

## SIDNEY (WALLY) WALDO WHITEHEART

### Business Address:

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University of Kentucky College of Medicine  
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### Professional Experience:

- Mar. 1994- UNIVERSITY OF KENTUCKY COLLEGE OF MEDICINE  
Present Department of Molecular and Cellular Biochemistry  
Position: Assistant Professor 1994-Jan. 2000  
Associate Professor 2000-July 2005  
Professor 2005-Present  
Interim Chair 2011-2012  
Graduate Faculty in the Clinical Sciences Program 2006-2012 (program ended)
- Mar. 1991- SLOAN-KETTERING INSTITUTE  
Mar. 1994 Program of Cellular Biochemistry and Biophysics  
Advisor: Dr. James E. Rothman (Nobel Prize 2013)  
Position: Postdoctoral Fellow supported by The Jane Coffin Childs Memorial Fund for Medical Research and Sloan-Kettering Institute
- Jan. 1990-Mar. PRINCETON UNIVERSITY  
1991 Department of Biology  
Advisor: Dr. James E. Rothman (*Nobel Prize 2013*)  
Position: Postdoctoral Fellow supported by The Jane Coffin Childs Memorial Fund for Medical Research
- Aug. 1989-Jan. MERCK, SHARP, AND DOHME RESEARCH LABORATORIES  
1990 West Point, Pennsylvania  
Department of Pharmacology  
Supervisor: Dr. Robert Stein  
Position: Research Biochemist
- Jun. 1983-Aug. THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE  
1989 Department of Biological Chemistry  
Advisor: Dr. Gerald W. Hart  
Position: Graduate Student
- Summers BOWMAN GRAY SCHOOL OF MEDICINE  
1979-1982 Winston-Salem, North Carolina  
Department of Immunology and Microbiology  
Supervisor: Dr. Samuel H. Love  
Position: Laboratory Technician
- Education:**  
1983-1989 The Johns Hopkins University School of Medicine  
Baltimore, Maryland  
**Ph.D.**, Biological Chemistry (1989)
- 1979-1983 Emory University  
Atlanta, Georgia  
**B.A.**, Chemistry (1983)  
**B.S.**, Biology (1983)

**Professional Societies and Awards:**

Fellow of the Jane Coffin Childs Memorial Fund for Medical Research, 1990-1993  
 Member of American Association for the Advancement of Science  
 Member of American Society for Biochemistry and Molecular Biology  
 Member of the American Society of Hematology  
 Designated as an AHA-Sanofi Winthrop Grant-in-Aid Awardee, 1995  
 University of Kentucky Faculty Research Award (Junior Faculty) 1999  
 University of Kentucky Nominee for Howard Hughes Medical Institute Assistant Investigator Competition 1999  
 Editorial Board of the Journal of Biological Chemistry 2001-2006, 2008-2013  
 University of Kentucky Alumni Association Great Teacher Award 2006  
 University of Kentucky Research Professorship 2010  
 The Albert D. & Elizabeth H. Kirwan Memorial Prize 2013

**Grant Support:****PAST**

Small Research Grant from The University of Kentucky Research Fund, 1994	\$15,000
The University of Kentucky Research Fund Major Equipment Award, 1994	\$3,150
Research or Clinical Investigation Grant from the American Cancer Society, 1995-1996	\$185,000
“Role of NSF in Cellular Secretion: A Molecular Study” <b>P.I.</b>	
Research or Clinical Investigation Grant from the American Cancer Society, 1997	\$82,000
“Role of NSF in Cellular Secretion: A Molecular Study” <b>P.I.</b>	
Grant-in-Aid from American Heart Association, 1995-1998 (declined after first year)	\$119,000
“Identification and Characterization of Exocytic Machinery Components in the Platelet” <b>P.I.</b>	
Grant-in-Aid from American Heart Association Kentucky Affiliate, 1995-1996 (declined)	\$28,000
“Identification and Characterization of Exocytic Machinery Components in the Platelet” <b>P.I.</b>	
Kentucky Center for Structural Biology KY/NSF EPSCoR, 1996-1997	\$22,447
“NSF Structure and Function”	
National Institutes of Health, 1R01HL56652-01, 7/96-6/01	\$707,673
“Molecular Mechanisms of Platelet Exocytosis” <b>P.I.</b> 30% effort	
National Institutes of Health, 1R01AI41668 9/98-9/03	\$1,297,670
“Mechanism of YopM in Plague” S.C. Straley, P.I. 2.5% effort as Consultant	
Department of Veterans Affairs 10/99-9/02	\$275,000
“Long-Term Effect of Kindled Epilepsy on the Neurosecretory Apparatus” John Slevin, P.I. 5% effort as Co-Investigator	
American Heart Association Ohio Valley Affiliate 0150841B 7/1/01-6/30/03	
“Molecular Mechanisms of Platelet Exocytosis” <b>P.I.</b> 35% Effort	\$110,000
Returned after first year due to overlap with NIH HL56652-06	
National Institutes of Health, RO1HL56652-06 4/1/02-3/31/06	
“Molecular Mechanisms of Platelet Exocytosis” <b>P.I.</b> 35% effort budget increased by \$26,000 on 7/30/04	\$1,013,600
Department of Veterans Affairs 1/1/04-6/30/07	
“Long-Term Effect of Kindled Epilepsy on the Neurosecretory Apparatus” John Slevin, P.I. 10% effort as Co-Investigator	\$801,200
American Heart Association Ohio Valley Affiliate 0455422B 7/1/04-6/30/06	
“Structure/Function of N-ethylmaleimide Sensitive Factor” <b>P.I.</b> 25% Effort	\$121,000
Returned after first year due to overlap with NS046242-01	
National Institutes of Health, R21HL081614 submitted to PA 03-015 4/1/06-3/31/08	
“Role of O-GlcNAc in Platelet Activation” <b>P.I.</b> 20% effort	\$292,800
UBC Pharma The Keppra Investigator Initiated Study (KIIS) 11/1/05-8/1/08	\$34,150
“Effects of LEV on SNARE Complex Assembly during Epileptogenesis” John Slevin PI 10% Effort as Co-PI.	
National Institutes of Health, RO1 NS046242-01 9/20/04-6/30/09	
“Structure/Function of N-ethylmaleimide Sensitive Factor” <b>P.I.</b> 35% effort	\$1,149,969
Department of Veterans Affairs 7/1/07-6/30/11	
“Long-Term Effect of Kindled Epilepsy on the Neurosecretory Apparatus” John Slevin, P.I. 10% effort as Co-Investigator	\$801,200
National Institutes of Health P20 RR-021954-01A1 7/1/08-6/30/13	
Center of Biomedical Research Excellence (COBRE) in Obesity and Cardiovascular Disease Lisa Cassis, P.I.	\$10,532,685

Mentor to one of the young investigators (10% effort), role ended 2012 because mentee got a grant.

#### ACTIVE

National Institutes of Health P20 RR-03-014 9/1/04-6/30/14  
Center of Biomedical Research Excellence (COBRE) in the Molecular Basis of Human Disease \$6,855,940  
Louis B. Hersh P.I.  
Mentor to young investigators (5% effort).

