Curriculum Vitae

DAN J. BARE, Ph. D.

Home address:
10 Woodland Ct. C-4
Lombard, Illinois 60148

Phone: (312) 942-6019
E-mail: dan_bare@rush.edu
Citizenship: United States

Work address:
Dept. of Molecular Biophysics & Physiology
Rush University Medical Center
1750 W. Harrison St., JS-1259
Chicago, IL 60612-3825

Education & Research Training:

2014- Current	**Research Specialist** Rush University, Chicago, IL With Tom Shannon, DVM, Ph.D.
2008-2014	**Research Assistant Professor** Department of Medicine, Section of Cardiology University of Illinois-Chicago, Chicago, IL With Kathrin Banach, Ph.D.
2005-2008	**Research Assistant Professor** Department of Anatomy and Cell Biology, University of Illinois-Chicago, Chicago, IL With George DeVries, Ph.D.
1998-2005	**Research Specialist** Department of Physiology, Loyola University School of Medicine, Maywood, IL With Greg Mignery, Ph.D.
1995-1997	**Research Associate** Department of Psychiatry, Indiana University School of Medicine, Indianapolis, IN With Bill McBride, Ph.D.
1993-1995	**Research Associate** Department of Pathology and Lab Medicine, Indiana University School of Medicine, Indianapolis, IN With Judith Richter, Ph.D. and Bernardino Ghetti, M.D.
1990-1993	**Postdoctoral Fellow** Department of Biochemistry and Biophysics, University of North Carolina-Chapel Hill, Chapel Hill, NC With Patricia Maness, Ph.D.
1983-1990	**Ph.D., Neurobiology and Anatomy** Department of Neurobiology and Anatomy, Wake Forest University School of Medicine, Winston-Salem, NC Advisor: W. Keith O'Steen, Ph.D.

1978-1982 **B.S., Major: Biology / Minor: Chemistry**
Appalachian State University, Boone, NC

Thesis: *Light Cycle Regulation of Photoreceptor Survival in Light-induced Retinal Damage of the Albino Rat.*

Teaching Experience:
Graduate Teaching Assistant:

1984-1985	"Microanatomy I – Cells and Tissues"
	"Microanatomy II – Organ Systems"
1985-1986	"Gross Anatomy & Neuroanatomy"
1986-1987	"Microanatomy I – Cells and Tissues"
1987-1988	"Gross Anatomy"

Lecturer (Loyola University School of Medicine):
2000 Neuroscience Graduate Program / Cellular and Molecular Neurobiology
Guest Instructor (University of Illinois-Chicago):
2007 Medical Gross Anatomy: Unit 1 – Torso
Student Mentorship (University of Illinois-Chicago):
2012 & 2013 First place winner- Medical student research poster presentation - Anthony Lucero, B.S.; Center for Cardiovascular Research-UIC

Honors / Awards:
B.S. with Honors – Appalachian State University
Who's Who Among Students In American Universities and Colleges (1982)
Alpha Chi Honor Society / A.S.U. Vice-President (1982)
Gamma Beta Phi Honor Society
Beta Beta Beta Biological Honor Society / A.S.U. President (1982-1983)
A.S.U. Honors Program / English Honors Student

Wake Forest University School of Medicine – Graduate Traineeship Awards (1985-1990)

NRSA Postdoctoral Fellowship: National Eye Institute (2 years) 4/ 1 /91 - 3/ 31 /93
" Tyrosine-specific Protein Kinases in the Retina."

Professional Society Memberships and Service:

1986	Society for Neuroscience
2006	American Society for Neurochemistry
2007-2009	Research Safety Subcommittee; Dept. of Veterans Affairs, Edward Hines Jr. VA Hospital

Completed Research Support:
National Multiple Sclerosis Society- PP1542 (Pilot Research Project Grant)
Bare (**Principle Investigator**) 06/01/08 – 05/31/09
"Neuregulin-1 type-III expression in the CNS: The use of novel isotype-specific antibodies."

Publications:

O'Steen, W. K., **D. J. Bare**, M. Tytell, M. Morris, and D. J. Gower. 1990. Dehydration stress protects photoreceptors against light damage. *Brain Research* 534:99-105.

Bare, D. J., J. M. Lauder, M. B. Wilkie, and P. F. Maness. 1993. $p59^{FYN}$ in rat brain is localized in developing axonal tracts and subpopulations of adult neurons and glia. *Oncogene* 8:1429-1436.

Shock, L. P., **D. J. Bare**, S. G. Klinz, and P. F. Maness. 1995. Protein tyrosine phosphatases expressed in developing brain and retinal Müller glia. *Molecular Brain Research* 28:110-116.

Richter, J. A., **D. J. Bare**, H. Yu, B. Ghetti, and J. R. Simon. 1995. Dopamine transporter-dependent and -independent endogenous dopamine release from *weaver* mouse striatum in vitro. *Journal of Neurochemistry* 64:191-198.

O'Steen, W. K., R. L. Spencer, **D. J. Bare**, and B. S. McEwen. 1995. Analysis of severe photoreceptor loss and Morris water maze performance in aged rats. *Behavioral Brain Research* 68:151-158.

