

CURRICULUM VITAE

Matthew James Kennedy

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EDUCATION

Post-doctoral: June 2005-Present; Dept. Neurobiology, Duke University, Durham, NC

Advisor: Dr. Michael Ehlers

Post-doctoral: October 2004-May 2005; Dept. Biochemistry and Biophysics, University of California, San Francisco, CA

Advisor: Dr. Graeme Davis

Ph.D. March 2003; Biochemistry, University of Washington, Seattle, WA

Advisor: Dr. James B. Hurley

Thesis: Turning off the photoresponse in rod and cone photoreceptors

B.S. June 1996; St. John's University, Collegetown, MN

Major field of study: Chemistry

RESEARCH EXPERIENCE

Graduate Student 9/97-3/03

Lab of James B. Hurley, Professor, Department of Biochemistry, University of Washington, Seattle, WA.

Biochemical studies of the phototransduction pathway in rod and cone photoreceptors

Research Technician 9/96 to 7/97

Lab of Frank M. Rusnak, Professor, Department of Hematology, Mayo Clinic, Rochester, MN.

Biochemical studies on transition metal binding proteins

INVITED PRESENTATIONS

2001 Association for Research in Vision and Ophthalmology, Fort Lauderdale, FL

PUBLICATIONS

Kennedy, M.J., Ehlers, M.D. (2006) Organelles and trafficking machinery for postsynaptic plasticity. Annual Reviews Neuroscience 29: 325-362.

Frank, C.A.*, Kennedy, M.J.*, Goold, C.P., Marek, K.W., Davis, G.W. (2006) Mechanisms underlying the rapid induction and sustained expression of synaptic homeostasis. *Neuron*. 52:663-677

*contributed equally

Nair, K. S., Hanson, S.M., Kennedy, M.J., Hurley, J.B., Gerevich, V.V., Slepak, V.Z. (2004) Direct binding of visual arrestin to microtubules determines the differential subcellular localization of its splice variants in rod photoreceptors. *Journal of Biological Chemistry*. 279: 41240 –41248.

Kennedy, M.J., Dunn, F., Hurley, J.B. (2004) Visual pigment phosphorylation but not transducin translocation can contribute to light adaptation in zebrafish cones. *Neuron*. 41: 915-928.

Kennedy, M.J., Sowa, M., Wensel, T. Hurley, J.B. (2003) Acceleration of key reactions as a strategy to elucidate the rate-limiting chemistry underlying phototransduction inactivation. *Investigative Ophthalmology and Visual Science*. 44: 1016-22.

Saari, J.C., Nawrot, M., Garwin, G.G., Kennedy, M.J., Hurley, J.B., Ghyselinck, N.B., Chambon, P. (2002) Intercellular diffusion of all-trans-retinol and retinyl ester synthesis are impaired in the retinas of cellular retinol-binding protein type I (CRBPI) knockout mice. *Investigative Ophthalmology and Visual Science*. 43: 1730-5.

Kennedy, M.J., Lee, K.A., Niemi, G.A., Craven, K.B., Garwin, G.G., Saari, J.C. and Hurley, J.B. (2001) Multiple phosphorylation of rhodopsin and the in vivo chemistry underlying rod photoreceptor dark adaptation. *Neuron*. 31: 87-101.

Ramulu, P., Kennedy, M.J., Xiong, W.H., Williams, J., Cowan, M., Blesh, D., Yau, K.W., Hurley, J.B., Nathans, J. (2001) Normal Light Response, Photoreceptor Integrity, and Rhodopsin Dephosphorylation in Mice Lacking Both Protein Phosphatases with EF Hands (PPEF-1 and PPEF-2). *Molecular and Cellular Biology*. 21: 8605-8614.

Taylor, M.R., Van Epps, H.A., Kennedy, M.J., Saari, J.C., Hurley, J.B. and Brockerhoff, S.E. (2000) Biochemical analysis of phototransduction and visual cycle in zebrafish larvae. *Methods in Enzymology*. 316: 536-557.

Wengenack N.L., Lopes H., Kennedy M.J., Tavares P., Pereira A.S., Moura I., Moura J.J., Rusnak F. (2000) Redox potential measurements of the Mycobacterium tuberculosis heme protein KatG and the isoniazid-resistant enzyme KatG(S315T): insights into isoniazid activation. *Biochemistry*. 39(37):11508-13.

Kennedy, M.J., Yu, L., Lima, M.J., Ascenso, C.S., Czaja, C., Moura, I., Moura, J.J.G, Rusnak, F. Metal Binding to the Tetrathiolate Motif of Desulfiredoxin. and Related Polypeptides. (1998) *Journal of Biological Inorganic Chemistry*. 3:643-649.

Goodfellow, B.J., Lima, M.J., Ascenso, C., Kennedy, M.J., Sikkink, R., Rusnak, F., Moura, I., Moura, J.J.G. (1998) The use of Chemical Shifts as a Structural Probe in Tetrathiolate Metalloproteins. *Inorganica Chimica Acta*. 273:279-287.

Yu, L., Kennedy, M.J., Czaja, C., Tavares, P., Moura J.J., Moura I., Rusnak F. (1997) Conversion of desulforedoxin into a rubredoxin center. *Biochem. Biophys. Res. Commun.* 231(3):679-82.

AWARDS

National Research Service award (declined)	3/2005
UCSF postdoctoral training grant	10/2004-4/2005
National Eye Institute Travel Fellowship	4/2001
NIH Molecular and Cellular Biology Training Grant	7/1999-7/2002
Summer Undergraduate Research Fellowship, Mayo Clinic	6/1996-9/1996