CURRICULUM VITAE

L. JACKSON ROBERTS, II, M.D.

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L. JACKSON ROBERTS, II, MD

Birth Date and Place: December 10, 1943, Muscatine, Iowa

Marital Status: Married, two children

Education: 1965 - B.A. Degree (Chemistry & Biology), Cornell College, Mt. Vernon, Iowa

1969 - M.D. Degree, University of Iowa, Iowa City, Iowa

Certification: 1970 - License to practice medicine in the state of Iowa

1972 - License to practice medicine in the state of California

1975 - Diplomat of American Board of Internal Medicine

1978 - License to practice medicine in the state of Tennessee

Professional Experience: 1969-1970 Internship (rotating) Denver General Hospital, Denver, Colorado

1973	Internship (6 months, Internal Medicine), Washington University, St. Louis, Missouri
1973-1975	Residency, Internal Medicine, Washington University St. Louis, Missouri
1975-1977	Post-Doctorate Fellowship (Clinical Pharmacology), Vanderbilt University, Nashville, Tennessee
1977-1978	Instructor in Pharmacology and Medicine, Vanderbilt University, Nashville, Tennessee
1978-1983	Assistant Professor in Pharmacology and Medicine, Vanderbilt University, Nashville, Tennessee
1983-1986	Associate Professor of Pharmacology and Medicine, Vanderbilt University, Nashville, Tennessee

1986-	Professor of Pharmacology and Medicine Vanderbilt University, Nashville, Tennessee
2006-2010	T. Edwin Professor of Pharmacology
2010-	Director, Research Center for Pharmacology and Drug Toxicology
2011-	William Stokes Professor of Experimental Therapeutics

Military Service: United States Navy 1970-1973

Honors and Awards: Alpha Omega Alpha 1969

1983 Burroughs Wellcome Scholar in Clinical Pharmacology

2001 Sidney P. Colowick Faculty Research Award

Elected to the American Society for Clinical Investigation

Elected to the Association of American Physicians

National Institutes of Health MERIT Award, 2001

Discovery Award from the Society for Free Radical Biology & Medicine 2006

Earl Sutherland Prize for Achievement in Research from Vanderbilt University 2006

Recipient of the T. Edwin Rogers Chair in Pharmacology 2006

Distinguished Alumni Award from the University of Iowa School of Medicine 2007

Recipient of the Williams Stokes Chair in Experimental Therapeutics 2011

Elected *Fellow* of the Society for Free Radical Biology and Medicine (F-SRBM) 2013

Keynote Speaker, Collaborative Research Forum, San Juan, Puerto Rico, 2014

Recipient of the American Society of Pharmacology and Experimental Therapeutics (ASPET) Award, 2015

Keynote Speaker, Free Radical Biology & Medicine Annual Meeting, Boston, MA 2015

Societies:

American Federation of Clinical Research

American Society of Pharmacology and Experimental

Therapeutics

Founding Member, Association for Patient-Oriented Research

American Society for Clinical Investigation

Association of American Physicians

Society for Free Radical Biology and Medicine

Editorial Boards:

Associate Editor, *Prostaglandins and Other Lipid Mediators* 1982-2011

Associate Editor, *Free Radical Biology & Medicine* 2003-2015

Advisory Committees:

Member, Eicosanoid Nomenclature Committee, sanctioned by JCBN of IUPAC

Member, Safety & Data Monitoring Committee; Dartmouth Multicenter Trial On Aspirin Prevention of Colon Polyps, 1994-2001

Patient Mastocytosis Newsletter Professional Advisory Group, 1994 to present

International Advisory Committee; 9th International Conference on Prostaglandins and Related Compounds, Florence, Italy, 1994

International Advisory Committee; 4th International Conference on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation and Radiation Injury, Berlin, Germany, 1995

Member of NIEHS workshop on Measurement of Oxidative Stress in Human, Research Triangle Park, NC, 1996.

International Advisory Committee: 10th International Conference on Prostaglandins and Related Compounds. Vienna, Austria. 1996

Faculty Member: 4th International Congress on Essential Fatty Acids and Eicosanoids, Ediburgh, Scotland, 1997

Member, Scientific Advisory Board, Cell Therapeutics, Inc., Seattle, WA., 1997-2000.

Member, U.S.-Japan Panel of Environmental Mutagenesis and Carcinogenesis, coordinated by NIEHS, 1998.

Founding Member, Association for Patient-Oriented Research, 1998-present

International Advisory Committee: Sixth International Conference on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation, and Radiation Injury, 1999.

Member, International Advisory Committee: Tenth International Conference on Prostaglandins and Related Compounds, Florence, Italy, 2000.

Member, External Advisory Board Member for the Center for Free Radical Biology and the University of Alabama, 1999-2000

Reviewer, Vanderbilt Intramural Grant Discovery Grants Program, 1999, 2000, and 2006

Member, International Advisory Committee: 12th International Conference on Advances in Prostaglandin, Leukotriene and Other Bioactive Lipid Research: Basic Science and Clinical Applications, Instanbul, Turkey, 2002.

Board of Directors, Lipoprotein Diagnostics Co., Bodega, CA,

1995-2013.

Scientific Advisory Board Member: Cell Therapeutics, Inc., Seattle, WA, 1997-2000

Scientific Advisory Board Member: Galileo Laboratories, Inc., Santa Clara, CA., 2000-2003.

Scientific Advisory Board Member, Kronos Longevity Research Institute, Phoenix, AZ., 2000-2011

Founder and Scientific Advisory Board Member: Discovery Life Sciences, 2001-present.

External Advisor, University of Arkansas NIH/NIA Program Project Grant, 2004

Member, Vanderbilt University Division of Clinical Pharmacology Faculty Search Committee, 2005

Expert Witness for U.S. Government litigation regarding the causative role of thiomersal in vaccines in the development of autism. 2007-2008

Member, Discovery Award Selection Committee of the Society of Free Radical Biology & Medicine, 2009

Member, Publications Committee of the Society of Free Radical Biology & Medicine, 2009-2010

External Advisor, University of Kentucky Alzheimer's Program Project grant 2011

Member, Internal Advisory Board for Vanderbilt U19 Asthma and Allergic Diseases Cooperative Research Center, 2011-2012

Member, Society for Free Radical Biology & Medicine Committee Publications Committee, 2012 – 2014

Member, Program Committee for the Society for Free Radical Biology and Medicine, 2013

Member, Vanderbilt Technology Transfer Office Faculty Advisory Board 2013 –

Scientific Advisor for Program Project Grant, Douglas R. Spitz, PhD, PI , 2014-, University of Iowa

Member Scientific Advisory Board for VDDI Pharmaceuticals 2014-

Mentor, Dr. Jeff Reese T32 grant, Vanderbilt Medical Center, 2015

University Committees: Reviewer, Vanderbilt University Discovery Grants, 2006

Pharmacology Examiner for Graduate Student Prelim Exams 2007 - 2008

Faculty Senate and Advisory Committee Member 2007- 2010

University Faculty Senate Representative 2007-2010

Member Meharry Medical College-Vanderbilt University ARCH Consortium 2008 –

Member, Vanderbilt University Professional Ethics and Academic Freedom (PEAF) Committee 2007-2009

Member, Vanderbilt University Committee to select nominees for the Thomas Jefferson Award 2008-2010

Member, Vanderbilt–Meharry ARCH Program Advisory Committee 2008-

Member, VUMC Committee to establish a Certificate in Clinical Aspects of Basic Research 2009

Vice Chair Elect, University Faculty Senate 2008-2009

Member of the Vanderbilt Consultative Committee which selects nominees for the Harvie Branscomb, Joe B. Wyatt, and Alexander Heard awards 2008-2010.

