# **CURRICULUM VITAE**

## PERSONAL DATA

Name: Home Address: Cell Telephone: Birth date: Place of Birth: Citizenship: Family:

### Wiltz Walker Wagner, Jr., Ph.D.

19421 Quail Creek Drive, Fairhope, AL 36532 (251) 533-2731 July 7, 1939 New Orleans, Louisiana U.S.A. Spouse: Teresa McKay Wagner (deceased) Children: Anne Belen Wagner, Matthew McKay Schmidt, Thomas McKay Schmidt

# **CURRENT POSITION**

Professor Emeritus of Molecular and Cellular Pharmacology Professor Emeritus of Physiology and Cell Biology Emeritus V.K. Stoelting of Anesthesia Center for Lung Biology College of Medicine University of South Alabama Mobile, AL 36688 Telephone: (251) 533-2731 Email: wwwagner@southalabama.edu

# **EDUCATION**

Ph.D. Physiology and Biophysics, Colorado State University, 1974

# **PROFESSIONAL EXPERIENCE**

1960-1974 Research Associate, University of Colorado Medical School 1972-1985 Faculty, NIH Training Grant, University of Colorado Medical School 1974-1980 Instructor in Medicine, University of Colorado Health Sciences Center 1980-1985 Assistant Professor of Medicine, University of Colorado Medical School 1981-1985 Graduate Faculty, University of Colorado Medical School 1982-1985 Assistant Director, CVP Laboratory, University of Colorado Medical Center 1985-1990 Associate Professor, Anesthesiology and Physiology, Indiana University Medical School 1985-2005 Director of Research, Anesthesia Department, Indiana University Medical School 1986-2005 Graduate Faculty, Indiana University School of Medicine 1989-1990 V.K. Stoelting Distinguished Investigator, Indiana University School of Medicine 1990-2005 V.K.Stoelting Chair in Anesthesiology, Indiana University School of Medicine 1985-1985 Professor of Physiology and Biophysics, Indiana University School of Medicine 2019-2020 V.K.Stoelting Chair in Anesthesiology Emeritus, Indiana University School of Medicine 2019-2020 Professor Emeritus of Physiology and Biophysics, Indiana University School of Medicine 2005-2020 Graduate Faculty, University of South Alabama 2005-2020 Emeritus Professor of Pharmacology and Physiology, University of South Alabama, Mobile, AL

# **RESEARCH INTERESTS**

Control of the pulmonary circulation Pulmonary gas exchange Pulmonary pathophysiology of neutrophils Collateral ventilation History of medicine Comparative physiology of high altitude Diagnosis of burn severity

# **PROFESSIONAL SOCIETIES**

American Society of Anesthesiologists American Thoracic Society (board 1999 - 2003) Biomedical Engineering Society European Respiratory Society Fellow, American Heart Association, Cardiopulmonary Council Fellow, American Physiological Society, Cardiovascular Section International Anesthesia Research Society Microcirculatory Society New York Academy of Sciences Society of the Sigma Xi

# **PROFESSIONAL SERVICES**

Reviewer for the following journals: Journal of Applied Physiology (editorial board 1995-1999), Pulmonary Circulation (editorial board 2010 - 2014), American Review of Respiratory Diseases, American Journal of Physiology, Science, Circulation Research, Journal of Clinical Investigation, Journal of Physiology, American Journal of Pathology, Journal of Laboratory and Clinical Investigation, Microvascular Research, Microcirculation, Chest, Lung, Medicine and Science in Sports, American Journal of Respiratory and Critical Care Medicine, Journal of Vascular Research, Annals of Bioengineering, Respiratory Physiology & Neurobiology.

# **Study Sections**

Cardiovascular A Study Section, NIH, ad hoc 1990.

Respiratory and Applied Physiology Study Section, NIH, ad hoc 1993.

Medical Research Council of Canada, ad hoc 1993, 1995, 1998.

Veterans Administration Merit Review, ad hoc 1993.

Schweizerischer Nationalfonds zur Förderung der wissenschaftlichen Forschung, ad hoc 1994, 1998

Special Consultant, Aerospace Medicine Board, NASA, 1998

John Simon Guggenheim Memorial Foundation, fellowship evaluation, ad hoc 1998.

Small Business Innovation Research Study Section, Center for Scientific Review, NIH, 2000.

Parker B. Francis Foundation, fellowship evaluation, ad hoc, 2000.

NIH RIBT Study Section, ad hoc committee, 2006, 2007

Canada Foundation for Innovation, 2011

### **Conference Organizations**

Advisory Committee, 4th International Symposium on High Altitude Medical Science, Matsumoto, Japan, 1991. Chairman, Fifth Grover Conference, The Pulmonary Circulation and Gas Exchange, Deckers, Colorado, 1991. Steering Committee, The Grover Conference, 1990 - present.

Steering Committee, Mechanisms of Hypoxia Pulmonary Vasoconstriction, Matsumoto, Japan, 1991.

Program Committee, Assembly on Pulmonary Circulation, American Thoracic Society, 1993 - present.

Chairman, Pulmonary Circulation Assembly Program Committee, American Thoracic Society, 1994 - 1997

Chairman, Pulmonary Circulation Assembly, American Thoracic Society, 1999 - 2003

Executive Committee, Pulmonary Circulation Assembly, American Thoracic Society, 1999 - present

Planning Committee, Pulmonary Circulation Assembly, American Thoracic Society, 1999 - present

Board of Directors, American Thoracic Society, 1999 - 2003.

American Thoracic Society Assembly Structure Task Force, 2000.

Board of Directors, Pulmonary Circulation Foundation, 1999 - present.

Pulmonary Circulation Foundation, Treasurer, 1999 - present.

Chair, Special topics in pulmonary physiology: the next generation; American Thoracic Society, 2002

Strategic Planning Committee, American Thoracic Society, 2003 - 2005.

Organizational Structure Task Force, American Thoracic Society, 2008 - 2009.

