

CURRICULUM VITAE

David F. Stowe, M.D., Ph.D.

—is ranked in the top 2% of 6,880,389 world-wide scientists from 22 large scientific fields and 176 sub fields, including Biomedical Research, based on publications and citations (—also ranked top 0.3% in anesthesiology research, top 0.3% in cardiovascular research, top 0.7% in clinical medicine) by the Statistics and Meta-Research Innovation Center at Stanford (METRICS) University: PLoS Biol 17(8): e3000384. August 12, 2019.

<https://doi.org/10.1371/journal.pbio.3000384>

EDUCATION:

<u>Undergraduate</u>	Indiana University (Zoology) Bloomington, Indiana
	Goethe Language Institute (German) Staufen, West Germany
	Free University of Berlin Berlin, West Germany (Zweites Zoologisches Institut- Reciprocal Exchange Scholar)
B.A.	Indiana University (Zoology) Bloomington, Indiana
<u>Graduate</u>	Indiana University (Cell Biology) Bloomington, Indiana
M.A.	Western Michigan University (Biology) Kalamazoo, Michigan
Ph.D.	Michigan State University (Physiology) East Lansing, Michigan
<u>Medical</u>	Medical College of Wisconsin
M.D.	Milwaukee, Wisconsin

PRIOR ACADEMIC AND RESEARCH EXPERIENCE:

Graduate Assistant	German Language Laboratory Indiana University Bloomington, Indiana
Physiology Research Assistant II	Department of Experimental Biology The Upjohn Company Kalamazoo, Michigan
Research Assistant	Department of Physiology Michigan State University

	East Lansing, Michigan
Teaching Assistant	Department of Physiology Michigan State University
NIH Predoctoral Fellow	Department of Physiology Michigan State University
Chairperson	Physiology Graduate Student Body Michigan State University
NIH Minority Program Tutor	College of Medicine and School of Nursing Michigan State University
Teaching Assistant	Department of Physiology Michigan State University
NIH Postdoctoral Fellow	School of Medicine Cardiovascular Research Institute University of California San Francisco, California
NIH Young Investigator Research Grant Awardee	Department of Physiology Medical College of Wisconsin Milwaukee, Wisconsin
Rotating Internship (Medicine)	Medical College of Wisconsin Affiliated Hospitals, Milwaukee, Wisconsin Medical Licensure Wisconsin #27092
Residency Training (Anesthesiology)	Medical College of Wisconsin Affiliated Hospitals, Milwaukee, Wisconsin
Staff Anesthesiologist	Medical College of Wisconsin Affiliated Hospitals, Milwaukee, Wisconsin
Senior Staff Anesthesiologist	Medical College of Wisconsin Affiliated Hospitals, Milwaukee, Wisconsin

CURRENT FACULTY APPOINTMENTS:

Professor of Anesthesiology with Tenure	Medical College of Wisconsin Milwaukee, Wisconsin
Professor of Biomedical Engineering (Secondary)	Medical College of Wisconsin Milwaukee, Wisconsin
Professor of Physiology (secondary)	Medical College of Wisconsin Milwaukee, Wisconsin
Adjunct Professor of Biomedical Engineering	Marquette University Milwaukee, Wisconsin
Professor	Graduate School of Biomedical Sciences

Medical College of Wisconsin

PRIOR FACULTY APPOINTMENTS:

Visiting Assistant Professor of Biology	Department of Biology Marquette University Milwaukee, Wisconsin
Lecturer	School of Nursing University of Wisconsin-Milwaukee Milwaukee, Wisconsin

PROFESSIONAL SOCIETY MEMBERSHIPS:

American Association for the Advancement of Science
 American Physiological Society
 Society for Experimental Biology and Medicine
 American Heart Association - Council on Circulation
 Sigma Xi - Marquette Chapter
 Cardiovascular Section, American Physiological Society
 Cardiac Mechanics Section, American Physiological Society
 Wisconsin Society of Anesthesiologists
 The American Society of Anesthesiologists
 International Research Anesthesiology Society
 Society of Cardiovascular Anesthesiologists
 Association of University Anesthesiologists
 Biophysical Society

PRIOR AND CURRENT PROFESSIONAL ACTIVITIES:

Reviewer, grants and manuscripts, VA Research and Development Committee
 Ad hoc reviewer for the following and many others:

American Journal of Applied Physiology
Obstetrics and Gynecology
Basic Research in Cardiology
New York State Journal of Medicine
Journal of Molecular and Cellular Cardiology
Journal of Thoracic and Cardiovascular Surgery
Life Sciences Journal
Antioxidants and Redox Signaling
Cardiovascular Drugs and Therapy
British Journal of Anaesthesia
British Journal of Anaesthesia
Cardiovascular Research
British Medical Bulletin
Cellular and Molecular Life Sciences
Current Biology
Journal of Cardiovascular Pharmacology
Translational Research
Acta Physiologica Medicinal Research Reviews

Consultant reviewer: *Anesthesiology*
 Consultant reviewer: *Anesthesia and Analgesia*
 Consultant reviewer: *Cardiovascular Research*
 Consultant reviewer: *American Journal of Physiology Heart, Circ Physiol*

Consultant reviewer: *American Journal of Physiology Cell Physiology*
 Editorial Board: *Frontiers in Mitochondrial Physiology*
 Consultant reviewer: *Redox Report*

- Research Awareness Committee, American Heart Association of Wisconsin
- Participating Faculty, Cardiovascular Research Center, MCW
- Midwest Anesthesiology Residents Conference, MCW Moderator, Judge
- Peer Review Research Committee, American Heart Association of Wisconsin
- Affiliate Study Section, American Heart Association (national)
- Scientific Program Committee, Society of Cardiovascular Anesthesiologists
- Abstract Committee, Society of Cardiovascular Anesthesiologists
- Co-chair and Chair, annual meetings of Experimental Biology, American Society of Anesthesiologists
- Session co-chair, annual meetings of American Society of Anesthesiologists
- Midwest Anesthesiology Residence Conference, Milwaukee -Organizing Director
- Host Chair Program, 50th Meeting of Association of University Anesthesiologists
- CME (18 credits) Course Director, Anesthesia Topics in the Tropics, MCW
- Special Emphasis Grant Review Panel, National Institutes of Health
- Minority Program Grant Review Panel, National Institutes of Health
- Program Project Review Panel, National Institutes of Health
- Program Project Review Committee, National Institutes of Health
- Study Section Review Panel RFA, National Institutes of Health
- Ad Hoc Review Panel Member, National Science Foundation Merit Review
- R43/44 SBIR Grant Review Panel Member, National Institutes of Health
- FAER Academy of Research Mentors in Anesthesiology
- Merit Grant Review Panel CARA, Veterans' Administration
- R43/44 SBIR Grant Review Panel Member, National Institutes of Health
- R01 MIM Grant review Panel Member, National Institutes of Health

PRIOR AND CURRENT MEDICAL COLLEGE COMMITTEES:

Graduate Affairs and Admissions Committee-Physiology
 Interviewing Committee - Medical College
 Laboratory and Equipment Committee - Physiology
 Space and Physical Plant Committee - Physiology
 Graduate Affairs and Admission Committee, Chairman - Medical College
 Medical Admissions Committee - Medical College
 Nominating Committee to Faculty Assembly, Chairman - Medical College
 Continuing Education and Allied Health Committee, Chairman – Medical College
 Resident Selection Committee - Anesthesiology
 Coordinator for MCW-Midwest Anesthesia Residents Conference
 Student Interviewing Committee - Medical College of Wisconsin
 Task Force on MCW –MU Interaction in Research
 Chair-Anesthesiology Visiting Professor Program
 Organizer and Coordinator – Mitochondrial Interest Research Group
 Organizer and Coordinator – Residents Research Awareness Committee
 Grant reviewer – Clinical and Translational Sciences Institute
 Chair, Task Force on Research Data Security, MCW Office of Research
 Member, Honors in Research Committee, MCW Office of Research

PRIOR AND CURRENT EXTRACURRICULAR PROFESSIONAL ACTIVITIES:

- Educational Consultant, Abbott Laboratories. Development and introduction of sevoflurane to the anesthesiology community.
- Developmental Consultant, Lifeblood Medical, Inc. Development of a blood substitute for long-term preservation of hearts for transplantation.

- Medical Supervisor, Scientific Advisor, and Board Member, Cytometix, Inc. Development and testing of a novel non-narcotic pain therapeutic for intravenous anesthesia and oral pain relief. Guidance of drug through animal studies and on through phase 2 clinical trials (current).

