

BIOGRAPHICAL SKETCH

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NAME Wiley, John W.	POSITION TITLE Professor of Internal Medicine		
eRA COMMONS USER NAME (credential, e.g., agency login) jwiley			
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
Claremont-McKenna College, Claremont, CA	B.A.	1971	Biology
Oregon Health Sci. Univ., Portland, OR	M.D.	1980	Medicine
University of Michigan Hospitals, Ann Arbor, MI	Res., IM	1983	Medicine
University of Michigan Hospitals, Ann Arbor, MI	Fellow, GI	1987	Medicine

A. Positions and Honors

Positions and Employment

1970-1971 Teaching Assistant, Biology Laboratory, Claremont-McKenna College
 1975-1976 Graduate Teaching Assistant, Portland State University
 1980-1981 Internship- Internal Medicine, University of Michigan Hospitals
 1981-1983 Residency- Internal Medicine, University of Michigan Hospitals
 1983-1984 Instructor, Internal Medicine, University of Michigan Medical Center
 1983-1984 Director, Univ. Health Plan Clinic, Dept. of Internal Medicine, University of Michigan
 1987-1988 Instructor, Department of Internal Medicine, University of Michigan Medical Center
 1989-1994 Assistant Professor, Dept. of Internal Medicine, University of Michigan Medical Center
 1994-2008 Associate Professor, Dept. of Internal Medicine, University of Michigan Medical Center
 1998-2000 Chief, Gastroenterology Section, Veteran's Admin. Health System, Ann Arbor, MI
 2000-2007 Program Director, University of Michigan General Clinical Research Center
 2007- Director, Michigan Clinical Research Unit
 2007- Associate Director, Michigan Institute Clinical and Health Research
 2008- Professor, Dept. of Internal Medicine, University of Michigan Medical Center

Other Experience and Professional Memberships

1997-2000 Editorial Board, American Journal Physiology
 1988-1989,
 1991, 1994-1997 AGA Member and Chair of the Abstract Selection Committee (Motility Section & Hormone Section) National Meeting
 1991 Fellow, American College of Physicians
 1992 Co-director, Program Committee, American Motility Society Biennial Meeting
 1993 International Steering Committee, Little Brain-Big Brain 3
 1994-1998 NIH Clinical Research Centers Study Section
 1997-1998 Chair, NIH/GCRC Study Section
 1996 Director, American Motility Society Biennial Meeting
 1996-2000 Counselor, American Motility Society
 1998-2002 Counselor, International Neurogastroenterology Society
 2004- External Advisory Committee, Mayo Clinic NIH/PPG- Pathobiol. Enteric System
 2006 Chair, Program and Scientific Committees, 1st Joint International Neurogastroenterology & Motility Meeting
 2006 NIH Review Panel: Chemosensing in the GI Tract/ZDK1 GRB-R MI
 2006 External Reviewer, Clinical Research Infrastructure Initiative, U.K. and Republic of Ireland
 2006-2009 Scientific Review Panel, American Diabetes Association

2006-2010 Editorial Board, Autophagy

Honors and Awards

1984-1986 N.I.H. Post-doctoral Training Fellow in Gastroenterology, University of Mich. Hospitals
 1986-1987 N.I.H. Sponsored NRSA Grant #1F132AM-07698-01A1
 1987-1988 Recipient of American Gastroenterology Association Industry Scholar Award
 1987-1991 Research Associate, Veterans Administration Career Development Award
 1994 Jerome Conn Award for Distinguished Research, Department of Internal Medicine
 1999 Master's Award for Basic and Clinical Research in Digestive Diseases
 2000- Member, Selection Committee, Master's Awards in Gastroenterology
 2002- Who's Who- US & Who's Who- World
 2005-2006 President, GCRC Program Directors Association
 2005-Current External Advisory Committee, Mayo Clinic PPG: Pathobiology in the Enteric System
 2007 Consumers' Research Council, America's Top Physician Selectee