#### HONORS AND AWARDS

- 1966 Honors Achievement Award, The Angiology Research Foundation
- 1975 The Wagner Cup, North American Trials Council (Eponym)
- 1979 Lectures in Physiology and Medicine, Harvard Medical School, Boston
- 1989 Glaxo Visiting Professor, University of British Columbia Medical School, Vancouver
- 1990 Distinguished Scientist Lecturer, University of South Alabama, Physiology Department, Mobile
- 1990 V.K. Stoelting Chair in Anesthesiology, Indiana University School of Medicine
- 1990 Alliance of Distinguished Ranked Professors, Indiana University
- 1991 Silver Medal, Chiba Medical Society, Tokyo
- 1993 Chairman, Grover Conference on the Pulmonary Circulation, American Heart Association
- 1994 Chairman, Pulmonary Circulation Assembly Program Committee, American Thoracic Society
- 1999 Chairman, Pulmonary Circulation Assembly, American Thoracic Society (1999-2003)
- 1999 Board of Directors, American Thoracic Society (1999-2003)
- 2000 Chairman, Awards Committee, Pulmonary Circulation Assembly, American Thoracic Society (1999-present)
- 2001 Robert F. Grover Prize: Peter D Wagner, San Diego
- 2000 Leadership Award: Carol Vriem, Washington
- 2000 Estelle Grover Lecturer, American Heart Association
- 2001 Robert F. Grover Prize: John T Reeves, Denver
- 2001 Leadership Award: Suzanne Hurd, Washington
- 2002 Keynote speaker, Respiratory Section Dinner, American Physiological Society, New Orleans
- 2002 Leadership Award: Edward Block, Gainesville
- 2002 Robert F. Grover Prize: Charles A Hales, Boston
- 2003 Leadership Award: Dorothy Berlin Gail, Washington
- 2003 Inaugural Fellow, Council on Cardiopulmonary Physiology, American Heart Association.
- 2003 Robert F. Grover Prize: E Kenneth Weir, Minneapolis
- 2004 Leadership Award: E. Kenneth Weir, Minneapolis
- 2004 Recipient, Robert F. Grover Prize, American Thoracic Society, Indianapolis
- 2005 Recipient, Leadership Award, Pulmonary Circulation Assembly, American Thoracic Society
- 2005 Retirement portrait (oil), V.K. Stoelting Chair of Anesthesiology, Indiana University School of Medicine
- 2005 Emeritus V.K. Stoelting Chair in Anesthesiology, Indiana University School of Medicine
- 2007 Robert F. Grover Prize: Jimmie. T, Sylvester, Baltimore
- 2008 Robert F. Grover Prize: Dante Peñaloza and Javier Arias-Stella, Lima
- 2009 Robert F. Grover Prize: Johannes Piiper, Göttingen
- 2011 Robert F. Grover Prize: Jan Herget, Prague
- 2011 Nominated, American Thoracic Society Treasurer, declined due to age
- 2012 Robert F. Grover Prize: John Newman, Nashville, TN
- 2013 Robert F. Grover Prize: Lorna Moore, Denver, CO
- 2014 Robert F. Grover Prize: Peter Hackett, Grand Junction, CO
- 2014 Emeritus, American Thoracic Society
- 2014 Emeritus, American Physiological Society
- 2014 G. Edward Folk Senior Physiologists Award, American Physiological Society Distinguished Physiologists Committee
- 2019 Emeritus Professor of Pharmacology and Physiology, University of South Alabama, Mobile, AL
- 2019 Friend of American Motorcycle Association, Class of 2019, Pickerington, OH
- 2019 Hall of Fame, American Motorcycle Association, Class of 2019, Pickerington, OH

#### **TEACHING EXPERIENCE**

#### Visiting Lectureships/Professorships

- 1969 Duke University, Department of Medicine, Durham, NC
- 1970 University of California Medical School, Cardiovascular Research Institute, San Francisco, CA
- 1972 University of Southern California Medical School, Los Angeles, CA
- 1974 University of California Medical School, Department of Medicine, La Jolla, CA
- 1979 University of California Medical School, Cardiovascular Research Institute, San Francisco, CA
- 1979 Harvard Medical School, Department of Medicine, Boston, MA
- 1981 Colorado State University, Department of Physiology, Fort Collins, CO
- 1984 Medical College of Wisconsin, Department of Physiology, Milwaukee, WI
- 1984 Harvard Medical School, Department of Medicine, Boston, MA
- 1987 Université de Paris Sud, School of Medicine, Paris, France
- 1987 Royal Postgraduate Medical School, University of London, England
- 1987 Washington University School of Medicine, Department of Medicine, St. Louis, MO
- 1988 University of Virginia Medical School, Department of Bioengineering, Charlottesville, VA
- 1988 Pennsylvania State University Medical School, Department of Medicine, Hershey, PA
- 1988 University of Kentucky Medical School, Division of Pharmacology, Lexington, KY
- 1988 Université de Paris Sud, School of Medicine, Paris, France
- 1988 Royal Postgraduate Medical School, University of London, England
- 1988 Institut für Anaesthesiologie der Universität Erlangen-Nürnberg, Erlangen, West Germany
- 1989 University of Washington School of Medicine, Department of Medicine, Seattle, WA
- 1989 University of British Columbia Medical School, Vancouver, British Columbia, Canada
- 1989 Écolé Normale Supérieure, Laboratoire de Physique, Paris, France
- 1989 Instituto Boliviano de Biología de Altura, La Paz, Bolivia
- 1989 Colegio Medico de Santa Cruz, Santa Cruz, Bolivia
- 1989 Ludwig-Maximilians-Universität, München, West Germany
- 1990 University of Washington School of Medicine, Bioengineering Department, Seattle WA
- 1990 University of South Alabama, Physiology Department, Distinguish Scientist Lecture, Mobile, AL
- 1991 Baylor Medical School, Leukocyte Biology Department, Houston, TX
- 1991 Chiba University School of Medicine, Department of Chest Medicine, Chiba, Japan
- 1991 National Cardiovascular Research Institute, Osaka, Japan
- 1991 Colorado State University, Department of Physiology, Fort Collins, CO
- 1992 NASA/Johnson Space Center, Division of Medical Sciences, Houston, TX
- 1992 Guthrie Research Foundation, Sayre, PA
- 1992 University of Texas Health Center, Tyler, TX
- 1992 University of Utah, Pediatrics Department, Salt Lake City, UT
- 1993 University of Minnesota, Department of Medicine, Minneapolis, MN
- 1993 University of Cincinnati, Department of Anatomy and Cellular Biology, Cincinnati, OH
- 1995 Harvard School of Public Health, Department of Physiology, Boston MA
- 1995 Massachusetts Institute of Technology, Department of Fluid Mechanics, Boston, MA
- 1996 Tulane University Medical School, Department of Pharmacology, New Orleans, LA
- 1996 University of Colorado Medical School, Cardiovascular Pulmonary Laboratory, Denver, CO
- 1996 University of South Alabama, Pharmacology Department, Mobile, AL
- 1996 Colorado College, Biology Department, Colorado Springs, CO
- 1997 Vascular Biology Center, Medical College of Georgia, Augusta, GA
- 1998 University of California Medical School, Cardiovascular Research Institute, San Francisco, CA
- 1999 Columbia College of Physicians and Surgeons, New York, NY
- 1999 Brown University College of Medicine, Providence, RI
- 1999 Harvard Medical School, Department of Medicine, Boston, MA
- 1999 Johns Hopkins Medical School, Pulmonary Division, Baltimore MD
- 2000 University of Pennsylvania, Institute for Environmental Medicine, Philadelphia, PA
- 2001 Université de Paris Est, School of Medicine, Paris, France
- 2002 University of Washington, Department of Medicine, Seattle, WA
- 2003 University of Washington, Department of Medicine, Seattle, WA
- 2003 University of Minnesota, Department of Medicine, Minneapolis, MN
- 2004 Medical College of Wisconsin, Christopher Dawson Memorial Symposium, Milwaukee, WI
- 2014 Keynote Speaker, Quest Program on Integrity, New York, NY
- 2016 Living History of Physiology American Physiological Society http://www.the-aps.org/mm/Membership/Living-History/Wiltz-Wagner

### Courses Indiana

F 735 Respiratory Physiology Seminar, Course Director, 1987, 1990

- F 702 Seminar in Physiology, 1986-1989, 1995-2006
- F 509 Respiratory Physiology in Dental Physiology Course, 1987-2005

