

CURRICULUM VITAE (updated 9/2023)

NAME: William Charles Sessa, Jr.
BIRTHDATE: May 17, 1961, Trenton, New Jersey

EDUCATION:

1999 M.A. (honorary) Yale University, New Haven, CT 06520
1989 M.Sc. and Ph.D., Department of Pharmacology, New York Medical College, Valhalla, New York 10595 (Mentor: Alberto Nasjletti)
1986 M.Sc., Department of Pharmacology, University of Rhode Island, Kingston, Rhode Island 02881 (Mentor: Robert L Rodgers)
1984 B.Sc., Pharmacy, Philadelphia College of Pharmacy and Sciences, Philadelphia, Pennsylvania 19104

APPOINTMENTS

February 2022 Senior Vice President, Chief Scientific Officer of Internal Medicine, Pfizer
February 2022 Alfred Gilman Professor Emeritus of Pharmacology, and Medicine (Cardiology)
February 2011 Alfred Gilman Professor of Pharmacology, Professor of Medicine (Cardiology)
June 2007 Director, Vascular Biology & Therapeutics Program
September 2005 Vice Chairman, Department of Pharmacology, Deputy Director, Vascular Biology & Transplantation Program
June 2002- September 2005 Director, Vascular Cell Signaling and Therapeutics Program
July 1999 to present Professor of Pharmacology (with tenure), Yale University School of Medicine
July 1996 to June 1999 Associate Professor of Pharmacology, Yale University School of Medicine
February 1993 to June 1996 Assistant Professor of Pharmacology, Yale University School of Medicine, The Boyer Center for Molecular Medicine

June 1992-January 1993 Research Assistant Professor of Physiology,
Department of Physiology,
The University of Virginia Health Sciences Center,
Box 449, Charlottesville, Virginia 22908

May 1991-June 1992 Post-doctoral fellow, Department of Pharmacology,
The University of Virginia Health Sciences Center, School
of Medicine, Box 448, Charlottesville, Virginia, 22908
(Mentors: Mike Peach and Kevin Lynch)

Jan 1990-May 1991 Post-doctoral fellow/Senior Scientist, The William Harvey
Research Institute, St. Bartholomew's Hospital Medical
College, Charterhouse Square, London, EC1M 6BQ
(Mentor: Sir John Vane)

HONOR & AWARDS:

2022 Russell Ross Memorial Lecture Award in Vascular
Biology, American Heart Association

2021 Elected as an inaugural fellow to Academy of Physiology,
International Union of Physiological Sciences

 Annual Alumnus Award, Philadelphia College of Pharmacy
& Sciences

2019 Earl P. Benditt Award, North American Vascular Biology
Organization

2017 R35 Outstanding Investigator Award, NHLBI, NIH

2016 Inaugural American Heart Association MERIT Award

2014 ATVB Special Recognition Award in Vascular Biology

2010 William Harvey Medal, John R. Vane Lecture

2009 MERIT Award, NHLBI, NIH

 Elected to Connecticut Academy of Science & Technology

2008 21st Annual John C. Krantz Distinguished Scientist Award,
University of the Sciences in Philadelphia

2007 Robert M. Berne Distinguished Lecture Award, American
Physiological Society, Cardiovascular Section

2004 Senior Investigator Award, Sandler Program for Asthma
Research

- 2000 John J. Abel Medal in Pharmacology, American Society of Pharmacology and Experimental Therapeutics
- 1997 Young Alumnus Award, Philadelphia College of Pharmacy & Sciences
- 1996 Established Investigator Award, American Heart Association
- 1994 FIRST Award, NIH
- Pharmaceutical Manufacturer's Association Young Investigator Award
- Donaghue Foundation Young Investigator Award
- 1992 Merck Award for Cardiovascular Research (High Blood Pressure Council of American Heart Association)

SOCIETIES:

- American Physiological Society (2006)
- American Society for Pharmacology and Experimental Therapeutics (2000)
- Nitric Oxide Society (1997)
- American Society for Biochemistry and Molecular Biology (1995)
- North American Vascular Biology Organization (1994)
- Fellow of Council for High Blood Pressure Research-American Heart Association (1993); Member of Basic Science, Circulation, Atherosclerosis and Vascular Biology Councils-American Heart Association (1993)

PROFESSIONAL ACTIVITIES:

- 2019 Consulting Editor, Circulation
- 2018 Co-organizer, NAVBO meeting on Signaling in the Cardiovascular System
- 2016 International Advisory Board, Circulation Journal

2014 Associate Editor, Circulation Research (2014-19)

2012 Senior Consulting Editor, ATVB; Development Committee, NAVBO

2010 President, NAVBO

2009 President Elect, NAVBO; Co-Chair Keystone conference on Angiogenesis

2007 Associate Editor, Arteriosclerosis, Thrombosis & Vascular Biology (ATVB 2007-2012); Chair “Nitric Oxide” Gordon Conference