PRIOR TEACHING:

- Outstanding Medical Student Educator
- General Medical Pharmacology 201 (8 credits); General Anesthetics - 2 hours
- Introduction to Anesthesiology - Anesthetic Actions, medical student rotation
- Academic Lecture Course in Anesthesiology for Residents and Staff
- General Human Physiology 202 (8 credits); Cardiovascular System, Body Fluid Regulation, Neonatal and Aging Physiology - 2 hours; 70 hours); Director - Stress and Exercise Laboratory
- Cardiovascular Physiology 263. (3 credits) Course Director
- Scientific Communication 289. (2 credits) Course Co-director
- Nursing Pathophysiology 25. (3 credits) Lecturer in Circulation
- Continuing and Allied Health - Extramural semester course. "Physiology Underlying Aging Process."
- School of Nursing, University of Wisconsin - Milwaukee. "Theories of Aging." Extramural semester course
- Human Physiology Laboratory 173. Semester course. Departments of Biology and Allied Health, Marquette University.

PRIOR AND CURRENT PRE- AND POST DOCTORAL SUPERVISION:

Major Advisor:

Allen E. Beranek	M.S. (1981) in Physiology
Enis Novalija, M.D.	M.S. (1999) in Physiology
Mathias L. Riess, M.D.	Ph.D. (2004) in Physiology
Andre Heinen, M.D.	Ph.D. (2008) Anesthesiology Research (University of Amsterdam)

Co-Major Advisor:

Samhita S. Rhodes	Ph.D. (2003) Biomedical Engineering (Marquette University)
Enis Novalija, M.D.	Ph.D. (2006) Physiology

Associate Advisor:

Thomas J. Ebert	M.S. (1978); Ph.D.(1980) in Physiology
Carol J. Porth	M.S. (1976); Ph.D.(1980) in Physiology
Amanda Potocky	M.S. (2002) Biomedical Engineering (Marquette University)
Angela Thomlinson	M.S. (2005) Biomedical Engineering (Marquette University)

Guidance Committee member:

Stanley Jolly	Ph.D. (1980) in Pharmacology
Randy Khulman	Ph.D. (1981) in Anatomy
Michael J. Burke	M.S. (1981) in Physiology
Abas Abdoli	Ph.D. (2014) in Mechanical Engineering (Florida International University)
Jennifer Tinklenberg	Ph.D. (2022 pending)

Post-doctoral trainees:

Jure Marijic, M.D.	1986-1990	Jianzhong An, M.D.	1997-2000
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Rosemary Rooney, M.D.	1988-1989	S. Gopu Varadarajan, MD	1997-2001
Lori Gallenberg, Ph.D.	1987-1988	Amadou KS Camara, Ph.D.	1999-2001
Nediljka Buljubasic, M.D.	1989-1992	Qun Chen, M.D.	2000-2002
Mladen Boban, M.D.	1989-1992	Matthias Riess, M.D.	2000-2004
Bernhard Graf, M.D.	1992-1995	Leo Kevin, M.D.	2001-2003
Wally O'Brien, M.D.	1993-1994	Samhita S Rhodes, Ph.D.	2003-2007
Helmut Habazettl, M.D.	1993-1994	Andre Heinen, M.D.	2004-2006
Milan Jordan, M.D.	1993-1994	Mohammed Aldakkak, M.D.	2003-2008
Satoshi Fujita, M.D.	1994-1996	Johan Haumann, M.D.	2006-2009
Enis Novalija, M.D.	1994-2004	Age Bolens, M.D.	2009-2011
Christoph Blomeyer, M.D.	2010-2013	Bhwanna Agarwal, Ph.D.	2009-2015
Jason Bazil, Ph.D.	2010-2016		

Medical Student NIH or FAER Research Program mentor:

John M. Kampine	1985	Taft Parsons	1996-1998
Sean Monroe	1987	Colin Goggins	2000-2001
David Chang	1992	Jeffery Fitzgerald	2002-2002
Jolene Andryk	1992	Joe McCormick	2002-2003
Forrest Moore	1993	Peter Katz	2002-2003 (Honors)
Chris Knop	1993	Matt Vernon	2005-2006
Wynda Chung	1995	Jeff Young	2006-2007
Richard Paulsen	1995-98 (Honors)	Maria Herrera	2007-2008
Tim Tricheler	2008	Juan Vega	2007-2008
Cory Hartman	2008	David Nielsen	2010-2012
Andrew Wuenstel	2011-14 (Honors)	Daniel Lindsey	2012-2014 (Honors)
Wei Hao Zheng	2013-2017	Ryan Lubbe	2013-2015
Floyd Rose	2014-2016	Michael Boswell	2015-2017
Harry Gertes	2015-17 (Honors)	Christopher Navarro	2016-2018
Ariea Davini	2016-19 (Honors)	Mark Goss	2017-2019 (Honors)
Nana YA Kwansa	2017-2018	David Lambert	2017-2021
Kareem Malas	2018-2022 (Honors)		

Undergraduate Student Summer Research Program mentor:

Joe Peterson	1991	Becky Bartley	2000
Mike Felt	1991	Sarah Labbs	2001
Susan Lawrence	1992	Ebenezer Addisu	2002
Mark Polewski	1996-1998	Hang Pham	2003
Bethany Cramer	1997	Anish Patel	2004
Craig Weber	1998	Rick Carlson	2004-2005
Chris Johnson	2005-2007	Scott Boyken	2005
Joe McCormick	2003	Jeff Fitzgerald	2002
Marisha Spence	2006	Emmanuel Ofungwu	2008
Linda Thomas	2010	Itohan Otasowie	2011
Andrew Steinfeldt	2013	Andrew Sobczak	2017
Saurabh Dhole	2018		

PRIOR GRANTS and CONTRACTS:

- Institutional General Research Support Grant- "Local Regulation of Coronary Flow by Chemicals." D.F. Stowe - Principal Investigator
- National Heart, Lung and Blood Institute, Young Investigator Research Award "Intrinsic Regulation of Coronary Blood Flow by Chemicals." D.F. Stowe - Principal Investigator
- Veterans Administration Central Office- "Use of Stress Tests for Evaluation of Coronary Artery Disease." Associate Investigator. (J.J. Smith - Principal Investigator)

- National Science Foundation- "Purchase of O₂ Content Analyzer." D.F. Stowe - Principal Investigator (W.J. Stekiel and J.H. Lombard, Collaborating Investigators)
- American Heart Association, Wisconsin Affiliate Sponsor- "Control of Coronary Flow by Adenosine During Work and Hypoxia." Allen E. Beranek - Recipient, (D.F. Stowe - Sponsor)
- Veterans Administration Central Office- "Clinical Application of Impedance Cardiology." Associate Investigator (J.J. Smith - Principal Investigator)
- American Heart Association, Wisconsin Affiliate-Grant-in-aid- "Role of endogenous adenosine in modulating cardiac function and intracardiac conduction during histamine release." D.F. Stowe - Principal Investigator (25% effort)
- American Heart Association of Wisconsin- "Preservation of cardiac function after 24 hours of hypothermic perfusion with diacetyl monoxime." D.F. Stowe - Principal Investigator (25% effort).
- Janssen Pharmaceutical Foundation- "Epidural narcotics for urological procedures." D.F. Stowe - Principal Investigator. (10% effort).