F 513 Respiratory Physiology in Medical Physiology, 1988

F 513 Medical Physiology – Problem Based Learning, 1993-2000

Pulmonary and Critical Care Fellows Pulmonary Physiology, 1997, 1999, 2000, 2003

### Courses Alabama

IDL 590 - Special Topics - 2007 - present

IDL 630 – Lung Biology – 2006 – present

IDL 650 – Special Topics – Historical Figures in Pulmonary Research – 2007

RES-140-001 Respiratory Module Medical students 2013 - present

Medical School Admissions Committee, ad hoc interviewer 2015-2018

Graduate Student Research Committee Chairman: Colorado: C.B. Feicht, M.S., 1979, C.F. Sanborn, Ph.D., 1983, S.M. Brooks, M.S. 1983, J.M. Berning, M.S., Indiana: 1985, J.P. Bartek, M.S., M.D., 1987, L.L. Checkley, M.D., Ph.D., 1992, C.J. Warner, M.S., M.D., 1992, A.M. Lindeman, M.S., 1998, E.M. Jaryszak, M.S., 2000, D. Sines, M.S. 2002, E.M. Jaryszak, M.D., Ph.D. 2003.

Research Committee Member/Mentor: Indiana: J.W. Barnard, Ph.D., 1987, J.C. Falcone, Ph.D., 1988, J.M. Steenbergen, Ph.D., 1993, D.M. Walker, Ph.D., 1998, Y.M. Kobayashi, Ph.D., 1999, B.T. Weinzapfel, M.D., Ph.D. 2000, M.D., B. Zani, Ph.D. 2005, Alabama: Wenkuan Xin, Ph.D., 2008. Xiulan Yang, Ph.D. 2009, Cristhiaan Ochoa, M.D., Ph.D. 2009, Wei Feinstein, Ph.D. 2010, Abdallah AlZoubi, M.D., Ph.D. 2012, Jamie Hill, Ph.D., 2015, Salina Gairhe, PhD, 2014, Ed Crockett, Ph.D., 2015, Kaori Oshima, Ph.D., 2016.

Post-Doctoral Research Fellows Colorado, Indiana, and South Alabama

- T. Kuriyama 1973-1975; faculty at Chiba University Medical School S. I. Rounds, M.D., 1975-1976; faculty at Brown University College of Medicine
- J.H. Newman, M.D., 1975-1976; faculty at Vanderbilt Medical Center G.J. Redding, M.D. 1976-1977, faculty at University of Washington M.C. Hammill, M.D., 1976-1977; faculty at Mayo Clinic T.S. Johnson, M.D., 1976-1977; faculty at Harvard Medical School

- M.N. Gillespie, Ph.D., 1981-1982; chairman at University of South Alabama
- M.D. Petrun, M.D., 1982-1983; private practice, Ft. Collins
- D.F. Boggs, Ph.D., 1983-1985; faculty at University of Montana
- S.A. Gebb, Ph.D., 1993-1994; faculty at University of South Alabama

#### Anesthesia, Surgical, and Pediatric Clinician Scientists Indiana

- J. D. Emhardt, M.D., 1986-1987; faculty at Indiana University
- L. J. Means, M.D., 1986-1987; faculty at Indiana University
- P. M. McCormick, M.D., 1987; private practice, Minneapolis
- R. G. Presson, M.D., 1987-1988; faculty at Indiana University
- T. N. Harwood, M.D., 1988-1989; faculty at Bowman Gray Medical School

- N. Harwood, M.D., 1988-1990; faculty at Bowman Gray Medical School
  M. C. Yoder, M.D., 1988-1990; faculty at Indiana University
  S. C. Hillier, M.D., 1989-1990; faculty at Indiana University
  K. O. Mounts, M.D., 1990-1991; faculty at Medical College of Wisconsin
  S. G. Walker, M.D., 1997-1999; faculty at Indiana University
  P. Urusopone, M.D., 1999; faculty of Medicine, Chulalongkorn University, Bangkok
  M.D. Rodefeld, M.D. 2004; faculty at Indiana University School of Medicine

#### Sabbatical Fellows Colorado and Indiana

R. L. Capen, Ph.D., 1977-1978, 1984-1986, 1992-1993; Biology Chairman at The Colorado College
T. Kuriyama, M.D., 1978-1980; Pulmonary Chairman at Chiba University Medical School, Japan
T. Sugita, M.D., Ph.D., 1980-1982; faculty at Chiba University Medical School, Japan
P. A. Hervé, M.D., 1986; faculty at the University of Paris
O. Okada, M.D., 1989-1991; faculty at Chiba University Medical School, Japan
N. Tanabe, M.D., 1994-1996; faculty at Chiba University, Japan

J. Aono, M.D., 1995-1996; faculty at Kochi Medical School, Japan.

### Indiana University Administrative Duties

Physiology Graduate Committee, 1996-1999 Physiology Faculty Meeting Moderator, 1996-2003 Chairman Education Committee, NIH training grant "Lung Pathophysiology," 1997-2003 Salary Equity Panel, 1999 Search Committee for Pulmonary Division Chief, 2001 Search Committee for Anesthesia Chairman, 2002

#### University of South Alabama Medical School

Liaison Committee on Medical Education 2010

### MAJOR RESEARCH GRANTS

"The Effect of Hypoxia on the Pulmonary Vessels," National Science Foundation, Co-Principal, 1963-1969	150,000
"The Effect of Hypoxia on the Pulmonary Vessels," U.S. Army Medical R&D Command, Principal, 1967-1972	124,000
"Pulmonary Circulatory Response to Hypoxia," National Institutes of Health RO1, Principal, 1971-1973	80,578
"Program Project Grant; Project C: Pulmonary Microcirculation," National Institutes of Health, Principal, 1972-1982	712,000
"Training Grant on Hypoxia and High Altitude," National Institutes of Health T-32, Co-Principal, 1977-1985	785,000
"Program Project Grant; Project C: Pulmonary Microcirculation," National Institutes of Health, Principal, 1972-1982	712,000
"Athletic Amenorrhea," National Institutes of Health, Principal, 1981-1984	256,000
"Program Project Grant; Project C-V: Collateral Ventilation," National Institutes of Health, Principal, 1982-1985	162,000
"Pulmonary Microcirculatory Hemodynamics," National Institutes of Health RO1, Principal, 1983-2007	3,400,000
"Skeletal Integrity of Amenorrheic Runners," National Dairy Council, Principal, 1984-1985	38,000
"Special Fellowship" for R. L. Capen, National Institutes of Health, Sponsor, 1985-1986	27,000
"Pulmonary Circulatory Transport Functions," American Heart Association, Indiana Affiliate, Principal, 1985-1986	28,000
"Hemodynamics of the Pulmonary Microcirculation," Indiana University Research Grant, Principal, 1986-1987	12,800
"Almitrine et Circulation Capillaire Pulmonary," Servier Laboratories, Co-Principal, 1987-1990	105,000
"Hormone Profiles in Amenorrheic Runners," Methodist Research Foundation, Co-Principal, 1987-1988	15,000
"Pathophysiology of Lung Vascular Injury," National Institutes of Health RO1, Co-Principal, 1986-1991	676,766
"Pulmonary Microcirculation in Perinatal Lambs," American Society of Anesthesiologists, Co-Principal, 1988-1989	15,000
"The Fate of Gas Emboli in Pulmonary Circulation," International Anesthesia Research Grant, Co-Principal, 1988-1989	5,000
"Effect of Almitrine on Pulmonary Microcirculation," International Anesthesia Research Grant, Co-Principal, 1989	25,000
"Pulmonary Microcirculation in Perinatal Lambs," Riley Memorial Association, Co-Principal, 1988-1989	18,300
"The Fate of Gas Emboli in the Pulmonary Circulation," Indiana University Research Grant, Co-Principal, 1989-1990	18,000
"The Pulmonary Circulation and Gas Exchange," National Institutes of Health, Principal, 1991-1992	10,000
"The Pulmonary Circulation and Gas Exchange," American Heart Association Grant, Principal, 1991-1992	15,000
"Mechanisms of Neutrophil Margination in the Normal Lung," National Institutes of Health, Principal, 1992-1996	1,621,264
"Training Grant on Lung Pathophysiology," National Institutes of Health T-32, Co-Investigator, 1993-2003	3,335,310
"The Imaging CryoMicrotome, National Institutes of Health RO1, Co-Investigator, 2001-2002 (pending)	208,701
"Capillary Fractal Perfusion Patterns May Protect the Lung During Microgravity, NASA, Principal, 2001-2002	22,000
"Training in Cell Signaling and Lung Pathobiology" National Institutes of Health, faculty, 2004-2014	1,842,758
"G. Edgar Folk Senior Physiologist Award", American Physiological Society, 2014	500