B. Selected Peer-Reviewed Publications (Selected from 48 peer-reviewed publications)

1. Roberts D, Gelperin D, Wiley J. Evidence for age-associated reduction in acetylcholine release and smooth muscle response in the rat colon. *Amer J Physiol*, 267:G515-G522, 1994.
2. Gelperin D, Mann D, DelValle J, Wiley J. Bradykinin (Bk) increases intracellular calcium in the rat myenteric plexus via BK-2 receptors coupled to mobilization of extra- and intracellular calcium: Evidence that calcium influx is prostaglandin dependent. *J Pharm & Exp Therap*, 271:507-514, 1994.
3. Hall K, Sima A, Wiley J. Voltage-dependent calcium currents are enhanced in dorsal root ganglion neurons from the Bio-Bred/Wistar diabetic rat. *J Physiol. (London)* 486:313-322, 1995.
4. Hall K, Sima A, Wiley JW. Opiate-mediated inhibition of calcium signaling is decreased in DRG neurons from the diabetic BB/W rat. *J. Clinical Inv.* 97: 1165-72, 1996.
5. Wiley J, Moises H, Gross R, Macdonald R. Dynorphin A-mediated reduction in multiple calcium currents involves a Go α -subtype G protein in rat primary afferent neurons. *J. Neurophysiology* 77:1338-1348, 1997.
6. Ristic H, Srinivasan, S, Hall KE, Sima AAF, Wiley JW. Serum from diabetic BB/W rats enhances calcium influx in primary sensory neurons. *J Neurophysiol.* 80:1236-1244, 1998.
7. Srinivasan S, Sheng H, Hall K, Stephens M, Wiley J. Serum from type 2 diabetics with neuropathy enhances calcium influx and apoptosis in neurons. *J. Clin. Invest.* 102:1454-1462, 1998.
8. Hall K, Wiley J. New insights into neuronal injury: a cautionary tale. *Am J Physiol* 274:G978-G983, 1998.
9. Wiley JW (ed). *Colon. Current Opinion in Gastroenterology*, Vol. 19, January, 1999.
10. Srinivasan S, Wiley JW. New insights into neural injury, repair, and adaptation in visceral afferents and the enteric nervous system. *Current Opinion in Gastroenterology*, Vol. 19, January, 2000.
11. Srinivasan S, Stevens M, Wiley JW. Diabetic peripheral neuropathy: Evidence for apoptosis and associated mitochondrial dysfunction. *Diabetes.* 49(11):1932-1938, 2000.
12. Takahashi T, Qoubutary A, Owyang, C, Wiley, JW. Decreased expression of nitric oxide synthase in the colon myenteric plexus of aged rats. *Brain Research.* 883(1):15-21, 2000.
13. Hall K, Sheng H, Srinivasan S, Spitsberger M, Tuttle J, Steers T, and Wiley JW. Treatment with NGF reverses the effect of aging on neurite outgrowth, calcium currents, and neuronal survival of rat primary sensory neurons in short-term, serum-free culture. *Brain Research. Brain Res.* 888(1):128-137, 2001.
14. Hall K, Liu Y, Wiley JW. Evidence for Impaired Inhibitory G Protein Function in Diabetic Neuropathy. *J. Neurophysiol.* 78:760-770, 2001.
15. Yoo J, Song II, Neubig R, Wiley JW. Expression of Novel Splice variants of Go α is Age-dependent and Tissue-Specific in the Rat. *Gene* 296:249-255, 2002.
16. Wiley JW. Mechanisms of Aging in the Enteric Nervous System: Lessons from Extraintestinal Sites and non-mammalian species. *Amer. J. Physiol. (Themes)* 45:G1020-G1026, 2002.
17. Shangguan Y, Hall K, Neubig R, Wiley JW. Diabetic Neuropathy: Inhibitory G protein dysfunction involves PKC-dependent phosphorylation of Go α . *J Neurochemistry.* 2003 Aug;86(4):1006-14.
18. Guo C, Shangguan Y, Hong S, Wiley J., Diabetic Autonomic Neuropathy: Evidence for apoptosis *in situ* in the rat. *Neurogastroenterology and Motility.* 16(3):335-45 2004.

