

NANCY R. WEBB, Ph.D.
PROFESSOR
DEPARTMENT OF PHARMACOLOGY & NUTRITIONAL SCIENCES
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I. Office Address

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Social Security Number:
Birth Date:
Certifications/Licensure: N/A
Marital Status: Married – Bruce A. Webb, Ph.D. Professor of Entomology.
Two children.

II. Education

Institution	Dates	Degree	Subject
University Virginia	1977-81	BA with Distinction	Biology
University Colorado	1981-82		Pharmacology
University Kentucky	1995-99	PhD	Microbiol/Immunol

III. Professional Experience

9/82-8/83 Department of Biochemistry, University of Kentucky, Lexington
9/82: Research Analyst
7/83: Promoted to Senior Research Analyst

10/83-1/88 Molecular Biology Department, Oncogen, Seattle, WA.
10/83: Research Technologist I
11/84: Promoted to Research Technologist II
11/85: Promoted to Senior Research Associate
1/87: Promoted to Principal Research Associate

3/88-11/90 Department of Entomology, Texas A & M University, College Station
Research Associate

1/91-12/94 American Cyanamid Agricultural Research Division, Princeton, NJ
Molecular Biologist

11/13-1/18 Department of Veterans Affairs, Lexington KY
Research Physiologist GS15

IV. Academic Appointments

- 1/95-8/99 Biomedical Scientist, Department of Internal Medicine, Division of Endocrinology and Molecular Medicine, University of Kentucky, Lexington
- 9/99-6/05 Assistant Professor, Department of Internal Medicine, Division of Endocrinology and Molecular Medicine, University of Kentucky, Lexington
- 7/05-6/09 Associate Professor with tenure, Department of Internal Medicine, Division of Endocrinology and Molecular Medicine, University of Kentucky, Lexington
- 7/09-2/14 Professor with tenure, Department of Internal Medicine, Division of Endocrinology and Molecular Medicine, University of Kentucky, Lexington
- 11/13-1/18 Research Physiologist (GS15), Department of Veterans Affairs, Lexington VA Medical Center
- 2/14- Professor with tenure, Department of Pharmacology and Nutritional Sciences, University of Kentucky, Lexington
- 2/14- Director, Division of Nutritional Sciences, Department of Pharmacology and Nutritional Sciences, University of Kentucky, Lexington
- 4/15- Member, University of Kentucky Markey Cancer Center
- 7/15- Member, University of Kentucky Lewis Honors College Faculty

V. Hospital Appointments – N/A

VI. Consultative Service – N/A

VII. Teaching Activities

- 2002-2009 MI615: Molecular Biology; 3 lecture contact hours
- 2003 ABT395: Molecular Genetics; 1 lecture contact hour
- 2003-present NS606: Molecular Biological Applications in Nutrition; Course Director; 30 lecture contact hours
- 2004 ABT201: 1 lecture contact hour
- 2006 ABT201: 1 lecture contact hour
- 2008 Mechanisms of Human Diseases; 2 lecture contact hours
- 2012-2016 MI685: Immunology, Infection, and Inflammation; 2 lecture contact hours
- 2014-2018 IBS608: Nutritional Modulation of Chronic Disease; 1 lecture contact hour
- 2017-2018 HON152: Frankenstein to Frankenfoods: Genetics, Mutations, and Society; Course co-Director; 20 lecture contact hours

VIII. Advising Activities

Junior Faculty

- 2006-2012 Victoria King
- 2013-2015 Changcheng Zhou
- 2015-2018 Venkateswaran Subramanian

2016-2018 Sangderk Lee
2016-present Vincent Venditto
2017-2018 Marlene Starr
2020-present Preetha Shridas

Postdoctoral Fellows

2003-2005 Boris Boyanovsky
2015-2016 Maggie Murphy

Graduate students

2000-2006 Bing Sun (major advisor)
2002-2006 Meredith Bostrom (major advisor)
2003-2008 Lewamy Mamadou
2003-2007 Shoba Shetty
2005-2010 Xia (Jasmine) Li (major advisor)
2006-2011 Xuan Zhang
2006-2009 Melissa Zack (major advisor)
2008-2010 Akin Akinmusire
2008-2012 Nicholas Hatch
2008 Huiyun Shen (outside examiner)
2008 Phillip Owens (outside examiner)
2008 Huiyun Shen (outside examiner)
2009-2012 Nadeem Mohammed
2009-2013 Jason Meyer
2010 Timothy David Peleshok (major advisor)
2010-2013 Joseph Layne (major advisor)
2010-2013 Lindsay Carter
2011-2014 Joel Thompson
2011-2015 Jianing Li
2012-2015 Kate Townsend Creasy
2012-2016 Robert Helsley (co-major advisor)
2012-2017 Heather O'Daniel
2013-2016 Heather Norman
2014 Kara Larson (outside examiner)
2015 Rebekah Lambert (master's thesis committee)
2015 Yuhuan Wang (Outside examiner)
2015 Reiya Hayden
2016-2020 Zheyang Chen
2016-present Courtney Turpin
2016 Minen Al-Kafajy (Outside examiner)
2016-2018 Jared Hoffman
2017 Peter Hecker
2017-present Shayan Mohammad Moradi
2018-present Rupinder Kaur
2019-present Gabriella Pugh
2020 Meghan Slack (master's thesis committee)

