

**G. Paul Matherne, Jr., MD, MBA**  
**Professor of Practice Darden School of Business**  
**Professor Emeritus UVA School of medicine**  
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***Personal***

Born: October 30, 1958  
 Family: Married. Linda A. Matherne

***Address***

Home: 4255 Redwood Lane.  
 Earlysville VA 22936

***Education***

Texas A&M University	B.S.	1980
Texas A&M College of Medicine	M.D.	1982
Darden School of Business	MBA	2010

***Post-Graduate Training***

Pediatric Residency University of Oklahoma	1982-1985
Pediatric Cardiology Fellow University of Iowa Hospitals and Clinics, Iowa	1985-1988
Postdoctoral Training, Department of Pediatrics University of Iowa, Laboratory of Dr. John Robillard	1986-1988
J. Francis Dammann Endowed Professor of Pediatrics University of Virginia, School of Medicine	2006 - 2022
Adjunct Professor Darden School of Business University of Virginia,	2015-2022

***Current Academic and Faculty Appointments***

J. Francis Dammann Professor Emeritus of Pediatrics University of Virginia, School of Medicine	2022 - present
Professor of Practice Darden School of Business University of Virginia,	2023 - present

***Past Academic and Faculty Appointments***

Interim Senior Associate Dean for Clinical Affairs	Jan – July 2020
Interim Chief medical Officer UVA Health System	Nov 2019 – April 2020
Service Line Lead Womens and Children’s	2017-2019
Vice Chair of Pediatrics for Clinical Affairs	2013-2018
Associate Chief Medical Officer Childrens Hospital	2013-2017
Vice Chair of Pediatrics for Clinical Strategy and Program Development	2011- 2013
Professor, Department of Pediatrics UVA SOM	2001- 2006
Division Head, Pediatric Cardiology	2003 – 2012
Medical Director, Virginia Children’s Heart Center	1999 – 2001; 2003 - 2012
Associate Chair for Research Department of Pediatrics	2001 -2010
Director, Pediatric Cardiology Training Program	2004 -2008
Associate Professor, Department of Pediatrics UVA SOM	1994-2001
Director, Pediatric Echocardiography Lab	2004 -2008
Assistant Professor, Department of Pediatrics UVA SOM	1988-1994
Fellow Associate, Department of Pediatrics U Iowa	1987-1988

***Honors***

Outstanding Teaching Resident Department of Pediatrics	1984 & 1985
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Clinical Investigator Award National Heart, Lung and Blood Institute	1990
Research Career Enhancement Award American Physiological Society	1997
Established Investigator Award American Heart Association	1998
Independent Scientist Award National Heart, Lung and Blood Institute	2001
Department of Pediatrics Award for Clinical Excellence	2005
UVA CH Career Enhancement Award	2006
Darden MBA for Executives Management Development Award (25% Scholarship)	2008
Darden MBA Award for Academic Excellence (top 10%)	2010
Darden MBA for Executives Top Student Award	2010
AHA CVDY Distinguished Achievement Award	2018
<b>Other Professional honors</b>	
Best Doctors in America®	2009-2023
<b>Other Professional Training</b>	
UVA SOM Leadership in Academic Medicine	2006
Leadership Development for Physicians in Academic Health Centers Harvard Univ., School of Public Health	2003
<b>Certification</b>	
Federal Licensure Examination (FLEX)	1982
American Board of Pediatrics	1986
American Board of Pediatrics Cardiology Sub board	1988, 1995, 2002, 2012
<b>Licensure</b> Virginia Medical License No. 0101042125 -- Issued	April 11, 1988
<b>Professional Organizations</b>	
American Heart Association Member	1985-2023
American Academy of Pediatrics Fellow	1988-2019
American Academy of Pediatrics, Section of Cardiology Member	1990-2019
American Physiological Society Member	1990 - 2007
American College of Cardiology Fellow	1990-2019
Society of Pediatric Research Member	1993- 2012
American Physiological Society, Cardiovascular Section Fellow	1995 - 2007
American Heart Association Fellow	2003
American Pediatrics Society	2005- 2012

## **Service**

### **Department Committees**

Chair, Children's Hospital Research Advisory Committee	2001-2010
Member, Pediatric Administrative Council	2001-2010
Member, Pediatric Finance Committee	2007-2010
Member, Pediatric Billing Quality Team	2007
Member, Pediatric Basic Research Advisory Committee	1991-1997
Bereavement Task Force, Housestaff Education Committee	1992-1996
Pediatric Housestaff, Curriculum Committee	1993-1998
Chair, Basic Research Advisory Committee	1993-1997
Member, Department of Tenure & Promotion Committee	1996-2000
Associate Director, CHRC Grant	2001-2002
Chair, Neonatology Division Head Search Committee	2005
Member Department P&T committee	2022-2024

### **University/Hospital Services**

Member, SOM's New Hires Committee	2019-2020
Member, SOM Tenure & Promotion Committee	2015-2018
Member of Patient care Committee	2012-2020
Co-Chair, Children's Hospital practice Committee	2010, 2013-2019
Member Strategic Business Development committee	2012-2016
Member, UPG Managed Care Sub Committee	2004-2016
Member Buchanan Endowment Committee	2009- 2015
SOM representative, Commonwealth of Virginia Campaign	2011-2013
Member UVA Center for Tele-Health Advisory Board	2011-2014
Member of the Health System Compliance Steering Committee	2010-2014
Member UPG Advisory Committee on Contracting	2003-2014
Member Cardiovascular Center of Excellence Planning group	2012-2013
Member, SAMMIC Oversight Committee	2001-2003
Member Market Strategy Committee	2010-2012
Member, Children's Hospital Leadership Committee	2008-2010
Member, HSF Southern Health Contracting Committee	2005
Member of the Health System patient care Committee	2008-2010,
Coordinator Cardiovascular Center Seminar Series	1998-2001
Member, CVRC Building Planning Committee	1997-2001
Member, Lab Utilization Review Committee	1996-1998