2006 NAVBO meeting planning committee

2005 Co-Chair for “Nitric Oxide” Gordon Conference

2004 Member of Editorial Board-Cell Metabolism
Chair-Vascular Cell and Molecular Biology Study Section

2003 Member of Editorial Board- Physiology (2003-05)

2002 Member of Editorial Board- Biochemical Pharmacology (02-04), Scientific Advisory Board for World Genomics Symposium

2001 Scientific Advisory Board-2nd International Conference on Biology, Chemistry and Application of Nitric Oxide-Prague, Czechoslovakia; Charter Member-Experimental Cardiovascular Sciences Study Section, NHLBI

2000 Member of Editorial Boards-The Journal of Clinical Investigation (00-13); The Journal of Biological Chemistry (00-05), Circulation Research (00-present); Program Committee-AHA High Blood Pressure Research Council (2000-03); Councilor for North American Vascular Biology Organization (NAVBO, 2000-03); Nominating Committee (2000-03); Councilor for Council on Arteriosclerosis, Thrombosis and Vascular Biology (2000-03)

1999 Scientific Advisory Board, 1st Conference on “The Biology, Chemistry and Therapeutic Applications of Nitric Oxide”-San Francisco,CA; ad hoc member of Experimental Cardiovascular Sciences Study Section-NIH (99-00)

- 1998 Member of Editorial Board- The FASEB Journal (1998-2005)
Associate Editor- General Pharmacology: The Vascular System (2000-2008)
- 1997 Member of Editorial Board-The American Journal of Physiology, Heart and Circulation (1997-2000)
Chair of AHA Study Section Cardiovascular Physiology & Pharmacology, Molecular Biology and Signaling-Northeast Consortium
- 1996 Co-organizer of Liver Microcirculation in Health and Disease Meeting, Member-AHA Vascular Wall Study Section; Publications Committee-AHA High Blood Pressure Council,
Editorial Board Member-Nitric Oxide: Biology and Chemistry (1996-present)
- 1995 Reviewer, International Human Frontiers in Science Program, VA Merit Review Grants
- 1994 Editorial Board Member, British Journal of Pharmacology (1994-1996) and The Journal of Vascular Research (1994-2004)

DISTINGUISHED LECTURES:

- 2022 Russell Ross Memorial Lecture in Vascular Biology, American Heart Association
- 2021 Research Day Keynote Lecturer, Roy H. Behnke Distinguished Lecturer, University of South Florida School of Medicine
- 2019 Earl P. Benditt Award Lecture, NAVBO Asilomar Meeting
B. Lowell Langille Vascular Biology Lecture, University of Toronto
Keynote Speaker, First EMBO workshop on Caveolae and Nanodomains, Le Pouliguen, France
- 2018 7th Dean Franklin Endowed Lecture, Dalton Cardiovascular Research Center, University of Missouri Medical School
- 2017 Inaugural Alexander Whitehill Clowes Distinguished Lecture, Society of Vascular Surgery, Vascular Research Initiative Conference

- 2013 34th Annual RD Wright Lecturer, High Blood Pressure Research Council of Australia/
Australian Atherosclerosis Society
- Distinguished Scientist Lecture Series, University of Washington at Seattle
- 2012 Visiting Professor (2011-2014), Sun Yat-Sen University, Guangzhou, China
- 2011 James W. Fisher Distinguished Lectureship in Pharmacology, 14th Annual, Tulane
University School of Medicine
- 2010 William Harvey Medal, John R. Vane Lecture, St. Bart's and Queen Mary London
Medical School, London, England
- Jaime Herrera Acosta Lecture, 5th Annual Lecture, Mexican Society of Nephrology,
Acapulco, Mexico
- 2009 2nd Annual Hal F. Dvorak Keynote Plenary Lecture, Beth Israel Deaconess Medical
Center, Center for Vascular Biology Research, Harvard Medical School
- 1st Annual Lowell Langille Memorial Lecture, Ontario Hypertension Society
- 2008 John C. Krantz Distinguished Lecture, 21st Annual Lecture, University of the Sciences in
Philadelphia
- Louis D'Agrosa 20th Memorial Lecture, St. Louis University School of Medicine
- 2007 Robert M. Berne Distinguished Lecture Award, American Physiological Society,
Cardiovascular Section
- Distinguished Visiting Professor Lecture, Lower Center of Excellence in Cardiovascular
Research, University of Toronto
- 2006 Distinguished Guest Lecturer, Molecular Cardiology Research Institute, Tufts Medical
Center
- Keynote Lecture, Biology of Free Radicals, Denver, CO.
- 2005 State of the Art Lecture, Inter-American Society of Hypertension, Cancun, Mexico;
- 2002 Keynote Lecture, Inter American Society of Hypertension, Mexico
- 2001 Keynote Speaker-Graduate School Research Symposium UMDNJ
- Distinguished Scholar Lecture- University of Virginia School of Medicine, Department
of Pharmacology
- Plenary Speaker, Presidential Symposium of Microcirculation Society at Experimental
Biology

2000 John J Abel Award Lecture, American Society of Pharmacology & Experimental Therapeutics.

NATIONAL AND INTERNATIONAL LECTURES:

- 2022 Keynote Lecture, Sarnoff Foundation Annual Meeting; Russel Ross Lecture AHA meeting
- 2021 Research Day Keynote Lecturer, Roy H. Behnke Distinguished Lecturer, University of South Florida School of Medicine, Invited Speaker, Johns Hopkins Institute of Cardio Science
- 2020 Invited Speaker, Department of Pharmacology, UTSW Dallas Medical School; Invited Speaker, University of Minnesota, Department of Physiology; Invited Speaker, International Vascular Biology Meeting, Seoul, Korea
- 2019 Invited Speaker, Deuel Conference on Lipids; Invited Speaker, Washington University School of Medicine, Cardiovascular Research Seminar Series; Invited Speaker, Lowell Langille Vascular Biology Lecture, University of Toronto; Keynote Speaker, First EMBO workshop on Caveolae and Nanodomains; Invited Speaker, Gordon Research Conference on Atherosclerosis
- 2018 Invited Speaker, Gordon Research Conference, Vascular Cell Biology, Ventura, CA, Invited Speaker, University of Chicago Section of Cardiology; Invited Speaker, Gordon Research Conference on Nitric Oxide, Oxford, UK, Invited Speaker, Aab Cardiovascular Research Center, University of Rochester School of Medicine, Keynote Speaker, 13th International Workshop on Cardiovascular Biology, Royal College of Physicians, London, UK; Invited Speaker, Frank Netter School of Medicine; Invited Speaker, Distinguished Seminar Series, UCLA Cardiovascular Theme and Cardiology; Invited Speaker LSU Cardiovascular Research Center, Plenary Lecture, International Vascular Biology Meeting, Helsinki, Finland, Plenary Lecture, International Atherosclerosis Society, Toronto, Canada
- 2017 Invited Speaker, Sanford-Burnham Institute, Lake Nona; Invited Speaker, Harvard Medical School, Harvard Vascular Biology Seminar Series, Invited Speaker, Keystone Conference on miRNA and therapeutics, Invited Speaker, Gordon Research Conference on Glycobiology, Invited Speaker, Keystone Conference of Angiogenesis and Vascular Disease, Inaugural Alexander W. Clowes Lecture, Society of Vascular Surgery, Vascular Research Initiative Conference; Invited Speaker, Gordon Research Conference on Atherosclerosis

- 2016 Invited Speaker University of Illinois at Chicago Medical School; Invited Speaker, Society of Free Radicals, Biology & Medicine REDOX symposium; Plenary speaker, Japanese Pharmacological Society, Yokohama, Japan; Invited Speaker, CVRI, University of Pennsylvania School of Medicine, Invited Speaker, University of Pittsburgh, Vascular Medicine Institute
- 2015 Invited Speaker, Cardiovascular Research Program, LSU School of Medicine; Invited Speaker, Pathobiology Program, Brown Medical School; Invited Speaker, Versalius Research Center, Leuven, Belgium, Invited Speaker, Department of Molecular Biology & Biochemistry, University of California at Irvine
- 2014 Invited Speaker, Department of Genetic and Complex Diseases, Harvard School of Public Health; Invited Speaker, Angiogenesis Kloster Seeon Meeting, Germany; Invited Speaker, University of Tennessee Health Sciences Center, Department of Pharmacology; Invited Speaker, Duke University Cardiovascular Research Center; Invited Speaker, International Symposium on Hydrogen Sulfide and Nitric Oxide in Health and Disease, Naples, Italy
- 2013 34th Annual RD Wright Lecturer, High Blood Pressure Research Council of Australia/ Australian Atherosclerosis Society, Melbourne, Australia, Invited Speaker, University of Southern Florida School of Medicine, Department of Molecular Physiology; Invited retreat speaker, SAHA Cardiovascular Research Institute, University of Kentucky; University of Washington Cardiovascular Program Distinguished Lecture, Seattle; ATVB Editors Symposium, ATVB meeting, Orlando; Keynote Speaker, 3rd Dutch Cardio Vascular Conference, Amsterdam, Holland; Invited Speaker, Department of Cell Biology & Physiology, Washington University School of Medicine, St. Louis; Invited Speaker, Vascular Biology Center, Georgia Regents University
- 2012 Invited Speaker, Keystone Conference on Angiogenesis; Invited Speaker, UCLA, Department of Cellular and Molecular Biology; Invited Speaker, Departments of Cardiology & Vascular Biology, Vanderbilt School of Medicine; Keynote Speaker, Australian Vascular Biology Society; Invited Speaker, Queensland University, University of Sydney, Monash University; Public Lecture, University College London-Yale Senior Scientist Lecture Series, Invited Speaker, 20th Anniversary of Robert Berne CV Center Symposium, University of Virginia
- 2011 Plenary Lecture, Annual ATVB meeting, Chicago; Keynote Speaker, McAllister Heart Institute Symposium, University of North Carolina School of Medicine; Invited Speaker, Cardiovascular Research Center, Boston University School of Medicine; Plenary Speaker, Free Radical Biology, Sao Pedro, Brazil; Invited Speaker, miRNA in the CV System, Cambridge, UK; Invited Speaker, Italian Pharmacology Society, Bologna, Italy