Vice Chair, University Faculty Senate 2009-2011

Chair, Ad Hoc Committee that investigated possible scientific misconduct by a VUMC faculty member, 2009

Chair. Vanderbilt Professional Ethics and Academic Freedom (PEAF) Committee to oversee a grievance filed from a VUMC faculty member, 2009-2010

Served on the VUMC NIH Grant Bridge Review Committee, 2011

Member of the Faculty Advisory Committee for Vanderbilt University Center for Technology Transfer and Commercialization (CTTC) 2013-

NIH Study Sections: Member, Medical Biochemistry Study Section, 1982-1984

Special Reviewer, Allergy and Clinical Immunology Review Group Subcommittee, Committee, National Institute of Allergy and Infectious Diseases, 1987

Site Visit Member, Medical Research Council of Canada, 1990

Site Visit Member, NIH grant review, Valahalla, NY, 1997

NIH New Innovator Awards, 2009, Reviewer

Ad Hoc Reviewer for the NIH NIDDK Board of Scientific Counselors, 2010

NIH Director Pioneer Awards, 2011, Reviewer

Reviewer for Dr. Stan Hazen NIH Program Project Grant, 2014

NIH Director's Pioneer Awards, 2015, Reviewer

NIH Director's Pioneer Awards, 2016, Reviewer

Patents: Compositions and methods for administration of antilipemic drugs. U.S. Patent No. 5,773,453. Issue date: June 30, 1998.

Method and compositions to assess oxidant stress *in vivo*. U.S. Patent No. 5,700,654. Issue date: Dec. 23, 1997.

Method and compositions to assess oxidative stress *in vivo.* U.S. Patent No. 5,858,696. Issue date: Jan. 12, 1999.

Assessment of oxidative stress *in vivo*. U.S. Patent No. 5,891,622. Issue date: April 6th, 1999.

Compositions, kits, and methods for administration of antilipemic drugs. U.S. Patent No. 5,981,555. Issue date: November 9, 1999.

Methods and compositions of a head restraint safety device for race car drivers. U.S. Patent No. 6,381,758. Issue date: May 7, 2002

Methods and compositions to assess oxidative brain injury. U.S. Patent No. 6,620,800 B1. Issue date: Sept. 16, 2003

Method of preventing and/or treating oxidant injury in neurodegenerative and oxidative diseases Patent No. 11,254,846. Issue date: April 27, 2010

Isoketal scavengers and mitigation of disorders involving oxidative injury. Patent No 12/395.464. Issue date: February 27, 2009

Inhibitors of hemoprotein-catalyzed lipid peroxidation. Patent No: 8,367,669 B2. Issue date: February 5, 2013

Methods for measuring oxidative stress, pending

Methods and compositions for the use of thromboxane receptor antagonists in hepatorenal syndrome and rhabdomyolysis-induced renal failure, pending

Methods and compositions for intercepting reactive γ-ketaldehydes, pending

Methods for reducing heme-induced tissue damage, pending

Antiinflammatory properties of γ-ketoaldehyde scavengers, pending

Methods and compositions for the use of γ-ketaldehyde scavengers as antihypertensive drugs, pending

Trainees:	Theodore Liston (pre)	1982 - 1985
	Karen Seibert (pre)	1984 - 1987
	Richard Dworski (post)	1985 - 1987
	William Parsons (pre)	1987 - 1989
	Stephen Baertschi (pre)	1987 - 1989
	Carmen Arzubiaga (post)	1988 - 1989
	Jason Morrow (post)	1988 - 1994
	Kahito Takahashi (post)	1988 - 1989
	Joseph Awad (post)	1990 - 1992
	Addison Longmire (post)	1992 - 1994
	Sharon O Byrne (post)	1991 - 1994
	Cynthia Brame (pre)	1995 - 1999
	Yan Chen (post)	1997 - 1999
	Sean Davies (post)	1998 - 2001
	Nathalie Bernoud-Hubac(post)	2000 - 2002
	Joshua Fessel (pre)	2000 - 2003
	Kyle Arneson	2003 – 2007
	Aaron Przybysz	2004 – 2009
	Hongmai Wu (post)	2007 - 2008
	Klarissa Hardy (pre)	2009 – 2011
	Brian Cox (post)	2009 - 2011
	Aurelia Vergede	2012 – present
	Thuy Nguyen	2012 - present
Member PhD Thesis Committees	Richard Maas	1984
	Theodore Liston	1985
	Karen Seibert	1987
	Wayne Glasgow	1988
	Molly Hughes	1993
	Steven Kudravi	1997
	Cynthia Brame	1999
	Gregory Gerdeman	2001
	Joyce Ou	2002
	Joshua Fessel	2006
	Kyle Arneson	2007
	Aaron Przybysz	2009
	Dalal Alkazemi (McGill Univ)	2012
	Thuy Nguyen	Current

PEER REVIEWED PUBLICATIONS

1. Ellis, EF., Oelz, O, **Roberts, LJ., II**, Payne, NA, Sweetman, BJ, Nies, AS and Oates, JA. Coronary arterial smooth muscle contraction by a substance released from platelets: Evidence that it is thromboxane A_2. *Science* 193:1135-1137, 1976.

2. **Roberts, LJ, II**, Sweetman, BJ, Morgan, JL, Payne, NA, and Oates, JA. Identification of the major urinary metabolite of thromboxane B_2 in the monkey. *Prostaglandins* 13:631-647, 1977.

3. Knapp, HR, Oelz, O, **Roberts, LJ, II**, Sweetman, BJ, Oates, JA, and Reed, PW. Ionophore stimulation of prostaglandin and thromboxane biosynthesis. *Proc. Natl. Acad. Sci.*, U.S.A. 74:4251-4255, 1977.

4. **Roberts, LJ, II**, Sweetman, BJ., Payne, NA, and Oates, JA. Metabolism of thromboxane B_2 in man: Identification of the major urinary metabolite. *J. Biol. Chem.* 252:7415-7417, 1977.

5. Duncan, GW, **Roberts, LJ, II**, and Watson, JP. Paroxysmal hypertensive hemicrania. *Headache* 17:5-6, 1977.

6. **Roberts, LJ, II**, Sweetman, BJ, and Oates, JA. Metabolism of thromboxane B_2 in the monkey. *J. Biol. Chem.* 253:5305-5318, 1978.

7. Samuelsson, B, Hamberg, M, **Roberts, LJ, II**, Oates, JA, and Nelson, NA. Note on thromboxane nomenclature. *Prostaglandins* 16:857-860, 1978.

8. **Roberts, LJ, II**, Marney, SR, Jr, and Oates, JA. Blockade of the flush associated with metastatic gastric carcinoid syndrome by combined histamine H_1 and H_2 receptor antagonists: Evidence for an important role of H_2 receptors in human vasculature. *New Engl. J. Med*. 300:236-238, 1979.

9. Lewis, RA, Holgate, ST, **Roberts, LJ, II**, Maguire, JF, Oates, JA, and Austen, KF. Effects of indomethacin on cyclic nucleotide levels and histamine release from rat serosal mast cells. *J. Immunol.* 123:1663-1668, 1979.

10. Baertagna, XY, Bloomgarden, ZT, Rabinowitz, D, **Roberts, LJ, II**, and Orth, DN. Molecular weight forms of immunoreactive calcitonin in a patient with medullary carcinoma of the thyroid: Dynamic studies with calcium, pentagastrin, and somatostatin. *Clinical Endocrinology* 13:115-123, 1980.

11. **Roberts, LJ, II**, Lewis, RA, Austen, KF, and Oates, JA. Prostaglandin, thromboxane, and 12-hydroxy-5,8,10,14-eicosatetraenoic acid production by ionophore-stimulated rat serosal mast cells. *Biochim. Biophys. Acta*. 575:185-192, 1979.