Undergraduate students

- 2000-2001 Whitney Browning: advisor for ABT395 research project
2001-2002 Ryan Mulligan: advisor for ABT395 research project
2002-2003 Tiffany Taylor: advisor for ABT395 research project
2003-2004 Joseph Slusher: advisor for ABT395 research project
2005-2007 Daniel Slusher: advisor for ABT395 research project (recipient of Agricultural Biotech undergraduate research award)
2008-2010 Kayla Talbott: advisor for ABT395 research project (recipient of AMSTEMM Summer Research Grant)
2011 Lauren Dixon: Summer Intern, under-represented minority student from Kentucky State University
2013-2015 Samuel Janes: advisor for ABT395 research project (podium presenter at 2014 National Conference for Undergraduate Research; recipient of 2014 University of Kentucky Summer Research Fellowship)
2013-2014 Katlyn Mulhall; advisor for ABT395 research project (winner of 2014 Fall semester Glenn B. Collins award for undergraduate research)
2016-2018 Madison Rich; advisor for ABT395 research project (recipient of Chellgren Undergraduate Research Fellowship)
2018-2019 Adam Farmer; advisor for ABT395 research project

High School students

- 2015-2016 Ethan Shen; mentor for Math, Science, and Technology Center (MSTC) Capstone Research Project

IX. Administrative Activities

- 2000-2010 Member, VA Medical Center Institutional Animal Care and Use Committee
2002 Chair, VAMC Institutional Animal Care and Use Committee
2003-2005 Member, Curriculum Committee, Graduate Center for Nutritional Sciences
2003-2014 Member, Equipment Committee, Graduate Center for Nutritional Sciences
2003 Member, Search Committee, Graduate Center for Nutritional Sciences Director
2004-2007 Member, University of Kentucky College of Medicine Non-indemnified Risk Committee
2004-2007 Member, Department of Medicine Committee on Gender Equity
2005 Member, Search Committee, Veteran's Administration Research Service Administrative Officer
2005 Member, University of Kentucky CDAR Six Year Review
2005 Member, University of Kentucky HHMI Committee
2006 Member, Search Committee, Univ. Kentucky Department of Surgery Chair

2006-2010	Member, University of Kentucky Department of Internal Medicine Appointments, Promotion, and Tenure Committee
2008	Vice-chair, VAMC Institutional Animal Care and Use Committee
2009	Chair, VAMC Institutional Animal Care and Use Committee
2009	Member, Search Committee, UK Center for Nutritional Sciences
2010	Member, Space Committee, Graduate Center for Nutritional Sciences
2010	Vice-chair, VAMC Institutional Animal Care and Use Committee
2010	Member, University of Kentucky Department of Pediatrics Six Year Review Committee
2011-2013	Chair, University of Kentucky Department of Internal Medicine Appointments, Promotion, and Tenure Committee
2011-2012	Member, Search Committee, University of Kentucky Department of Microbiology and Immunology and Molecular Genetics Chair
2011-2012	Member, College of Medicine Curriculum Task Force Committee for Integrated Biological Sciences Graduate Program
2013-2014	Member, Provost's <i>See tomorrow: The University of Kentucky Strategic Plan 2014 – 2020</i> Planning Committee
2013-2014	Member, College of Medicine Research Administration Integrated Business Unit Implementation Advisory Committee
2013-2017	Member, Lexington Biomedical Research Institute Executive Board (Representative for Dean, College of Medicine)
2013-2018	Member, VA Medical Center Institutional Animal Care and Use Committee
2014-2017	Member, University of Kentucky Radiation Safety Committee
2014-2017	Member, College of Medicine Postdoctoral Research Committee
2014-present	Member, Department of Pharmacology & Nutritional Sciences Education Committee
2014-present	Member, Nutritional Sciences Graduate Program Admissions Committee
2015	Member, UK Research Professorship Award Selection Committee
2015-2016	Member, University of Kentucky College of Medicine Women in Medicine and Science (WIMS) Executive Committee
2015-2016	Co-Chair, University of Kentucky College of Medicine WIMS Mentoring Subcommittee
2015-2017	Member, Department of Pharmacology & Nutritional Sciences Chair Search Committee
2015-2019	Member, Gill Heart Award Internal Advisory Committee
2016	Member, University of Kentucky MD/PhD Program Internal Advisory Committee

2016-2019	Member, Department of Pharmacology & Nutritional Sciences
2016-2019	Special Title Series Faculty Search Committee
2017-2019	Elected Member, University of Kentucky Faculty Senate
	Member, Barnstable Brown Diabetes Center Strategy Team
2017-present	Member, AHA Summer Undergraduate Research Fellowship Oversight Committee
	Member, Internal Advisory Committee, T32 training program in
2018-present	Translational Research in Alzheimer's disease and related
2018-present	Dementias (TRIAD)
	Member, Provost's Graduate Education Advisory Team
2018-present	Alternate Member, VA Medical Center Institutional Animal Care and Use Committee
2019-present	Member, Vice President for Research's Priority in Obesity/Diabetes (UK-POD) Leadership Team
2019-present	Member, Department of Pharmacology & Nutritional Sciences Faculty Search Committee
2019-present	Member, Department of Microbiology, Immunology and Molecular Genetics Chair Search Committee
2020-present	Member, College of Medicine STAR Advisory Group