- NIH HL34708 - "Interaction between anesthetics and calcium antagonists." Z.J. Bosnjak - Principal Investigator; D.F. Stowe - Co-Investigator (25% effort).
- National Institutes of Health - First Award "Crystal growth inhibitory activity in human cerebrospinal fluid." Elaine Worcester, M.D. - Principal Investigator. D.F. Stowe - Associate Investigator
- NIH NIGMS - Anesthesiology Research Training Grant, Institutional National Research Service Award. D.C. Warltier - Principal Investigator; - D.F. Stowe - Participating Faculty (5% effort).
- Veterans Administration - Merit Review Award "Cardiac and coronary preservation following prolonged hypothermic perfusion." D.F. Stowe - Principal Investigator (25% effort).
- American Heart Association of Wisconsin - "Stereoisomeric effects of anesthetics on cardiac tissues." Bernhard M. Graf, M.D. and Satoshi Fujita MD, PhD - fellowship awardees; D.F. Stowe - Mentor.
- E. Merck and Co- "Protection of isolated hearts by bimakalim during reperfusion after long term hypothermic preservation." D.F. Stowe - Principal Investigator (20% effort)
- American Heart Association of Wisconsin- "The roles of calcium overload, efflux and influx pathways in stunned myocardium." Co-investigator (5% effort) (Steven C. Smart (PI) -
- American Heart Association of Wisconsin - "Protection against coronary microvascular injury and cardiac dysfunction after long term hypothermic preservation" D.F. Stowe - Principal Investigator (25% effort)
- E. Merck and Co.- "Mechanism of protection by K_{ATP} openers in isolated hearts during reperfusion after long term hypothermic preservation." D.F. Stowe - Principal Investigator (20% effort)
- Abbott Laboratories - "Cardioprotective effects of volatile anesthetics." D.F. Stowe - Principal Investigator (15% effort).
- Medical College of Wisconsin Research Affairs Committee- "Effects of hypothermia on myocardial Ca²⁺ handling." D. F. Stowe - Principal Investigator (5% effort).
- NIH NIGMS (T32 GM 08377) - Anesthesiology Research Training Grant, Institutional National Research Service Award. D.C. Warltier - Principal Investigator; - D.F. Stowe - Participating Faculty (5% effort).
- E. Merck and Co. - "Mechanisms of protection by sodium-hydrogen exchange inhibition during severe hypothermia." D.F. Stowe - Principal Investigator (10% effort).
- American Heart Association -Heartland Affiliate- "Do mitochondrial and sarcolemmal K_{ATP} channels mediate anesthetic preconditioning?" Enis Novalija - Fellowship Applicant, D. F. Stowe, Sponsor.
- American Heart Association -Heartland Affiliate. "The role of the mitochondrial K_{ATP} channel in the preservation of mitochondrial function in ischemic preconditioning." J.T. Eells, Principal Investigator, -D.F. Stowe -Co-Investigator (10% effort)
- NIH-RO1-HL58691-01 - "Myocardial calcium handling during and after hypothermia." D.F. Stowe - Principal Investigator (40% effort)

