

JERRY DAVID MONROE
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Bowling Green, KY 42101-1080
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EDUCATION

University of Wisconsin-Milwaukee Milwaukee, WI
Ph.D., Biological Sciences 2012
Dissertation: Phosphatase 2A (PP2A) Mediated Regulation of Axonal and Dendritic Development.

University of Wisconsin-Milwaukee Milwaukee, WI
B.A., Biological Sciences 2001

Marquette University Milwaukee, WI
J.D., Law 1997

San Diego State University San Diego, CA
M.A., Philosophy 1994

Indiana University Bloomington, IN
N/A, Philosophy 1991-1992

San Diego State University San Diego, CA
B.A., Philosophy 1989

RESEARCH SUPPORT

Ongoing Research Support

1 R15 CA188890-01A1 Smith (PI) 7/01/15-6/30/18
NIH
Finding novel platinum(II) complex anti-cancer drugs with reduced ototoxicity
Examination of unexplored platinum compounds as potential chemotherapy drugs that avoid the side effect of ototoxicity and hearing loss.
Role: Postdoctoral research associate

8 P20GM103436-12 KBRIN-IDeA Smith (PI) 6/01/15-4/30/16
NIH
Finding Novel Platinum(II) Complex Anti-Cancer Drugs with Reduced Ototoxicity

Examination of unexplored platinum compounds as potential chemotherapy drugs that avoid the side effect of ototoxicity and hearing loss.

Role: Postdoctoral research associate

Completed Research Support

2 P20 GM103436-14 Smith (PI) 5/01/13-4/30/15
NIH

Finding novel platinum(II) complex anti-cancer drugs with reduced ototoxicity.

Examination of unexplored platinum compounds as potential chemotherapy drugs that avoid the side effect of ototoxicity and hearing loss.

Role: Postdoctoral research associate

KSEF 3017-RDE-017 Smith (PI) 7/1/14-6/30/15

Kentucky Science and Engineering Foundation

A high throughput zebrafish assay for testing ototoxicity of anti-cancer drugs.

Role: Postdoctoral research associate

8 P20 GM103436-12 Smith (PI) 5/01/12-4/30/14
NIH

Zebrafish: A potential model for mammalian hair cell death and regeneration.

This study examines the role of growth hormone on zebrafish auditory hair cell regeneration.

Role: Postdoctoral research associate

AWARDS

Chancellor's Award 2005-2011

University of Wisconsin-Milwaukee

Ruth Walker Travel Award 2007-2009

University of Wisconsin-Milwaukee

RESEARCH EXPERIENCE

Western Kentucky University Bowling Green, KY

Postdoctoral Researcher; Advisor: Michael Smith June 2013 to present

- Design and performance of experiments testing if novel platinum (II) complexes cause cytotoxicity in cancer cell lines and ototoxicity in the zebrafish inner ear.

University of Wisconsin-Milwaukee Milwaukee, WI

Graduate Researcher; Advisors: Charles Fink, R. David Heathcote August 2008-May 2012

- Designed and conducted experiments testing if protein phosphatase 1 and 2A regulated axon and dendrite extension and branching in hippocampal cell culture.

- Initiated and performed experiments testing if protein phosphatase 1 and 2A regulated synapse formation in hippocampal cell culture.

TEACHING EXPERIENCE

Western Kentucky University

Instructor, Biological Concepts: Cells, Metabolism and Genetics

Bowling Green, KY

January 2014-May 2014

University of Wisconsin-Milwaukee

Lead Teaching Assistant, Anatomy and Physiology II

Teaching Assistant, Anatomy and Physiology II

Milwaukee, WI

August 2008-May 2012

August 2005-August 2008

POSITIONS AND EMPLOYMENT

2013-current Postdoctoral Researcher and Biology Instructor, Western Kentucky University, Bowling Green, KY

2005-2012 Anatomy and Physiology Teaching Assistant, University of Wisconsin—Milwaukee, Milwaukee, WI

