

BIOGRAPHICAL SKETCH

Provide the following information for the key personnel in the order listed on Form Page 2.
Follow this format for each person. **DO NOT EXCEED FOUR PAGES.**

NAME Bryan William Jones		POSITION TITLE Research Assistant Professor	
EDUCATION/TRAINING <i>(Begin with baccalaureate or other initial professional education, such as nursing, and include postdoctoral training.)</i>			
INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	YEAR(s)	FIELD OF STUDY
University of Utah	BS	1996	Biology, Chemistry
University of Utah	Ph.D.	2003	Neurophysiology
Huntsman Cancer Institute	Post-Doctoral	2003-2004	Cell biology
Moran Eye Center	Post-Doctoral	2004-2005	Ophthalmology

A. Positions**Employment**

1990-1994 Polysomnography/Neurodiagnostics, Sleep Disorders, University of Utah School of Medicine
 1994-2004 Sleep and Clinical Neurodiagnostics consultant, Snow Canyon Clinic/Neurodiagnostics
 1997-2003 Graduate Student University of Utah Department of Physiology
 2003-2004 Post Doctoral Fellow, Huntsman Cancer Institute
 2004-2005 Post Doctoral Fellow, Moran Eye Center
 2005- Research Assistant Professor, Moran Eye Center

Experience**Awards:**

National Eye Institute (NEI) Travel Fellowship Grant, 2002.
 Young Investigator Award RD2004.
 Research Prevent Blindness Career Development Award. 2006

Committees:

Chair: Student Tenure Review Committee Moran Eye Center 2001-2004
 Member: Faculty review committee. Dept. of Bioinformatics University of Utah School of Medicine
 2001-2002.

Reviewer: Vision Research, Experimental Neurology, Journal of Comparative Neurology, Experimental Eye Research

Editor/Webmaster: Webvision <http://webvision.med.utah.edu/>

Teaching:

Physiology Lab: Epilepsy, Sleep EEG and neurodiagnostics to first and second year medical students:
 University of Utah School of Medicine 1997-2008
 Teaching digital imagery and image analysis: Marc Lab 1998-2008
 Graduate and Undergraduate Student Mentoring: 2004-2008

Publications:

Papers:

- A Computational Framework for Ultrastructural Mapping of Neural Circuitry. Anderson JR, Jones BW, Yang J-H, Shaw MV, Watt CB, Koshevoy P, Spaltenstein J, Jurrus E, Kannan UV, Whitaker R, Mastronarde D, Tasdizen T, Marc R. 2008. Submitted to PLoS Biology
- Effect of Shape And Coating Of A Subretinal Prosthesis On Its Integration With The Retina. Butterwick A, Huie P, Jones BW, Marmor MF, Marc RE, Palanker D. Experimental Eye Research. 2008. In Press.
- Chapter: Retinal Remodeling and Visual Prosthetics. Jones BW, Watt CB, Marc RE. Visual Prosthetics, Elsevier Press. 2008. In Press.
- Extreme Retinal Remodeling Triggered by Light Damage: Implications for AMD. Marc RE, Jones BW, Watt CB, Vazquez-Chona F, Vaughan DK, Organisciak DT. 2008. Molecular Vision 14: 782-806.
- Neural Reprogramming in Retinal Degenerations. Marc RE, Jones BW, Anderson JR, Kinard K, Marshak DW, Wilson JH, Wensel TG, Lucas RJ. 2007. Invest. Ophthalmol. Vis. Sci. 48(7):3364-71.
- Review: Retinal Remodeling During Retinal Degeneration. Jones BW, Marc RE. Experimental Eye Research. 2005, 81: 121-244.
- Excitation Mapping With the Organic Cation AGB²⁺. Marc RE, Kalloniatis M, Jones BW. 2005. Vision Research 45: 3454-3468.
- Review: Retinal Remodeling in Retinal Degenerations. Jones BW, Watt CB, Marc RE. 2005. Clinical and Experimental Optometry 88: 282-291.
- Chapter: Neural Plasticity Revealed by Light-Induced Photoreceptor Lesions. Jones BW, Marc RE, Watt CB, Vaughan DK, Organisciak DT. Retinal Degenerative Diseases, Springer, (New York), pp. 405-410. 2005.
- Retinal remodeling triggered by photoreceptor degenerations. Jones BW, Watt CB, Frederick JM, Baehr W, Chen CK, Levine EM, Milam AH, LaVail MM, Marc RE. Journal of Comparative Neurology pp. 1-16 Sep, 8;464(1) 2003
- Neural Remodeling in Retinal Degeneration. Marc RE, BW Jones, CB Watt and E Strettoi. Progress in Retinal and Eye Research, Prog Retin Eye Res. pp. 607-655 Sep; 22(5) 2003
- Retinal remodeling in inherited photoreceptor degenerations. Marc RE, BW Jones Molecular Neurobiology 28: 139-148 2003.
- Molecular Phenotyping of Retinal Ganglion Cells Robert E. Marc and Bryan W. Jones. The Journal of Neuroscience. pp 413-427 Jan, 15 22(2) 2002.
- Familial advanced sleep-phase syndrome: A short-period circadian rhythm variant in humans: pp 1062-1065 CR Jones, SS Campbell, SE Zone, F Cooper, A DeSano, PJ Murphy, B Jones, L Czajkowski & Louis J. Ptacek. Nature Medicine 2000

Research Support:

Career Development Award. Research to Prevent Blindness. Aims: To better understand processes related to retinal remodeling through examination of factors that mediate cell recognition via examination of loss of Ca²⁺ mediated signaling results in cell stress and subsequent and integrin expression profile change in retinal remodeling.

NIH NEI RO1 EY02576-30 ... 35, Title: Structural Neurochemistry of Retinal Circuits. Period 01 Jan 2006 – 31 Dec 2010. Role & Objectives: Bryan W. Jones (75%), Robert E. Marc, PI; Aims: (1) Generate a comprehensive retinal map of connectivity steered by computational classification; (2) resolve the neurochemical identities of key interneurons; (3) resolve the scaling parameters for glutamatergic drive through the retina..

NIH NIBIB, Title: Large-scale computational reconstruction of three-dimensional neural connectivity from serial- section microscopy, Bryan W. Jones, 25%; PI: T Tasdizen, Univ Utah School of Computing. Period 01 Jul 2005 – 30 Jun 2009. Role & Objectives; Aim: Develop high-capacity software tools for precise, non-linear, automated image mosaicking/registration; process segmentation/tracking; texture mapping; and synapse identification in Tbyte ultrastructural datasets from the mammalian retina.