- 2010 Invited Speaker, University of Virginia School of Medicine, Division of Cardiology and Vascular Biology, Invited Speaker, Temple University, Department of Pharmacology; Invited Speaker, Keystone Conference on Angiogenesis; Plenary Lecture, Keystone Conference on Thrombospondins and Extracellular matrix; Plenary Lecture, Canadian Society of Atherosclerosis and Vascular Biology, Montreal, Plenary Lecture, Fifth Annual Jaime Herarra Acosta Lecture, Acapulco, Mexico
- 2009 Invited Speaker, University of Pennsylvania, Division of Cardiology; Invited Speaker, University of Rochester School of Medicine, Aab Cardiovascular Center; Keynote Speaker, Nitric Oxide Gordon Conference, Il Ciocco, Italy; Plenary Speaker, International Society for Liver Disease, Budapest, Hungary; Invited Speaker Columbia University Medical Center, Cardiovascular Research Initiative Symposium; Invited Speaker Montreal International Symposium on Angiogenesis and Metastasis.
- 2008 Invited Speaker, CNIC and CBIO, Madrid, Spain; Invited Speaker, University of Missouri Medical School, Department of Physiology & Pharmacology, Keynote Speaker, Center for Vascular Remodeling & Regeneration, University of Pittsburgh School of Medicine; Invited Speaker, Atherosclerosis and Metabolic Syndrome, Keystone Conference.
- 2007 Invited Speaker, Inflammation Workshop, Banff, Canada; Distinguished Lecture, University of Toronto; Invited Lecture, Vascular Biology Program, Cornell School of Medicine
- 2006 Invited Speaker, Molecular Biology of the Vasculature, Keystone, CO; Lecturer- Joslin Diabetes Center, Boston, MA; Invited Lecturer, Department of Physiology, UNDMJ; Plenary Speaker, ESH Euro conference on Angiogenesis, Cannes, Fr; Invited Lecturer, International NO meeting, Monterrey, CA; Invited Speaker, Vascular Biology Gordon Conference, NH;
- 2005 Lecturer- Cancer Center, Columbia University School of Medicine; Invited Speaker, Gordon Conference on Angiogenesis & Microcirculation, Newport, RI; Co-Chair, NO Gordon Conference, Il Ciocco, Italy; Plenary lecture, Translational Vascular Biology, Crete, Greece; Lecturer-Vascular Biology Program, Medical College of Georgia
- 2004 Invited Lecture in Lennox Black Symposium on Translational Medicine, Thomas Jefferson Medical School; Invited lecture-Seeon Conference on Angiogenesis, Munich, Germany ; Plenary lecture-"NO and inflammation", Rio, Brasil; Lecturer-Division of Radiation Oncology, Mass General; Invited Speaker-"Oxygen Radicals" Gordon Conference; Lecturer-Division of Cardiology, University of Pennsylvania School of Medicine, Lecturer-Division of Cardiology, Dartmouth Medical School, Invited Speaker- International Society of Heart Research, Cancun, Mexico

- 2003 Invited lectureship-“Development & Remodeling of the Cardiopulmonary System” , Max Planck Society, Bad Nauheim, Germany; Lecturer- Department of Cell Biology, Duke University School of Medicine; Invited Speaker and Chair, Nitric Oxide Gordon Conference, Ventura, CA; Invited Speaker, ATVB meeting, Washington, D.C., Invited Speaker, Experimental Biology Meeting, San Diego, CA, Invited Speaker, Angiogenesis Gordon Conference, Newport RI.
- 2002 Lecturer-Cardiovascular Research Institute, Massachusetts General; Lecturer-Department of Physiology, LSU Medical Center, Shreveport; Lecturer-Department of Cardiology, Emory University; Lecturer-Department of Pharmacology, University of Illinois at Chicago; Plenary Lecture- 2nd International Meeting on the Biology, Chemistry, and Therapeutic Applications of Nitric Oxide, Prague, Czechoslovakia; Lecturer- Department of Neuroscience, DIBIT, San Raffaele Scientific Institute, Milan.
- 2001 Visiting Professor- University of Naples, Department of Pharmacology, Italy; Lecturer-Cancer and Angiogenesis Program, Beth Israel Hospital; Lecturer- Cardiovascular Medicine, University of Iowa School of Medicine;; Plenary Speaker at “Physiology in Focus” at Experimental Biology; Invited Speaker, Conference on Therapeutic Angiogenesis and Revascularization-AHA, Santa Fe, NM; Lecturer-Visiting Scholar at CMIER, Northwestern Medical School; Lecturer- Department of Physiology, SUNY at Stony Brook
- 2000 Invited Speaker in Plenary Session and Chair- AHA National meeting, New Orleans; Invited Speaker and Chair- ISHR meeting, Louisville; Plenary Speaker-Biology of Nitric Oxide, San Francisco; Plenary Speaker-First Annual ATVB /NAVBO meeting, Denver, CO; Lecturer-Department of Pharmacology, University of Florida School of Medicine; Lecturer-Department of Pharmacology, Cornell University Medical School; Plenary Speaker-Experimental and Clinical Regulation of Angiogenesis, Keystone Symposia; Lecturer-Vascular Biology Seminar Series, Harvard Medical School; Lecturer-Vascular Biology Center, University of Connecticut School of Medicine
- 1999 Lecturer- Departments of Biomedical Engineering, Physiology and Biophysics, Mayo Clinic, Rochester; State of the Art Lecture-High Blood Pressure Council, American Heart Association; Plenary Speaker-U.S.-Japan Workshop on Molecular and Cellular Aspects of Vascular Smooth Muscle Function, Honolulu; Lecturer-Medical College of Georgia, Vascular Biology Center; Lecturer- Department of Physiology, University of Calgary; Lecturer-Department of Pharmacology, University of Vancouver; Lecturer-Division of Cardiovascular Research, St. Elizabeth’s Hospital, Boston

