechanisms of integrating information from multiple sensory modalities. Although multisensory studies have traditionally relied on simple stimuli (LEDs and white noise), I am currently introducing the use of complex, moving, environmentally relevant stimuli (e.g., videos of moving prey that provide concurrent auditory and visual stimuli) to

record responses from multisensory neurons in the neocortex of awake cats during single-unit electrophysiological recordings. Since merging information from multiple senses provides a more reliable percept of the environment, the use of naturalistic stimuli should more precisely and accurately address the perceptual and integrative roles of multisensory neurons in the neocortex. Furthermore, I have begun to extend the laboratory's electrophysiological studies from the use of single electrodes to multielectrode array recordings. This technique – increasingly used in unisensory analyses but slow to be adopted by the multisensory community – will allow me to look at measures of correlated activity and neural synchrony, and bridge to more network-based analyses of multisensory processing. My future experiments will assess the behavioral gains (speeded and accuracy of responses) coincident with multisensory enhancements (recorded through multielectrode arrays) through a series of discrimination tasks. Performing these experiments will help to significantly advance the multisensory field, shedding important light on the neural mechanisms of cortical multisensory processing. Most importantly, this will provide an essential foundation for understanding how multisensory interactions contribute to an overall perceptual gestalt, as well as how alterations in these processes might contribute to a range of clinical conditions – including autism spectrum disorder, schizophrenia, dyslexia, and attention deficit hyperactivity disorder – affecting a large percentage of the population.

My future studies will also involve awake recordings including environmental manipulations (e.g., dark-reared animals, spatial-disparity-reared-animals, temporal disparity-reared animals), trimodal stimulus presentations, and examination of multisensory processing in mammals with particular sensory specializations in order to examine the possible range of specializations in multisensory processing, as has been shown in unisensory processing. My extensive background in comparative neurobiology and sensory processing combined with my cumulative expertise in a broad spectrum of experimental techniques provides me with a unique perspective for my multisensory investigations and will instruct creative approaches to my future studies as an independent researcher.

Statement of Teaching Philosophy

Diana K. Sarko, Ph.D.

Having had both my mother and father for teachers during middle school (in math and science, respectively), I grew up with a strong sense of the importance of communicating new concepts to students in a way that would be thought-provoking and would stimulate interest in the subject matter. Absorbing my parents' lessons on how to deliver one's message effectively, I entered graduate school to pursue a Ph.D. in neuroscience at the University of Florida. There I had the opportunity to serve as a teaching assistant in the graduate courses of neuroanatomy as well as embryology through the College of Veterinary Medicine. The neuroanatomy course offered me the extremely rewarding opportunity to interact with students on an individual basis and to guide them in understanding how to localize different neuroanatomical structures and relate each to the functional pathways enumerated during lectures. The embryology course followed a similar format, with a focus on individual guidance as the students navigated through slides of chick and pig embryos sectioned at different stages of development. During the embryology course I also had the opportunity to serve as lecturer, bridging the concepts heard in lecture and seen somewhat esoterically on slides by introducing the students to clinically relevant cases such as hydrocephalus and cerebellar hypoplasia. These lectures proved critical to the students' understanding and to their interest in the course material, as the structures visible on slide preparations manifested as real-world relevance that might be encountered in the clinical setting.

I have found that my pedagogical style must be flexible enough to accommodate both the knowledge base of the students and the particular goals of the course. For instance, in contrast to the above approach for professional students that effectively combined lectures on course material with practical laboratory experience and clinical case reports, I have also served as a guest lecturer for undergraduate students of an Animal Behavior course at Vanderbilt. There I recognized that it was necessary to provide a solid but introductory foundation for understanding specialized sensory systems, perception, and behavior in species adapted to particular environmental niches. These lectures introduced scientific terminology to undergraduates while encouraging critical thinking and group discussions, emphasizing class involvement and communication with peers. Each student was also given an assignment to submit a question following the lecture, and these questions were graded by teaching assistants for insight into the material explored during class.

This approach also necessarily differs from that used for early level graduate courses. I have served as lecturer for two such courses at Vanderbilt, "Electrophysiology for Biologists" and "Systems Neuroscience." In the former, methodological and technical concerns were the focus. Therefore, I first introduced the

key concepts of single-unit electrophysiology and compared this technique to other methods already familiar to the students. This was followed by a lecture period dedicated to paper discussion for which I chose two critical journal articles (one classic and one more modern in its use of the technique) and tasked the students with explaining the experimental design along with each figure representing the results, conclusions, and importance of the work. Finally, a lecture period dedicated to laboratory demonstration solidified the core concepts of single-unit electrophysiological recordings by allowing the students to see an electrode, experience the sound of a neuron firing, and actually see the waveform of a stimulus-driven multisensory neuronal response. This proved to be an extremely effective teaching strategy for instructing the students about both the possibilities and limitations of single-unit electrophysiology as one of many experimental techniques in the methodological "toolbox." In contrast, the Systems Neuroscience course was designed to provide graduate students with a thorough understanding of sensory processing. Within this context, my lecture covered multisensory processing in both animal models and human psychophysical experiments, including assessments of relevant, intriguing clinical conditions associated with atypical cross-modal processing, such as synesthesia. Following the lecture, I assigned a relevant journal article to a pair of students who worked (together with teaching assistants) to understand the paper in depth and to present the findings to the class. These presenters were then given detailed feedback regarding their clear communication of background information in order to provide the other students with a foundation for the reasoning and inspiration behind conducting the study, as well as the communication of key concepts addressed within the paper. This teaching paradigm allowed the students to master the core constructs of multisensory processing while also being engaged in class discussions and honing their ability to present research findings to their peers.

During graduate school I also had the opportunity and the privilege to mentor several veterinary graduate-level students performing summer projects in the lab in addition to one undergraduate student providing technical assistance. During my postdoctoral training I have further had to opportunity to train and work with several graduate students and technicians. The teamwork that I have experienced in these laboratories has provided an open forum allowing multiple levels of support for seeking advice or assistance with laboratory matters and has been inspiring and influential for my path toward becoming a mentor as an independent researcher.