XI. Special Assignments

XII. Honors and Awards

1981-1982	NIH NRSA Pre-doctoral Fellowship
1992	American Cyanamid "Diligent Digger" Award for Excellence in Discovery Research
1999	NIH Postdoctoral Fellowship (declined)
1999	American Heart Association Postdoctoral Fellowship (declined)
2000-2001	University of Kentucky Medical Center Research Fund Award
2001-2004	American Heart Association Scientific Development Grant
2002-2003	Atorvastatin Research Award
2004	Finalist, Irvine H. Page Young Investigator Research Award
	American Heart Association, Council on Arteriosclerosis, Thrombosis and Vascular Biology
2004-2018	Annual University of Kentucky Wethington Research Award
2012	Fellow, American Heart Association
2015	First Annual Department of Pharmacology and Nutritional Sciences Faculty of the Year Award
2015	Special Recognition Award, AHA Arteriosclerosis, Thrombosis, and Vascular Biology Council
2019	Mentor of Women Award, AHA Arteriosclerosis, Thrombosis, and Vascular Biology Council
2019	Outstanding Contributions and Service Award, AHA Arteriosclerosis, Thrombosis, and Vascular Biology Council
2019	Distinguished Achievement Award, AHA Arteriosclerosis, Thrombosis, and Vascular Biology Council

XIII. Professional Activity and Public Service

1989-1999	American Society for Virology
2001-present	American Heart Association
2001-present	Arteriosclerosis Council of the American Heart Association
2006	Member, Program Committee, Conference on Arteriosclerosis, Thrombosis and Vascular Biology
2006-2007	Member, Research Committee, AHA Ohio Valley Affiliate
2006-2007	Member, Steering Committee, AHA Ohio Valley Affiliate
2007-2011	Member, Research Committee, American Heart Association Great Rivers Affiliate
2008-2010	Member, Women's Research Leadership Committee, American Heart Association Council on Arteriosclerosis, Thrombosis, and Vascular Biology
2009	Co-Chair, Southeast Lipid Research Conference, Callaway Gardens, GA October 2009
2009-2016	Member, Executive Board, South East Lipid Research Conference
2010	Chair, Southeast Lipid Research Conference
2010-present	American Society for Biochemistry and Molecular Biology
2010-2012	Vice-chair, Women's Research Leadership Committee, American Heart Association Council on Arteriosclerosis, Thrombosis, and Vascular Biology
2010-2011	Vice-chair, Research Committee, American Heart Association Great Rivers Affiliate
2011-2014	Member, Arteriosclerosis, Thrombosis, and Vascular Biology Council Nominating Committee
2012	Participant, AHA Research Summit
2012-2014	Chair, Women's Research Leadership Committee, AHA Council on Arteriosclerosis, Thrombosis, and Vascular Biology
2012-2014	Chair, Research Committee, AHA Great Rivers Affiliate
2012-2014	Member, Board of Directors, AHA Great Rivers Affiliate
2012-2014	Member, Leadership Committee, AHA Council on Arteriosclerosis, Thrombosis, and Vascular Biology
2013-2014	Member, Arteriosclerosis, Thrombosis, and Vascular Biology Program Committee
2014-2016	Immediate Past Chair, Women's Research Leadership Committee, AHA Council on Arteriosclerosis, Thrombosis, and Vascular Biology
2015-2017	Member, National AHA Peer Review Steering Committee
2015-2017	Vice-chair, Arteriosclerosis, Thrombosis, and Vascular Biology Scientific Sessions Program Committee
2017-2019	Chair, Vascular Discovery (formerly Arteriosclerosis, Thrombosis, and Vascular Biology) Scientific Sessions Program Committee
2017-2019	Member, Arteriosclerosis, Thrombosis, and Vascular Biology Council of the AHA Leadership Committee
2018-present	Member, University of Wisconsin Cardiovascular Center T32 Program External Advisory Committee

2019-2021 Immediate Past Chair, Vascular Discovery: From Genes to
Medicine Scientific Sessions Program Committee