#### PUBLICATIONS

- 1 Averill, K.H., W.W. Wagner, Jr., and J.H.K. Vogel. Studies on bronchial arterial blood flow and bronchopulmonary anastomoses. Med. Thorac. 19: 598-608, 1962.
- 2 Averill, K.H., W.W. Wagner, Jr., and J.H.K. Vogel. Correlation of right ventricular pressure with right ventricular weight. Amer. Heart J. 66: 632-635, 1962.
- 3 Vincent, T.N., R.S. Mitchell, G.F. Filley, G. Dart, L. Harris, W.W. Wagner, Jr., T. Petty, and S. Ryan. Alveolar duct ectasia: An asymptomatic pulmonary change related to age. J. Lancet 84: 331-336, 1964.
- 4 Wagner, W.W. Jr. Duct ectasia as studied by microradiography. Med. Thorac. 22: 188-195, 1965.
- 5 Wagner, W.W. Jr. and G.F. Filley. Microscopic observation of the lung in vivo. Vascular Dis. 2: 229-241, 1965.
- 6 Wagner, W.W. Jr., D.B. Barker, and G.F. Filley. A photographic method for quantitating blood flow in the pulmonary microcirculation. J. Biol. Photo. Assn. 35: 95-108, 1967.
- 7 Wagner, W.W. Jr., D.B. Barker, and G.F. Filley. The bioengineering of cinemicrography of the lung in vivo. San Diego Biomed. Engineering Symp. 7: 95-98, 1967.
- 8 Wagner, W.W. Jr. Pulmonary microcirculatory observations in vivo under physiologic conditions. J. Appl. Physiol. 26: 375-377, 1969.
- 9 Wagner, W.W. Jr., L.P. Latham, P.D. Brinkman, and G.F. Filley. Pulmonary gas transport time. Science 163: 1210-1211, 1969.
- 10 Wagner, W.W. Jr. and D.E. Olson. Concerning pulmonary gas transport time. Science 165: 824, 1969.
- 11 Wagner, W.W. Jr, P.D. Brinkman, D.B. Barker, and G.F. Filley. Erythrocyte photomicrography: contrast control by monochromatic transillumination. J. Biol. Photo. Assn. 37: 156-164, 1969.
- 12 Olson, D.E., K. Horsfield, J. Wagner, W.W. Wagner, Jr., and G.F. Filley. Investigation of flow patterns in the upper airways during mouth breathing. Amer. Rev. Resp. Dis. 101: 456-457, 1970
- 13 Wagner, W.W. Jr. Interpretation of in vivo microscopic changes of the pulmonary microanatomy. Anesth. Analg. 49: 843-845, 1970.
- 14 King, E.G., W.W. Wagner, Jr., D.G. Ashbaugh, L.P. Latham, and D.R. Halsey. Alterations in pulmonary microanatomy after fat embolism. Chest 59: 524-530, 1971.
- 15 Wagner, W.W. Jr., L.P. Latham, and D.R. Halsey. The effect of hypoxia on the pulmonary microcirculation. *In* Research Animals in Medicine. L.T. Harmison (ed) DHEW(NIH) 72-333. Washington DC, p 253-259, 1972.
- 16 Wagner, W.W. Jr. and L.P. Latham. Vasomotion in the pulmonary microcirculation. *In* Small Vessel Angiography. S.K. Hilal (ed), Mosby, St. Louis MO, p 301-306, 1973.
- 17 Wagner, W.W. Jr., L.P. Latham, and D.R. Halsey. The effects of hypoxia and high alveolar pressure on the pulmonary microcirculation. Chest 63: 41s-42s, 1973.
- 18 Wagner, W.W. Jr. The effects of hypoxia on the pulmonary capillaries. Ph.D. Dissertation, Colorado State University, Fort Collins CO, 1974.