- NIH-RO1-HL58691-01A2 - "Myocardial calcium handling during and after hypothermia." Minority Investigator Research Supplement. Amadou KS Camara, Recipient, D.F. Stowe - Principal Investigator (40% effort)
- NIH NIA-B R03 PAR-02-049 - Myocardial protection in the aging rat heart." D.F. Stowe – Principal Investigator (10% effort)
- American Heart Association -Heartland Affiliate - "Cardiac ischemic preconditioning against cold storage: K_{ATP} channel, sarcoplasmic reticulum and small heat shock protein." J.Z. An, Principal Investigator, -D.F. Stowe -Co-Investigator (10% effort).
- American Heart Association -Heartland Affiliate-"Ischemic preconditioning: Role in metabolic sparing." E. Novalija, Principal Investigator, -D.F. Stowe -Co-Investigator (10% effort).
- American Heart Association -Heartland Affiliate – "Role of mitochondrial bioenergetics in hypothermia-induced cardioprotection: Ca²⁺, NADH and membrane potential." D.F. Stowe – Principal Investigator
- NIH NIGMS (T32 GM 08377) - Anesthesiology Research Training Grant, Institutional National Research Service Award. D.C. Warltier - Principal Investigator; - D.F. Stowe - Participating Faculty (5% effort).
- American Heart Association –Greater Midwest Affiliate - "Calcium-contraction coupling and mitochondrial bioenergetics in the aged rat heart: Influence of ischemia and inotropic interventions" Samhita S. Rhodes, Postdoctoral Fellow, -D.F. Stowe –Mentor
- Foundation for Anesthesia Education and Research – "Anesthetic preconditioning – Novel role of cardiac mitochondrial Ca²⁺ -activated K channels." S.G. Varadarajan – Principal Investigator – D.F. Stowe – Mentor
- Lifeblood Medical, Inc. - "Long-term preservation of hearts" D.F. Stowe –Principal Investigator
- NIH K01 HL-073246 - "Na/H exchanger and cardiac hypothermia: Role of ROS."- A.K.S. Camara – Principal Investigator, -D.F. Stowe – Co Investigator (5 % effort)
- AHA 0855940G – Grant-in-Aid - "Impact of trans-matrix cation flux on mitochondrial energetics: Role of cation channels and exchangers"- D.F. Stowe – Principal Investigator (10% effort).
- AHA 0735325N– Scientist Development Grant- "Myogenic mechanism for changes in heart rate variability in denervated hearts after ischemia reperfusion injury" Samhita S. Rhodes – Principal Investigator, -David F. Stowe Mentor and Co-Investigator (10% effort).
- AHA – Scientist Development Grant- "Computational modeling of mitochondrial energetics"- R. Dash– Principal Investigator; David F. Stowe – Co-Investigator (5% effort).
- VA Merit Grant 8204-05P- "Temperature dependent free radicals reduce cold cardiac protection"- D.F. Stowe – Principal Investigator (40% effort).
- NIH R01 HL094317 - "Mechanism of metabolic dysfunction in heart disease." – Dan H. Beard – Principal Investigator, - D.F. Stowe – Co Investigator (5% effort)
- 2P01 GM066730 - "Anesthetic –induced cardiac preconditioning"- Z.J. Bosnjak –Program Director, -D.F. Stowe –Co Investigator (5% effort)
- R01 HL089514 - "Ca -sensitive K⁺ channel –induced superoxide and cardiac protection"- D.F. Stowe – Principal Investigator (40% effort).
- NIH R01 HL095122- "Cations and ROS in modulating mitochondrial function in normal and ischemic heart."- A.K.S. Camara and R.K. Dash - Co-Principal Investigators; – D.F. Stowe – Co Investigator (5 % effort)
- Microbiotix Pharmaceutical Company- "Assessment of spectinomides on neuromuscular activity." D.F. Stowe - Principal Investigator (5% effort)
- VA Career Development Grant - "Genetic mechanisms of resistance against cardiac preconditioning" – M.L. Riess – Principal Investigator (40% effort); – D.F. Stowe Mentor and Co-Investigator (10% effort)
- 1K99HL121160-01- "Mechanistic characterization of calcium and ROS induced mitochondrial dysfunction" – J. Bazil -Principal Investigator: D.F. Stowe, co-mentor (5% effort)
- VA Merit Grant BX002539-01- "Differential cardioprotection by mitochondria Ca²⁺ sensitive potassium channels." D.F. Stowe - Principal Investigator - (20 % effort)
- 1R01 HL131673-01A1 - "Transformation of Mitochondrial VDAC1 between Protective and Lethal States." A.K.S. Camara and W.M. Kwok (Co-Principal Investigators) D.F. Stowe – Consultant