- Grant reviewer:
- Member, NIH Study Section, Clinical and Integrative Cardiovascular Science (March 2005-June 2011)
 - Member, NIH Special Emphasis Panel Hematology IRG, ZRg1-HEME-C (February 2007 and December 2007)
 - Ad hoc reviewer, Natural Sciences and Engineering Research Council of Canada
 - Ad hoc reviewer, Austrian Science Fund
 - Member, Peer Review Committee 2B, American Heart Association, Ohio Valley Affiliate (2003-2006)
 - Co-chair, Peer Review Committee 2B, American Heart Association, Great Rivers Affiliate (2007-2009)
 - Chair, Peer Review Committee 2B, American Heart Association, Great Rivers Affiliate (2010)
 - Member, NIH Special Emphasis Panel/Scientific Review Group HLBP S (May 17, 2010)
 - Member, NIH Special Emphasis Panel/Scientific Review Group HLBP S (April 7, 2011)
 - Member, NIH Special Emphasis Panel/Scientific Review Group HLBP S (June 24, 2011)
 - Member, NIH Special Emphasis Panel/Scientific Review Group HLBP S (January 31, 2012)
 - Member, NIH Special Emphasis Panel/Scientific Review Group ZRG1 EMNR-S November 8, 2012
 - Adhoc Reviewer, National Science Foundation Division of Molecular and Cellular Biosciences, July 2012
 - Member, HLBP 1 Workgroup 001 (May 16, 2013)
 - Member, UK VPR Pilot grant review panel (December 2013)
 - Ad hoc Member, NIH Study Section, Atherosclerosis and Inflammation of Cardiovascular System (October 2014)
 - Member, UK CCTS Pilot grant review panel (January 2015)
 - Ad hoc Member, NIH Study Section, Atherosclerosis and Inflammation of Cardiovascular System study section (February 2015)
 - Ad hoc Member, NIH Study Section, Atherosclerosis and Inflammation of Cardiovascular System study section (September, 2015)
 - Ad Hoc Member, NIH Special Emphasis Panel Study Section ZRG1-EMNR-F-02 (April, 2016)
 - Member, UK CCTS Pilot grant review panel (April 2017)
 - Standing Member, NIH Study Section, Atherosclerosis and Inflammation of Cardiovascular System study section (July, 2017-June, 2021)

- Manuscript reviewer:
- Atherosclerosis
 - Arteriosclerosis, Thrombosis and Vascular Biology
 - Biochemical Journal
 - Biochimica et Biophysica Acta
 - Circulation
 - Circulation Research
 - Journal Lipid Research
 - Journal Clinical Investigations
 - Lipids
 - Nature Medicine
 - New England Journal of Medicine
 - Pharmacological Research
 - PLOS One
- Editorial Board Member:
- Journal of Lipid Research, 2010-2017
 - Arteriosclerosis, Thrombosis, & Vascular Biology, 2010-present
- Abstract grader:
- Scientific Sessions, American Heart Association, 2004-2007, 2016-2019
 - Conference on Arteriosclerosis, Thrombosis, and Vascular Biology, 2005-2008, 2010, 2012-2017
- Session chair:
- Southeast Lipid Research Conference, 2004
 - Scientific Sessions, American Heart Association, 2004
 - Scientific Sessions, American Heart Association, 2006
 - Scientific Sessions, Arteriosclerosis, Thrombosis and Vascular Biology, 2006
 - Scientific Sessions, American Heart Association, 2007
 - Southeast Lipid Research Conference, 2008
 - Scientific Sessions, Arteriosclerosis, Thrombosis, and Vascular Biology, 2013
 - Scientific Sessions, Arteriosclerosis, Thrombosis, and Vascular Biology, 2014
 - Southeast Lipid Research Conference, 2014
 - Scientific Sessions, American Heart Association, 2015
 - Gordon Research Conference on Lipoprotein Metabolism, 2016
 - Vascular Discovery: From Genes to Medicine, 2018
 - Vascular Discovery: From Genes to Medicine, 2019
- Mentor:
- University of Kentucky “Girls in Research” Program for middle school age girls 2004-2008

- Consultant for
tenure review:
- University of Kentucky Undergraduate Research Committee 2011-2017
 - AHA ATVB Council Mentoring Program 2014-present
 - Lafayette High School Science + Snacks Workshops 2020
- Judge:
- Department of Food Science and Human Nutrition, Colorado State University (2016)
 - Department of Internal Medicine, University of Iowa College of Medicine (2018)
 - Department of Medicine, Vanderbilt University Medical Center Nashville, TN (2019)
 - Department of Molecular Genetics, University Texas Southwestern Medical Center (2020)
- Kentucky State Science Fair 2007
 - Regional Science Fair 2008, 2010, 2014

XIV. Invited Speaking Engagements

Local

- 1995 Department of Internal Medicine Research Seminar Series, “Viral Vectors: Tools for the Researcher and Clinician”
- 2000 Graduate Center for Nutritional Sciences Seminar Series, “The HDL receptor SR-BI”
- 2001 University of Kentucky Cardiovascular Seminar Series, “The metabolic fate of high density lipoproteins after processing by the scavenger receptor B-I.”
- 2002 University of Kentucky Department of Pathology Seminar Series, “Charting the fate of HDL particles in vivo: Studies in mice over-expressing the scavenger receptor B-I”
- 2004 Graduate Center for Nutritional Sciences Seminar Series, “A mechanistic link between LDL and atherosclerosis”
- 2011 University of Kentucky Department of Internal Medicine, Division of Endocrinology and Molecular Medicine Seminar Series, “Secretory phospholipase A₂’s: Old and new functions”
- 2011 University of Kentucky Graduate Center for Nutritional Sciences Seminar Series, “Recent Insights into (unexpected) functions of secretory phospholipase A₂’s”
- 2013 University of Kentucky Department of Molecular & Biomedical Pharmacology Seminar Series, “Diverse functions of secretory phospholipase A₂’s”
- 2014 University of Kentucky Endocrine Conference Series, “Secretory phospholipase A₂’s: There’s more than first meets the eye”