National Institutes of Health, RO1HL56652 7/1/96-5/31/16  
“Molecular Mechanisms of Platelet Exocytosis” P.I. 30% effort \$1,172,000

Department of Veterans Affairs 10/1/10-9/30/14  
“TBI Epileptogenesis: Pathologic Hippocampal L-Glut Synaptic Plasticity” John Slevin, P.I. \$736,348  
10% effort as Co-Investigator

University of Cincinnati/University of Kentucky Centers for Clinical and Translational Science  
7/1/13-12/31/14 “Analysis of Platelet Function in Hemophagocytic Lymphohistiocytosis” \$38,468  
Co-PI with Dr. Alexandra Filipovich (no funded effort)

National Institutes of Health 1R01HL119393-01 8/1/13-3/30/17 \$1,826,838  
“Structure/Function Determinants of Platelet Granule Secretion”  
Brian Storrie P.I. (University of Arkansas College of Medicine)  
1-3% effort as Co-Investigator,

#### PENDING

National Institutes of Health (October 2013 submission)  
“Crosstalk between membrane traffic proteins and integrin activation”  
Zhenyu Li P.I. (University of Kentucky College of Medicine)  
3.6% effort as Co-Investigator Received a 25 score, 12<sup>th</sup> percentile at the Feb 2014 study section

National Institutes of Health 1R01HL091893-05 (to be resubmitted as A1 in 2014) \$1,492,216  
“The Platelet Secretory Machinery”  
P.I. 30% Effort

National Institutes of Health P30 RR-03-014 7/1/04-6/30/19 \$5,625,000  
Center of Biomedical Research Excellence (COBRE) in the Molecular Basis of Human Disease  
Louis B. Hersh P.I.  
5% effort as Program Director. (Scored 11, no percentile given 12/13)

#### Publications:

1. Whiteheart, S.W., Campbell, R.D., and Love, S.H. (1982) Adaptable System for Microdialysis. **Journal of Chromatography** 240, 203.
2. Campbell, R.D., Love, S.H., Whiteheart, S.W., Young, B., and Myrvik, Q.N. (1982) Increased Hyaluronic Acid is Associated with Dermal Delayed-Type Hypersensitivity. **Inflammation** 6, 235.
3. Herman, J.H., Whiteheart, S.W., Shirey, R.S., Johnson, R.J., Kickler, T.S., and Ness, P.M. (1987) Red Cell Th Activation: Biochemical Studies. **British Journal of Haematology** 65, 205.
4. Whiteheart, S.W. and Hart, G.W. (1987) Sialyltransferases as Specific Cell Surface Probes of Terminal and Penultimate Saccharide Structures on Living Cells. **Analytical Biochemistry** 163, 123.
5. Powell, L.D., Whiteheart, S.W., and Hart, G.W. (1987) Cell Surface Sialic Acid Influences Tumor Cell Recognition in the Mixed Lymphocyte Reaction. **Journal of Immunology** 139, 262.
6. Reichner, J.S., Whiteheart, S.W., and Hart, G.W. (1988) Intracellular Trafficking of Cell Surface Sialoglycoproteins. **Journal of Biological Chemistry** 263, 16316.

7. Whiteheart, S.W., Passaniti, A., Reichner, J.S., Holt, G.D., Haltiwanger, R.S., and Hart, G.W. (1989) Glycosyltransferase Probes. **Methods in Enzymology** 179, 82.
  8. Whiteheart, S.W., Shenbagamurthi, P., Chen, L., Cotter, R.J., and Hart, G.W. (1989) Murine Elongation Factor EF-1  $\alpha$  is Posttranslationally Modified by Novel Amide-Linked Ethanolamine-Phosphoglycerol Moieties: Addition of Ethanolamine-Phosphoglycerol to Specific Glutamic Acid Residues on EF-1 $\alpha$ . **Journal of Biological Chemistry** 264, 14334.
  9. Whiteheart, S.W., McLenithan, J.C., and Hart, G.W. (1990) Surfaces of Murine Lymphocyte Subsets Differ in Sialylation State and Antigen Distribution of a Major N-Linked Penultimate Saccharide Structure. **Cellular Immunology** 125, 337 .
  10. Wilson, D.W., Whiteheart, S.W., Orci, L., and Rothman, J.E. (1991) Intracellular Membrane Fusion. **Trends in Biochemical Science** 16, 334.
  11. Wilson, D.W., Whiteheart, S.W., Wiedmann, M., Brunner, M., and Rothman, J.E. (1992) Programmed Assembly and Disassembly of a Multisubunit Particle Involved in Membrane Fusion. **Journal of Cell Biology** 117, 531.
  12. Whiteheart, S.W., Brunner, M., Wilson, D.W., Wiedmann, M., and Rothman, J.E. (1992) Soluble N-Ethylmaleimide-Sensitive Fusion Attachment Proteins (SNAPs) Bind to a Multi-SNAP Receptor Complex in Golgi Membranes. **Journal of Biological Chemistry** 267, 12239.
  13. Whiteheart, S.W., Griff, I.C., Brunner, M., Clary, D.O., Mayer, T., Buhrow, S. A., and Rothman, J.E. (1993) SNAP family of NSF attachment proteins includes a brain-specific isoform. **Nature** 362, 353.
  14. Söllner, T., Whiteheart, S.W., Brunner, M., Erdjument-Bromage, H., Geromanos, S., Tempst, P., and Rothman J.E. (1993) SNAP receptors implicated in vesicle targeting and fusion. **Nature** 362, 318. (*Cited as a Key Publication in James E Rothman's Nobel Prize notification, 10/7/13*)
  15. Söllner, T., Bennnett, M.K., Whiteheart, S.W., Scheller, R.H., and Rothman, J.E. (1993) A Protein Assembly-Disassembly Pathway *In Vitro* That May Correspond to Sequential Steps of Synaptic Vesicle Docking, Activation, and Fusion. **Cell** 75, 409.
  16. Whiteheart, S.W., and Hart, G.W. (1994) Incorporation of [<sup>3</sup>H]Ethanolamine into a Single Cytosolic Protein in a Cell Free System: Ethanolaminylation of EF-1  $\alpha$  *in vitro*. **Archives of Biochemistry and Biophysics** 309, 387.
  17. Whiteheart, S.W., Rossnagel, K., Buhrow, S.A., Brunner, M., Jaenicke, R., and Rothman, J.E. (1994) N-Ethylmaleimide-Sensitive Fusion Protein: A Trimeric ATPase Whose Hydrolysis of ATP is Required for Membrane Fusion. **Journal of Cell Biology** 126, 945.
- Since starting at University of Kentucky**
18. DeBello, W.M., O'Connor, V., Dresbach, T., Whiteheart, S.W., Wang, S.S.-H., Scheizer, F.E., Betz, H., Rothman, J.E., and Augustine, G.J. (1995) SNAP-Mediated Protein-Protein Interactions are Essential for Neurotransmitter Release. **Nature** 373, 626.
  19. Whiteheart, S.W. and Kubalek, E.W. (1995) SNAPs and NSF: general members of the fusion apparatus. **Trends in Cell Biology** 5, 64.
  20. Nagiec E.E., Bernstein A., and Whiteheart, S.W. (1995) Each Domain Distinctly Contributes to the Transport Activity of the N-Ethylmaleimide Sensitive Fusion Protein (NSF). **Journal of Biological Chemistry** 270, 29182.
  21. Burns, M.E., Beushausen, S.A., Chin, G.J., Tang, D., DeBello, W.M., Dresbach, T., O'Connor, V., Schweizer, F.E., Wang, S.S., Whiteheart, S.W., Hawkey, L.A., Betz, H., and Augustine, G.J. (1995) Proteins Involved in Synaptic Vesicle Docking and Fusion. **Cold Spring Harbor Symposium on Quantitative Biology** 60, 337
  22. Apodaca, G., Cardone, M.H., Whiteheart, S.W., DasGupta, B.R., and Mostov, K.E. (1996) NSF and SNARE Requirement for Transcytosis: Existence of Multiple Fusion Mechanisms with the Apical Surface of MDCK Cells. **EMBO Journal** 15, 1471.