- Wagner, W.W. Jr. and L.P. Latham. Airway hypoxia causes pulmonary capillary recruitment in the dog. J. Appl. Physiol. 39: 900-905, 1975.
- 20 Wagner, W.W. Jr. and L.P. Latham. Regulation of pulmonary capillary blood flow. *In* Muscular exercise and the lung. Reed CE and Dempsey J (eds), Univ Wisc Press, Madison WI, Chapter 26, p 369-386, 1976.
- 21 Hammill, S.C., W.W. Wagner W.W. Jr., L.P. Latham, W.W. Frost, and J.V. Weil. Autonomic cardiovascular control during hypoxia in the dog. Circ. Res. 44: 569-575, 1979.
- 22 Feicht, C.B., T.S. Johnson, B.J. Martin, K.E. Sparks, and W.W. Wagner, Jr. Secondary amenorrhea in athletes. Lancet II (9100): 1145-1146, 1979.
- 23 Wagner, W.W. Jr., L.P. Latham, and R.L. Capen. Capillary recruitment during airway hypoxia: the role of pulmonary artery pressure. J. Appl. Physiol. 47: 383-387, 1979.
- 24 Reeves, J.T., W.W. Wagner, Jr., I.F. McMurtry, and R.F. Grover. Physiological effects of high altitude on pulmonary circulation. Int. Rev. Physiol. 20: 289-310, 1979.
- 25 Capen, R.L., L.P. Latham, and W.W. Wagner, Jr. Diffusing capacity of the lung during hypoxia: the role of capillary recruitment. J. Appl. Physiol. 50: 165-171, 1981.
- 26 Kuriyama, T. and W.W. Wagner, Jr. Collateral ventilation protect against high altitude pulmonary hypertension. J. Appl. Physiol. 51: 1251-1256, 1981.
- 27 Kuriyama, T., T. Sugita, A. Sawada, S. Watanabe, L.P. Latham, L.D. Horwitz, and W.W. Wagner, Jr. Experimental pulmonary hypertension. Nippon Kyobu Shikkan Gakkai Zasshi 19: 820-825, 1981.
- 28 Capen, R.L. and W.W. Wagner, Jr. Intrapulmonary blood flow redistribution during hypoxia increases gas exchange surface area. J. Appl. Physiol. 52: 1575-1581, 1982.
- 29 Sanborn, C.F., B.J. Martin, and W.W. Wagner, Jr. Is athletic amenorrhea specific to runners? Am. J. Ob-Gyn 143: 859-861, 1982.
- 30 Wagner, W.W. Jr., L.P. Latham, M.N. Gillespie, J. Guenther, and R.L. Capen. Red cell transit times across pulmonary capillaries. Science 218: 379-380, 1982.
- 31 Sugita, T., T.M. Hyers, I.M. Dauber, W.W. Wagner, Jr., I.F. McMurtry, and J.T. Reeves. Lung vessel leak precedes right ventricular hypertrophy in monocrotaline treated rats. J. Appl. Physiol. 54: 371-374, 1983.
- 32 van Grondelle, A., R.V. Ditchey, B.M. Groves, W.W. Wagner, Jr., and J.T. Reeves. The thermodilution method overestimates low cardiac output in man. Am. J. Physiol. 245: H690-H692, 1983.
- 33 Sugita, T., K.R. Stenmark, W.W. Wagner, Jr., P.M. Henson, J.E. Henson, T.M. Hyers, and J.T. Reeves: Abnormal alveolar cells in monocrotaline induced pulmonary hypertension. Exptl. Lung Res. 5: 200-215, 1983.
- 34 Grover, R.F., W.W. Wagner, Jr., I.F. McMurtry, and J.T. Reeves. The pulmonary circulation. *In* The Handbook of Physiology. Shepherd J.T. and Abboud F.M. (eds). Waverly Press, Baltimore MD, p 103-136, 1983.
- 35 Brooks, S.M., C.F. Sanborn, B.H. Albrecht, and W.W. Wagner, Jr. Diet in athletic amenorrhea. Lancet 1: 559-560, 1984.

- 36 Kuriyama, T., L.P. Latham, L.D. Horwitz, J.T. Reeves, and W.W. Wagner, Jr. The role of collateral ventilation in maintaining ventilation-perfusion balance. J. Appl. Physiol. 56: 1500-1506, 1984.
- 37 Wagner, W.W. Jr. and H.B. Wagner. A history of the pulmonary circulation. Seminars in Respiratory Medicine 7: 117-123, 1985.
- 38 Wagner, W.W. Jr. Control of the pulmonary circulation. Seminars in Respiratory Medicine 7: 124-135, 1985.
- 39 Sanborn, C.F. and W.W. Wagner, Jr. Athletic amenorrhea Chap 8, pp 125-148. *In* Female Endurance Athletes. B.L. Drinkwater (ed). Human Kinetics Publ. Champaign IL, 1986.
- 40 Wagner, W.W. Jr., L.P. Latham, W.L. Hanson, S.E. Hofmeister, and R.L. Capen. Vertical gradient of pulmonary capillary transit times. J. Appl. Physiol. 61: 1270-1274, 1986.
- 41 Capen, R.L., L.P. Latham, and W.W. Wagner, Jr. Comparison of direct and indirect measurements of pulmonary capillary transit times. J. Appl. Physiol. 62: 1150-1154, 1987.
- 42 Lien, D.C., W.W. Wagner, Jr., R.L. Capen, C. Haslett, W.L. Hanson, S.E. Hofmeister, P.M. Henson, and G.S. Worthen. Physiologic neutrophil sequestration in the canine pulmonary circulation: visual evidence for localization in capillaries. J. Appl. Physiol. 62: 1236-1243, 1987.
- 43 Gadpaille, W.J., C.B. Sanborn, and W.W. Wagner, Jr. Athletic amenorrhea, major affective disorders, and eating disorders. Am. J. Psychiatry 144: 939-942, 1987.
- 44 Sanborn, C.F., B.H. Albrecht, and W.W. Wagner, Jr. Athletic amenorrhea: lack of association with low body fat. Med. Sci. Sports Exerc. 19: 207-212, 1987.
- 45 Dawson, C.A., R.L. Capen, L.P. Latham, W.L. Hanson, S.E. Hofmeister, T.A. Bronowski, D.A. Rickaby, and W.W. Wagner, Jr. Pulmonary arterial transit times. J. Appl. Physiol. 63: 770-777, 1987.
- 46 Sanborn, C.F. and W.W. Wagner, Jr. Concerning hydrostatic weighing. Med. Sci. Sports Exerc. 19: 621-622, 1987.
- 47 Wagner, W.W., Jr. The pulmonary microcirculation: state of the art. Chest 93: 85S 88S, 1988.
- 48 Barnard, J.W., C.E. Patterson, M.T. Hull, W.W. Wagner, Jr., and R.A. Rhoades. Role of microvascular pressure in reactive oxygen-induced lung edema. J. Appl. Physiol. 66: 1486-1493, 1989.
- 49 Wagner, W.W. Jr. et P.A. Hervé. Physiologie du recrutement capillaire pulmonaire. Rev. Mal. Resp. 6: 39-44, 1989.
- 50 Wagner, W.W. Jr. The pulmonary circulation and gas exchange, Chapter 22, pp. 645 664. *In* Human Physiology. R.A. Rhoades R.A. and R.P. Pflanzer (eds) Saunders, Philadelphia, 1989.
- 51 Wagner, W.W. Jr. and R.A. Rhoades. Respiration in unusual environments, Chapter 23, pp. 665 680. *In* Human Physiology. R.A. Rhoades and R.P. Pflanzer (eds) Saunders, Philadelphia, 1989.
- 52 Hanson, W.L., J.D. Emhardt, J.P. Bartek, L.P. Latham, L.L. Checkley, R.L. Capen, and W.W. Wagner, Jr.: The site of recruitment in the pulmonary microcirculation. J. Appl. Physiol. 66: 2079-2083, 1989.
- 53 Herve, P., D. Musset, G. Simonneau, W.W. Wagner, Jr., and P. Duroux. Almitrine decreases the distensibility of the large pulmonary arteries in man. Chest 96: 572-577, 1989.

