Donias Doko

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Neuroscience Research and Laboratory Qualifications

- Experience following laboratory protocols, documenting findings in detailed reports, conducting, and summarizing literature searches associated with specific topics within research settings, supervised by PIs and doctoral students.
- Academic excellence in neuroscience, supplemented by broad based natural and physical science courses.
- Confidence within medical and research facilities, interacting with patients, physicians, researchers, and health care professionals.
- Abilities to use Word, Excel, PowerPoint, Prism, and Internet applications to complete research, editing, data collection, retrieval and analysis, and presentation focused projects.

Neuro and Life Science and Pre-Medical Research and Laboratory Experience

University of Rochester **Rochester, NY**

Raizada Lab-Lab Manager *Fall 2013-Present*

- Assist Dr. Raizada in using pattern-based fMRI analysis to study neural representation.
- Recruit participants and ran behavioral studies as well as fMRI scans

Jaeger Lab Research Assistant *Fall 2012-Present*

- Supported Dr. Florian Jeager and his colleagues' human language processing lab efforts.
- Recruited participants and ran experiments to test how previously acquired linguistic knowledge affects future language learning.
- Explored phonological acquisition of adults and the manner in which they process and learn novel speech sounds.
- Focus on generalization from properties of known language when learning a new language.
- Results to date reveal that learners can take advantage of current linguistic knowledge by generalizing phonetic detail across different segments and across languages.

Johnson Lab *Fall 2009-May 2011*

Supported Dr. Gail V. W. Johnson and her colleagues' Alzheimer's research efforts.

- Conducted in vitro enzyme assays with purified proteins to elucidate the cellular targets of Alzheimer disease relevant forms of tau
- Created constructs for graduate and postdoctoral students to be used for studying how abnormally phosphorylated and proteolytically processed tau impacts mitochondrial function.
- Mastered PCR, gel electrophoresis, ligation, transfection, and western blotting.
- Results to date suggest that mitochondria may be a crucial downstream target of pathological tau and contribute to neudegenerative process

Neuro and Life Science, Pre-Medical, and Research Education, Honors and Activities

University of Rochester **Rochester, NY**

Bachelor of Science Neuroscience *Anticipated May 2013*

Bachelor of Arts History *Anticipated May 2013*

- Neuroscience studies focused on examination of cellular basis of nervous system function; and enhanced capacities to read and analyze published research to better understand nervous system function and disorders
- Cumulative GPA 3.64 and Neuroscience GPA 3.60 (out of 4.0) and Phi Alpha Theta History Honor Society Member
- *As Student Association Project and Services Security Coordinator*: facilitated discussions between security and student body to better improve security on campus. As *Student Supervisor for Safe Ride Home Program*: created schedule and program that provided escorted rides by security. As *Cinema Group Programming Director*: interacted with suppliers to acquire movies, and created and maintained screening schedule. As *Residential Advisor* for four years: facilitated growth of residents; worked with RA colleagues and supervisor to maintain residential communities and enhance student development through paraprofessional advising and programs to facilitate discussion and interactions between residents.

Neuro and Life Science and Pre-Medical Courses, Labs and Concepts

General Biology I and II, Principles of Genetics, Biochemistry, Molecular Cell Biology, Mammalian Anatomy, Basic Neuroscience, Neurochemical Foundations of Behavior, Neuropsychology, Sensory and Motor Neuroscience, Laboratory in Neurobiology, General Chemistry I and II, Organic Chemistry I and II, General Physics I and II, Neuroscience Statistics

Laboratory in Neurobiology: Familiarized with cellular neuroanatomy (learned different methods of staining neuronal tissues), electrophysiology (tested neuromodulating agents' affects on neuronal spiking pattern by preparing and measuring cricket cercal ganglion response), neurogenesis (learned immunocytochemistry for BrdU and GFAP, and cell counting), and rat surgery, perfusion, brain dissection, staining, and cell counting.

Neurochemical Foundations of Behavior: Gained an understanding of the chemical composition of the brain, metabolism of the brain and chemistry of neurotransmission.

Principles of Genetics Laboratory: Performed various lab procedures including gel electrophoresis, and several DNA transformation and conjugation techniques.

Mammalian Anatomy: Gained experience using a microscope and dissecting a multitude of animals and tissues as well as analyzing structures and systems.

Organic Chemistry I and II: Familiar with techniques such as Northern Blotting, gel filtration chromatography, ion-exchange chromatography, size-exclusion chromatography, IR analysis, and separatory techniques.

Molecular Cell Biology: Gained an understanding of membrane biogenesis, cytoskeleton, cell signaling, cell cycle growth and death.