- 1998 Invited Speaker in Plenary Session-“New Biology of Nitric Oxide”, AHA National Meeting in Dallas, Chair-“Nitric Oxide Synthase session”, AHA National Meeting in Dallas; Plenary Speaker-Third International Conference, “Biochemistry and Molecular Biology of Nitric Oxide”, UCLA; Plenary Speaker-Institute Pasteur, “Nitric Oxide: Basic Research and Clinical Applications, Paris, France; Invited Speaker-University of Naples, Department of Pharmacology, Naples, Italy; Invited Speaker- NATO Conference “Vascular Endothelium: Mechanisms of Cell Signaling, Crete, Greece; Lecturer- Department of Biochemistry, Cornell University Medical College; Visiting Professor- University of Frankfurt (Germany, Goethe Universitat Department of Physiology); Plenary Lecturer- "Advances in Hypertension", Society of Hypertension of Mexico, Mexico City, Mexico; Lecturer-Department of Biochemistry, University of Texas at San Antonio.
- 1997 Invited Speaker-“Regulation of NOS by Tetrahydrobiopterin”, Chair-“Angiogenesis session”- AHA National Meeting in Orlando; Plenary Session Speaker- “Endothelium and Cardiovascular Control”, FASEB Summer Conference; Visiting Professor Lecture- Cardiovascular Research Center, Medical College of Wisconsin; Lecturer-University of Pennsylvania, Department of Pharmacology; Lecturer- Boston University, Department of Endocrinology and Cardiovascular Research Center; Invited Speaker and Co-Chairman- “Nitric oxide and vasoactive molecules”, AHA Vascular Biology in New Orleans.
- 1996 Lecturer -University of Chicago, Department of Pathology; Lecturer-University of Texas at Houston and San Antonio, Departments of Hematology and Biochemistry; Lecturer- University of California at San Diego, Department of Bioengineering; Invited Speaker- “Molecular Mechanisms of Vascular Disease”, Experimental Biology in Washington, D.C.; Invited Speaker-“Mechanisms of Vasodilation”, International Vascular Biology Meeting in Seattle; Invited Speaker -“Biochemistry and Molecular Biology of Nitric Oxide, UCLA
- 1995 Lecturer-Department of Pharmacology, Cleveland Clinic Research Institute, Lecturer- University of Pennsylvania; Institute of Environmental Medicine; Session Chairman on Endothelium-dependent mechanisms-Experimental Biology; Session Chairman and Invited Speaker of Nitric Oxide Cell Biology - Fourth International Meeting of the Biology of Nitric Oxide; Session Chairman and Invited Speaker- Nitric Oxide Biology- AHA, Visiting Professorship-University of Indiana School of Medicine
- 1994 Invited Speaker and Symposium Organizer, "Nitric Oxide"-Endocrine Society, Lecturer - Mayo Clinic, Department of Physiology
- 1993 Plenary Speaker- "Advances in Hypertension", Society of Hypertension of Mexico, National Institute of Cardiology, Mexico City, Mexico; Invited Speaker-Third International Meeting of the Biology of Nitric Oxide, Cologne, Germany.

TEACHING AND INSTITUTIONAL ACTIVITIES:

2011	Yale-University College London Collaborative- Steering Committee; Advisory Committee, Yale Center for Molecular Discovery
2008-2011	Divisional Director of Biological Sciences, Yale University; Chair, BSAC and TACBS
2007	Director, Vascular Biology & Therapeutics Program
2006-2008	Member, Yale University Basic Science Advisory Committee (BSAC) and Tenure Appointments Committee in Biological Sciences (TACBS)
2005	Vice Chairman, Department of Pharmacology; Deputy Director, Vascular Biology & Transplantation Program
2004	Member, Provost's Committee on Conflict of Interest
2002	Director, Vascular Cell Signaling & Therapeutics Program
2000	Member, Executive Committee of the Graduate School of Arts and Sciences; Member, Senior Appointments and Promotion Committee of the School of Medicine (2000-2003)
1999	Program Director, T32 predoctoral training grant in Pharmacological Sciences (1999-2017)
1999-2005	Director of Graduate Studies, Pharmacological Sciences and Molecular Medicine
1996-1999	Chair, Graduate Admissions Committee, Department of Pharmacology

Industry relationships and boards:

- Member of Scientific Advisory Boards for the biotech companies N30 (2009-2012), Cardium (2006-2012), Antibe Pharmaceuticals (2012-present) and Alucent Biomedical (2018-present)
- Founder and CSO, CavtheRx (2015-present)
- Board of Directors and Chair of the SAB for New Haven Pharmaceuticals (2012-2016)
- Pfizer, member of scientific advisory board for Internal Medicine Research Unit (Dec 2016-Feb 2022)

- Advisory Board Aab Cardiovascular Research Institute, University of Rochester School of Medicine (2015-present)

- International Advisory Board, William Harvey Institute, London, England (2014-present)

Major papers on eNOS regulation:

1. Sessa, W. C., Harrison, J. K., Barber, C. M., Zeng, D., Durieux, M. E., D'Angelo, D. D., Lynch, K. R. and Peach, M. J. Molecular cloning and expression of a cDNA encoding endothelial cell nitric oxide synthase. *J Biological Chemistry*, 267:15274-6 (1992).