12. Holgate, ST, Lewis, RA, Maguire, JF, **Roberts, LJ, II**, Oates, JA, and Austen, KF. Effects of prostaglandin D_2 on rat serosal mast cells: Discordance between immunologic mediator release and cyclic AMP levels. *J.Immunol.* 125: 1367-1373, 1980.

13. **Roberts, LJ, II**, Lewis, RA, Folarin, VF, Austen, KF, and Oates, JA. Markedly increased synthesis of prostaglandin D_2 in systemic mastocytosis. *Trans. Assoc. Am. Physicians. XCIII:141-147,* 1980.

14. **Roberts, LJ, II**, Sweetman, BJ, Lewis, RA, Austen, KF, and Oates, JA. Marked overproduction of prostaglandin D_2 in patients with systemic mastocytosis. *N. Engl. J. Med.* 303:1400-1404, 1980.

15. Feely, J, Heidemann, H, Gerken, J, **Roberts, LJ, II**, and Branch, RA. Sodium depletion enhances nephrotoxicity of amphotericin B. *Lancet* i:1422-1423, 1981.

16. Robertson, RM, Robertson, D, **Roberts, LJ, II**, Maas, RL, FitzGerald, GA, Friesinger, GC, and Oates, JA. Thromboxane A_2 in vasotonic angina pectoris: Evidence from direct measurements and inhibitor trials. *New Engl. J. Med.* 17:998-1004, 1981.

17. **Roberts, LJ, II**, Sweetman, BJ, and Oates, JA. Metabolism of thromboxane B_2 in man: Identification of twenty urinary metabolites. *J. Biol. Chem.* 256:8384-8393, 1981.

18. FitzGerald, GA, Maas, RL, Brash, AR, Stein, R, Oates, JA, and **Roberts, LJ, II**. Intravenous prostacyclin in thrombotic thrombocytopenic purpura. *Annals Intern. Med.* 95:319-322, 1981.

19. Turk, J, Maas, RL, Brash, AR, **Roberts, LJ, II**, and Oates, JA. Arachidonic acid 15-lipoxygenase products from human eosinophils. *J. Biol. Chem.* 257:7068-7076, 1982.

20. Lewis, RA, Soter, NA, Diamond, PT, Austen, KF, Oates, JA, and **Roberts, LJ, II**. Prostaglandin D_2 generation after activation of rat and human mast cells with anti-IgE. *J. Immunol.* 129:1627-1631, 1982.

21. Kootte, A, Haak, A, and **Roberts, LJ, II**. The flush syndrome; expression of systemic mastocytosis with elevated prostaglandin D_2 production. *Neth. J. Med.* 26:18-20, 1983.

22. Turk, J, Rand, TH, Maas, RL, Lawson, JL, Brash, AR, **Roberts, LJ, II**, and Oates, JA. Identification of lipoxygenase products from arachidonic acid metabolism in stimulated murine eosinophils. *Biochim. Biophys. Acta.* 750:78-40, l983.

23. Turk, JW, Oates, JA, and **Roberts, LJ, II**. Intervention with epinephrine in shock associated with mastocytosis. *J. Allergy Clin. Immunol*. 7l:l89-l92, l983.

24. FitzGerald, GA, Oates, JA, Hawiger, J, Maas, RL, **Roberts, LJ, II**, Lawson, JL, and Brash, AR. Endogenous biosynthesis of prostacyclin and thromboxane and platelet function during chronic administration of aspirin in man. *J. Clin Invest.* 7l:676-688, l983.

25. **Roberts, LJ, II**, Bloomgarden, ZT, Marney, SR, Jr, Rabin, D, and Oates, JA. Histamine release from a gastric carcinoid: Provocation by pentagastrin and inhibition by somatostatin. *Gastroenterology* 84:272-275, l983.

26. Scott, HW, Parris, WC, Sandidge, PC, Oates, JA, and **Roberts, LJ, II**. Hazards in the operative management of patients with systemic mastocytosis. *Annals Surg.* l97:507-5l4, l983.

27. **Roberts, LJ, II**. Pentafluorobenzyl derivative of histamine for determination by gas-chromatography negative ion chemical ionization mass spectrometry. *J. Chromatogr.* 287:l55-l60, l984.

28. **Roberts, LJ, II**, and Oates, JA. Accurate and efficient method for quantification of urinary histamine by gas chromatography negative ion chemical ionization mass spectrometry. *Anal. Biochem.* l36:258-263, l984.

29. **Roberts, LJ, II**. Recurrent syncope due to systemic mastocytosis. *Hypertension* 6:285-294, l984.

30. **Roberts, LJ, II**, Aulsebrook, KA, and Oates, JA. Comparative evaluation of the radioenzymatic method for the determination of urinary histamine with a mass spectrometric assay. *J. Chromatogr.* 338:4l-49, l985.

31. Forman, MB., Oates, JA, Robertson, D, Robertson, RM, **Roberts, LJ, II**, and Virmani, R. Increased adventitial mast cells in a patient with proven coronary spasm. *New Engl. J. Med.*, 3l3:ll38-ll4l, l985.

33. **Roberts, LJ, II**, and Sweetman, BJ. Metabolic fate of endogenously synthesized prostaglandin D_2 in a human female with mastocytosis. *Prostaglandins* 30:383-400, l985.

34. Liston, TE, and **Roberts, LJ, II**. Metabolic fate of radiolabelled prostaglandin D_2 in a normal human male volunteer. *J. Biol. Chem.* 260:l3l72-l3l80, l985.

35. Liston, TE, and **Roberts, LJ, II**. Transformation of prostaglandin D_2 to 9α,11&-l5(S)-Trihydroxy-5(Z), l3(E)-dien-l-oic acid: A unique biologically active prostaglandin produced enzymatically *in vivo* in humans. *Proc. Natl. Acad. Sci. USA*, 82:6030-6034, l985.

36. Vire, G, **Roberts, LJ, II**, and King, LE. Urticaria pigmentosa and natural sunlight. *J. Am. Acad. Derm.* l4:687-688, l986.

37. Watanabe, K, Iguchi, Y, Iguchi, S, Arai, Y, Hayaishi, O, and **Roberts, LJ, II**. Stereospecific conversion of prostaglandin D_2 to (5Z,13E)-(15S)-9α,11β-trihydroxyprostadien-1-oic acid (9α,11β-prostaglandin D_2) and prostaglandin H_2 to prostaglandin $F_{2\alpha}$ by bovine lung prostaglandin F-synthase. *Proc. Natl. Acad. Sci.*, *USA*, 83:l583-l587, l986.

38. Murray, JJ, Tonnel, A, Brash, AR, **Roberts, LJ, II**, Gosset, P, Workman, R, Capron, A, and Oates, JA. Prostaglandin D_2 is released into human airways during acute allergic bronchospasm. *N. Engl. J. Med.* 315:800-804, 1986.

39. Seibert, K, Sheller, JR, and **Roberts, LJ, II**. (5Z,13E)-(15S)-9α,11β trihydroxyprostadien-1-oic acid (9α,11β-prostaglandin F_2): Formation and metabolism by human lung and contractile effects on human bronchial smooth muscle. *Proc. Natl. Acad. Sci., USA*, 84:256-260, 1987.

40. Lynes, WL. Flynn, S, Shortliffe, LD, Lemmers, M, Zipser, R, **Roberts, LJ, II**, and Stamey, TA. Mast cell involvement in interstitial cystitis. *J. Urology* 138:746-752, 1987.

41. Stier, CT, Jr, **Roberts, LJ, II**, and Wong, P Y-K. Renal response to 9α,11β-PGF_2 in the rat. *J. Pharmacol. Exp. Therap.* 243:487-491, 1987.

42. Wendelborn, DF, Seibert, K, and **Roberts, LJ, II**. Isomeric prostaglandin F_2 compounds arising from prostaglandin D_2: A family of eicosanoids produced in vivo in humans. *Proc. Natl. Acad. Sci., USA*, 85:304-308, 1988.