23. Timmers, K.I., Clark, A.E., Omatsu-Kanbe, M., Whiteheart, S.W., Bennett, M.K., Holman, G.D., and Cushman, S.W. (1996) Identification of SNAP Receptors in Rat Adipose Cell Membrane Fractions and Membrane Fusion Complexes Co-Immunoprecipitated with NEM-Sensitive Fusion Proteins. **Biochemical Journal** 320, 429.
24. Colombo, M.I., Taddese, M., Whiteheart, S.W., and Stahl, P.D. (1996) A Possible Pre-Docking Attachment Site for NSF: insights from in vitro endosome fusion. **Journal of Biological Chemistry** 271, 18810.
25. Lemons, P. P., Chen, D., Bernstein, A. M., Bennett, M. K., and Whiteheart, S.W. (1997) Regulated Secretion in Platelets: Identification of Elements of the Platelet Exocytosis Machinery. **Blood** 90, 1490.
26. Matveeva, E.A., He, P., and Whiteheart, S.W. (1997) N-Ethylmaleimide-sensitive Fusion Protein (NSF) contains high and low affinity ATP-binding sites that are functionally distinct. **Journal of Biological Chemistry** 272, 26413.
27. Colombo, M.I., Gelberman, S.C., Whiteheart, S.W., and Stahl, P.D. (1998) N-ethylmaleimide-Sensitive Factor-dependent  $\alpha$ -SNAP Release, an Early Event in the Docking/Fusion Process, is not Regulated by Rab GTPases. **Journal of Biological Chemistry** 273, 1334.
28. Low, S.H., Chapin, S.J., Wimmer, C., Whiteheart, S.W., Kömüves, L.G., Mostov, K.E., and Weimbs, T. (1998) The SNARE Machinery Is Involved in Apical Plasma Membrane Trafficking in MDCK Cells. **The Journal of Cell Biology**, 141, 1.
29. Leung, S.-M., Chen, D., DasGupta, B.R., Whiteheart, S.W., and Apodaca, G. (1998) SNAP-23 Requirement for Endocytic Traffic in Streptolysin-O Permeabilized Madin-Darby Canine Kidney Cells. **Journal of Biological Chemistry**, 273, 17732.
30. Lenzen, C.U., Oppitz, D., Whiteheart, S.W., and Weis, W.I. (1998) Crystal Structure of the Hexamerization Domain of N-Ethylmaleimide-Sensitive Fusion Protein. **Cell**, 94, 525-536.
31. Matveeva, E. A., and Whiteheart, S.W. (1998) The Effect of SNARE Complexes on the ATPase Activity of NSF. **FEBS Letters**, 435, 211.
32. Minger, S.L., Geddes, J.W., Holtz, M.L. Craddock, S.D., Whiteheart, S.W., Siman, R.G., and Pettigrew, L.C. (1998) Glutamate Receptor Antagonists Inhibit Calpain-Mediated Cytoskeletal Proteolysis in Focal Cerebral Ischemia. **Brain Research** 810, 181.
33. Bernstein, A.M. and Whiteheart, S.W. (1999) Identification of a Cellubrevin/VAMP 3 Homologue in Human Platelets. **Blood**, 93, 571.
34. Chen, D. and Whiteheart, S.W. (1999) Intracellular Localization of SNAP-23 to Endosomal Compartments. **Biochemical Biophysical Research Communications**, 255, 340.
35. Chen, D., Minger, S.L., Honer, W.G., and Whiteheart, S.W. (1999) Organization of the Secretory Machinery in the Rodent Brain: Distribution of the t-SNAREs, SNAP-25 and SNAP-23. **Brain Research**, 831, 11.
36. May, A.P., Misura, K.M.S., Whiteheart, S.W., and Weis, W.I. (1999) Crystal Structure of the Amino-Terminal Domain of the N-ethylmaleimide Sensitive Fusion Protein (NSF). **Nature Cell Biology**, 1, 175
37. He, P., Southard, R.C., Chen, D. Whiteheart, S.W., and Copper, R.L. (1999) Role of  $\alpha$ -SNAP in Promoting Efficient Neurotransmission at the Crayfish Neuromuscular Junction. **Journal of Neurophysiology**, 82, 3406.
38. Richards-Smith, B., Novak, E.K., Jang, E.K., Haslam, R.J., Castle, D., He, P., Whiteheart, S.W., and Swank, R.T. (1999) Analyses of Proteins Involved in Vesicular Trafficking in Platelets of Mouse Models of Hermansky Pudlak Syndrome. **Molecular Genetics and Metabolism**, 68, 14.
39. Chen, D., Bernstein, A.M., Lemons, P.P., and Whiteheart, S.W. (2000) Molecular Mechanisms of Platelet Exocytosis: Role of SNAP-23 and Syntaxin 2 in Dense Core Granule Release. **Blood**, 95, 921.

40. Lemons P.P., Chen, D., and Whiteheart, S.W. (2000) Molecular Mechanisms of Platelet Exocytosis: Requirements for  $\alpha$ -Granule Release. **Biochemical Biophysical Research Communications**, 267, 875.
41. Chen, D., Lemons, P.P., Schraw, T., and Whiteheart, S.W. (2000) Molecular Mechanisms of Platelet Exocytosis: Role of SNAP-23 Syntaxin 2 and 4 in Platelet Lysosome Release. **Blood**, 96, 1782.
42. Southard, R.C., Haggard, J., Crider, M.E., Whiteheart, S.W., and Cooper, R.L. (2000) Influence of Serotonin on the Kinetics of Vesicle Release. **Brain Research**, 871, 16.
43. Whiteheart, S.W., Schraw, T., and Matveeva, E. A. (2001) N-ethylmaleimide Sensitive Factor (NSF) Structure and Function. **International Review of Cytology**, 207, 71.
44. Matveeva, E.A., Whiteheart, S.W., Vanaman, T.C., and Slevin, J.T. (2001) Phosphorylation of the N-ethylmaleimide Sensitive Factor (NSF) is Associated with Depolarization-Dependent Neurotransmitter Release from Synaptosomes. **Journal of Biological Chemistry**, 276, 12174.
45. Chen, D., Xu, W., He, P., Medrano, E.E., and Whiteheart, S.W. (2001) Gaf-1, a  $\gamma$ -SNAP Binding Protein Associated with Mitochondria. **Journal of Biological Chemistry**, 276, 13127.
46. May, A.P. Whiteheart, S.W., and Weis W. I. (2001) Unraveling the Mechanism of NSF, the N-ethylmaleimide Sensitive Factor. **Journal of Biological Chemistry**, 276, 21991.
47. Cooper, R.L., Southard, R.C., He, P., and Whiteheart, S.W. (2002) Influence of neuromodulators and vesicle docking related proteins on quantal release. In, "The Crustacean Nervous System". (Konrad Wiese, ed.) Springer-Verlag, Heidelberg, Germany. pp. 63.
48. Matveeva, E.A., May, A.P., He, P. and Whiteheart, S.W. (2002) Uncoupling of NSF ATPase from SNARE Complex Disassembly. **Biochemistry**, 41, 530.
49. Rutledge, T. and Whiteheart, S.W. (2002) SNAP-23 is a Target for Calpain Cleavage in Activated Platelets. **Journal of Biological Chemistry**, 277, 37009.
50. Matveeva, E.A., Whiteheart, S.W., and Slevin, J.T. (2003) Accumulation of SNARE Complexes in Hippocampal Synaptosomes from Chronically Kindled Rats. **Journal of Neurochemistry**, 84, 1.
51. Skrzypek, E., Myers-Morales, T., Whiteheart, S.W., and Straley, S.C. (2003) Localization of Domains Involved in Trafficking to the Yeast Nucleus by *Yersinia pestis* YopM. **Infection and Immunity**, 71, 937.
52. Schraw, T.D., Lemons, P.P., Dean, W.L., and Whiteheart, S.W. (2003) Role for Sec1/Munc18 Proteins in Platelet Exocytosis. **Biochemical Journal**, 374, 207.
53. Schraw, T. D., Rutledge, T. W. , Crawford, G. L., Kalen, L. A., Pessin, J. E., Bernstein, A. M., and Whiteheart, S.W. (2003) Granule Stores from Cellubrevin/VAMP-3 Null Mouse Platelets Exhibit Normal Stimulation-Induced Release. **Blood**, 102, 1716.
54. Puri, N., Kruklak, M.J., Whiteheart, S.W., and Roche, P.A. (2003) Mast Cell Degranulation Requires N-Ethylmaleimide-Sensitive Factor-Mediated SNARE Disassembly. **Journal of Immunology**, 171, 5345.
55. Rutledge, T. W. and Whiteheart, S.W. (2004) Studies of Secretion Using Permeabilized Platelets. **Platelets and Megakaryocytes: Vol. 1 Functional Assays**, Gibbins, J.M. and Mahaut-Smith, M.P. eds., **Methods in Molecular Biology** Vol. 272, p. 109.
56. Dean W.L. and Whiteheart, S.W. (2004) Plasma Membrane  $\text{Ca}^{2+}$ -ATPase (PMCA) Translocates to Filopodia during Platelet Activation. **Thrombosis and Haemostasis**, 91, 325. (Cover Photo)
57. Whiteheart, S.W. and Matveeva, E.A. (2004) Multiple Binding Proteins Suggest Diverse Functions for the N-ethylmaleimide Sensitive Factor (NSF). **Journal of Structural Biology**, 146, 32.

