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EDUCATION

Baylor College of Medicine, Houston, TX 2002-2006

Ph.D. Neuroscience: “The Role of NADPH Oxidase in Signal Transduction, Synaptic Plasticity, and Memory in the Hippocampus.” Advisor: Eric Klann, Ph.D.

University of California at Davis, Davis, CA 1999

B.S. Genetics; Minor in Philosophy

RESEARCH EXPERIENCE

2006-present: **Postdoctoral Associate,**

Human Neuroimaging Laboratory, Department of Neuroscience, Baylor College of Medicine, Houston, TX.

1999-2006: **Graduate Student,**

Baylor College of Medicine, Houston, TX. Advisor: Eric Klann. Doctoral Thesis: “The Role of NADPH Oxidase in Signal Transduction, Synaptic Plasticity, and Memory in the Hippocampus.”

1998-1999: **Student Research Assistant,**

University of California at Davis, Davis, CA. Cloning and expression of scorpion toxin genes in the yeast *Pichia Pastoris*.

1998: **Summer Medical and Research Training (S.M.A.R.T) Program,**

Baylor College of Medicine, Houston, TX. Genotyping single nucleotide polymorphisms of alpha-1-antichymotrypsin from human patients with Spinocerebellar ataxia type 1.

1995-1998: **Student Research Assistant,**

University of California at Davis, at Davis, CA. Investigating the effect of reactive oxygen species on the efficacy of engineered baculoviral biopesticides.

HONORS AND AWARDS

- 2004-2006: **Ruth L. Kirschstein National Research Service Award**,
Predoctoral Fellowship, "Source of ROS in Hippocampal Plasticity and Memory"
2003-2004: **Predoctoral Fellow NIH Training Grant T32-HL007676**,
"Molecular Excitability in the Cardiovascular System"
1995: **Japanese-American Citizens League Scholarship Award**

PUBLICATIONS

Peer Reviewed Articles:

*Chiu, P.H., *Kayali, M.A., **Kishida, K.T.**, Tomin, D., Klinger, L.G., Klinger, M.R., and Montague, P.R. (2008). Self responses along cingulate cortex reveal quantitative neural phenotype for high functioning autism. *Neuron*. 57, 463-473.

Kishida, K.T., and Klann, E. (2007). Sources and targets of reactive oxygen species in synaptic plasticity and memory. *Antioxid. Redox Signal*. 2, 233-244.

Kishida, K.T., Hoeffler, C.A., Hu, D., Pao, M., Holland, S.M., and Klann, E. (2006). Synaptic plasticity deficits and mild memory impairments in mouse models of chronic granulomatous disease. *Mol. Cell. Biol*. 15, 5908-5920.

Kishida, K.T., Pao, M., Holland, S.M., and Klann, E. (2005). NADPH oxidase is required for NMDA receptor-dependent activation of ERK in hippocampal area CA1. *J. Neurochem*. 2, 299-306.

Hoover, K., **Kishida, K.T.**, Digiorgio, L.A., Workman, J., Alaniz, S.A., Hammock, B.D., and Duffey, S.S. (1998). Inhibition of baculoviral disease by plant-mediated peroxidase activity and free radical generation. *J. Chem. Ecol*. 1949-2001.

*These authors contributed equally to the work.

Thesis:

Kishida, KT. The Role of NADPH Oxidase in Signal Transduction, Synaptic Plasticity, and Memory in the Hippocampus. (2006).

Book Chapter:

Kishida, K.T., and Klann, E. (2008). "ROS in Synaptic Plasticity and Memory." Oxidative Neural Injury: Contemporary Clinical Neuroscience, Ed. Sigrid Veasey. Humana Press (in press).

POSTER PRESENTATIONS

Rush and Helen Record Neuroscience Forum, Galveston, TX (2008)

Imagining Self and Watching Others Elicits Agent-Specific Responses from the Cingulate Cortex of Accomplished Athletes. Kenneth T. Kishida, Philip R. Baldwin, Justin Schwind, Pearl Chiu, P. Read Montague

Society for Neuroscience, San Diego, CA, (2007)

“Self” responses revealed independently by fMRI during Visualization. Kenneth T. Kishida, Philip R. Baldwin, Justin Schwind, Jian Li, Dongni Yang, Pearl Chiu, P. Read Montague

Computational Cognitive Neuroscience Conference, San Diego, CA (2007)

Imagining Self and Watching Others Elicits Agent-Specific Responses from the Cingulate Cortex of Accomplished Athletes. Kenneth T. Kishida, Philip R. Baldwin, Justin Schwind, Jian Li, Dongni Yang, Pearl Chiu, P. Read Montague