National/International

- 1996 Gordon Research Conference on Serum Amyloid A (Ventura, CA)
“Adenoviral vectors in the study of SAA function”
- 1999 European Atherosclerosis Society (Athens, Greece) “Scavenger Receptor BI (SR-BI) and clearance of apoB-containing lipoproteins in apoE-deficient mice”
- 1999 American Heart Association (Atlanta, Georgia) “SR-BI over-expression results in depletion of apoB-containing lipoproteins that accumulate in apoE-deficient, but not LDL receptor-deficient or apoB transgenic, mice”
- 2002 Southeast Lipid Research Conference (Callaway Gardens, GA) “The fate of HDL particles after selective lipid uptake”
- 2003 Atorvastatin Research Awards Summit (Salt Lake City, Utah) “Secretory phospholipases and atherosclerosis: Local and systemic effects”
- 2003 Southeast Lipid Research Conference (Callaway Gardens, GA) “Group V sPLA₂: Potential Role in Atherosclerosis”
- 2004 5th Annual Conference on Arteriosclerosis, Thrombosis and Vascular Biology (San Francisco, CA) “Hydrolysis of LDL by secretory phospholipase A₂ results in spontaneous particle aggregation and promotes macrophage foam cell formation”
- 2004 Gordon Research Conference on Lipoprotein Metabolism (Meriden, NH) “Role of secretory phospholipases in lipoprotein metabolism and atherosclerosis”
- 2005 University of California, Davis “Secretory phospholipase A₂ enzymes: A link between LDL and atherosclerosis?”
- 2005 Columbia University “Group V sPLA₂: A mechanistic link between LDL and atherosclerosis?”
- 2006 7th Annual Conference of Arteriosclerosis, Thrombosis and Vascular Biology (Denver, CO) “Secretory Phospholipase A₂ in Atherosclerosis”
- 2006 FASEB Research Conference on Phospholipases (Saxtons River, VT) “Secretory phospholipase A₂ enzymes: A mechanistic link between LDL and atherosclerosis?”
- 2007 Boehringer Ingelheim Pharmaceuticals, Inc. (Ridgefield, CT) “Secretory Phospholipase A₂ in Atherosclerosis”
- 2007 Pfizer (Chesterfield, MO) “Secretory Phospholipase A₂ and Atherosclerosis”
- 2007 University of Cincinnati Obesity Research Center “Secretory phospholipase A₂'s and atherosclerosis”
- 2007 AHA Scientific Sessions (Orlando, FL) “Group X sPLA₂ deficiency increases adiposity and adipose tissue inflammation in mice”
- 2008 Gordon Research Conference on Lipoprotein Metabolism (Waterville Valley, NH) “Group X sPLA₂ negatively regulates lipolysis in adipose tissue”
- 2008 FASEB Research Conference on Phospholipid Metabolism (New Haven, CT) “Group V sPLA₂ in atherosclerosis: An update”
- 2008 Southeast Lipid Research Conference (Callaway Gardens, GA) “Role of Group X sPLA₂ in adipose tissue”
- 2012 2012 HDL Summit (New York, NY) “HDL and the Acute Phase Response”

- 2012 University of Virginia Robert M. Berne Cardiovascular Research Center (Charlottesville, VA) “Recent Insights into (unexpected) functions of secretory phospholipase A₂'s”
- 2012 Arteriosclerosis, Thrombosis and Vascular Biology Annual Conference (Chicago, IL) “Group V secretory phospholipase A₂ enhances the progression of angiotensin II-induced abdominal aortic aneurysms but confers protection against angiotensin II-induced cardiac fibrosis in apoE-deficient mice”
- 2012 AHA Scientific Sessions (Los Angeles, CA) “Mechanism of Hepatic HDL Formation and Impact of Inflammatory Processes”
- 2013 Arteriosclerosis, Thrombosis and Vascular Biology (Chicago, IL) “Origins and Significance of Nascent HDL Heterogeneity”
- 2013 Boston University School of Medicine Biochemistry Department Seminar Series (Boston, MA) “New (and unexpected) functions of secretory phospholipase A₂'s”
- 2014 Ohio Valley Affiliates for Life Sciences conference (Cincinnati, OH) “University of Kentucky initiatives in metabolic diseases”
- 2016 Gordon Research Conference on Lipoprotein Metabolism (Meriden, NH) "Serum Amyloid A in Modern Chronic Inflammatory Disease: An Ancient Acute Phase Reactant Gone Rogue?"
- 2017 Keynote speaker, Nebraska Center for the Prevention of Obesity Diseases Symposium (Lincoln, Nebraska) “Serum amyloid A in metabolic disease: An acute phase reactant gone rogue?”
- 2017 Invited Speaker, Great Wall International Congress of Cardiology (Beijing, China) “Serum Amyloid A in Chronic Inflammatory Diseases”
- 2018 Invited Presenter, 2018 HDL Workshop “In Memoriam” Address, San Francisco, CA
- 2018 Keynote Address, Chinese American Academy of Cardiology Metabolic Vascular Disease Symposium (San Francisco, CA) “Serum amyloid A in metabolic disease: An acute phase reactant gone rogue?”
- 2018 Northeast Ohio Medical University Department of Integrative Medical Sciences Seminar Series (Rootstown, OH) “Serum Amyloid A in Chronic Inflammatory Diseases: An acute phase reactant gone rogue?”
- 2019 University of Wisconsin-Madison Department of Cell and Regenerative Biology Seminar Series (Madison, WI) “Serum Amyloid A in chronic inflammatory diseases”
- 2019 Medical College of Wisconsin Cardiovascular Center Seminar Series (Milwaukee, WI) “Serum Amyloid A in Cardiovascular Disease: An acute phase reactant gone rogue?”
- 2020 Medical College of Georgia Vascular Biology Center Seminar Series (Augusta, GA) “Serum Amyloid A in Cardiovascular Disease: An acute phase reactant gone rogue?”