2004-2005 Laboratory Technician, Degussa Food Ingredients, Waukesha, WI

2003-2003 Laboratory Technician, QC Inspection Services, Brookfield, WI

1998-2003 Data Conversion Technician, Analytical Surveys Inc., Waukesha, WI

1996-1997 Research Assistant, Marquette University School of Law, Milwaukee, WI

1995-1996 Circulation Desk Attendant, Marquette University Law Library, Milwaukee, WI

1992-1994 Library Student Assistant, San Diego State University, San Diego, CA

1991-1992 Teaching Assistant, Indiana University, Bloomington, IN

1989-1991 Library Research Assistant, University of San Diego Legal Research Center, San Diego, CA

1985-1989 Library Student Assistant, San Diego State University, San Diego, CA

PROFESSIONAL ASSOCIATIONS

Member of the Society for Neuroscience

Member of the State Bar of Wisconsin (inactive status)

PRESENTATIONS

Monroe, J.D., Williams, K.M. and Smith, M.E. (2016). Finding Novel Platinum(II) Complex Anti-cancer Drugs. Poster presentation delivered at the NIH, NIGMS Sixth Biennial National IDeA Symposium of Biomedical Research Excellence. Washington, DC

Heine, M., Billings, T., **Monroe, J.D.**, Smith, M.E. (2016). New Platinum Compounds May Kill Cancer Without Causing Hearing Side-Effects. Poster presentation delivered at Posters-at-the-Capitol. Frankfort, KY

Heine, M., Billings, T., **Monroe, J.D.**, Smith, M.E. (2015). Effects of Cisplatin, Phenanthriplatin, and Pyriplatin on Hearing and Inner Ear Hair Cells of Zebrafish (*Danio rerio*). Poster presentation delivered at the Kentucky Academy of Sciences. Highland Heights, KY

Heine, M., Billings, T., **Monroe, J.D.**, Smith, M.E. (2015). Effects of Cisplatin on Hearing and Inner Ear Hair Cells of Zebrafish (*Danio rerio*). Poster presentation delivered at the Western Kentucky University Biology Summer Undergraduate Research Experience Symposium. Bowling Green, KY

Monroe, J.D., Williams, K.M. and Smith, M.E. (2014). A Zebrafish Assay for Testing Ototoxicity of Platinum-Based Anti-Cancer Drugs. Poster presentation delivered at the Kentucky Innovation and Entrepreneurship Conference. Louisville, KY

Monroe, J.D., Williams, K.M. and Smith, M.E. (2014). Finding Novel Platinum(II) Complex Anti-cancer Drugs. Poster presentation delivered at the NIH, NIGMS Fifth Biennial National IDeA Symposium of Biomedical Research Excellence. Washington, DC

Manning, D.P., Uribe, P., **Monroe, J.D.**, Smith, M.E., and Coffin, A.B. (2014). GFP expression in hair cells is correlated with reduced hearing sensitivity in transgenic zebrafish. Northwest Regional Society for Developmental Biology, Friday Harbor Laboratories, University of Washington, WA.

Monroe, J.D. (2013). Synaptic Plasticity. Invited presentation in Biology 335 (Neurobiology) Course. Western Kentucky University, Bowling Green, KY.

Monroe, J.D. (2012). Phosphatase Regulation of Axon and Dendrite Growth. Oral presentation delivered at the Biological Sciences Department Colloquium. University of Wisconsin—Milwaukee, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2011). The Role of Phosphatase 1 and 2A Isoforms in Dendritic and Axonal Development. Oral presentation delivered to the Neuroscience Group at the University of Wisconsin—Milwaukee, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2010). The Role of Phosphatase 1 and 2A Isoforms in Dendritic and Axonal Development. Poster presentation delivered at the University of Wisconsin—Milwaukee Biological Sciences Symposium, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2010). The Role of Phosphatase 1 and 2A Isoforms in Dendritic and Axonal Development. University of Wisconsin—Milwaukee. Oral presentation delivered to the Neuroscience Group at the University of Wisconsin—Milwaukee, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2010). The Role of Phosphatase 1 and 2A Isoforms in Dendritic and Axonal Development. Poster presentation delivered at the 27th Midwest Neurobiology Meeting, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2009). The Role of Phosphatase 1 and 2A Isoforms in Axonal and Dendritic Development. Poster presentation delivered at the Society for Neuroscience 39th Annual Meeting. Program Number 312.4, Chicago, IL.

