

NANCY R. WEBB, Ph.D.
PROFESSOR EMERITUS
DEPARTMENT OF PHARMACOLOGY & NUTRITIONAL SCIENCES
Updated: January 2022

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
- 2/14-12/21 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
- 1/22- Professor Emeritus, Department of Pharmacology and Nutritional Sciences, University of Kentucky, Lexington

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
- 2003-2019 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
2016-2021	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
2016-2021	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)
2020-present Jerram John
2020-present Sam C. Tyagi
2021-present Mary Burchett

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 Farman; advisor for ABT395 research project
2020-2021 Avery Patrick; co-advisor for ABT395 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
2014-2021	Member, Department of Pharmacology & Nutritional Sciences Education Committee
2014-2021	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
2015-2016	Member, Department of Pharmacology & Nutritional Sciences Chair Search Committee
2015-2017	Member, Gill Heart Award Internal Advisory Committee
2015-2019	Member, University of Kentucky MD/PhD Program Internal Advisory Committee
2016	Member, Department of Pharmacology & Nutritional Sciences Special Title Series Faculty Search Committee
2016-2019	Elected Member, University of Kentucky Faculty Senate
2016-2019	Member, Barnstable Brown Diabetes Center Strategy Team
2017-2019	Member, AHA Summer Undergraduate Research Fellowship Oversight Committee
2017-2021	Member, Internal Advisory Committee, T32 training program in Translational Research in Alzheimer's disease and related Dementias (TRIAD)
2018-2021	Member, Provost's Graduate Education Advisory Team
2018-2020	Alternate Member, Lexington VA Medical Center Institutional Animal Care and Use Committee
2018-2021	Member, Internal Advisory Committee, Center of Research on Obesity and Cardiovascular Disease COBRE (P20GM127211; L. Cassis, PI)
2019-2021	Member, Division of Endocrinology Chief Search Committee
2019-2021	Diabetes/Obesity Research Priority Area Leadership Team
2019-2020	Member, Department of Pharmacology & Nutritional Sciences Faculty Search Committee
2019-2020	Member, Department of Microbiology, Immunology and Molecular Genetics Chair Search Committee
2020-2021	Member, College of Medicine STAR Advisory Group

XI. Special Assignments – N/A

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
2004-2020	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 Invited guest, *Lunch with Legends*, AHA Scientific Sessions
- 2019 Distinguished Achievement Award, AHA Arteriosclerosis, Thrombosis, and Vascular Biology Council
- 2021 Invited Panelist, Celebrating the 20 Years of Mentor of Women Award

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
- 2010-2021 Member, 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 ATVB/PVD) Scientific Sessions Program Committee
2017-2019	Member, Arteriosclerosis, Thrombosis, and Vascular Biology Council of the AHA Leadership Committee
2018, 2019	Faculty, AHA Research Leaders' Academy
2018-2021	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, 2010-2022

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
 - University of Kentucky Undergraduate Research Committee 2011-2017
 - AHA ATVB Council Mentoring Program 2014-present
 - Lafayette High School Science + Snacks Workshops 2020

- Consultant for tenure review:
- 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)

- Judge:
- 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* 223:177-181.
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.

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ABSTRACTS (up to 2009 only)

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Li, X. and **Webb, N.R.** (2008) Role of Group X secretory phospholipase A₂ in adipocytes. Southeast Lipid Research Conference (Callaway Gardens, GA).

Shridas, P. and **Webb, N.R.** (2008) Group X secretory phospholipase A₂ modulates macrophage inflammatory responses. Southeast Lipid Research Conference (Callaway Gardens, GA).

Shridas, P., Bailey, W. and **Webb, N.R.** (2009) Group X secretory phospholipase A₂ enhances macrophage inflammatory responses by modulating expression levels of ABCA1 and ABCG1. Conference on Arteriosclerosis, Thrombosis and Vascular Biology (Washington, D.C.).

Zack, M., Shridas, P., Bailey, M., Forrest, K., Howatt, D.A., Daugherty, A. and **Webb, N.R.** (2009) Group X secretory phospholipase A₂ deficiency protects apoE-deficient mice from angiotensin II-induced abdominal aortic aneurysms. Conference on Arteriosclerosis, Thrombosis and Vascular Biology (Washington).

De Beer, M.C. **Webb, N.R.**, Wroblewski, J.M., Rateri, D.L., Ji, A., van der Westhuyzen, D.R., and de Beer, F.C. (2009) Impact of serum amyloid A on high-density lipoprotein composition, levels, and function. Conference on Arteriosclerosis, Thrombosis and Vascular Biology (Washington, D.C.).

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

NIH

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

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

01/01/2017 – 12/31/2021 (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, J. 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

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.