43. Soberman, RJ, Sutyak, JP, Okita, RT, Wendelborn, DF, **Roberts, LJ, II**, and Austen, KF. The identification and formation of 20-aldehyde leukotriene B_4. *J. Biol. Chem.* 263:7996-8002, 1988.

44. Prakash, C, Saleh, S, **Roberts, LJ, II**, and Blair, IA. Synthesis of the major urinary metabolite of prostaglandin D_2. *J. Chem. Soc. Perkin I:2821-2826,* 1988.

45. Parsons, WG, III, and **Roberts, LJ, II**. Transformation of prostaglandin D_2 to isomeric prostaglandin F_2 compounds by human eosinophils: a potential mast cell-eosinophil interaction. *J. Immunol.* 141:2413-2419, 1988.

46. Dworski, R, Sheller, JR, Wickersham, NE, Oates, JA, Brigham, KL, **Roberts, LJ, II**, and FitzGerald, GA. Allergen-stimulated release of mediators into sheep bronchoalveolar lavage fluid. *Am. Rev. Respir. Dis.* 139:46-51, 1989.

47. Morrow, JD., Parsons, WG., III, and **Roberts, LJ, II**. Release of markedly increased quantities of prostaglandin D_2 in vivo in humans following administration of nicotinic acid. *Prostaglandins* 38:263-274, 1989.

48. Smith, S, Anthony, L, **Roberts, LJ, II**, Oates, JA, Pincus, T. Musculoskeletal pain in the carcinoid syndrome: resolution after treatment with the somatostatin analogue octreotide. *Annals Int. Med.* 112:66-68, 1990.

49. Morrow, JD., Harris, TM., and **Roberts, LJ, II**. Non-cyclooxygenase oxidative formation of a series of novel prostaglandins: Analytical ramifications for measurement of eicosanoids. *Anal. Biochem*. 184:1-10, 1990.

50. Atsmon, J, Freeman, ML., Meredith, MJ, Sweetman, BJ and **Roberts, LJ, II**. Conjugation of 9-deoxy-Δ^9,Δ^{12} (E)- prostaglandin D_2 with intracellular glutathione and enhancement of its antiproliferative activity by glutathione depletion. *Cancer Res.* 50:1879-1885, 1990.

51. Atsmon, J, Sweetman, BJ, Baertschi, SW, Harris, TM, and **Roberts, LJ, II**. Formation of thiol conjugates of 9-deoxy-Δ^9,Δ^{12}(E)-prostaglandin D_2 and Δ^{12}(E)-prostaglandin D_2. *Biochemistry* 29:3760-3765, 1990.

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52. Morrow, JD, Hill, KE, Burk, RF, Nammour, TM, Badr, KF, and **Roberts, LJ, II**. A series of prostaglandin F_2-like compounds are produced *in vivo* in humans by a non-cyclooxygenase free radical catalyzed mechanism. *Proc. Natl. Acad. Sci., USA*, 87:9383-9387, 1990.

53. Guzzo, C, Lavker, R, **Roberts, LJ, II**, Fox, K, Schechter, N, and Lazarus, G. Urticaria pigmentosa: Systemic evaluation and successful treatment with topical steroids. *Arch. Dermatol.* 127:191-196, 1991.

54. Arzubiago, C, Morrow, J, **Roberts, LJ, II**, and Biaggioni, I. Neuropeptide Y, a putative co-transmitter in noradrenergic neurons, induces mast cell degranulation but not prostaglandin D_2 release. *J. Allergy Clin. Immunol*. 87:88-93, 1991.

55. Morrow, JD, Prakash, C, Duckworth, TA, Zackert, WE, Blair, IA, Oates, JA, and **Roberts, LJ, II**. Quantification of the major urinary metabolite of prostaglandin D_2 by a stable isotope dilution mass spectrometry assay. *Anal. Biochem.* 193:142-148, 1991.

56. Morrow, JD, Rowland, J, Margolies, G, and **Roberts, LJ, II**. Evidence that histamine is the causative toxin of scombroid fish poisoning. *N. Engl. J. Med*. 324:716-720, 1991.

57. Morrow, JD, and **Roberts, LJ, II**. Was the tuna a red herring. *Patient Care*, May 15:245-248, 1992.

58. Morrow, JD, and **Roberts, LJ, II**. Hearing loss: which drug caused it? *Patient Care*, May 15:238-242, 1992.

59. Morrow, JD, Awad, JA, Oates, JA, and **Roberts, LJ, II**. Identification of skin as the major site of prostaglandin D_2 release following oral administration of niacin in humans. *J. Invest. Dermatol.* 98:812-815, 1992.

60. Takahashi, K, Nammour, TM, Ebert, J, Morrow, JD, **Roberts, LJ, II** and Badr, KF. Glomerular actions of a free radical generated novel prostaglandin, 8-epi-prostaglandin $F_{2\alpha}$ in the rat: Evidence for interaction with thromboxane A_2 receptors. *J. Clin. Invest.* 90:136-141, 1992.

61. Morrow, JD, Minton, TA, and **Roberts, LJ, II**. The F_2-isoprostane, 8-epi-prostaglandin $F_{2\alpha}$, a potent agonist of the vascular thromboxane/endoperoxide receptor, is a platelet thromboxane/endoperoxide receptor antagonist. *Prostaglandins* 44:155-163, 1992.

62. Banerjee, M, Kang, KH, Morrow, JD, **Roberts, LJ, II**, and Newman, JH. Effects of a novel non-cyclooxygenase derived prostaglandin, 8-epi-$PGF_{2\alpha}$, in rabbit lung *in situ*. *Am. J. Physiol.* 263 (*Heart Circ. Physiol 32*):H660-H663, 1992.

63. Morrow, JD, Awad, JA, Kato, T, Takahashi, K, Badr, KF, **Roberts, LJ, II**, and Burk, R.F. Formation of novel non-cyclooxygenase derived prostanoids (F_2-isoprostanes) in carbon tetrachloride hepatotoxicity, an animal model of lipid peroxidation. *J. Clin. Invest.* 90:2502-2507, 1992.

64. Morrow, JD, Awad, JA, Boss, HJ, Blair, IA, and **Roberts, LJ, II**. Non-cyclooxygenase derived prostanoids (F_2-isoprostanes) are formed *in situ* on phospholipids. *Proc. Natl. Acad. Sci.* 89:10721-10725, 1992.

65. Kang, HK, Morrow, JD, **Roberts, LJ, II**, Newman, JH, and Banerjee, M. Airway and vascular effects of 8-epi-prostaglandin $F_{2\alpha}$ in isolated perfused rat lung. *J. Appl. Physiol.* 74:460-465, 1993.

66. Smith, CI, Morrow, JD, **Roberts, LJ, II**, and Marnett, LJ. Differentiation of monocytoid THP-1 cells with phorbol ester induces expression of prostaglandin endoperoxide synthase-1 (Cox-1). *Biochem. Biophys. Res. Comm.* 192:787-793, 1993.

67. Awad, JA, Morrow, JD, and **Roberts, LJ, II**. Identification of metabolites of noncyclooxygenase derived prostaglandin F_2-like compounds (F_2-isoprostanes) in human urine and plasma. *J. Biol. Chem.* 268:4161-4169, 1993.

68. Kayganich, KA, Rose, DM, Murphy, RC, Morrow, JD, and **Roberts, LJ, II**. Collision induced dissociation of isoprostane-containing phospholipids. *J. Lipid Res.* 34:1229-1235, 1993.

69. Morrow, JD, Moore, KP, Awad, JA, Ravenscraft, MD, Marini, G, Badr, KF, Williams, R, and **Roberts, LJ, II**. Marked overproduction of non-cycloxygenase derived prostanoids (F_2-isoprostanes) in the hepatorenal syndrome. *J. Lip. Mediators* 6:417-420, 1993.