- 54 Yamaguchi, T., R.F. O'Brien, W.L. Hanson, W.W. Wagner, Jr., and I.F. McMurtry. Prostacyclin synthesis contributes to inhibition of hypoxic pulmonary vasoconstriction by alkalosis. Prostaglandins 38: 53-63, 1989.
- 55 Wagner, W.W. Jr. Direct measurement of pulmonary capillary transit time and recruitment. *In* Microvascular Mechanics: Hemodynamics of Systemic and Pulmonary Microcirculation. J.S. Lee and T.C. Skalak (eds). Springer-Verlag. New York. 163-174, 1989.
- 56 Presson, R.G. Jr., K.R. Kirk, J.H. Linehan, K.A. Haselby, S. Zaleski, and W.W. Wagner, Jr. The fate of air emboli in the pulmonary circulation. J. Appl. Physiol. 67: 1898-1902, 1989.
- 57 Berning, J.C., C.F. Sanborn, and W.W. Wagner, Jr. Osteoporosis, diet, and exercise. *In* Scientific Foundations of Sports Medicine. Teitz, C.C. (ed.) B.C. Decker. Philadelphia. 135-152, 1989.
- 58 Lien, D.C., G.S. Worthen, R.L. Capen, W.L. Hanson, L.L. Checkley, S.J. Janke, P.M. Henson, and W.W. Wagner, Jr. Neutrophil kinetics in the pulmonary microcirculation: effects of pressure and flow in the dependent lung. Amer. Rev. Resp. Dis. 141: 953-959, 1990.
- 59 Yoder, M.C., L.L. Checkley, U. Giger, W.L. Hanson, K.R. Kirk, R.L. Capen, and W.W. Wagner, Jr. Pulmonary microcirculatory kinetics of neutrophils deficient in leukocyte adhesion-promoting glycoproteins. J. Appl. Physiol. 69: 207-213, 1990.
- 60 Capen, R.L., W.L. Hanson, L.P. Latham, C.A. Dawson, and W.W. Wagner, Jr. Distribution of pulmonary capillary transit times in recruited networks. J. Appl. Physiol. 69: 473-478, 1990.
- 61 Wagner, W.W. Jr. Recruitment of pulmonary capillaries. In Respiratory Biomechanics: Engineering Analysis of Structure and Function. M.A.F. Epstein and J.R. Ligas (eds). Springer-Verlag. New York. 1990.
- 62 Presson, R.G. Jr., K.R. Kirk, K.A. Haselby, and W.W. Wagner, Jr. The effect of ventilation with soluble and diffusible gases on the size of air emboli. J. Appl. Physiol. 70: 1068-1074, 1991.
- 63 Lamm, W.E., K.R. Kirk, W.L. Hanson, W.W. Wagner, Jr., and R.K. Albert. Flow through Zone I lungs utilizes alveolar corner vessels. J. Appl. Physiol. 70: 1518-1523, 1991.
- 64 Emhardt, J.D., S.S. Moorthy, J.W. Brown, M.D. Cohen, and W.W. Wagner, Jr. Chest radiographic changes after cardiopulmonary bypass in children. J. Cardiovasc. Surg. 32: 314-317, 1991.
- 65 Lien, D.C., R.L. Capen, W.L. Hanson, J.E. Henson, W.W. Wagner, Jr., P.M. Henson, and G.S. Worthen. The acute inflammatory process in the lung: direct observation of neutrophil behavior in response to C5 fragments. Lab. Invest. 65: 145-159, 1991.
- 66 Wagner, W.W. Jr. Pulmonary capillary transit times in fully recruited networks. *In* Neue Aspekte zur respiratorischen Insuffizienz. E. Rugheimer (ed). Springer-Verlag. New York. 1992.
- 67 Okada, O., R.G. Presson, Jr., K.R. Kirk, P.S. Godbey, R.L. Capen, and W.W. Wagner, Jr. Capillary perfusion patterns in single alveolar walls. J. Appl. Physiol. 72: 1838-1844, 1992.
- 68 Wagner, W.W. Jr. The pulmonary circulation and gas exchange, Chapter 22, pp. 732 754. *In* Human Physiology, second edition. R.A. Rhoades R.A. and R.P. Pflanzer (eds) Saunders, Philadelphia, 1992.
- 69 Wagner, W.W. Jr. and R.A. Rhoades. Respiration in unusual environments, Chapter 23, pp. 755 776. *In* Human Physiology, second edition. R.A. Rhoades and R.P. Pflanzer (eds) Saunders, Philadelphia, 1992.

- 70 Wagner, W.W. Jr. and O. Okada. Pulmonary capillary recruitment during airway hypoxia. In High Altitude Medicine. G. Ueda, J.T. Reeves, and M. Sekiguchi (eds). Shinshu University Press. Matsumoto, Japan. 1992.
- 71 Wagner, W.W., Jr. *The Bronchial Circulation*. J. Butler (ed.) Book Review. Am. J. Physiol. 263: L729-L730, 1992.
- 72 Hanger, C.C., W.W. Wagner, Jr., S.J. Janke, T.C. Lloyd, Jr., and R.L. Capen. Computer simulation of neutrophil movement through the pulmonary capillary bed. J. Appl. Physiol. 74: 1647-1652, 1993.
- Hanson, W.L., D.F. Boggs, J.M. Kay, S.E. Hofmeister, and W.W. Wagner, Jr. Collateral ventilation and pulmonary arterial smooth muscle in the coati mundi. J. Appl. Physiol. 74: 2219-2224, 1993.
- 74 Means, L.J., W.L. Hanson, K.O. Mounts, and W.W. Wagner, Jr. Pulmonary capillary recruitment in neonatal lambs. Pediatr. Res. 34: 596-599, 1993.
- 75 Wagner, W.W., Jr. Pulmonary capillary perfusion by plasma. (Invited editorial). J. Appl. Physiol. 75: 1437-1438, 1993.
- 76 Wagner, W.W., Jr. and R.G. Presson, Jr. Gas exchange reserve during hypoxia: role of capillary recruitment. pp 77-88. *In* Hipoxia: Investigaciones Basicas Y Clinicas. F. León-Velarde and A. Arregui (eds). UPCH/IFEA, Lima, 1993.
- 77 Hillier, S.C., P.S. Godbey, C.C. Hanger, J.A. Graham, R.G. Presson, Jr., O. Okada, J.H. Linehan, C.A. Dawson, and W.W. Wagner, Jr. Direct measurement of pulmonary microvascular distensibility. J. Appl. Physiol. 75: 2106-2111, 1993.
- 78 Wagner, W.W., Jr., and E.K. Weir. (eds.) The Pulmonary Circulation and Gas Exchange. Futura, Mount Kisco, NY. 1994.
- 79 Okada, O., R.G. Presson, Jr., P.S. Godbey, R.L. Capen, and W.W. Wagner, Jr. Temporal capillary perfusion patterns in single alveolar walls of intact dogs. J. Appl. Physiol. 76: 380-386, 1994.
- 80 Presson, R.G., Jr., C.C. Hanger, P.S. Godbey, J.A. Graham, T.C. Lloyd, Jr., and W.W. Wagner, Jr. The effect of increasing flow on the distribution of pulmonary capillary transit times. J. Appl. Physiol. 76: 1701-1711, 1994.
- 81 Presson, R.G., Jr., O. Okada, P.S. Godbey, J.A. Graham, C.C. Hanger, R.W. Glenny, and W.W. Wagner, Jr. Stability of alveolar capillary opening pressures. J. Appl. Physiol. 77: 1630-1637, 1994.
- 82 Presson, R.G., Jr., J.A. Graham, C.C. Hanger, P.S. Godbey, S.A. Gebb, R.A. Sidner, R.W. Glenny, and W.W. Wagner, Jr. Distribution of pulmonary capillary erythrocyte transit times. J. Appl. Physiol. 79: 382-388, 1995.
- 83 Gebb, S.A., J.A. Graham, C.C. Hanger, P.S. Godbey, R.L. Capen, C.M. Doerschuk, and W.W. Wagner, Jr. Sites of leukocyte sequestration in the pulmonary microcirculation. J. Appl. Physiol. 79: 493-497, 1995.
- 84 Hanger, C.C., S.C. Hillier, R.G. Presson, Jr., R.W. Glenny, and W.W. Wagner, Jr. Measuring pulmonary microvessel diameters using video image analysis. J. Appl. Physiol. 79: 526-532, 1995.
- 85 Godbey, P.S., J.A. Graham, R.G. Presson, Jr., W.W. Wagner, Jr., and T.C. Lloyd, Jr. The effect of capillary pressure and lung distention on capillary recruitment. J. Appl. Physiol. 79: 1142-1147, 1995.
- Wagner, W.W. Jr. and R.A. Rhoades. The pulmonary circulation, gas exchange, Chapter 21, pp. 639 634. *In* Human Physiology, third edition. RA Rhoades, RP Pflanzer (eds) Saunders, Philadelphia, 1995.