58. Ogura, T., Whiteheart, S.W., and Wilkinson, A.J. (2004) Conserved Arginine Residues Implicated in ATP Hydrolysis, Nucleotide Sensing, and Inter-Subunit Interactions in AAA and AAA+ ATPases. **Journal of Structural Biology**, 146, 106.
59. Schraw, T.D., Crawford, G.L., Ren, Q., Choi, W., Thurmond, D. C., Pessin, J. E., and Whiteheart, S.W. (2004) Platelets from Munc18c Heterozygous Mice Exhibit Normal Stimulus-Induced Release. **Thrombosis and Haemostasis**, 92, 829.
60. Slevin, J. T., Whiteheart, S. W. and Vanaman, T. C. (2005) A Proteomic Approach to the Molecular Analysis of Kindling. In **Kindling 6** (Corcoran, M. and Moshe, S., eds) Kluwer/Plenum Press, Inc., New York, NY.
61. Gage, R.M., Matveeva, E.A., Whiteheart, S.W., and von Zastrow, M. (2005) Type I PDZ ligands are sufficient to promote rapid recycling of G protein-coupled receptors independent of binding to NSF. **Journal of Biological Chemistry**, 280, 3305.
62. Schraw, T.D. and Whiteheart, S.W. (2005) The development of a quantitative ELISA to detect human platelet factor 4. **Transfusion**. 45, 717.
63. Hepp, R., Puri, N., Hohenstein, A.C., Crawford, G.L., Whiteheart, S.W., and Roche, P.A. (2005) Phosphorylation of SNAP-23 Regulates Exocytosis from Mast Cells. **Journal of Biological Chemistry**, 280, 6610.
64. Hanson, P.I. and Whiteheart, S.W. (2005) AAA ATPases: Have Engine Will Work. **Nature Reviews, Molecular Cell Biology**, 6, 519. (Featured Article)
65. Chen, X., Matsumoto, H., Hinck1, C.S., Al-Hasani, H., St.-Denis, J.F., Whiteheart, S.W., and Cushman, S. W. (2005) Demonstration of differential quantitative requirements for NSF among multiple vesicle fusion pathways of GLUT4 using a dominant-negative ATPase-deficient NSF. **Biochemical Biophysical Research Communications** 333, 28.
66. Mackenzie, I., Baker, M., West, G., Woulfe, J., Qadi, N., Adamson, J., Feldman, H., Lindholm, C., Melquist, S., Pettman, R., Sadovnick, A. D., Dwosh, E., Whiteheart, S. W., Hutton, M., Pickering-Brown, SM (2006) A Family With Tau-Negative Frontotemporal Dementia and Neuronal Intranuclear Inclusions Linked to Chromosome 17. **Brain**, 129, 853.
67. Choi, W., Karim, Z. and Whiteheart, S.W. (2006) Arf6 Plays an Early Role in Platelet Activation by Collagen and Convulxin. **Blood** 107, 3145.
68. Matveeva, E.A., Vanaman, T.C., Whiteheart, S.W., and Slevin, J.T. (2007) Asymmetric Accumulation of Hippocampal 7S SNARE Complexes Occurs Regardless of Kindling Paradigm. **Epilepsy Research** 73, 266.
69. Ren, Q., Barber, H.K., Crawford, G.L., Karim, Z.A., Zhao, C., Choi, W., Wang, C.C., Hong, W., and Whiteheart, S.W. (2007) Endobrevin/VAMP-8 is the Primary v-SNARE Required for the Platelet Release Reaction. **Molecular Biology of the Cell** 18, 24.
70. Badol, P., David-Duflho, M., Auger, J., Whiteheart, S.W., and Rendu, F. (2007) Thiosulfates modulate platelet activation by reaction with surface free sulfhydryls and internal thiol-containing proteins. **Platelets** 18, 481.
71. Zhao, C., Slevin, J.T., and Whiteheart, S.W. (2007) Cellular Functions of NSF: Not Just SNAPs and SNAREs. **FEBS Letters** 581, 2140.
72. Smyth, S.S., Monroe, D.M., Wysokinski, W.E., McBane, R.D., II, Whiteheart, S.W., Becker, R.C., and Steinhubl, S.R.. (2007) Platelet activation and its patient-specific consequences. **Thrombosis Research**. 122, 435.
73. Matveeva, E. A., Vanaman, T. C., Whiteheart, S. W., and Slevin, J. T. (2008) Levetiracetam Prevents Kindling-Induced Accumulation of Hippocampal 7S SNARE Complex. **Epilepsia**, 49, 1749.
74. Karim, Z.A., Choi, W., and Whiteheart, S.W. (2008) Primary Platelet Signaling Cascades and Integrin-Mediated Signaling Control ADP-Ribosylation Factor (Arf)-6-GTP Levels during Platelet Activation and Aggregation. **Journal of Biological Chemistry**, 283, 11995.