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Weiwu Jiang[a1], Krithika Lingappan[a1], Lihua Wang[a] L, Xanthi I. Couroucli[a], Binoy Shivanna[a], Stephen E. Welty[a] Roberto Barrios[b], M. Firoze Khan[c], L Jackson Roberts[d], Daniel W. Nebert[e], Timothy Dalton[e], and Bhagavatula Moorthy[a*] Mice deficient in the gene for cytochrome P450 (CYP)1A1 are more susceptible to hyperoxic lung injury *in vivo*: Evidence for the role of CYP1A in the detoxification of lipid peroxides. *Submitted*

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Jane G. Wigginton, MD[1], Kareem R. AbdelFattah, MD [1], Joshua W. Gatson, PhD [1], Paul E. Pepe, MD, MPH[1], Scott Emerson, MD, PhD [2] , James W. Simpkins, PhD [3], Eileen Bulger, MD[2], Michael Foreman, MD[4], David Hoyt, MD[5], Jeff Kerby, MD[6], David L. Maass, BS[1], Christopher Madden, MD[1], Susanne May, PhD[2], Joseph P. Minei, MD[1], Judy Powell, BSN[2], Michael A. Ramsay, MD[4], **L. Jackson Roberts, II,** MD.[7], Karla Saner, PhD[1], Kevin Schug, PhD[8], Debra Egan, MS, MPH[1], George Sopko, MD, MPH[1]

and Ahamed H. Idris, MD [1] RESCUE Shock and RESCUE TBI: Twin Randomized Pilot Trials of Early, Single-dose Estrogen for Acute Traumatic Injury, *Submitted*

Egnatchik RA, Brittain E, Shah AT, Barnett JV, DeLaughter D, Seidman JG, Fares WH, Ford HJ, Monahan K, Kang CJ, Hysinger E, Austin E, Skala MC, Young JD, **Roberts, LJ, II**, Hemnes AR, West J, Fessel JP. BMP signaling is a fundamental regulator of cellular metabolic program, *Submitted*

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Ormseth MJ, Yancey PG, Solus JF, Bridges SL, Jr, Curtis JR, Linton MF, Fazio S, Davies SS, **Roberts, LJ, II**, Vickers KC, Kon V, Stein CM, TETRAD Investigators. Effect of drug therapy on net cholesterol efflux capacity of HDL-enriched serum in rheumatoid arthritis, *Submitted*

Joshua M. Diamond[1], Mary K. Porteous[1], L. Jackson Roberts II[2], Nancy Wickersham[3], Melanie Rushefski[1], Steven M. Kawut[1,4,5], Rupal J. Shah[6], Edward Cantu III[7], David J. Lederer[8], Shampa Chatterjee[9], Vibha N. Lama[10], Sangeeta Bhorade[11], Maria Crespo[12], John McDyer[12], Keith Wille[13], Jonathan Orens[14], Ann Weinacker[15], Selim Arcasoy[8], Pali D. Shah[14], David S. Wilkes[16], Chadi Hage[16], Scott M. Palmer[17], Laurie Snyder[17], Carolyn S. Calfee[6,18], Lorraine B. Ware*[19], and Jason D. Christie*[1,4] for the Lung Transplant Outcomes Group. The relationship between plasma lipid peroxidation products and primary graft dysfunction is modified by donor smoking and reperfusion hyperoxia, *submitted*

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INVITED PAPERS, CHAPTERS, AND REVIEWS

1. Sweetman,. BJ, **Roberts, LJ, II**, and Oates, JA. Elucidation of the structure of the major urinary metabolite of thromboxane B_2 in the monkey. *Proc. 5th Ann. Conf. of Mass Spectrom. and Allied Topics*, pp. 594-597, 1977.

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114. Fessel JP, and **Roberts LJ, II.** Isofurans: Novel products of lipid peroxidation that define the occurrence of oxidant injury in settings of elevated oxygen tension. In: *Antioxidants & Redox Signaling* 7:202-209, 2005.

115. **Roberts LJ, II**, Fessel JP, and Davies SS. The biochemistry of the isoprostane, neuroprostane, and isofuran pathways of lipid peroxication. *Brain Pathol.,* 15:143-148, 2005

116. Montuschi P, Barnes PJ, and **Roberts LJ, II**. Insights into oxidative stress: The F_2-isoprostanes. *Current Med. Chem,* 14:703-717, 2007

117. Arneson KO, and **Roberts LJ, II.** Measurement of Products of Docosahexaenoic Acid Peroxidation, Neuroprostanes, and Neurofurans. *Methods Enzymol.,* 433:127-143, 2007

118. Boyden PA, Davies SS, Viswanathan P, Amarnath V, Balser JR, and **Roberts LJ, II**. Potential role of isoketals formed via the isoprostane pathway of lipid peroxidation in ischemic cardiac arrhythmias. *J. Cardiovasc. Pharmacol,* 50:480-486, 2007

119: Milne GL, Yin H, Books JD, Sanchez S, **Roberts LJ, II**, Morrow JD. Quantification of F_2-isoprostanes in biological fluids and tissues as a measure of oxidative stress. *Methods Enzymol.* 433:113-126, 2007

120. Davies SS, Amarnath V, Brame CJ, Boutaud, O, and **Roberts LJ, II.** Measurement of chronic oxidative stress by quantification of isoketal (-ketoaldehyde protein adducts using liquid chromatography tandem mass spectrometry. *Nature Protocols* 2:2079-2091, 2007

121. Montuschi P, Barnes P, **Roberts, LJ, II**. Insights in to oxidative stress: The isoprostanes. *Current Med Chem*. 14:703-717, 2007

122. **Roberts, LJ, II.** Inhibition of heme protein redox cycling: Reduction of ferryl heme by iron chelators and the role of a novel through-protein electron transfer pathway. *Free Rad. Biol. Med.,* 44:257-260, 2008

123. **Roberts, LJ, II** and Milne GL. Isoprostanes. *J. Lip. Res.* 50:S219-S223, 2009

124. **Roberts, LJ, II**, Traber M, and Frei B. Vitamins E and C in the prevention of cardiovascular disease and cancer in men. Letter to the Editor, *Free Rad. Biol. Med.*, 46:1558, 2009.

125. **Roberts, LJ, II,** Fessel JP, and Arendash G. Oxygen therapy- Use and abuse. Letter to the Editor, *Clin Cardiol* 33: 52, 2010

126. Fessel JP and **Roberts, LJ, II**. Limitations of measuring isoprostanes to assess lipid peroxidation in the setting of elevated concentrations of oxygen. Letter to the Editor, *Br. J. Anesthesiol, submitted*

127. Boutaud O and **Roberts, LJ, II**. Mechanism based therapeutic approaches to rhabdomyolysis-induced renal failure. *Free Rad Biol Med* 51:1062-1067, 2011

128. Davies SS and **Roberts LJ, II.** F_2-isoprostanes as an indicator and risk factor for coronary heart disease. *Free Rad Biol Med,* 50:559-566, 2011

129. **Roberts, LJ, II**. Vitamin E dose and cataract prevention. Letter to the Editor. *Arch Opthamol,* 129:816, 2011

130. Milne GL, Yin H, Hardy KD, Davies SS, **Roberts LJ, II.** Isoprostane Generation and Function. *Chem Rev* 111:5973-5996, 2011

131. Moore KP and **Roberts, LJ, II**. Effects of intracellular superoxide removal at acupoints with TAT-SOD on obesity. Editorial *Free Rad Biol Med,* 51:2163, 2011

132. Kalaynaraman B, Darley-Usmar V, Davies KJ, Dennery PA, Forman HJ, Grisham MB, Mann GE, Moore K, **Roberts LJ, II**, Ischiropoulos H. Measuring reactive oxygen and nitrogen species with fluorescent probes: challenges and limitations. *Free Rad Biol Med,* 52:1-6, 2012

133. Gastarache J, **Roberts LJ, II**, Ware L. Thinking outside the cell: how cell-free hemoglobin can potentiate acute lung injury. *Commentary*: American J. Physiology – Lung Cellular and Molecular Physiology, *in press*

134. Milne GL, Dai Q, **Roberts LJ, II**. The Isoprostanes – 25 Years Later. Biochim Biophys Acta, 2014, 1851:433-445, 2015

135. Forman HJ, Augusto O, Brigelius-Flohe R, Dennery PA, Kalyanaraman B, Ischiropoulos H, Mann G, Radi R, **Roberts LJ, II**, Vina J, Davies KJA. Even free radicals should follow some rules: A suggested guide to free radical research terminology and methodology. *Free Rad. Biol. Med., in press*

INVITED LECTURES AND PRESENTATIONS

1. B*lockade of the Flush in Gastric Carcinoid Syndrome by Combined H1 and H2 Receptor Antagonists.* Presented at the Plenary Session of the Southern Section American Federation for Clinical Research Meeting, 1979.