XIV. Research and/or Creative Productivity

PUBLICATIONS

1. Dunwiddie, T.V., **Roberson, N.L. (Webb)**, and Worth, T. (1982) Modulation of long term potentiation: Effects of adrenergic and neuroleptic drugs. *Pharm. Bioch. and Behav.* 17:1257-1264.
2. **Webb, N.R.**, Chari, R.V.S., Depillis, G., Kozarich, J.W., and Rhoads R.E. (1984) Purification of the messenger RNA cap-binding protein using a new affinity medium. *Biochemistry* 23:177-181.
3. Gold, P.E., **Roberson, N.L. (Webb)**, and Delanoy, R.L. (1985) Post-training brain catecholamine levels: lack of response to water-motivated training. *Behav. Neural Biol.* 44:425-33.
4. Hiremath, L.S., **Webb, N.R.**, and Rhoads, R.E. (1985) Immunological detection of the messenger RNA cap-binding protein. *J. Biol. Chem.* 260:7843-7849.
5. Lee, D.C., Rose, T.M., **Webb, N.R.**, and Todaro, G.J. (1985) Cloning and sequence analysis of a cDNA for rat transforming growth factor-alpha. *Nature* 313:489-491.
6. Todaro, G.J., Lee, D.C., **Webb, N.R.**, Rose, T.M., and Brown, J.P. (1985) Rat type-alpha transforming growth factor: Structure and possible function as a membrane receptor. *In: Cancer Cells 3: Growth Factors and Transformation, Cold Spring Harbor Symposium* pp 51-58.
7. **Webb, N.R.**, Rose, T.M., Malik, N., Marquardt, H., Shoyab, M., Todaro, G.J., and Lee, D.C. (1987) Bovine and human complementary DNA sequences encoding a putative benzodiazepine receptor ligand. *DNA* 6:71-79.
8. Lee, D.C., Rose, T.M., **Webb, N.R.**, Twardzik, D.R., Ranchalis, J., Marquardt, H., and Todaro, G.J. (1987) Rat transforming-alpha is apparently cleaved from a transmembrane precursor by an unusual protease. *In: A Prospective on Biology and Medicine in the 21st Century* pp 187-198.
9. Gentry, L.E., **Webb, N.R.**, Lim, G.J., Brunner, A. M., Ranchalis, J.E., Twardzik, D.R., Lioubin, M.N., Marquardt, H., and Purchio, A.F. (1987) Type 1 transforming growth factor beta: Amplified expression and secretion of mature and precursor polypeptides in Chinese hamster ovary cells. *Mol. Cell. Biol.* 7:3418-3427.
10. Madisen, L., **Webb, N.R.**, Rose, T.M., Marquardt, H., Ikeda, T., Twardzik, D., Seyedin, S., and Purchio, A.F. (1988) Transforming growth factor- β 2: cDNA cloning and sequence analysis. *DNA* 7:1-8.