2. García-Cardena, G., Oh, P., Liu, J., Schnitzer, J.E. and Sessa, W.C. Targeting of nitric oxide synthase to endothelial cell caveolae via palmitoylation: Implications for nitric oxide signaling. *Proc. Natl. Acad. Sci. USA*, 93: 6448-6453 (1996).

3. Garcia-Cardena, G., Martasek, P., Masters, B.S.S., Skidd, P.M., Couet, J., Li, S., Lisanti, M.P. and Sessa, W.C. Dissecting the intersection between nitric oxide synthase and caveolin: Functional significance of the NOS-caveolin binding domain in vivo. *J. Biological Chemistry* , 272 : 25473-25440 (1997).

4. Papapetropoulos, A., Garcia-Cardena, G., Madri, J.A. and Sessa, W.C. Nitric oxide contributes to the angiogenic properties of vascular endothelial growth factor in human endothelial cells. *J. Clinical Investigation*, 31, 3131-3139 (1997).

5. Rudic, R.D., Shesely, E.G., Maeda, N., Smithies, O., Segal, S.S. and Sessa, W.C. Direct evidence for the importance of endothelium-derived nitric oxide in vascular remodeling. *J. Clinical Investigation*, 101:731-736 (1998).

6. Garcia-Cardena, G., Fan, R., Shah, V., Sorrentino, R., Cirino, G., Papapetropoulos, A. and Sessa, W.C. Dynamic activation of endothelial nitric oxide synthase by Hsp90. *Nature*, 392:821-824 (1998).

7. Fulton, D., Gratton, J.P., McCabe, T.J., Fontana, J., Fujio, Y., Walsh, K., Franke, T.F., Papapetropoulos, A. and Sessa, W.C. Regulation of endothelium-derived nitric oxide production by Akt. *Nature*, 399:597-601 (1999).

8. Bucci, M, Gratton, J.P., Rudic, R.D., Acevedo, L., Roviezzo, F., Cirino, G., and Sessa, W.C. In vivo delivery of the caveolin-1 scaffolding domain inhibits nitric oxide synthesis and reduces inflammation. *Nature Medicine*, 6: 1362-1367 (2000).

9. Gratton, J.P., Lin, M.I., Yu, J., Weiss, E.D., Jiang, Z.L., Fairchild, T.A., Iwakiri, Y., Groszmann, R., Claffey, K.P., Cheng, Y.C. and Sessa, W.C. Selective inhibition of tumor microvascular permeability by cavtratin blocks tumor progression in mice. *Cancer Cell*, 4:19-29 (2003).

10. Ackah, E, Yu, J., Zoellner, S., Iwakiri, Y., Skurk, C, Shibata, R., Ouichi, O., Easton, R.M., Galasso, G., Birnbaum, M.J., Walsh, K. and Sessa, W.C. Akt1/protein kinase B is critical for ischemic and VEGF-mediated angiogenesis. *J Clinical Investigation* 115:2119-2127 (2005).
11. Fernandez-Hernando, C., Fukata, M., Bernatchez, P.N., Fukata, Y., Lin, M.I., Bredt, D.S. and Sessa, W.C. Identification of Golgi localized acyltransferases that palmitoylate and regulate endothelial nitric oxide synthase. *J. Cell Biology*, 174(3):369-77 (2006).
12. Schleicher, M., Yu, J., Murata, T., Derakhshan, B., Atochin, D., Qian, L., Kashiwagi, S., Di Lorenzo, A., Harrison, K.D., Huang, P.L and Sessa, W.C. The Akt1-eNOS axis illustrates the specificity of kinase-substrate relationships in vivo. *Science Signaling*, 2(82):ra41 (2009).
13. Lee, M.Y., Luciano, A.K., Ackah, E. Rodriguez-Vita, J., Bancroft, T. A., Eichmann, A., Simons, M., Kyriakides, T.R., Morales-Ruiz, M. and Sessa, W.C. Endothelial Akt1 mediates angiogenesis by phosphorylating multiple angiogenic substrates. *Proc Natl Acad Sci (U S A)* (2014).
14. Garcia V, Park EJ, Siragusa M, Frohlich F, Mahfuzul Haque M, Pascale JV, Heberlein KR, Isakson BE, Stuehr DJ, and Sessa WC. Unbiased proteomics identifies plasminogen activator inhibitor-1 as a negative regulator of endothelial nitric oxide synthase. *Proc Natl Acad Sci U S A*. 117 (17) 9497-9507 (2020).