2. *Arachidonic Acid Metabolism and Immediate Hypersensitivity.* Presented at a Symposium on Inflammation: Mediators at the FASEB meeting, Anaheim, CA, 1980.

3. *Clinical Application of Prostaglandin Metabolite Quantification in Man*. Presented at the Golden Jubilee International Congress on Essential Fatty Acids and Prostaglandins, Minneapolis, MN 1980.

4. *Clinical Applications of Prostaglandin Metabolite Measurements*. Presented at the Xth International Congress of Internal Medicine, Hamburg, Germany, 1980.

5. *Quantification of Prostaglandin Metabolites: An Investigational Tool in Clinical Pharmacology*. Presented at the annual meeting of the American Society of Pharmacology and Experimental Therapeutics, Rochester, MN, 1980.

6. *Markedly Increased Synthesis of Prostaglandin D_2 in Mastocytosis*. Presented at the Plenary Session of the Association of American Physicians National Meeting, 1980.

7. *Prostanoids in Circulatory Shock: Clinical Aspects*. Presented at the 4th Annual Meeting of the Shock Society, Marco Island, FL, 1981.

8. (A) *The Role of Arachidonic Acid Metabolism in Immediate Hypersensitivity*.

(B) *Syndrome(s) of Abnormal Mast Cell Proliferation: Clinical Description, Mediators, and Therapeutic Advances.* Both presented at the Third Susan Dees Symposium on Allergy and Immunology, Duke University, Durham, NC, 1982.

9. *Mastocytosis Without Urticaria Pigmentosa: A Frequently Unrecognized Cause of Recurrent Syncope.* Presented at the Plenary Session of the Association of American Physicians National Meeting, 1982.

10. *Mastocytosis Without Urticaria Pigmentosa: An Unrecognized Syndrome*. Presented at the University of Tennessee College of Medicine, l982.

11. *Mastocytosis - Revisited*. Presented at Washington University, St. Louis, Missouri, l982.

12. *Mastocytosis: New Perspectives*. Presented at the 8th Annual symposium on Allergy and Immunology, University of Louisville, Louisville, Kentucky, l983.

13. *Recurrent Syncope Due to Systemic Mastocytosis*. Presented at Grand Rounds at Massachusetts General Hospital, Harvard University, Boston, Mass., l984.

14. *Assessment of Endogenous Production of Prostaglandin D_2*. Presented at the Annual Meeting of the American Heart Association, Miami Beach, Florida, l984.

15. *Systemic Mast Cell* Disorders. Presented at the 4lst Annual Meeting of the American Academy of Allergy and Immunology. New York, l985.

16. Invited discussant regarding *Mediators of Myocarditis*, National Institutes of Health Workshop on Myocarditis, Washington, D.C., l985.

17. *Recent Metabolic Findings Bring Into Question the Reliability of All Existing Methods for Quantification of PGF_2 in Human Biological Fludis.* Presented at the 6th International Conference on Prostaglandins and Related Compounds, Florence, Italy, l986.

18. Invited discussant at workshop entitled *Potential Therapeutic Use of Inhibitors of Leukotriene Generation and Function* sponsored by the National Institute of Allergy and Infectious Diseases and the World Health Organization Center for Allergic Diseases, National Institutes of Health, Bethesda, MD., June, 1986.

19. *Clinical Significance of Eicosanoids in Mast Cell Activation Disorders*. Presented at the 600th Anniversary of the University of Heidelberg, Heidelberg, Federal Republic of Germany, l986.

20. *Mast Cell Activation Disorders and the Role of Prostaglandin D_2*. Presented at Wellcome Research Laboratories, Beckenham, Kent, United Kingdom. February, 1988.

21. *Transformation of Prostaglandin D_2 to Isomeric Prostaglandin F_2 Compounds by Human Eosinophils: A potential mast cell eosinophil interaction.* Presented at the Taipei Conference on Prostaglandin and Leukotriene Research, Taipei, ROC, April, 1988.

22. *Application of Mass Spectrometry to the Analysis of Eicosanoids*. Presented at the Taipei Conference on Prostaglandin and Leukotriene Research, Taipei, ROC, April, 1988.

23. *Disorders of Systemic Mast Cell Activation*. Presented at Rheumatology Grand Rounds, University of Alabama, Birmingham, AL., June 1988.

24. *Non-Cyclooxygenase Formation of a Series of Novel Prostaglandins In Vivo in Humans*. Presented at the International Symposium on Biological Oxidation Systems, Bangalore, India, 1989.

25. *Non-Cylooxygenase Free Radical Catalyzed Formation of Biologically Active Prostaglandins In Vivo*. Presented at the Gordon Conference on Free Radicals in Biology, Ventura, CA, January, 1990.

26. *Free Radical Catalyzed Formation of Biologically Active Prostaglandins In Vivo in Humans*. Presented at a NIH Workshop on "In vivo methods to assess oxidative status in relation to cancer risk", February, 1990.

27. *Biochemical Diagnosis of Systemic Mast Cell Disorders*. Presented at a "Roundtable Discussion on Mastocytosis," Bermuda, June 1990.

28. *Production of Bioactive Prostaglandins In Vivo in Humans by a Non-cyclooxygenase Free Radical Catalyzed Mechanism*. Presented at Syntex Laboratories, August 1990.

29. *Formation of Novel Prostaglandins by a Non-Cyclooxygenase Free Radical Catalyzed Mechanism*. Presented at the Upjohn Company, Kalamazoo, MI, June, 1991.

30. *Formation of Novel Prostaglandins by a Non-Cyclooxygenase Free Radical CatalyzedMmechanism*. Presented at Allergan Corporation, Irvine, CA, July,1991.

31. *Endogenous Formation of Prostaglandins by a Non-Cyclooxygenase Free Radical Catalyzed Mechanism*. Presented at Bristol Meyers Squibb Research, Princeton, NJ, December, 1991.

32. *Free Radical Catalyzed Formation of Novel Prostaglandin Containing Glycerophospholipids In Vivo*. Presented at the 2nd International Conference on Eicosanoids and Other Bioactive Lipids in Cancer, Inflammation, and Radiation Injury, Berlin, F.R.G., September, 1991.

33. *The Quixotic Search for Prostaglandin-Containing Glycerophospholipids: The Ultimate Folly?* Presented at the Winter Prostaglandin Conference, Keystone, CO, January 1992.

34. *Non-enzymatic Prostaglandin Synthesis*. Presented at the Gordon Conference on Oxygen Radicals in Biology, Ventura, CA, February, 1992.

35. *Isoprostanes: A Series of Recently Discovered Novel Products of Lipid Peroxidation*. Presented at the Department of Chemistry, Case Western Reserve University, July, 1993.