CURRENT GRANTS AND CONTRACTS):

- NIH 5T35 HL072483-34 “Diversity summer health research education program”
This is a training program for medical students to conduct summer research and to attain the “Honors with Distinction” in association with the awarding of the MD degree. D.F. Stowe – Faculty mentor

PENDING GRANTS AND CONTRACTS

- NIH NIDA; PA19-056; 1 R01 DA052336-01- “Identification of supra-spinal neuronal receptors as targets for agonists to suppress ascending pain transmission without addiction potential.” The aim of this proposal is to identify and validate novel pain targets in the midbrain that are anti-nociceptive and non-addictive.
D.F. Stowe – PD/Co-PI (40% effort); JR Falck – CoPI

PUBLICATIONS not found in MyNCBIBOOK CHAPTERS:

1. Stowe DF: Chapter 31: Excitation--contraction uncoupling and vasodilators for long-term cold preservation of isolated hearts *in Advances in Pharmacology* 1994; pp. 39-61. Edited by Bosnjak ZJ. [Book Chapter]
2. Stowe DF. Serotonin -agonists, antagonists, and reuptake inhibitors. *in: Essence of Anesthesia Practice*. 1st ed. 1997; pp. 544. Edited by Roizen MF, Fleisher LA. Saunders, Philadelphia, PA. [Book Chapter]
3. Novalija E, Stowe DF: Prior preconditioning by ischemia or sevoflurane improves cardiac work per oxygen use in isolated guinea pig hearts after global ischemia *in Oxygen Transport to Tissue XX*. Chapter 64; pp. 533-542. Edited by Hudetz and Bruley, Plenum Press, New York, 1998. [Book Chapter]
4. Stowe DF. Serotonin -agonists, antagonists, and reuptake inhibitors. *in: Essence of Anesthesia Practice*. 2nd ed. 2002; pp. 561. Edited by Roizen MF, Fleisher LA. Saunders, Philadelphia, PA. [Book Chapter]
5. Stowe DF: Chapter 41: Cardiovascular Pharmacology *in Foundations of Anesthesia: Basic Sciences for Clinical Practice*. 2nd ed. 2006; pp. 499-509. Edited by Hemmings HC Jr, Hopkins PM, Mosby-Elsevier Limited. [Book Chapter]
6. Stowe DF, Camara AKS, Heisner JS, Aldakkak M, Harder, DR: 20 h Preservation of Guinea Pig Isolated Hearts Perfused at Low Flow with Air –saturated Lifer Solution at 26°C *in Recent Advances in Cardiovascular Disease – Proceedings of the 13th World Congress on Heart Disease*. 2008; pp. 445-450. Edited by Kimchi A, Medimond International Proc, Bologna. [Book Chapter]
7. Kampine JP, Stowe DF, Pagel PS: Chapter 10: Heart and Peripheral Circulation *in Clinical Anesthesia*. 6th ed. 2009; pp. 207-232. Edited by Barash P, Cullen B, Stoelting R, Cahalan M, Stock C., Lippincott Williams & Wilkins, Philadelphia. [Unabridged Book Chapter]
8. Kampine JP, Stowe DF, Pagel PS: Chapter 10: Heart and Peripheral Circulation *in Handbook of Clinical Anesthesia*. 6th ed. 2009; pp. 94-111. Edited by Barash P, Cullen B, Stoelting R, Cahalan M, Stock C., Lippincott Williams & Wilkins, Philadelphia. [Abridged Book Chapter]
9. Stowe DF. Serotonin -agonists, antagonists, and reuptake inhibitors. *in: Essence of Anesthesia Practice*. 3rd ed. 2010; p. 641. Edited by Roizen MF, Fleisher LA. Saunders, Philadelphia, PA. [Book Chapter]
10. Stowe DF, Ebert TE: Chapter 40: Essential Drugs in Anesthetic Practice: Sympathomimetic and Sympatholytic Drugs *in Anesthetic Pharmacology, Physiologic Principles and Clinical Practice*. 2nd ed. 2011. pp. 648-665. Edited by Evers A, Maze M, Kharasch E, Cambridge University Press, Cambridge. [Book Chapter]

11. Camara AKS, Aldakkak M, Stowe DF. "Mitochondria as potential therapeutic targets in mitochondrial-related diseases". *in Mitochondria: Structure, Function, and Dysfunction*. 2011. pp. 471-552. Edited by Svensson OL, Cell Biology Research Progress Series, Nova Science Publishers [Book Chapter]
12. Pagel PS, Kampine JP, Stowe DF: Chapter 10: Cardiac Anatomy and Physiology *in Clinical Anesthesia*. 7th ed. 2013; pp. 239-262. Edited by Barash P, Cullen B, Stoelting R, Cahalan M, Stock C, Ortega R. Lippincott Williams & Wilkins, Philadelphia. [Unabridged Book Chapter]
13. Pagel PS, Kampine JP, Stowe DF: Chapter 10: Cardiac Anatomy and Physiology *in Handbook of Clinical Anesthesia*. 7th ed. 2013; pp. 99-111. Edited by Barash P, Cullen B, Stoelting R, Cahalan M, Stock C, Ortega R. Lippincott Williams & Wilkins, Philadelphia. [Abridged Book Chapter]
14. Camara AKS, Stowe DF: Chapter 75: Reactive Oxygen Species (ROS) and Cardiac Ischemia and Reperfusion Injury *in Systems Biology of Free Radicals and Antioxidants*. 2014; pp. 889-949. Edited by Laher I. Springer-Verlag, Berlin [Book Chapter].
15. Pagel PS, Stowe DF: Chapter 12. Cardiac Anatomy and Physiology *in Clinical Anesthesia*. 8th ed. 2017; pp 277-300. Edited by Barash P, Cullen B, Stoelting R, Cahalan M, Stock C, Ortega R. Lippincott Williams & Wilkins, Philadelphia. [Unabridged Book Chapter]
16. Stowe DF. Serotonin -agonists, antagonists, and reuptake inhibitors. *in: Essence of Anesthesia Practice*. 4th^d ed. 2018; p. 498. Edited by Roizen MF, Fleisher LA. Saunders, Philadelphia, PA.; 600 pages [Book Chapter]