- 87 Wagner, W.W. Jr. and R.A. Rhoades. Environmental physiology. Chapter 29, pp. 853 884. *In* Human Physiology, third edition. R.A. Rhoades and R.P. Pflanzer (eds) Saunders, Philadelphia, 1995.
- 88 Short, A.C., M.L. Montoya, S.A. Gebb, R.G. Presson, Jr., W.W. Wagner, Jr., and R.L. Capen. Pulmonary capillary diameters and recruitment characteristics in subpleural and interior networks. J. Appl. Physiol. 80: 1568-1573, 1996.
- 89 Wagner, W.W. Jr. Recruitment of gas exchange vessels. In *The Lung*: Scientific Foundations, 2nd Edition. Crystal, R.G., J.B. West, E.R. Weibel, and P.J. Barnes (eds.) pp 1537-1547. Raven, New York, 1996.
- 90 Hanger, C.C., R.G. Presson, Jr., O. Okada, S.J. Janke, J.J. Watkins, W.W. Wagner, Jr., and R.L. Capen. Computer determination of perfusion patterns in pulmonary capillary networks. J. Appl. Physiol. 82: 1283-1289, 1997.
- 91 Hillier, S.C., J.A. Graham, C.C. Hanger, P.S. Godbey, R.W. Glenny, and W.W. Wagner, Jr. Hypoxic vasoconstriction in pulmonary arterioles and venules. J. Appl. Physiol. 82:1084-1090, 1997.
- 92 Presson, R.G., Jr., T.M. Todoran, B.J. DeWitt, I.F. McMurtry, and W.W. Wagner, Jr. Capillary recruitment and transit time in the rat lung. J. Appl. Physiol. 83: 543-549, 1997.
- 93 Presson, R.G., Jr., C.C. Hanger, J.A. Graham, G.M. Zenk, R.A. Sidner, P.S. Godbey, T.M. Todoran, and W.W. Wagner, Jr. Pulmonary microvascular flow changes after vessel occlusion. J. Appl. Physiol. 84: 303-310, 1998.
- Wagner, W.W. Jr., and R.G. Presson, Jr. Complexity of perfusion in the pulmonary gas exchange vessels. In *Complexity in Structure and Function of the Lung*. Hlastala M.P., and H.T. Robertson (eds.) pp 429 - 460 Marcel Dekker, New York. 1998.
- 95 Presson, R.G. Jr., S.H. Audi, C.C. Hanger, G.M. Zenk, R.A. Sidner, J.H. Linehan, W.W. Wagner, Jr., and C.A. Dawson. Anatomic distribution of pulmonary vascular compliance. J. Appl. Physiol. 84: 303-319, 1998.
- <sup>95</sup> Tanabe, N., T.M. Todoran, G.M. Zenk, B.R. Bunton, W.W. Wagner, Jr., and R.G. Presson, Jr. Perfusion heterogeneity in the pulmonary acinus. J. Appl. Physiol. 84: 933-938, 1998.
- 96 Wagner, W.W., Jr., T.M. Todoran, N. Tanabe, T.M. Wagner, J.A. Tanner, R.W. Glenny, and R.G. Presson. Jr. Pulmonary capillary perfusion: intra-alveolar fractal patterns and interalveolar independence. J. Appl. Physiol. 86: 825 - 831, 1999.
- 97 Hanson, W.L., D.F. Boggs, J.M. Kay, S.E. Hofmeister, O. Okada, and W.W. Wagner, Jr. Pulmonary vascular response of the coati to chronic hypoxia. J. Appl. Physiol. 88: 981-986, 2000.
- 98 Tanabe, N., T.M. Todoran, G.M. Zenk, J. Aono, W.W. Wagner, Jr., and R.G. Presson, Jr. Mechanism of pulmonary acinar perfusion heterogeneity. J. Appl. Physiol. 89: 1943-1948, 2000.
- 99 Glenny, R.W., W.J.E Lamm, S.L. Bernard, D. An, M. Chornuk, S.L. Pool, W.W. Wagner, Jr., M.P. Hlastala, and H.T. Robertson. Selected Contribution: Redistribution of pulmonary perfusion during weightlessness and increased gravity. J. Appl. Physiol. 89: 1239-1248, 2000.
- 100 Jaryszak, E.M., W.A. Baumgartner, A.J. Peterson, R.G. Presson, Jr., R.W. Glenny, and W.W. Wagner, Jr. Selected Contribution: Response of the pulmonary capillaries to sudden changes in flow. J. Appl. Physiol. 89: 1233-1238, 2000.
- 101 Jaryszak, E.M., W.A. Baumgartner, A.J. Peterson, R.G. Presson, Jr., R.W. Glenny, and W.W. Wagner, Jr.Video clip: Response of the pulmonary capillaries to sudden changes in flow, 2000. http://jap/physiology.org/cgi/content/full/89/3/1233/DC1