36. *Non-Cyclooxygenase Derived Prostanoids (Isoprostanes)*. Presented at the New York Academy of Science Symposium: Cellular generation, transport, and effects of eicosanoids: Biological roles and Pharmacologic Intervention. Stockholm, Sweden, November 1993.

37. *Isoprostanes: Novel Markers of Lipid Peroxidation and Mediators in Oxidant Injury*. 3rd International Conference on Lipid Mediators in Health and Disease, Jerusalem, Israel, November 1993.

38. *Isoprostanes: A New Twist in Lipid Peroxidation*. Presented at Syntex, Inc., Palo Alto, CA, February 1994.

39. *Clinical Pharmacology of NSAID's*. Presented at American Cancer Society Workshop on NSAID's and Cancer, Atlanta, GA, March 1994.

40. *Isoprostanes: Novel Markers of Lipid Peroxidation and Mediators in Oxidant Injury*. Presented at the 9th International Conference on Prostaglandins and Related Compounds, Florence Italy, June 1994.

41. *Isoprostanes: Novel Products of Lipid Peroxidation*. Presented at Margaret Fischer Bosche Institute for Clinical Pharmacology, Stuttgart, Germany, July 1994.

42. *Isoprostanes: Novel Products of Lipid Peroxidation*. Presented at University of South Carolina, Columbia, SC, October 1994.

43. *Isoprostanes: Novel Products of Lipid Peroxidation*. Presented at Oakland University, Oxford, MI, March 1995.

44. *Measurement of Isoprostanes to Assess Oxidative Modification of Plasma Lipoproteins In Vivo*. Presented at a FASEB symposium on The Role of Reactive Lipids, Oxygen, and Nitrogen Metabolites in Inflammation, Atlanta, GA, April 1995.

45. *Isoprostanes: Novel Bioactive Products of Lipid Peroxidation*. Presented at a FASEB symposium on Lipid Mediators, Atlanta, GA, April 1995.

46. *Isoprostanes: Unique Products of Lipid Peroxidation*. Presented at Monsanto/ Searle Co., St. Louis, MO, June 1995.

47. *Isoprostanes: Novel Products of Free Radical Catalyzed Peroxidation of Arachidonic acid*. Presented at the XIIIth International Congress of Nephrology, Madrid, Spain, July, 1995.

48. *The Occurrence of Episodes of Sleep Following Systemic Mastocyte Activation and Ingestion of Niacin: A Causative Role for Prostaglandin D_2*. Presented at the World Federation of Sleep Research Societies Second International Congress, Naussau, The Bahamas, September, 1995.

49. *Isoprostanes: What They Are And Why They Are of Interest*. Presented at the University of Alabama, February, 1996.

50. *Isoprostanes: Unique Bioactive Products of Lipid Peroxidation*. Presented at the American Society for Biochemistry and Molecular Biology, June, 1996.

51. *The Utility of Measuring Isoprostanes to Assess Oxidative Stress Status In Vivo.* Presented at a NIEHS workshop entitled "Measuring Oxidative Stess in Humans, NIEHS, Research Triangle Park, NC., September, 1996

52. *Detection of Lipid Peroxidation: The Latest and the Greatest*. Presented at the Oxygen 96 Meeting, Miami Beach, Fl., November 1996.

53. *Isoprostanes: Unique Products of Lipid Peroxidation*. Presented at ICOS Corporation, Bothell, WA, January, 1997

54. *Isoprostanes: Unique Products of Lipid Peroxidation*. Presented at Cell Therapeutics, Inc., Seattle, WA, January, 1997

55. *The Isoprostanes and Related Compounds: New Developments*". Presented at the Keystone Conference on Lipid Mediators, Keystone, CO, January, 1997.

56. *Products of Non-Enzymatic Lipid Peroxidation: The Isoprostanes and Related Compounds*. Presented at the Gordon Conference on Lipid Metabolism, Meriden, NH, June, 1997.

57. *Formation of Novel Isoprostane-Like Compounds in Brain by Free Radical Catalyzed Peroxidation of DHA*. Presented at the 4th World International Congress on Essential Fatty Acids and Eicosanoids, Edinburgh, Scotland, July, 1997.

58. *Isoprostanes and Related Compounds: What They Are, What They Do, and What They Allow Us To Do*. Presented at the Regional UK Free Radical Group Meeting, London, UK, July 1997.

59. *Novel Reactive Products of the Isoprostane Pathway*. Presented at the 5th International Conference on Eicosanoids and Other Bioacitve Lipids in Cancer, Inflammation, and Related Diseases, La Jolla, CA, October, 1997.

60. *Evidence for Oxidant Injury to the Kidney in Myoglobinuria*. Presented at the Oxygen 97 Society Meeting, San Francisco, CA, November, 1997.

61. *Methods to Detect the Impact of Oxidative Environmental Carcinogens and Mutagens in Humans*. Presented at a NIEHS meeting of the U.S.-Japan Panel of Environmental Mutagenesis and Carcinogenesis, Maui, Hawaii, February, 1998.

62. *Isoprostanes and Related Compounds*. Presented at the Department of Cell Biology at the New Jersey University of Medicine and Dentistry, Stratford, NJ, April, 1998.

63. *Formation of Novel Isoprostane-Like Compounds (Neuroprostanes) In Vivo From Oxidation of Docosahexaenoic Acid*. Presented at 3rd International Society for the Study of Fatty Acids and Lipids (ISSFAL), Lyon, France, June 1998.

64. *Mechanisms of Lipid Peroxidation and Isoprostane Formation*. Presented at the FASEB Summer Research Conference on "Molecular and Biological Mechanisms of Antioxidant Action", Copper Mountain, CO, August, 1998.

65. *Isoprostanes and Related Compounds: What=s New?* Presented at University of Alabama, August, 1998.

66. *Isoprostanes: New Developments.* Presented at the Southeastern Pharmacology Meeting, September, 1998.

67. *F_2-isoprostanes: Markers of Lipid Peroxidation*. Presented as the Keynote Speaker at the S.E. Lipid Conference, Atlanta, GA, September, 1998.

68. *Cerebrospinal Fluid Levels of F_2-Isoprostanes in Neurodegenerative Disease.* Presented at the Oxygen 98 Meeting, Washington, D.C., November, 1998.

69. *F_2-isoprostanes: Markers for Lipid Peroxidation.* Presented at the 1999 Duel Conference on Lipids, Borrego Springs, CA, March, 1999.

70. *Utility of Measurements of F_2-Isoprostanes to Assess Oxidative Stress Status in Humans.* Presented at Monsanto Pharmaceutical Co., April, 1999.

71. *The Discovery and Pathophysiologic Implications of Isoprostanes.* Presented at the University of Mississippi, May, 1999.

72. *Isoprostanes and Related Compounds: Unique Bioactive Products of Lipid Peroxidation.* Presented at the Hospital for Sick Children, Toronto, Canada, June 1999.

73. *Biomarkers of Oxidative Stress.* Presented at a roundtable discussion at the University of Washington, Seattle, WA., June, 1999.

74. *Isoprostanes: A Radical Route for the Formation of Prostanoids*. *Plenary Lecture* at the 6th International Conference on Eicosanoids & Other Bioactive Lipids in Cancer, Inflammation, and Related Diseases, Boston, MA, September, 1999.

75. *Reactive Compounds Formed as Products of the Isoprostane Pathway.* Presented at the Center of Experimental Therapeutics, University of Pennsylvania, Philadelphia, PA, February, 2000.

76. *The Ins and Outs of Measuring Isoprostanes as Markers of Oxidative Stress In Vivo.* Presented at NIEHS, Research Triangle Park, NC, May, 2000.

77. *Isoprostanes: Unique Bioactive Products of Lipid Peroxidation*. Invited speaker at the ASBMB/ASPET 2000 Meeting, Boston, June, 2000.