11. **Webb, N.R.**, Madisen, L., Rose, T.M., and Purchio, A.F. (1988) Structural and sequence analysis of TGF- β 2 cDNA clones predicts two different precursor proteins produced by alternative mRNA splicing. *DNA* 7:493-497.
12. Madisen, L., Farrand, A.L., Lioubin, M.N., Marzowski, J., Knox, L.B., **Webb, N.R.**, Lim, J., and Purchio, A.F. (1989) Expression and characterization of recombinant TGF-beta 2 proteins produced in mammalian cells. *DNA* 8:205-212.
13. Bascom, C.C., Wolfshohl, J.R., Coffey, R.J. Jr., Madisen, L., **Webb, N.R.**, Purchio, A.R., Derynck, R., and Moses, H.L. Complex regulation of transforming growth factor beta 1, beta 2, and beta 3 mRNA expression in mouse fibroblasts and keratinocytes by transforming growth factors beta 1 and beta 2. *Mol. Cell Biol.* 9:5508-5515.
14. **Webb, N.R.**, Madoulet, C., Tosi, F., Broussard, D.R., Sneed, L., Nicolau, C., and Summers, M.D. (1989) Cell-surface expression and purification of human CD4 produced in baculovirus-infected insect cells. *Proc. Natl. Acad. Sci. USA* 86:7731-7735.
15. **Webb, N.R.** and Summers, M. D. (1990) Expression of proteins using recombinant baculoviruses. *Technique* 2:173-188.
16. De Beer, M. C., de Beer, F. C., Gerardot, C.J., Cecil, D.R., **Webb, N.R.**, Goodson, M.L., and Kindy, M.S. (1996) Structure of the mouse *Saa4* gene and its linkage to the serum amyloid A gene family. *Genomics* 34:139-142.
17. **Webb, N.R.**, de Beer, M.C., van der Westhuyzen, D.R., Kindy, M.S., Banka, C.L., Tsukamoto, K., Rader, D.J., and de Beer, F.C. (1997) Adenoviral vector-mediated over-expression of serum amyloid A in apoA-I-deficient mice. *J. Lipid Res.* 38:45-52.
18. **Webb, N.R.**, de Villiers, W.J.S., Connell, P.M., de Beer, F.C., and van der Westhuyzen, D.R. (1997) Alternative forms of the scavenger receptor BI (SR-BI). *J. Lipid Res.* 38:1490-1495.
19. Welch, C.L., Xia, Y.-R., Gu, L.-J., Machleder, D., Mehrabian, M., Wen, P.Z., **Webb, N.**, de Williers, W.J.S., van der Westhuyzen, D., and Lusis, A.J. (1997) *Srb1* maps to mouse chromosome 5 in a region harboring putative QTLs for plasma lipoprotein levels. *Mammalian Genome* 8:942-944.
20. **Webb, N.R.**, Connell, P.M., Graf, G.A., Smart, E.J., de Williers, W.J.S., de Beer, F.C., and van der Westhuyzen, D.R. (1998) SR-BII, an isoform of the scavenger receptor BI containing an alternate cytoplasmic tail, mediates lipid transfer between high density lipoprotein and cells. *J. Biol. Chem.* 273:15241-15248.
21. Hosai, H., **Webb, N.R.**, Glick, J., Purdom, M.S., de Beer, F.C., and Rader, D.J. (1999) Expression of serum amyloid A protein in the absence of the acute phase

- response is not sufficient to reduce HDL cholesterol or apoA-I levels in mice. *J. Lipid Res.* 40:1-6.
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ABSTRACTS (up to 2009 only)

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Shridas, P., Bailey, W., Gizard, R., Bruemmer, D., and **Webb, N.R.** (2009) Group X secretory phospholipase A₂ negatively regulates activation of liver X receptors. Scientific Sessions, American Heart Association (Orlando, FL).

GRANT AND CONTRACT ACTIVITY

Active Support

NIH

MPI: **N.R. Webb**, F.C. de Beer

Serum Amyloid A, Inflammasome Activation, and Abdominal Aortic Aneurysms (R01 HL134731-01)

01/01/2017 – 12/31/2020 (Direct costs \$1,202,180)

NIH

PD: **N.R. Webb**

Training Program in Pharmacology and Nutritional Sciences: Multidisciplinary Approaches for Metabolic Disease (T32 DK007778-19)

8/1/2015 – 7/31/2021 (NCE)

NIH

MPI: Lisa Tannock, Preetha Shridas

Mechanisms Regulating the Atherogenic Activities of Serum Amyloid A (R01 HL147381)

7/5/2020 – 6/30/2024

Role: co-I

NIH

PI: Jon Thorson

COBRE in Pharmaceutical Research and Innovation (P20 GM130456)

3/1/2020 – 1/31/2025

Role: co-I

NIH

PI: Analia Loria

Effect of early life stress on obesity-induced hypertension in mice (R01 HL135158)

12/01/17 – 11/30/22

This supplement to parent R01 supports pre-doctoral graduate student, Jacqueline Leachman

Role: co-I

NIH

PD: Linda Van Eldik

Training in Translational Research in Alzheimer's and Related Dementias (TRIAD) (T32 AG057461)

9/15/2017 – 8/31/2022

Role: Internal Advisory Committee

AHA

PI: Alan Daugherty

University of Kentucky-Baylor College of Medicine Aortopathy Research Center (18SFRN33900001)

4/1/2018 – 3/31/22 (Total Award \$902,300)

Role: Training Director

CSR&D MERIT REVIEW AWARD

VA-ORD

PI: Merrill Benson

Pathogenesis and Treatment of AA Amyloidosis (I01 CX001631)

7/1/2018 – 6/31/2022

Role: Consultant

CSR&D MERIT REVIEW AWARD

VA-ORD

PI: Lisa Tannock

Mechanisms Linking Obesity and Abdominal Aortic Aneurysm (BX004275)

8/1/2019 – 7/31/2023

Role: Consultant

Completed Research Support

NIH

PI: **N.R. Webb**

Vascular Discovery: From Genes to Medicine (R13 HL147519)

3/1/19 – 2/28/20

NIH
PI: Lisa A. Cassis
Center of Research in Obesity and Cardiovascular Disease (5P20 GM103527)
09/08/08 – 7/31/19
Role: co-I

CSR&D MERIT REVIEW AWARD
VA-ORD
PI: Lisa Tannock
The association of SAA with apoB lipoproteins affects cardiovascular risk (1101 CX000975)
4/1/2014 – 3/31/2018 (Direct costs \$641,000)
Role: Consultant