19. Hong S, Marrow TJ, Paulson PE, Isom LL, Wiley JW. Early painful diabetic neuropathy is associated with differential changes in tetrodotoxin-sensitive and -resistant sodium channels in dorsal root ganglion neurons in the rat. *J Biol Chem.* 279(28):29341-50 2004.
20. Hong S and Wiley JW. Early painful diabetic neuropathy is associated with differential changes in the expression and function of vanilloid receptor 1. *J.Biol.Chem.* 280:618-27, 2005.
21. Towns, R, Kabeya, Y, Yoshimori, T, Guo, C, Shangguan, Y, Kaplan, M, Klionsky, DJ, Wiley, JW. Sera from Patients with Type 2 Diabetes and Neuropathy Induce Autophagy and Colocalization with Mitochondria in SY5Y Cells. *Autophagy.* 1(3): 163-170, 2005.
22. Hong S and Wiley JW. Altered expression and function of sodium channels in large DRG neurons and myelinated A-fibers in early diabetic neuropathy in the rat. *Biochemical and Biophysical Research Communications,* 3391(2):652-60, 2006.
23. Lopez-Santiago L, Pertin M, Morisod X, Chen C, Hong S, Wiley J. Decosterd, I and Isom L. Sodium Channel β 2 subunits regulate tetrodotoxin-sensitive sodium channels in small dorsal root ganglion neurons and modulate the response to pain. *Journal of Neuroscience* 26(30):7984-94, 2006.
24. Wiley JW. Many faces of nitric oxide: cytotoxic, cytoprotective or both. *Neurogastroenterology & Motility.* 2007; 19(7):541-4.
25. Paulson PE, Wiley JW, Morrow TJ. Concurrent Activation of the Somatosensory Forebrain and Deactivation of Periaqueductal Grey Associated With Diabetes-Induced Neuropathic Pain. *Experimental Neurology,* 2007; 2:305-313.
26. Towns R, Guo C, Shangguan Y, Hong S, Wiley JW. Type 2 Diabetes with Neuropathy: Autoantibody Stimulation of Autophagy via Fas. *NeuroReport,* 2008; 19(3):265-9.
27. Klionsky DJ, Abeliovich H, Agnostinis P, Agrawal DK, Aliev G, et al. Guidelines for the Use and Interpretation of Assays for Monitoring Autophagy in Higher Eukaryotes. *Autophagy* 2008; 4(2): 151-75.
28. Towns R, Pietropaolo M, Wiley JW. Stimulation of autophagy by autoantibody-mediated activation of death receptor cascades. *Autophagy* 2008; 4(4):715-16.
29. Garvin B, Wiley JW. The role of serotonin in irritable bowel syndrome: implications for management. *Curr Gastroenterol Rep.* 2008; 10(4):363-8.
30. de Giorgio R, Volta U, Stanghellini V, Cogliandro RF, Barbara G, Corinaldesi R, Towns R, Guo C, Hong S, Wiley JW. Neurogenic chronic intestinal pseudo-obstruction: antineuronal antibody-mediated activation of autophagy via Fas. *Gastroenterology.* 2008; 135(2):601-9.
31. Hong S, Fan J, Kemmerer ES, Evans S, Li Y, Wiley JW. Reciprocal Changes in Vanilloid (TRPV1) and Endocannabinoid (CB1) Receptors Contribute to Visceral Hyperalgesia in the Water Avoidance Stressed Rat. *Gut.*2009; 58(2):202-10.
32. Wiley JW, Pietropaolo M. Autoimmune pancreatitis: the emerging role of serologic biomarkers. *Diabetes.* 2009; 58(3):520-2.

C. Research Support

Ongoing Research Support

MICHR CTSA Pienta (PI) 9/17/2007 – 5/31/2008
 UL1 RR024986
 Associate Director: John W. Wiley, M.D.

RO1 DK56997-6 Wiley (PI) 02/01/06 – 01/31/11

NIH/NIDDK

Autoimmune Mechanisms in Diabetic Neuropathy

This application focuses on the pathogenesis of diabetic enteric neuropathy. The PI hypothesizes that increased calcium influx diabetic neuropathy is associated with increased PKC-dependent phosphorylation of the inhibitory G protein, G₀ which impairs its function.

Role: Primary Investigator

P30 DK34933 Owyang (PI) 02/01/05 – 11/30/10
NIH/NIDDK
University of Michigan G.I. Hormone Research Center supporting research on Brain-Gut Peptides
Role: Co-director In Vivo Core

Internal University Award Wiley (PI) 03/01/09 – 02/28/10

Novel Targets in Diabetic Neuropathy Identified with High Throughput Proteomic Screening
This application focuses on identification of novel protein moieties whose expression is selectively altered in diabetic neuropathy.
Role: Principal Investigator

Completed Research Support

2 M01RR000042 Kelch (PI) 03/01/06 – 2/28/11
NIH/NIDDK
UM General Clinical Research Center
This award provides funding for a center to support clinical research efforts at the University of Michigan.
Role: Program Director, University of Michigan GCRC.

NIH 1 K30 HL04108-03 Schteingart (PI) 09/01/05 - 08/31/10
NIH/NIDDK
University of Michigan Training Program in Clinical Research - K30 Grant
This grant provides training for post-doctoral fellows in the principles of clinical research.
Role: Co-developer of a course in the principles of translational research.

NIH 3 P60 DK20572-2451 Herman (PI) 09/01/01-11/30/02
NIH/NIDDK
Michigan Diabetes Research and Training Center - Supplement
Examines the behavioral, physiology, biochemical and molecular basis of painful diabetic neuropathy.
Role: PI on Project Supplement

RO1 DK 52387 Wiley (PI) 02/01/98 - 01/31/03
NIH/DDK
Visceral Neuronal Calcium Signaling in Diabetes Mellitus
The major goal of this project is to clarify the role of altered calcium signaling in diabetic sensory neuropathy.
Role: PI