Bare, D. J., B. Ghetti, and J. A. Richter. 1995. The tyrosine kinase inhibitor genistein increases endogenous dopamine release from normal and *weaver* mutant mouse striatal slices. *Journal of Neurochemistry* 65:2096-2104.

Simon, J. R., **D. J. Bare**, B. Ghetti, and J. A. Richter. 1997. A possible role for tyrosine kinases in the regulation of the neuronal dopamine transporter. *Neuroscience Letters* 224:1-5.

Bare, D. J., J. H. McKinzie, and W. J. McBride. 1998. Development of rapid tolerance to ethanol-stimulated serotonin release in the ventral hippocampus. *Alcoholism: Clinical and Experimental Research* 22:1272-1276.

Haber, H., N. Dumaual, **D. J. Bare**, M. F. Melzig, W. J. McBride, L. Lumeng, and T. -K. Li. 1999. The quantitative determination of R- and S-salsolinol in the striatum and adrenal glands of rats selectively bred for disparate alcohol drinking. *Addiction Biology* 4:181-189.

Ramos-Franco, J., **D. Bare**, S. Caenepeel, A. Nani, M. Fill, and G. Mignery. 2000. Single channel function of recombinant type 2 inositol 1,4,5-trisphosphate receptor. *Biophysical Journal* 79:1388-1399.

Kockskämper, J., K. A. Sheehan, **D. J. Bare**, S. L. Lipsius, G. A. Mignery, and L. A. Blatter. 2001. Activation and propagation of Ca^{2+} release during excitation-contraction coupling in atrial myocytes. *Biophysical Journal* 81:2590-2605.

Thielen, R. J., **D. J. Bare**, W. J. McBride, L. Lumeng, and T. -K. Li. 2002. Ethanol-stimulated serotonin release in the ventral hippocampus: an absence of rapid tolerance for the alcohol-preferring P rat and insensitivity in the alcohol-nonpreferring NP rat. *Pharmacology, Biochemistry and Behavior* 71:111-117.

Holtzclaw, L. A., S. Pandhit, **D. J. Bare**, G. A. Mignery, and J. T. Russell. 2002. Astrocytes in adult rat brain express type 2 inositol 1, 4, 5-trisphosphate receptors. *Glia* 39:69-84.

Serysheva I. I., **D. J. Bare**, S. J. Ludtke, C. S. Kettlun, W. Chiu, and G.A. Mignery. 2003. Structure of the type 1 inositol 1, 4, 5-trisphosphate receptor revealed by electron cryomicroscopy. *Journal of Biological Chemistry* 278:21319-21322.

Bare, D. J., C. S. Kettlun, M. Liang, D. M. Bers, and G.A. Mignery. 2005. Cardiac type 2 inositol 1, 4, 5-trisphosphate receptor: interaction and modulation by calcium / calmodulin-dependent protein kinase II. *Journal of Biological Chemistry* 280:15912-15920.

Remus, T. P., A. V. Zima, J. Bossuyt, **D. J. Bare**, J. L. Martin, L. A. Blatter, D. M. Bers, and G.A. Mignery. 2005. Biosensors to measure inositol 1, 4, 5-trisphosphate concentration in living cells with spatiotemporal resolution. *Journal of Biological Chemistry* 281:608-616.

Zima, A.V., **D. J. Bare**, G.A. Mignery and L. A. Blatter. 2007. IP_3-dependent nuclear Ca^{2+} signaling in the mammalian heart. *Journal of Physiology* 584: 601-611.

Bare, **D. J.,** S. G. Becker-Catania, and G. H. DeVries. 2011. Differential localization of neuregulin-1 type III in the central and peripheral nervous system. *Brain Research* 1396:10-20.

DeSantiago, J., **D. J. Bare**, I. Semenov, R. D. Minshall, D. L. Geenen, B. M. Wolska, and K. Banach. 2012. Excitation-contraction coupling in ventricular myocytes is enhanced by paracrine signaling from mesenchymal stem cells. *Journal of Molecular and Cellular Cardiology* 52:1249-1256.

Mureli, S., C. P. Gans, **D. J. Bare**, D. L. Geenen, N. M. Kumar, and K. Banach. 2012. Mesenchymal stem cells improve cardiac conduction by up-regulation of connexin 43 through paracrine signaling. *AJP-Heart and Circulatory Physiology* 304:H600-H609.

DeSantiago, J., **D. J. Bare,** Y. Ke, K. A. Sheehan, R. John Solaro**,** and K. Banach. 2013. Functional integrity of the T-tubular system in cardiomyocytes depends on p21-activated kinase 1. *Journal of Molecular and Cellular Cardiology* 60: 121-128.

DeSantiago, J., **D. J. Bare,** and K. Banach. 2013. Ischemia-reperfusion injury protection by mesenchymal stem cell derived antioxidant capacity. *Stem Cells and Development* 22: 2497-2507.

DeSantiago, J., **D. J. Bare,** L. Xiao**,** Y. Ke, R. John Solaro**,** and K. Banach. 2014. p21-Activated kinase 1 (Pak1) is a negative regulator of NADPH-oxidase 2 in ventricular myocytes. *Journal of Molecular and Cellular Cardiology* 67: 77-85.