NIH
PI: **N.R. Webb**
ATVB/PVD Scientific Sessions 2018 (R13 HL142278-01)
3/1/18 – 2/28/19

CSR&D MERIT REVIEW AWARD
PI: **N.R. Webb**
HDL Remodeling in Metabolic Syndrome (1101CX000773)
01/01/2014-12/31/2017 (Direct costs \$924,050)

NIH
PI: **N.R. Webb**
Group X sPLA₂: Regulator of Lipolysis and Glucose Homeostasis (R01 DK082419)
08/01/09 - 07/31/14; \$1,659,111 (Direct costs \$1,132,500)

NIH
PI: D.R. van der Westhuyzen
Project 3 Leader: **N.R. Webb**
HDL function and metabolism during inflammation (P01 HL086670)
04/01/07–3/31/13 (Direct costs, \$4,081,724)

NIH
PI: A. Daugherty
Project 3 Leader: **N.R. Webb**
Mechanisms of Abdominal Aortic Aneurysms (P01 HL080100-01A1)
04/08/06 – 03/31/12; \$8,438,000 (Direct costs \$5,760,000)

NIH
PI: Lisa Tannock
Co-Investigator: **N.R. Webb**
Role of serum amyloid A in atherosclerosis (R01 HL096589)
09/01/09 – 08/31/11 (Direct costs \$524,000)

NIH

PI: **N.R. Webb**

Co-investigators: F.C. de Beer, D.R. van der Westhuyzen, A. Daugherty
Group V sPLA₂ in Atherosclerosis (R01 HL071098)
04/01/03 - 09/31/08; \$1,810,000 (Direct costs \$1,250,000)

NIH

PI: D.R. van der Westhuyzen

Co-Investigator: **N.R. Webb**

SR-BI and SR-BII recycling and selective lipid uptake (R01 HL063763)
8/15/05 – 7/31/09; (Direct costs \$1,125,000)

NIH

PI: S.R. Post

Co-investigators: **N.R. Webb**, W. Akers, C. Loftin, G.R. Post
Regulation of Ras signaling by Rlf in myocytes (R01 HL75241)
12/1/03 – 11/30/08; \$1,416,623 (Direct costs, \$1,025,000)

NIH

PI: F.C. de Beer

Co-investigators: **N.R. Webb**, D.R. van der Westhuyzen
SR-BI mediated selective cholesterol ester uptake (R01 AG17237)
03/01/01 – 02/28/06; \$1,102,500 (Direct costs \$875,000)

NIH

PI: F.C. de Beer

SAA and sPLA₂: Role in atherogenesis (R01 HL69463)
09/30/01 – 07/31/05; \$1,206,440 (Direct costs \$1,000,000)

NIH

PI: D.R. van der Westhuyzen

Co-investigators: **N.R. Webb**, A. Daugherty, F.C. de Beer
Class B scavenger receptors and foam cell formation (R01 HL65730)
09/15/00-08/31/04; \$882,000 (Direct costs \$700,000)

Kentucky Council on Postsecondary Education

PI: C. Hanley

STEM PRIDE: Partnering with Research & Industry to Develop STEM Educators
for College and Career Readiness (PO2 415 1500002812 1)
01/01/15 – 6/30/16 (Direct costs \$149,939)
Role: Co-Investigator

University of Kentucky VPR Research Support Program

PI: **N.R. Webb**

Serum amyloid A, inflammasome activation, and cancer
7/1/2014 – 6/30/2015 (Direct costs \$20,000)

American Heart Association, Ohio Valley Affiliate

PI: Boris Boyanovsky

Sponsor: **N.R. Webb**

Bioactive molecules generated by secretory phospholipase A₂ Group V and Group X hydrolysis of LDL (AHA 0525425B)

07/01/05 – 06/30/07; \$82,000 (Direct costs \$82,000)

American Heart Association, Ohio Valley Affiliate

PI: Bing Sun; Sponsor: **N.R. Webb**

Class B scavenger receptors: Defining receptor and ligand trafficking (AHA 0415238B)

07/01/04 – 06/30/06; \$36,000 (Direct costs \$36,000)

American Heart Association, Ohio Valley Affiliate

PI: Meredith Bostrom

Sponsor: **N.R. Webb**

Macrophage-derived GX sPLA₂ and atherosclerosis (AHA 0315079B)

American Heart Association, National Center

PI: **N.R. Webb**

Scavenger receptor BI: Distinct functional domains (AHA 0130020N)

01/01/01 – 12/31/04; \$260,000 (Direct costs \$236,364)

Atorvastatin Research Awards Program

PI: **N.R. Webb**

Inflammatory modification of HDL promotes delivery of oxidized lipids to macrophages

07/01/02 – 06/30/03; \$50,000 (Direct costs \$50,000)

University of Kentucky Medical Center Research Award

PI: **N.R. Webb**

Scavenger receptor B-I and remnant lipoprotein metabolism

07/01/00 – 6/30/01; \$15,000 (Direct costs \$15,000)

OTHER CREATIVE ACTIVITY

Issued patents

“Cloning and expression of transforming growth factor β 2” issued June 22, 1993.

“Compositions and methods for detecting and treating atherosclerosis” (U.S. patent number #7,521,198) issued April 21, 2009.