RESEARCH REVIEW ARTICLES:

1. Ebert, TJ, Stowe DF: Peripheral Circulation: Recent insights on autonomic control and endothelial factors relevant to cardiovascular disease and anesthesia. *Current Opinions in Anesthesiology* 4:3-11, 1991. [Review]
2. Ebert TE, Stowe DF: Neural and endothelial control of the peripheral circulation: Implications for anesthesia: Part I: Neural control the peripheral vasculature. *J Cardiovasc Anesthesiol* 10:147-158, 1996. [Review]
3. Stowe DF, Ebert TE: Neural and endothelial control of the peripheral circulation: Implications for anesthesia: Part II. Endothelium mediated effects in the normal and diseased circulation. *J Cardiovasc Anesthesiol* 10:159-171, 1996. [Review]
4. Stowe DF, Kevin LG: Cardiac preconditioning by volatile anesthetic agents: A defining role for altered mitochondrial bioenergetics. *Antiox Redox Signal* 6:439-448, 2004. [Review]
5. Riess ML, Stowe DF, Warltier DC: Cardiac pharmacologic preconditioning: from bench to bedside? *Am J Physiol Heart Circ Physiol* 286:H1603-07, 2004. [Review]
6. deHert S, Turani F, Mathur S, Stowe DF: Cardioprotection with volatile anesthetics – mechanism and clinical implications. *Anesth Analg* 100:1584-93, 2005. [Review]
7. Kevin LG, Novalija E, Stowe DF: Reactive oxygen species as mediators of cardiac injury and protection: relevance to anesthesia. *Anesth Analg* 101:1275-1287, 2005. [Review]
8. Chen Q, Camara AKS, Stowe DF, Hoppel CL, Lesnefsky EJ: Modulation of electron transport protects cardiac mitochondria and decreases myocardial injury during ischemia and reperfusion. *Am J Physiol Cell Physiol* 292:C137-47, 2007. [Review]
9. Stowe DF, Camara AKS: Mitochondrial reactive oxygen species production in excitable cells: Modulators of mitochondrial and cell function. *Antioxid Redox Signal* 11:1373-1414, 2009. PMID: PMC2842133 [Comprehensive Invited Review]
10. Camara AKS, Lesnefsky EJ, Stowe DF: Potential therapeutic benefits of strategies directed to mitochondria *Antioxid Redox Signal* 13:279-347, 2010. PMID: PMC2936955 [Comprehensive Invited Review]
11. Camara AKS, Bienengraeber M, Stowe DF: Mitochondrial approaches to protect against cardiac ischemia and reperfusion injury. *Front Physiol* 2: 13, 2011. PMID: PMC3082167 [Comprehensive Review]
12. Camara AKS, Aldakkak M, Bienengraeber M, Stowe DF: Cardioprotection by pre- and post-conditioning: implications for the role of mitochondria. *Acta Anesth Croatica* 8:7-18, 2011. [Review]

13. Agarwal B, Stowe DF, Dash, RK, Bosnjak ZJ, Camara AKS: Mitochondrial targets for volatile anesthetics against cardiac ischemia-reperfusion. *Front Mitochondrial Physiol* 5:341;1-17, 2014. [Comprehensive Review]

CLINICAL REVIEW ARTICLES:

1. Aldakkak M, Stowe DF, Camara AKS: Safety and efficacy of ranolazine for the treatment of chronic angina pectoris. *Clin Med Insights: Therapeutics* 5:1-14, 2012. [Clinical Review]
2. Munim M, Iqbal Z, Stowe DF. Risks of methadone use as substitute therapy for opioid addiction during pregnancy and use of clonidine as a plausible alternative. *J Addiction Med Therap Sci* 2:0-5, 2016 [short review].
3. Heerdt PM, Stowe DF. Single-lung ventilation and oxidative stress: a different perspective on a common practice. *Curr Opin Anesthesiol* 30:42-49, 2017.

EDITORIALS AND LETTERS:

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ABSTRACTS (427 available on request)

EXTRAMURAL PRESENTATIONS; SCIENTIFIC/MEDICAL (104 available on request)

LECTURE INVITATIONS, WORKSHOPS (93 available on request)