78. *Isoprostanes and Related Compounds: New Developments.* Invited presentation and session chair at the 11th International Conference on Advances in Prostaglandin and Leukotriene Research, Florence, Italy, June, 2000.

79. *Isoprostanes and Related Compounds: Bioactive Markers of Lipid Peroxidation.* Presented at Galileo Laboratories, Santa Clara, CA, July, 2000.

80. *Isoprostanes and Related Compounds: Unique Products of Lipid Peroxidation.* Presented at the University of Indiana, Indianapolis, IN, September, 2000.

81. *Isoprostanes and Related Compounds: Markers and Functional Involvement in Aging.* Presented at Kronos Foundation, Phoenix, AZ, September, 2000.

82. *Isoprostanes: Unique Markers of Lipid Peroxidation*. Invited presentation and session chair, 10th Biennial Meeting of the International Society for Free Radical Research, Kyoto, Japan, October, 2000.

83. *Combined Use of Isoprostanes and Products of a New Pathway of Lipid Peroxidation to Assess Oxidative Stress.* Presented at the Oxygen 2000 annual meeting of the Oxygen Society, San Diego, CA, November, 2000.

84. *Products of the Isoprostane Pathway: Unique Bioactive Molecules and Markers of Lipid Peroxidation*. Presented at a combined seminar sponsored by the Department of Pharmacology and Toxicology and The Biophysics Department, University of Wisconsin, March, 2001.

85. *Isoprostanes: Unique Biomarkers of Lipid Peroxidation.* Presented at Astra/Zenica Corp., San Diego, CA, March, 2001.

86. *Oxidant Stress and Oxidized Lipids in Allergic Asthma.* Presented at the Sandler Foundation Symposium on Asthma, San Francisco, May, 2001.

87. *Isoprostanes and Related Compounds: Unique Bioactive Products of Lipid Peroxidation.* Presented at Columbia University, New York, NY, July, 2001.

88. *Non-Enzymatic Production of TP-Receptor Agonists: Isoprostanes.* Invited speaker in a Cardiovascular Seminar at the American Heart Association Scientific Sessions 2001, Anaheim, CA, November, 2001

89. *Rapid Occurrence of Both Systemic and Brain Oxidant Injury after Cardiac Arrest and Resuscitation.* Presented at the Oxygen Society 2001 Annual Meeting, Research Triangle Park, NC., November, 2001

90. *Reactive Products of the Isoprostane Pathway, Isoketals and Cyclopentenone Isoprostanes, Adduct to Proteins Which Alter Cellular Function.* Invited speaker, Keystone Symposium on "Regulators of Cellular Responses by Lipid Mediators, Taos, NM, Februrary 2002.

91. *Isoprostanes and Related Compounds as Markers of Oxidant Injury In Vivo*. Invited speaker at a FASEB meeting symposium, New Orleans, April 2002.

92. Role of prostaglandin D_2 in disorders of vasodilation. Presented at Arena, Co, San Diego, CA, June 2002.

93. *Vitamin E inhibits isoprostane formation in humans but only at doses of 800 IU/d or higher*. Presented at the Oxygen Society Meeting, San Antonio, TX, November 2002

94. *Isoprostanes and Related Compounds: Unique Products of Lipid Peroxidation*. Presented at Aventis Pharmaceuticals, Bridgewater, NJ., January 2003.

95. *Isoprostanes and Related Compounds: Unique Products of Lipid Peroxidation.* Presented at the University of Texas Health Science Center, San Antonio, TX, March, 2003

96. Discovery of new products of lipid peroxidation which provide novel insights into disorders associated with elevated oxygen tension. Presented at Cleveland Clinic Foundation, Cleveland, OH, October, 2003.

97. New developments in the isoprostane pathways and their translation to human disease. Presented at the meeting of the Society for Free Radical Biology and Medicine, Seattle, WA, November, 2003.

98. Biochemistry of the isoprostane and isofuran pathways of lipid peroxidation. Keynote Speaker at the 1st European Workshop on Isoprostanes, Montpellier, France, June, 2004

99. Isoprostanes and related compounds: unique products of lipid peroxidation. Presented at Gordon Conference on "Mechanisms of Toxicity", Waterville, Maine, July 2004

100. Isoprostane and Isofuran pathways of lipid peroxidation. Presented at the International Conference on Oxidative Stress in Aging. Bandera, TX, October, 2004

101. Acetaminophen potently reduces myoglobin and prevents rhabdomyolysis-induced renal failure. Presented at the annual Society for Free Radical Biology and Medicine meeting, November, 2004.

102. Biochemistry and pharmacology of the isoprostane and isofuran pathways of lipid peroxidation. Presented at the University of Louisville, Louisville, KY, March 2006

103. Biochemistry and pharmacology of the isoprostane and isofuran pathways of lipid peroxidation. Presented at the Autonomic Dysfunction Seminar series, Vanderbilt University, April 2006

104. New insights into the pathogenesis and treatment of rhabdomyolysis-induced renal failure. Presented at the Renal Research Conference, Vanderbilt University, April 2006

105. How the discovery of isoprostanes advanced the field of free radical biology and medicine. Society of Free Radical Biology and Medicine Discovery Award presentation, Annual SFRBM meeting, November, 2006, Denver, CO.

106. Oxidized lipids. Presented at the Lipid MAPS meeting, San Diego, CA, May 2007.

107. Isoprostanes and isofurans: surrogate biomarkers of oxidative injury. Presented at a MSCI Conference at Meharry Medical College, December, 2007.

108. Isoprostane, Neuroprostane, and Isofuran pathways of lipid peroxidation. Presented at Pathology Seminar Series, Vanderbilt University, March, 2008

109. Invited discussant and participant in a CHDI workshop on "Mitochondrial Changes in Early Huntington's Disease", Los Angeles, CA, July, 2008.

110. Isoprostane and isofuran pathways of lipid peroxidation. Invited symposium speaker at the Annual ISSX Conference, San Diego, CA, October 2008

111. In Memorium: Jason D. Morrow, MD. Discovery of Isoprostanes. Presented at the Winter Prostaglandin Conference, Baltimore, MD, March 2009

112. Isoprostane, Neuroprostane, and isofuran pathways of lipid peroxidation. Presented at the Linda H. Chen Symposium on Nutrition and Oxidative Stress., University of Kentucky, Lexington, KY May 2009

113. Discovery of Isoprostanes. Presented at Jason D. Morrow Symposium. Vanderbilt University, June 2009

114. New Insights Into the Pathogenesis and Treatment of Rhabdomyolysis-Induced Renal Failure. Presented at Medical Grand Rounds, Vanderbilt University School of Medicine, September, 2010

115. Biotoxicity of γ-Ketoaldehydes. Presented at the Vanderbilt Toxicology Center Seminar Series. October, 2010

116. Generation and Biological Effects of γ-Ketoaldehydes (Isoketals). Presented at the Pre-Meeting Workshop at the Society of Free Radical Biology & Medicine Annual Meeting, November, 2011

117. Inhibition of Hemeprotein Catalyzed Oxidative Injury. Presented at the Vanderbilt Toxicology Center Seminar Series. May, 2012

118. Development of γ-Ketoaldehyde Scavengers for the Treatment of Hypertension. Presented at NIH, NHLBI, January, 2014

119. The Role of Free Radical Generation of γ-Ketoaldehydes and Hemeprotein Redox Cycling in Disease Pathogenesis. *Keynote Speaker* at the 6th Annual Meeting of the Collaborative Research Forum, San Juan, Puerto Rico, March, 2014

120. Prevention of Hemoglobin Induced Renal Injury in Malaria Patients and Exploiting γ-Ketoaldehydes For The Development of a Malaria Vaccine. Presented at the Vanderbilt Institute for Global Health, Vanderbilt Medical Center, October, 2014