ADDITIONAL KEY PUBLICATIONS:

1. Papapetropoulos, A., Fulton, D., Mahboubi, K., Kalb, R.G., O'Connor, D.S., Li, F., Altieri, D.C. and Sessa, W.C. Angiopoietin-1 inhibits endothelial cell apoptosis via the Akt/survivin pathway. *J. Biological Chemistry*, 275: 9102-9105, (2000).
2. Morales-Ruiz, M., Fulton, D., Sowa, G., Languino, L.R., Fujio, Y., Walsh, K. and Sessa, W.C. Vascular endothelial growth factor stimulated actin reorganization and migration of endothelial cells is regulated via the serine/threonine kinase Akt. *Circulation Research*, 86: 892-896 (2000).
3. Acevedo, L. Yu J, Erdjument-Bromage, H, Miao, R.Q., Kim J., Fulton, D., Temps, P, Strittmatter, S.M. and Sessa, W.C. A novel role for Nogo in vascular remodeling. *Nature Medicine*, 10: 382-388 (2004).
4. Yu, J., Bergaya, S., Murata, T., Alp, I.F., Bauer, M.P., Lin, M.I., Drab, M., Kurzchalia, T.V., Stan, R.V. and Sessa, W.C. Direct evidence for the role of caveolin-1 and caveolae in mechanotransduction and remodeling of blood vessels. *J Clinical Investigation*, 116:1284-91 (2006).
5. Miao, R.Q., Gao, Y., Harrison, K.D., Prendergast, J., Acevedo, L.M., Yu, J., Hu, F., Strittmatter, S.M. and Sessa, W.C. Identification of a receptor necessary for Nogo-B stimulated chemotaxis and morphogenesis of endothelial cells. *Proc Natl Acad Sci (U S A)* 103:10997-11002 (2006).

6. Suarez, Y., Fernandez-Hernando, C., Pober, J.S. and Sessa WC. Dicer dependent microRNAs regulate gene expression and functions in human endothelial cells. *Circulation Research*, 100:1164 - 1173 (2007).
7. Fernandez-Hernando, C., Ackah, E., Yu, J., Suarez, Y., Murata, T., Iwakiri, Y., Prendergast, J., Miao, R.Q., Birnbaum, M.J. and Sessa, W.C. Loss of Akt1 leads to severe atherosclerosis and occlusive coronary artery disease. *Cell Metabolism* (6):446-57 (2007).
8. Suárez Y, Fernández-Hernando C, Yu J, Gerber SA, Harrison KD, Pober JS, Iruela-Arispe ML, Merckenschlager M and Sessa WC. Dicer-dependent endothelial microRNAs are necessary for postnatal angiogenesis. *Proc Natl Acad Sci U S A*. 16;105(37):14082-7 (2008).
9. Fernández-Hernando, C., Yu, J, Suárez, Y., Rahner, C., Dávalos, A., Lasunción, M.A. and Sessa, W.C. Genetic evidence supporting a critical role of endothelial caveolin-1 during the progression of atherosclerosis. *Cell Metabolism*. 10(1):48-54 (2009).
10. Harrison, K.D., Miao, R.Q., Fernandez-Hernando, C., Suarez, Y., Dávalos, A. and Sessa, W.C. Nogo-B receptor stabilizes Nieman Pick Type C2 protein and regulate intracellular cholesterol trafficking. *Cell Metabolism*, 10: 208-218 (2009).
11. Harrison, K.D., Park, E.J., Gao, N., Kuo, A., Rush, J.S., Waechter, C.J., Lehrman, M.A. and Sessa, W.C. Nogo-B receptor is necessary for cellular dolichol biosynthesis and protein N-glycosylation. *EMBO J*. 30(12):2490-500 (2011).
12. Park, E.J., Grabińska, K.A., Guan, Z., Stránecký, V., Hartmannová, H., Hodaňová, K., Barešová, V., Sovová, J., Jozsef, L., Ondrušková, N., Hansíková, H., Honzík, T., Zeman, J., Hůlková, H., Wen, R., Kmoch, S. and Sessa, W.C. Mutation of Nogo-B Receptor, a Subunit of cis-Prenyltransferase, Causes a Congenital Disorder of Glycosylation. *Cell Metabolism* (2014).
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Book Chapters

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Issued Patents:

1. UNITED STATES PATENT "Treatment of autoimmune and/or inflammatory disease using novel caveolin modulators" PCT/US 20170128520

2. UNITED STATES PATENT "Method of treating and preventing ocular angiogenesis" PCT/US 20150141340

3. UNITED STATES PATENT "Novel Cell-Penetrating Compositions and Methods Using Same" PCT/US2014/066619

4. UNITED STATES PATENT "Caveolin Peptides and Their Use as Therapeutics" US Pat No. 7,494,976

5. UNITED STATES PATENT "eNOS mutations useful for gene therapy and therapeutic screening" Pat No. 6,900,038

6. UNITED STATES PATENT "Methods and means of detecting nitric oxide synthase" Pat No. 6,605,447

Trainees:

Doctoral Students and present positions:

Guillermo Garcia-Cardena, Ph.D.- Associate Professor of Pathology, Harvard Medical School
Radu Daniel Rudic, Ph.D.- Professor of Pharmacology, Augusta University