75. Crawford, G.L., Hart, G.W., and Whiteheart, S.W. (2008) Murine Platelets are not Regulated by O-Linked  $\beta$ -N-acetylglucosamine. **Archives of Biochemistry and Biophysics**, 474, 220.
76. Ren, Q., Ye, S. and Whiteheart, S.W. (2008) The Platelet Release Reaction: Just when you thought platelet secretion was simple. **Current Opinion in Hematology**, 15, 537.
77. Vanaman, T.C., Whiteheart, S.W., Matveeva, E.A., and Slevin, J.T. (2009) Proteomic approaches to the analysis of protein alterations at the synapse in kindling. **Encyclopedia of Basic Epilepsy Research** (ed. Schwartzkroin, P.). 1176.
78. Whiteheart, S.W., Matveeva, E.A., Vanaman, T.C., and Slevin, J.T. (2009) Presynaptic Neurotransmission: Alterations in Exocytotic/Secretory Machinery in Kindling. **Encyclopedia of Basic Epilepsy Research** (ed. Schwartzkroin, P.). 892.
79. Konopatskaya, O., Gilio, K., Harper, M.T., Zhao, Y., Cosemans, J.M.E.M., Karim, Z.A., Whiteheart, S.W., Molkentin, J.D., Verkade, P., Watson, S.P., Heemskerk, J.W.H., and Poole A.W. (2009) PKC $\alpha$  regulates platelet granule secretion and thrombus formation. **Journal of Clinical Investigation**, 119, 399.
80. Graham, G.J., Ren, Q., Dilks, J.R., Blair, P. Whiteheart, S.W.<sup>#</sup>, and Flaumenhaft, R. (2009) Endobrevin/VAMP-8-Mediated Dense Granule Release is Required for Efficient Thrombus Formation *In Vivo*. **Blood**, 114, 1083. <sup>#</sup>Corresponding author. *Highlighted on the Cover and as the subject of an "Inside Blood" commentary.*
81. Zhao, C., Matveeva, E.A., Ren, Q., and Whiteheart, S.W. (2010) Dissecting the N-Ethylmaleimide Sensitive Factor (NSF): Required Elements of the N and D1 Domains. **Journal of Biological Chemistry**, 285, 761.
82. Kondkar, A.A. , Bray, M.S., Leal, S.M., Nagalla, S., Liu, D.J., Jin, Y., Dong, J.F., Ren, Q., Whiteheart, S.W., Shaw, C., and Bray, P.F. (2010) VAMP8/Endobrevin is over expressed in hyperactive human platelets: Suggested role for platelet micro-RNA. **Journal of Thrombosis and Haemostasis**. 8, 369.
83. Zhao, C., Hellman, L. M., Zhan, X., Bowman, W.S., Whiteheart, S.W. <sup>#</sup>, and Fried, M. G. (2010) Hexahistidine-Tag-Specific Optical Probes for Analyses of Proteins and their Interactions. **Analytical Biochemistry**, 399, 237. <sup>#</sup>Corresponding author. *Highlighted by the Faculty of 1000.*
84. Choi, W., Karim, Z.A., and Whiteheart, S.W. (2010) Protein Expression in Platelets from Six Species that Differ in their Open Canalicular System. **Platelets**, 21, 167.
85. Ren, Q., Wimmer, C., Chicka, M., Ye, S., Ren, Y., Hughson, F.M., and Whiteheart, S.W. (2010) Munc13-4 is a limiting factor in the pathway required for platelet granule release and hemostasis. **Blood**, 116, 869. *Highlighted on the cover, selected as a Plenary Paper, and as the subject of an "Inside Blood" commentary. Highlighted by the Faculty of 1000.*
86. Smyth, S.S., Whiteheart, S.W., Italiano, J.E., and Coller, B.S. (2010) Platelet Morphology. Biochemistry, and Function. in **Williams Hematology** 8<sup>th</sup> Edition (eds.Kaushansky, K., Lichtman, M.A., Beutler, E., Kipps, T.J., Seligsohn, U., and Prchal, J.T.). 1735.
87. Feng, W., Madajka, M., Kerr, B.A., Mahabeleshwar, G.H., Whiteheart, S.W., and Byzova, T.V. (2011) A Novel Role for Platelet Secretion in Angiogenesis: Mediating Bone Marrow-derived Cell Mobilization and Homing. **Blood**, 117, 3893. *Highlighted on the cover and as the subject of an "Inside Blood" commentary.*
88. Hellman, L.M., Zhao, C., Melikishvili, M., Tao, X., Hopper, J.E., Whiteheart, S.W., Fried, M.G. (2011) Histidine-tag-directed chromophores for tracer analyses in the analytical ultracentrifuge. **Methods**, 54, 31.
89. Zhang, G., Xiang, B., Ye, S., Chrzanowska-Wodnicka, M., Morris, A.J., Gartner, T.K., Whiteheart, S.W., White, G.C., Smyth, S.S. and Li, Z. (2011) Novel functions for Rap1b in platelet secretion and integrin  $\alpha$ IIb $\beta$ 3 outside-in signaling. **Journal of Biological Chemistry**, 286, 39466.
90. Whiteheart, S.W. (2011) Platelet Granules: Surprises in small packages. **Blood**, 118, 1190. (*"Inside Blood" Commentary*)



91. Matveeva, E.A., Davis, V.A., Whiteheart, S.W., Vanaman, T.C., Gerhardt, G.A. and Slevin, J.T. (2012) Kindling-Induced Asymmetric Accumulation of Hippocampal 7S SNARE Complexes Correlates with Enhanced Glutamate Release. **Epilepsia**, 53, 157.
92. Zhao, C., Smith, E.C., and Whiteheart, S.W. (2012) Requirements for the Catalytic Cycle of the N-ethylmaleimide Sensitive Factor (NSF). **Biochimica Biophysica Acta-Molecular Cell Research**, 1823, 159.
93. Matveeva, E.A., Price, D.A., Whiteheart, S.W., Vanaman, T.C., Gerhardt, G.A. and Slevin, J.T. (2012) Reduction of VAMP2 Expression leads to a Kindling-Resistant Phenotype in a Murine Model of Epilepsy. **Neuroscience**, 202, 77.
94. Moeller, A., Zhao, C., Fried, M.G., Wilson-Kubalek, E.M., Carragher, B., and Whiteheart, S.W. (2012) Nucleotide-Dependent Conformational Changes in the N-Ethylmaleimide Sensitive Factor (NSF) and their Potential Role in SNARE Complex Disassembly. **Journal of Structural Biology**, 177, 335.
95. Al Hawas, R., Ren, Q., Ye, S., Karim, Z.A., Filipovich, A.H., and Whiteheart, S.W. (2012) Munc18b/STXBP2 Is Required for Platelet Secretion. **Blood**, 120, 2493. *Highlighted as the subject of an "Inside Blood" commentary*
96. Ye, S., Karim, Z.A., Al Hawas, R., Pessin, J.E., Filipovich, A.H., and Whiteheart, S.W. (2012) Syntaxin-11, but not Syntaxin-2 and Syntaxin-4, Is Required for Platelet Secretion. **Blood**, 120, 2484. *Highlighted as the subject of an "Inside Blood" commentary*
97. Ye, S. and Whiteheart, S.W. (2012) Molecular Basis for Platelet Secretion. in **Hemostasis and Thrombosis: Basic Principles and Clinical Practice**, 6<sup>th</sup> Edition. (eds. Marder, V., Aird, W.C., Bennett, J., Schulman, S., White, G.C. III).
98. Jonnalagadda, D., Izu, L.T., and Whiteheart, S.W. (2012) Platelet Secretion is Kinetically Heterogeneous in an Agonist-Responsive Manner. **Blood**, 120, 5209.
99. Xiang, B., Zhang, G., Stefanini, L., Bergmeier, W., Gartner, T.K., Whiteheart, S.W., and Li, Z. (2012) The Src family kinases and PKC synergize to mediate G<sub>q</sub>-dependent platelet activation. **Journal of Biological Chemistry**, 287, 41277.
100. Karim, Z.A., Zhang, J., Banerjee, M., Chicka, M., Al Hawas, R., Hamilton, T.R., Roche, P.A., and Whiteheart, S.W. (2013) IκB Kinase (IKK) phosphorylation of SNAP-23 controls platelet secretion. **Blood**, 121, 4567. *Selected by Blood Editors to be included the weekly email to media about the journal's print edition. Also highlighted on the issue's cover.*
101. Whiteheart, S.W. (2013) α-Granules at the BEACH. **Blood**, 122, 3247. (*"Inside Blood" Commentary*)
102. Xiang, B., Zhang, G., Guo, L.Li, X.A., Morris, A.J., Daugherty, A., Whiteheart, S.W., Smyth, S.S. and Li, Z. (2013) Platelets protect from septic shock by inhibiting macrophage-dependent inflammation via the cyclooxygenase 1 (COX1) signaling pathway. **Nature Communications**, 4, 2657.
103. Nair-Gupta, P., Baccarini, A., Tung, N., Seyffer, F., Florey, O., Huang, Y., Banerjee, M., Overholtzer, M., Roche, P., Tampé, R., Brown, B. D., Amesne, D., Whiteheart, S.W., and Blander, J. M. (2014) TLRs Control Phagosomal MHC-I Delivery from Endosomal Recycling Compartments to Aid Cross-presentation in Dendritic Cells. **Cell**, in press.
104. Ye, S., Yang, F., Zhang, G., Smyth, S. S., Li, Z., Takai, Y., Whiteheart, S.W. (2014) STXBP5/Tomosyn is Critical for Platelet Secretion and Thrombosis. **Journal of Clinical Investigation**, In revision.
105. Jonnalagadda, D., Sunkara, M., Morris, A.J., and Whiteheart, S.W. (2014) Granule-Mediated Release of Sphingosine-1-Phosphate by Activated Platelets. In preparation.
106. Xiang, B., Zhang, G., Ye, S., Huang, C., Lui, J., Ruan, C., Smyth, S.S., Whiteheart, S.W., and Li, Z. (2014) VPS33B binds to integrin β subunits and is required for endocytosis and α<sub>IIb</sub>β<sub>3</sub> outside-in signaling. In preparation.
107. Chicka, M., Ren, Q., Richards, D. and Whiteheart, S.W. (2014) Role of Munc13-4 as a Ca<sup>2+</sup>-dependent tether during platelet secretion. In preparation.