Cognitive Neuroscience Society, New York, NY (2007)

Expertise and Perspective Effects on Visualization in Accomplished Athletes. Jian Li, Kenneth T. Kishida, Dongni Yang, P. Read Montague, and Arturo E. Hernandez

Rush and Helen Record Neuroscience Forum, Galveston, TX (2007)

Expertise and Perspective Effects on Visualization in Accomplished Athletes. Jian Li, Kenneth T. Kishida, Dongni Yang, P. Read Montague, and Arturo E. Hernandez

Rush and Helen Record Neuroscience Forum, Galveston, TX (2006)

NADPH Oxidase Subunits gp91phox and p47phox are Required for Long-term Potentiation and Memory Formation in the Hippocampus. Kenneth T. Kishida, Steven M. Holland, Maryland Pao, and Eric Klann.

Society for Neuroscience, Washington D.C. (2005)

NADPH Oxidase Subunits gp91phox and p47phox are Required for Long-term Potentiation and Memory Formation in the Hippocampus. Kenneth T. Kishida, Steven M. Holland, Maryland Pao, and Eric Klann.

Rush and Helen Record Neuroscience Forum, Galveston, TX (2005)

NADPH Oxidase as a Possible Source of Superoxide that is Necessary for Long-term Potentiation and Memory in the Hippocampus. Kenneth T. Kishida, Steven M. Holland, Maryland Pao, and Eric Klann.

Society for Neuroscience, San Diego, CA, (2004)

NADPH Oxidase as a Possible Source of Superoxide that is Necessary for Long-term Potentiation and Memory in the Hippocampus. Kenneth T. Kishida, Steven M. Holland, Maryland Pao, and Eric Klann.

Rush and Helen Record Neuroscience Forum, Galveston, TX (2004)

NADPH Oxidase as a Possible Source for Superoxide Necessary for NMDA Receptor-dependent ERK Activation & LTP in Hippocampal Area CA1. Kenneth T. Kishida and Eric Klann.

Society for Neuroscience, New Orleans, LA, (2003)

NADPH Oxidase as a Possible Source for Superoxide Necessary for NMDA Receptor-dependent ERK Activation & LTP in Hippocampal Area CA1. Kenneth T. Kishida and Eric Klann.

Rush and Helen Record Neuroscience Forum, Galveston, TX (2003)

NADPH Oxidase Mediates NMDA Receptor-Dependent activation of ERK in Hippocampal Area CA1. Kenneth T. Kishida and Eric Klann.

Society for Neuroscience, Orlando, FL, (2002) (151.7)

NADPH Oxidase Mediates NMDA Receptor-Dependent activation of ERK in Hippocampal Area CA1. Kenneth T. Kishida and Eric Klann.

Rush and Helen Record Neuroscience Forum, Galveston, TX (2002)

Exploring the Source and Role of Superoxide in the Induction of LTP in Hippocampal Area CA1. Kenneth T. Kishida and Eric Klann.

Rush and Helen Record Neuroscience Forum, Galveston, TX (2001)

Exploring the Role of MATH1 in Retinal Development. Kenneth T. Kishida, Huda Y. Zoghbi.

LECTURES

Thesis Defense, Baylor College of Medicine, Houston, TX (2006)

The Role of NADPH Oxidase in Signal Transduction, Synaptic Plasticity, and Memory in the Hippocampus

Rush and Helen Record Neuroscience Forum, Galveston, TX (2004)

NADPH Oxidase as a Possible Source for Superoxide Necessary for NMDA Receptor-dependent ERK Activation & LTP in Hippocampal Area CA1

TEACHING EXPERIENCE

- 2007-present: Mentoring Masters-level Graduate Student in Dr. Read Montague's laboratory.
- 2007: Mentored Rotating Graduate Students in Dr. Read Montague's laboratory.
- 2003-2006: Mentored various incoming graduate students in Dr. Eric Klann's laboratory.
- 2005: Co-organizer of "Consciousness" Journal Club discussing scientific and philosophic approaches to the scientific study of consciousness.
- 2004: Mentored S.M.A.R.T. program (BCM) intern Jorge Uribe.
- 2002-2003: Teaching Assistant for "Integrative Neuroscience" core curriculum course.

DEPARTMENTAL INVOLVEMENT

- 2007: Faculty Search Committee for Computational and Cognitive Neuroscience
Position
- 2000-2001: Division of Neuroscience student council representative
Committees served:
Graduate School Admissions Committee
Fundraising Committee

PROFESSIONAL ORGANIZATIONS

- 1999-present: Society for Neuroscience (S.F.N.)
2005-2007: Association for the Scientific Study of Consciousness (A.S.S.C.)