Monroe, J.D. and Fink, C.C. (2009). The Role of Phosphatase 1 and 2A Isoforms in Axonal and Dendritic Development. Oral presentation delivered to the Neuroscience Group at the University of Wisconsin—Milwaukee, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2009). The Role of Phosphatase 1 and 2A Isoforms in Dendritic and Axonal Development. Poster presentation delivered at the University of Wisconsin—Milwaukee Biological Sciences Symposium, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2009). The Role of Phosphatase 1 and 2A Isoforms in Axonal and Dendritic Development. Poster presentation delivered at the 26th Midwest Neurobiology Meeting, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2008). The Role of Phosphatase 1 and 2A Isoforms in Axonal and Dendritic Development. Poster presentation delivered at the University of Wisconsin—Milwaukee Biological Sciences Symposium, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2008). The Role of Phosphatase 1 and 2A Isoforms in Axonal and Dendritic Development. Oral presentation delivered to the Neuroscience Group at the University of Wisconsin—Milwaukee, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2008). The Role of Phosphatase 1 and 2A Isoforms in Axonal and Dendritic Development. Poster presentation delivered at the Society for Neuroscience 38th Annual Meeting. Program Number 231.9. Washington, D.C.

Monroe, J.D. and Fink, C.C. (2007). The Role of Phosphatase 1 and 2A Isoforms in Dendritic Development. Poster presentation delivered at the University of Wisconsin—Milwaukee Biological Sciences Symposium, Milwaukee, WI.

Monroe, J.D. and Fink, C.C. (2007). The Role of Phosphatase 1 and 2A Isoforms in Dendritic Development. Poster presentation delivered at the Society for Neuroscience 37th Annual Meeting. Program Number 239.1. San Diego, CA.

Monroe, J.D. and Fink, C.C. (2007). The Role of Phosphatase 1 and 2A Isoforms in Dendritic Development. Oral presentation delivered to the Neuroscience Group at the University of Wisconsin—Milwaukee, Milwaukee, WI.

SCIENTIFIC PUBLICATIONS

Monroe, J.D., Manning, D.P., Uribe, P., Smith, M.E., Coffin, A.B. Fluorescent Gene Reporters Regulate Hearing Thresholds in Transgenic Zebrafish (*submitted*).

Monroe, J.D., Rajadinakaran, G., and Smith, M.E., 2015 Sensory Hair Cell Death and Regeneration in Fishes. *Frontiers in Cellular Neuroscience* 9:131. doi: 10.3389/fncel.2015.00131.

Smith, M.E., **Monroe, J.D.** Hearing Loss and Masking in Teleost Fishes: A Historical Perspective. In: *Fish Hearing and Bioacoustics: An Anthology in Honor of Arthur N. Popper and Richard R. Fay*. Sisneros, J. (Ed.). Springer-Verlag (*accepted*).

Monroe, J.D. and Heathcote, R.D., 2013. Protein Phosphatases Regulate the Development of Neurites. *International Journal of Developmental Neuroscience* 31, 250–257.

Monroe, J.D., 2012. Phosphatase 2A Mediated Regulation of Axonal and Dendritic Morphology. PhD Thesis.

OTHER PUBLICATIONS

Monroe, J.D., 1997. ProCD v. Zeidenberg: An Emerging Trend in Shrinkwrap Licensing. *Marquette Intellectual Property Law Review* 1, 143-179.

Monroe, J.D., 1994. An Evaluation of Immanuel Kant's Theory of Contract Right. M.A. Thesis.