108. He, P., Xi, C., Buhrow, S.A., and Whiteheart, S.W. (2014) Binding of N-ethylmaleimide Sensitive Factor (NSF) To the Exocytosis Regulator Synaptotagmin. In preparation.

**Invited Lectures:**

1. Biology of Parasitism Course, Marine Biology Laboratories, Woods Hole, MA, (7/20/94)
2. University of Kentucky, Department of Biology, Lexington, KY (4/13/94)
3. Universität Heidelberg, Institut für Biochemie, Heidelberg, Germany (10/20/95)
4. Washington University, Department of Cell Biology, St. Louis, MO (11/3/95)
5. The Scripps Research Institute, Department of Cell Biology, La Jolla, CA (5/20/96)
6. Integrative Physiology Seminar, University of Kentucky, Department of Physiology, (9/13/96)
7. University of Louisville School of Medicine, Department of Biochemistry, Louisville, KY (9/23/96)
8. University of Louisville School of Dentistry, Cell Biology Course, Louisville, KY (9/23/96)
9. University of Pittsburg School of Medicine, Department of Cell Biology and Physiology, Pittsburg, PA (12/4/96)
10. Laboratoire de Biochimie et Biophysique des Systemes Integres, CEA-Grenoble, Grenoble France (5/21 and 5/22/97)
11. Vanderbilt University, Department of Biochemistry, Nashville, TN (7/14/97)
12. University of Kentucky, Department of Microbiology and Immunology, Lexington, KY (2/10/98)
13. Morehead State University, Morehead, KY (2/12/98)
14. University of Virginia School of Medicine, Department of Cell Biology, Charlottesville, VA (3/31/99)
15. Sloan-Kettering Institute, Program for Cellular Biochemistry and Biophysics, New York, NY (9/14/99)
16. University of Alabama at Birmingham, Department of Cell Biology, Birmingham, AL (9/16/99)
17. School of Life Science, Tokyo University of Pharmacy and Life Science, Tokyo Japan (10/5/99)
18. Japanese Biochemical Society, Mini-symposium on AAA proteins, Yokohama Japan (10/8/99)
19. 8<sup>th</sup> Erfurt Conference on Platelets, Erfurt, Germany (6/27/00)
20. Conference on Hermansky-Pudlak Syndrome, Bethesda, MD (7/6/00)
21. University of Kentucky, Department of Physiology, Lexington, KY (12/20/00)
22. Nottingham Platelet Conference, Nottingham, United Kingdom (7/29/02)
23. 5<sup>th</sup> International Conference on AAA Proteins, Warrenton, VA, (6/17/03)
24. Sol Sherry Thrombosis Research Center, Temple University, Philadelphia, PA (9/30/03)
25. Department of Biochemistry and Molecular Biology, Wright State University, Dayton, OH (10/24/03)
26. Cardiovascular Seminar Series, University of Kentucky, Lexington, KY (10/31/03)
27. Department of Microbiology and Immunology, Loyola Univ., Stritch School of Medicine, Chicago, IL (3/11/04)
28. Sixth International Conference on Kindling, Victoria, B.C. Canada (6/5/04)
29. Department of Biochemistry, University of Vermont School of Medicine, Burlington, VT (5/20/05)
30. Sol Sherry Thrombosis Research Center, Temple University, Philadelphia, PA (6/05/05)
31. 6<sup>th</sup> International Conference on AAA Proteins, Graz, Austria, (9/15/05)
32. National Platelet Colloquium, Miami, FL, (1/19-20/06)
33. Cardiovascular Seminar Series, University of Kentucky, Lexington, KY (3/31/06)
34. University of Louisville School of Medicine, Louisville, KY (6/29/06)
35. AFLAC Cancer Center & Blood Disorders Service (Emory University, Atlanta, GA) (8/23/06)
36. University of Arkansas Medical Center, Little Rock, AR (2/22/07)
37. Oklahoma Health Science Center, Oklahoma City, OK (3/14/07)
38. University of Kentucky, Lexington, KY Clinical Sciences Program (3/22/07)
39. Laboratory of Cell Biology-NHLBI, National Institutes of Health, Bethesda, MD (9/20/07)
40. American Society of Hematology, Atlanta, GA (12/8/07)
41. Cardeza Foundation for Hematologic Research, Thomas Jefferson University, Philadelphia, PA (1/16/08)
42. ATVB Annual Conference, Atlanta, GA (4/16/08)
43. International Conference on Translational Pharmacology and 41st Annual Conference of Indian Pharmacological Society, Delhi, India (12/18/08)
44. Department of Biological Sciences, Bowling Green State University, Bowling Green OH (2/3/10)
45. Molecular Signaling Group, University of Louisville (6/18/10)
46. HLH Research Group, Cincinnati Children's Hospital (7/23/10)
47. FASEB Summer Research Conference "Arf Family G Proteins" (8/15-20/10)
48. 13<sup>th</sup> Biennial Midwest Platelet Conference (10/13-15/10)
49. Sol Sherry Thrombosis Research Center, Temple University, Philadelphia, PA (3/29/11)
50. Brown University's Annual Pathobiology Graduate Program, Featured Speaker, Providence RI (8/30/11)
51. 13<sup>th</sup> United Kingdom Platelet Group Meeting, Plenary Speaker, (9/8/11)