Michelle I Lin, Ph.D. – Head of Preclinical Sciences, Vor Biopharma
Jason Fontana, Ph.D.- VP US Coronary Strategy and Development, Medtronic
Eric Ackah, M.D., Ph.D.- Cardiologist, Ohio Health Heart and Vascular
Lisette Acevedo, Ph.D. – Senior Director, Development, Equilibrium Inc
Paulette Wright Andreotta, Ph.D. - Principal Scientist, Pharmacology, Moderna Therapeutics
Kenneth Harrison, Ph.D. - Principal, Novo Ventures
Amelia Luciano, Ph.D. – Scientist, FogPharma
Andrew Kuo, Ph.D.- Post-doctoral fellow, Tim Hla’s lab, Harvard Medical School
Wenping Zhou, Ph.D.- Biotech Analyst, Connecticut Innovations
Ban Edani, Ph.D. Post-doctoral Fellow, Merck
Joseph Wayne Fowler, Ph.D. Senior Scientist, Internal Medicine Research Unit, Pfizer

Post-doctoral fellows and present positions:

Sebastian Albinsson –Professor of Physiology, University of Lund, Sweden
Ilkay Alp Yildirim- Associate Professor, Istanbul University
Michael Bauer- Senior Software Engineer, KarmaCheck
Sonia Bergaya - INSERM Cardiovascular Research Center, Paris, France
Pascal Bernatchez - Professor, Department of Pharmacology, Anesthesiology and Therapeutics, University of British Columbia, Canada
Michael Boyer- Senior Scientist, InVitro Cell Research
Mariosario Bucci- Professor, Department of Pharmacology, School of Pharmacy University of Naples, Italy
John Chidlow- CEO, Innolyzer
Alberto Davalos- Senior Researcher, IMDEA Initiative, Madrid Spain
Behrad Derakshan- Chief Business Officer, Edgewise Therapeutics
Kaushik Desai- Professor of Pharmacology, University of Saskatchewan, Canada
Annarita DiLorenzo- Associate Professor of Pathology, Weil Cornell School of Medicine
Carlos Fernandez-Hernando- Brady Professor, Professor of Comparative Medicine, Director, Yale VBT Program and Yale School of Medicine
David Fulton- Professor and Director of Vascular Biology Center, Georgia Regents University School of Medicine
Victor Garcia- Assistant Professor of Pharmacology, New York Medical College
Julie Goodwin M.D.- Chief (Section of Pediatric Nephrology), Associate Professor of Pediatric (Nephrology), Yale School of Medicine
Jean-Philippe Gratton- Professor and Chair, Department of Pharmacology, University of Montreal, Canada
Kara Held- Science Director, Baker Company
Yasuko Iwakiri- Professor of Internal Medicine (Digestive Diseases), Yale School of Medicine
Levente Jozsef- Associate Research Scientist in Nephrology, Yale School of Medicine
Jan Kraehling- Lab Head, Bayer Pharmaceuticals
Monica Lee- Assistant Professor of Physiology, University of Illinois at Chicago
Jianwei Liu- Associate Director at AstraZeneca
Shira Landskroner-Eiger- Associate Director, External Innovation Ipsen

Robin Looft-Wilson- Professor, Department of Kinesiology, College of William and Mary
Ethan Marin, M.D., Ph.D.- Clinical Liason, Regeneron
Timothy J McCabe- Principal Research Scientist, Janssen Pharmaceuticals
Robert Qing Miao- Professor of Pathology & Pharmacology, NYU
Manuel Morales-Ruiz- Professor, Department of Biochemistry and Molecular Genetics, Hospital Clínic, IDIBAPS, Barcelona, Spain
Takahisa Murata- Professor, Department of Veterinary Pharmacology, University of Tokyo, Japan
Eon Joo Park- Assistant Professor, Sanford Institute of Genetic Diseases
Andreas Papapetropoulos- Professor and Chair of Pharmacology, University of Athens, Greece
Chitra Rajagopal- Scientist, Takeda Oncology
Michael Schleicher- Team Leader Analytical Development, Novartis, Switzerland
Ramona Scotland- Principal Investigator, William Harvey Research Institute, London, England
Vijay Shah, M.D.- Chair, Department of Medicine, Mayo Clinic
Mauro Siragusa- Scientist, Institute for Vascular Signaling Centre for Molecular Medicine Goethe University
Abhishek Singh- Senior Scientist, Internal Medicine Research Unit, Pfizer
Athanasia Skoura- Clinical Development Manager, Pfizer
Grzegorz Sowa- Professor, Department of Medical Pharmacology & Physiology, University of Missouri – Columbia
Yajaira Suarez- Professor of Comparative Medicine, Yale School of Medicine
Victoria Ulrich- Senior Medical & Scientific Affairs, Roche Pharmaceuticals
Jun Yu M.D., Ph.D.- Associate Professor, Temple University School of Medicine
Pei Jasin (Zhang)- Assistant Director, Academic Industry Partnerships, Johns Hopkins University
Stefan Zoellner- CEO and lead consultant, Scimus Pharmaca GmbH