- 102 Wagner, W.W. Jr. Farewell to a champion, National Dragster, 42: 100, 2001. https://www.dragbike.com/news/02-01/021301a.htm
- 103 Presson, R.G., Jr., W.A. Baumgartner, Jr., A.J. Peterson, R.W. Glenny, and W.W. Wagner, Jr. Pulmonary capillary recruitment lowers vascular resistance during pulsatile flow. J. Appl. Physiol. 92: 1183-1190, 2002.
- 104 Presson, R.G., Jr., W.A. Baumgartner, Jr., A.J. Peterson, R.W. Glenny, and W.W. Wagner, Jr. Pulmonary capillary recruitment lowers vascular resistance during pulsatile flow. J. Appl. Physiol. http://jap/physiology.org/cgi/content/full/92/3/1183/DC1
- 105 Wagner, W.W. Jr. Leukocyte and erythrocyte kinetics in the pulmonary microcirculation. In *Blood Elements and the Pulmonary Circulation*. E.K. Weir, H.L. Reeve, and J.T. Reeves (eds.) pp 317 338 Futura, Armonk, NY 2002.
- 106 Wagner, W.W. Jr. and R.A. Rhoades. The pulmonary circulation and gas exchange *In* Human Physiology, fourth edition. R.A. Rhoades and R.P. Pflanzer (eds) Saunders, Philadelphia, 2003.
- 107 Wagner, W.W., Jr. *Attitudes on Altitudes*. J.T. Reeves and R.F. Grover (eds.) Book Review. The Physiologist. 45: 122, 2002.
- 109 Nabors, L.K., W.A. Baumgartner, Jr., S.J. Janke, J.R. Rose, W.W. Wagner, Jr., and R.L. Capen. Red blood cell orientation in pulmonary capillaries. *J. Appl. Physiol.* 94: 1634-1640, 2003.
- 110 Baumgartner, W.A. Jr., E.M. Jaryszak, A.J. Peterson, R.G. Presson, Jr., and W.W. Wagner, Jr. Heterogeneous capillary recruitment among adjoining alveoli. *J. Appl. Physiol.* 95: 469-476, 2003.
- 111 Rodefeld, M.D., J.A. Boyd, C.D. Myers, R.G. Presson, Jr., W.W. Wagner, Jr., J.W. Brown. Cavopulmonary assist in the newborn: an alternative strategy for single ventricle palliation. *J. Thorac. Cardiovasc. Surg.* 127: 705-711, 2004.
- 112 Wagner, W.W., Jr. Dave's Secret World. National Dragster 41:76, 2000. Dragbike.com December, 2004
- 113 Baumgartner, W.A. Jr., A.J. Peterson, R.G. Presson, Jr., N. Tanabe, E.M. Jaryszak, and W.W. Wagner, Jr. Increased hematocrit reduces blood flow switching among pulmonary capillaries. *J. Appl. Physiol.* 97:522-526, 2004.
- Lamm, W.J.E., S.L. Bernard, W.W. Wagner, Jr., and R.W. Glenny. Intravital microscopic observation of 15 μm microspheres lodging in the pulmonary microcirculation. *J. Appl. Physiol*.98:2242-2248, 2005.
- 115 Wagner, W.W., Jr., and R.G. Presson, Jr. Forms of reserve in the pulmonary capillaries. *Encyclopedia of the Microvasculature*. 497-503, 2006, D. Shepro ed. Elsevier, San Diego. Elsevier Academic Press, Amsterdam.
- Lamm, W.J.E., S.L. Bernard, W.W. Wagner, Jr., and R.W. Glenny. Intravital Microscopic Observation of μm microspheres lodging in the pulmonary microcirculation. *J. Appl. Physiol*.98:2242-2248, 2005.
- 117 Jaryszak, E.M., A.J. Peterson, D.T. Sines, R.G. Presson, Jr., and W.W. Wagner, Jr. Unexpected temporal redistribution of pulmonary capillary blood flow. *J. Appl. Physiol.* (submitted).
- 118 Wagner W.W,Jr., W.J. Lamm, S.L.Bernard, A. Dowon M. Chornuk, S.L. Pool, M.P. Hlastala, H.T. Robertson, and R. W. Glenny. *Selected contribution*. Paradoxical redistribution of pulmonary blood flow in the left lateral posture comparing microgravity and increased gravity. *J. Grav. Physiol.* 13:25-34, 2006.
- 119 Wagner, W.W. Jr. Point-Counterpoint. Gravity is/is not the major determining factor the distribution of blood flow in the human lung. Comment, Increasing complexity. *J Appl Physiol* 104:1537-1538, 2008.

- 120 Glenny, R.W., W.J. E. Lamm, S.L. Bernard, D. An, M. Chornuk, S.L. Pool, W.W. Wagner, Jr., M.P. Hlastala, and H.T. Robertson. *Selected Contribution*: Redistribution of pulmonary perfusion during weightlessness and increased gravity *J Appl Physiol* 89: 1239–1248, 2006.
- 121 Stevens, T. Genetic and Environmental Determinants of Pulmonary Endothelial Cell. Function. Wagner, W.W., Jr. and A.B. Wagner (eds.) 2004 Grover Conference, 2011. http://www.groverconference.org/grover\_conference2004.htm
- 123 Fagan, K., and I.F. McMurtry. Rho Family GTPases in Pulmonary Vascular Pathophysiology. Wagner, W.W., Jr. and A.B. Wagner (eds.) 2006 Grover Conference, 2011. http://www.groverconference.org/grover\_conference2004.htmce.org 2011
- 124 Weir, E.K., W.W. Wagner, Jr., and S.L. Archer. Lofty goals at high altitude: The Grover Conference, 1984 2011. *Pulmonary Circulation*. 1:501-508, 2011.
- 125 Wagner, W.W., Jr. The Grover Conference—When Stars Align. Interview by T. Stevens. 2015 https://www.youtube.com/watch?v=wUPNLMZxB38
- 126 Oshima K, McClendon JM, Wagner WW Jr, McMurtry IF, Oka M. Chronic hypoxia does not cause wall thickening of intra-acinar pulmonary supernumerary arteries. *Physiol Rep.* 2016 Feb;4(2).
- 127. Wagner, W.W., Jr. Charles Hales (1941 2015). Pulm Circ 6: 402-403, 2016.
- 128. Wagner, W.W., Jr. Living History of Physiology Project, American Physiological Society, interview by T. Stevens. http://www.the-aps.org/mm/Membership/Living-History/Wiltz-Wagner 2016.
- 129. Wagner, W.W., Jr. and E.K. Weir. (eds.) The Pulmonary Circulation and Gas Exchange. Futura, Mount Kisco, NY. 1994. Serialized form in *Pulmonary Circulation*. 2017. 5,648 chapters downloaded in 2017.
- 130. Simmons JD, Kahn SA, Vickers AL, Crockett ES, Whitehead JD, Krecker AL, Lee YL, Miller AN, Patterson SB, Richards WO, Wagner WW Jr. Early Assessment of Burn Depth with Far infrared Time-Lapse Thermography. J Am Coll Surg. 2018 Jan 31, pii: S1072-7515918)30034-6. doi: .1016/j.jamcollsurg.2017.12.051:
- 131. Simmons JD, Kahn SA, Vickers AL, Crockett ES, Whitehead JD, Krecker AL, Lee YL, Miller AN, Patterson SB, Richards WO, Wagner WW Jr. Early Assessment of Burn Depth with Far infrared Time-Lapse Thermography. J Am Coll Surg. 2018:687-693,2018.
- Wagner WW Jr, Jaryszak EM, Peterson AJ, Doerschuk CM, H. Bohlen HG, King JAC, Tanner JA, Crockett ES, Glenny RW, Presson RG Jr. A Perpetual Switching System in Pulmonary Capillaries. *J Appl Physiol*. (Online ahead of print). https://doi.org/10.1152/japplphysiol.00507.2018
- 133. Wagner WW Jr, Jaryszak EM, Peterson AJ, Doerschuk CM, Bohlen HG, King JA, Tanner JA, Crockett ES, Glenny RW, Presson RG Jr. A perpetual switching system in pulmonary capillaries. J Appl Physiol 126: 494– 501, 2019.
- 134. Wagner, WW Jr. Robert F Grover, MD, PhD. (1924 2021). *Am Thorac Soc News*. Aug 2021. https://news.thoracic.org/ats-news-articles/robert-grover-md-phd.php

#### **ABSTRACTS 161 titles**

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