52. University of Kentucky, Department of Biological Sciences (10/31/11)
53. Cardiovascular Medicine Grand Rounds, University of Kentucky College of Medicine (1/5/12)
54. Department of Pediatrics, University of Toronto, ON, Canada (2/10/12)
55. American Heart Association National Scientific Session CVS.712, Los Angeles, CA (11/5/12)
56. American Society of Hematology, Atlanta, GA (12/8/12)
57. Department of Biochemistry and Molecular Biology, University of Arkansas for Medical Sciences (1/30/13)
58. Gordon Research Conference Cell Biology of Platelets and Megakaryocytes, Galveston, TX (4/16/13)
59. Gordon Research Conference Lysosomal Diseases, Lucca (Barga), Italy (4/17/13)
60. Cincinnati Children's Hospital: Bone Marrow Transplant and Immune Deficiency Seminar Speaker (4/23/13)
61. Department of Biological Sciences, University of Delaware, Newark, DE (5/8/13)
62. Center for Life Science, Boston, MA (8/5/13)
63. Biological Science Fall 2013 Seminar Series University of North Texas, Denton, TX (10/18/13)
64. Department of Biochemistry and Molecular Biology, University of Texas Medical Branch, Galveston, TX (1/10/14)
65. Aab Cardiovascular Research Institute, University of Rochester, Rochester, NY (1/21/14)
66. Zing Conference on Lysosome-Related Organelles Conference, Nerja, Spain (2/15/14)

### **Journals Reviewed for:**

**Editorial Board**, The Journal of Biological Chemistry 2001-2006; 2008-2013

Journal of Clinical Investigation

Science

Proceedings of the National Academy of Science, USA

Trends in Cell Biology

Molecular Biology of the Cell

The Journal of Cell Biology

Journal of Cell Science

Blood

Thrombosis and Haemostasis

The Journal of Thrombosis and Haemostasis

Platelets

ATVB

Transfusion

Biochemistry

Biochimica, Biophysica Acta

European Journal of Biochemistry

Proteins: Structure, Function and Genetics

Journal of Structural Biology

Proteomics

The Journal of Neurochemistry

The Journal of Neuroscience

The Journal of Comparative Neurology

The Quarterly Review of Biology

FEBS Letters

Endocrinology

The European Journal of Histochemistry

The Journal of Leukocyte Biology

The International Journal of Biochemistry and Cell Biology

Arteriosclerosis, Thrombosis and Vascular Biology

American Journal of Cardiology

Journal of Cellular and Molecular Medicine

British Journal of Physiology

Traffic

### **Extramural Committees:**

Cell Structure and Metastasis Study Section, American Cancer Society *ad hoc* 1/97

Cell Biology, Cellular Organization Subprogram, National Science Foundation, *ad hoc* 4/97, 10/97, 10/99, 5/02, 10/02, 10/04, 9/05, 10/05, 4/06, 10/06, 10/08

Health Research Council of New Zealand, *ad hoc* 8/97

American Heart Association, Mid-American Research Consortium Peer Review Committee #4 Term 1997-2004

Research and Development Committee, VA Medical Center, Lexington, KY *ad hoc* 5/98

The Wellcome Trust, *ad hoc* 9/98, 4/00, 8/05, 11/06, 12/08  
 American Heart Association, Mid-American Research Consortium Peer Review Committee #4 **Vice Chair** 2001-2  
 American Heart Association, Mid-American Research Consortium Peer Review Committee #4 **Chair** 2003-4  
 Science Foundation of Ireland, *ad hoc* 2/03  
 NIH NINDS SYN Study Section *ad hoc* 10/04, 10/05  
**Session Moderator**, “Novel Mechanism of Platelet Activation”, AHA National Meeting 11/2004  
 6<sup>th</sup> International Conference on AAA Proteins, **Scientific Committee** 9/14-18/05 Graz, Austria  
 Biotechnology and Biological Sciences Research Council, United Kingdom, *ad hoc* 9/2005  
 American Heart Association, Mid-American Research Consortium Peer Review Committee #2a/b, 2006-08  
**Session Moderator**, Midwest Blood Club, Lexington, KY 4/7/06  
 NIH Cellular Aspects of Diabetes & Obesity (CADO) Study Section *ad hoc* 6/7-9/06 and 10/06  
 United States-Israel Binational Science Foundation, *ad hoc* 5/06  
 Medical Research Council United Kingdom *ad hoc* 7/06  
 Biotechnology and Biological Sciences Research Council, United Kingdom *ad hoc* 12/06  
**Session Moderator** ATVB Annual Conference, Atlanta, GA (4/16-19/08)  
 PPG Special Emphasis Panel NHLBI NIH 9/18/08, 1/26/10  
**Co-Host and Organizer** for The Midwest Platelet Conference (10/2-4/08)  
**Co-Chair** AHA Region II Thrombosis Study Group 2009  
**Chair** AHA Region II Thrombosis Study Group 2010  
 Discussion Leader, Gordon-Kenan Research Seminar 7/24-25/10  
 NIH NIHLB ZRG1 HM Study section 2/6-7/12  
 NIH 2012/10 HLBP 1Workgroup 9/12/2012  
 NIH 2013/01 ZRG1 VH-J (02) M Member Conflict: Clinical and Experimental Hematology 9/19-22/2012  
 ASBMB Travel Award Review Committee 1/25/13  
 NIH 2013/05 ZRG1 VH-J (02) M Member Conflict: Clinical and Experimental Hematology 1/31/13-2/1/13  
 AHA Basic Cell MSO 1Study section 4/10/13, 9/13, 4/14

#### **University Committees:**

Major Research Equipment Grant Review Committee 1996  
 Integrated Graduate Program Committee 1999  
     Curriculum Subcommittee 1999  
 College of Medicine Research and Graduate Education Committee 1999-2002  
 Graduate Council Committee on Fellowships and Traineeships 2000-2003  
 Graduate School Academic Year Fellowship Selection Panel 12/2001  
 IBS Graduate Committee 2000-2003  
 Fellowship Panel 2003-2004 Women in Under-Represented Areas, Panel **Chair** 2003  
 Institutional Animal Care and Use Committee (IACUC) 2004-present  
     **Medical Center Subcommittee Chair** 2008  
     **Vice Chair** 2008, 2010-2011  
     **Chair** 2008-2010  
 University Senate 8/08—8/11  
     Senate Research Committee 2011  
 Search Committee for Chair of Department of Microbiology, Immunology and Molecular Genetics (3/11-6/11)  
 Academic Area Advisory Committee for Biological Sciences 2011-2013  
 Biomedical Sciences Advisory Board for the College of Medicine 2011-2013  
 MD/PhD Internal Advisory/Admission Committee 2012-present  
 The Albert D. & Elizabeth H. Kirwan Memorial Prize Selection Committee (Chair) 2014

#### **Departmental Committees:**

Graduate Studies Committee 1995 to 2003  
     Curriculum subcommittee 1998 to 2003  
 Course Director BCH501/607-IBS601 1998-2001  
 Course Director BCH610 Lipids and Biomembranes 2003-2014  
 Course Director BCH618 Scientific Communication 2010-2011 (initiated the course)  
 Tissue Culture Room Renovation Committee 1997  
 Seminar Speaker **Coordinator** 1996-2000  
 Meet-the-PI Seminar Series (for first year students) **Coordinator** 1997-2000  
 Departmental Vice Chair for Facilities, 2012-present

**Thesis Committees:**

<b>1. Audrey Bernstein</b>	<b>Biochemistry</b>	<b>1995-1999</b>	
2. Brian Finlin	Biochemistry	1995-1999	
3. Ken Henry	Biochemistry	1995-2000	
<b>4. Paula Lemons</b>	<b>Biochemistry</b>	<b>1996-1999</b>	
5. Haipeng Shao	Biochemistry	1996-2000	
6. Ashley Bray	Biochemistry	1996-1999	
7. Michael Thompson	Biochemistry	1996-2000	
8. Paula Hempen	Micro/Immuno	1996-1999	
<b>9. Dong Chen</b>	<b>Biochemistry</b>	<b>1997-2000</b>	
10. Wai Kan Loh	Micro/Immuno	1997-2001	
11. Jun-tao Guo	Biochemistry	1997-2001	
12. Misty Crider	Biology (MS)	1997-1998	
13. Ping He	Biology (MS)	1997-1998	
14. Anuradha Guha Niyogi	Biochemistry	1998-2002	
15. Brian Thompson	Biochem. (MS)	1998-2001	
16. Lisa Pedersen	Micro/Immuno	1998-2000	
17. Elena Braithewaite	Toxicology	1998-2000	
18. Johann Sohn	Biology (MS)	1998-1999	
<b>19. Tara Rutledge</b>	<b>Biochemistry</b>	<b>1999-2004</b>	
<b>20. Todd Schraw</b>	<b>Biochemistry</b>	<b>1999-2004</b>	<b>AHA Ohio Valley Grant Awardee 2002-2004</b>
21. Deborah Sullivan	Biochemistry	1999-2003	
22. Eric Lubert	Biochemistry	1999-2003	
23. Michael Spenser	Biochemistry	1999-2002	
24. Yasemin Kaya	Micro/Immuno	1999-2005	
25. Kris Jones	Biochem.(MS)	1999-2000	
26. Steve Zink	Micro/Immuno	1999-2002	
27. Amber Mosley	Biochemistry	2000-2004	
28. Bruce Griffis	Biology (MS)	2001-2002	
29. JiaYao	Biochemistry	2001-2005	
30. Kirk Williams	Biochem. (MS)	2001-2001	
31. Brian York	Biochemistry	2001-2006	
<b>32. Garland Crawford</b>	<b>Biochemistry</b>	<b>2002-2007</b>	<b>AHA Ohio Valley Grant Awardee 2004-2006</b>
33. Cara Pager	Biochemistry	2002-2006	
34. Kathleen Nichols	Micro/Immuno	2002-2008	
35. Rexford Assare	Micro/Immuno	2002-Left the University in 2005	
36. John Carmen	Micro/Immuno	2003-2007	
37. Jennifer Rudolph	Biochemistry	2003-2008	
<b>38. Qiansheng Ren</b>	<b>Biochemistry</b>	<b>2003-2008</b>	<b>AHA Ohio Valley Grant Awardee 2006-2008</b>
<b>39. Wangsun Choi</b>	<b>Biochemistry</b>	<b>2003-2008</b>	<b>AHA Ohio Valley Grant Awardee 2006-2008</b>
40. Lynea Alene Browning	Toxicology	2003-2008	
41. Sameera Dasari	Biology	2003-2007	
42. Megan Sampley	Biochemistry	2004-2009	
43. Rachel Schowalter	Biochemistry	2004-2008	
<b>44. Chunxia Zhao</b>	<b>Biochemistry</b>	<b>2005-2010</b>	<b>Steckler Award Winner 2006</b>
45. Jianing Yang	Biochemistry	2005-2012	
46. Aashish Joshi	Neuroscience	2005-2009	
47. Julie Oestreich	Pharmacy	2005-2009	
48. Jie Zhang	Toxicology	2005-2012	

<b>49. Rania Al-Hawas</b>	<b>Clinical Sci.</b>	<b>2006-2012</b>	
<b>50. Shaojing Ye</b>	<b>Biochemistry</b>	<b>2006-2012</b>	<b>Steckler Award Winner 2009</b>
51. Weikang Cai	Biochemistry	2006-2011	
52. Andreea Popa	Biochemistry	2006-2011	
53. Clint Smith	Biochemistry	2007-2011	
54. Xiaoyan Liu	Biochemistry	2007-2012	
<b>55. Deepa Jonnalagadda</b>	<b>Biochemistry</b>	<b>2008-2013</b>	<b>Steckler Award Winner 2011</b>
<b>56. Nikki Trinh</b>	<b>Biochem. (MS)</b>	<b>2008-2008</b>	
57. Kevin Pinto	Micro/Immuno	2008-2008	
58. Yang Fanmuyi	Physiology	2008-2012	
59. Andres Chang	Biochemistry	2008-2012	
60. Zachary Fulkerson	Physiology	2008-2011	
<b>61. Yunjie Huang</b>	<b>Biochemistry</b>	<b>2009-present</b>	<b>AHA Ohio Valley Grant Awardee 2011-2013</b>
62. Jason Meyer	Biochemistry	2009-2013	
<b>63. Jinchao Zhang</b>	<b>Biochemistry</b>	<b>2010-present</b>	
64. Hou-Fu Guo	Biochemistry	2010-present	
65. Congqing Wu	Physiology	2010-present	
66. Liuqing Liu	Biochemistry	2010-present	
<b>67. Meenakshi Banerjee</b>	<b>Biochemistry</b>	<b>2011-present</b>	
68. Xiaobo Li	Biochemistry	2011-present	
70. Satrio Husodo	Biochemistry	2011-present	
71. Heather Williams	Biochemistry	2011-present	
<b>72. Smitha Joshi</b>	<b>Biochemistry</b>	<b>2012-present</b>	
73. Edita Klimyte	Biochemistry	2012-present	
74. Catherine Kaminski	Biochemistry	2012-present	
75. Erica Faulkner	Medical MS	2012	
76. Megan Pannell	Biochemistry	2013-present	
77. David Henderson	Biochemistry	2013-present	

Students in **BOLD** are in my research group

#### Post-Doctoral Fellows Supervised:

Susan A. Buhrow	1995-1996	
Elena Matveeva	1997-2012	(Research Associate 2000)
Dong Chen	2000-2002	<b>AHA Ohio Valley Post-Doctoral Fellowship 2000-2002</b>
Zubair Karim	2004-2013	(Research Associate 2008)
Michael Chicka	2008-2010	<b>AHA Great Rivers Post-Doctoral Fellowship 2009-2011</b>
Qiansheng Ren	2008-2011	
Wangsun Choi	2008-2009	
Chunxia Zhao	2010-2011	
Rania Al Hawas	2012	
Shaojing Ye	2012-2014	<b>Clinical Scholar in Cardiovascular Science (T32HL091812)</b>
Deepa Jonnalagadda	2013-2014	

#### Undergraduates and High School Students Supervised:

Jennifer Baker	1995
Bridgett Boggess	1996
Laila Akhlaghi	1995-1996
Ali Akhlaghi	1997
Robert Sisk	1996
Carson McCloud	1998
Azadeh Shirazi	1997-1999

Katherine Parks	1999	
Brian Ward	2001	
Antonia Stoyanova	2002-2003	
Arun Sikka	2005, 2006	
Brett Begley	2007-2008	
Rachel Whiteheart	2008	
Yunjie Huang	2008	
Jeremy Zhao	2009-2010, 2011	Science and Engineering Mentorship Program Dunbar High School
Heejeong Son	2009	
Willis Bowman	2009	
Rohith Palli	2010, 2011	
Alison Winger	2010	
Ashley Hewett	2010	
Walker Reeves	2012-2014	Science and Engineering Mentorship Program Dunbar High School
Jimmy Chen	2013-present	Science and Engineering Mentorship Program Dunbar High School

### **Community Service:**

First Presbyterian Church, Lexington, KY

Christian Education Committee 1998-2003

Sunday School Superintendent 2001-2002

Session Member (Elder) 2003-2005

Co-Chair of Youth Ministry Team 2003-2005

Member of Youth Ministry Team 2003-2009

Nominating Committee 2009-2011

Co-Chair of Youth Minister Search Committee 2003 and 2005

Troop 111 BSA Meadowthorpe Presbyterian

Troop Committee 2007-present

Woodbadge Leadership Course (course completed 5/18/08: Beads awarded 4/28/09)

Leave No Trace Trainer (course completed 7/08)