### **State Committees**

Chair, Virginia AAP Hospital Care Committee	1997-1998
Member, Peer Review Subcommittee -- AHA Virginia Affiliate	1996-1997
Member, Governor's Task force on CCHD Screening	2012
Critical Congenital Heart Disease Regulatory Workgroup VDH	2014

### **National Committees/Boards**

<i>NETCCN Advisory Board (Deloitte)</i>	2020-2022
Member, Eastern States Nominating Committee	2021
Director, AHA Eastern Region	2019-2020
Co-Chair AHA Eastern Region Nominating committee	2019-2020
Member SFRN Oversight Advisory Committee	2017-1019
Member, AHA Portfolio Management Subcommittee	2016-2019
Member AHA Council Operations Committee	2013-2019
Director, AHA Mid-Atlantic Affiliate Board of Directors	2012-2019
Member AHA Budget review committee	2012-2017

Co-Chair, ACC ACPC Advocacy Work Group Chair	2011-2017
President, AHA Mid-Atlantic Affiliate Board of Directors	2015-2017
Member, AHA Leadership Committee CVDY	2001-2016
Advocacy Ambassador AHA for CVDY Leadership Committee	2012-2016
Member CHPHC Consortium Public Policy Committee	2011-2014
Member, AHA Committee on Congenital Heart Defects CVDY	1999-2012
Chair, AHA CVDY Nominations committee	2010 – 2012
Chair, AHA CVDY Council	2008 - 2010
Vice-Chair, AHA CVDY Council;	2005– 2008
Member AHA Manuscript Oversight Committee (MOC)	2008 - 2010
Member AHA Science Advisory and Coordinating Committee	2008 - 2010
Chair, AHA Committee on Congenital Heart Defects/CVDY	2005 - 2008
Member, AHA CVDY Communications Committee	2003 - 2007
Member, AHA CVDY Mentoring Committee	2004 - 2007
Member, Medical Advisory Board -- Children's Heart Foundation	1998-2003

### **Editorial Boards**

American Journal of Physiology: Heart & Circulatory	1999-2005
Newsletter Editor AHA CVDY Newsletter	2001-2005

### **Journal Reviewer- multiple journals including**

Circulation; Cardiovascular Research; Journal of Molecular and Cellular Cardiology; Journal of Pediatrics, American Journal of Physiology; Circulation Research; JAAC,

### **Grant Reviewer**

Chair, Protocol Review Committee PHN	2018-2019
Reviewer, NIH Special Study Section T32 and R13 proposals	2013
Reviewer, NIH Special Study Section PHN	1993, 2011, 2016
Member, Protocol Review Committee PHN	2001- 2019
Reviewer, NIH Special Study Section T32	2004, 2013
Reviewer, NIH Special Study Section for PPG	2001, 2005
Co-Chair, AHA SFRN Clinical Study Review	2017
Reviewer, AHA SFRN Center Review	2017

### **Chaired Sessions**

AHA/ABP MOC review session	2011, 2012
AHA Awards session	November, 2008-11
AHA Poster symposia on Fontan Circulation	November 5, 2007
AAP Section on Cardiology Session Chair	October 31, 1993
SPR Cardiology Session Chair	May 3, 1998
SPR Cardiology Session Chair	January 31, 1991

### **Community Boards/Service**

President Albemarle Foundation for Education	2022-present
Advisory Board Bennet's Village	2021- present
The Center (formerly the Senior Center) Board of directors	2021- 2023
Member, Albemarle Co. Schools, Budget oversight	2019-present
Special Hope Network Board of Directors	2012-2020
Camp Holiday Trail Board Member	2009-2013
Member, Long Range Planning Cmtee, Albemarle Co. Schools	2004-2006
Member, Redistricting Cmtee, Albemarle Co. Schools	2004-2005
Assistant Scout Master	1997-2001

## ***Business Teaching***

### **FY 12**

- Darden Health Care management course 8030 Spring 2012

### **FY13**

- Darden Health Care management course 8030 Spring 2013
- Business of Health Care in DxRx- one half day session Spring 2013
- *Sponsor DBCP Global eMBA* Spring 2013
- *Sponsor Summer DBCP full time MBA* Summer 2013

### **FY14**

- Darden Health Care management course 8030 Spring 2014
- Business of Health Care in DxRx- one half day session Spring 2014

### **FY15**

- Darden Health Care management course 8030 Fall 2014
- Business of Health Care in DxRx- one half day session Spring 2015

### **FY16**

- Darden Health Care management course 8030 Fall 2015

### **FY17**

- Darden Health Care management course 8030 Fall 2016
- Darden Health Care management course part II 8500c Winter 2017
- SOM 4<sup>th</sup> year elective Health Care systems 90t (3421) Winter 2017
- Guest lecturer UNC Kenan Flager- Medical Operations Spring 2017

### **FY18**

- Darden Health Care management course 8030 Fall 2017
- Darden Nonprofit management course Fall 2017
- Darden Health Care management course part II 8500c Winter 2018
- SOM 4<sup>th</sup> year elective Health Care systems 90t (3421) Winter 2018
- Guest lecturer UNC Kenan Flager- Intro to Medical systems Spring 2018
- Guest lecturer UNC Kenan Flager- Medical Operations Spring 2018
- *Faculty sponsor Darden Independent Study* Spring 2018
- Business of Health Care in DxRx- one half day session Spring 2018

### **FY 19**

- Guest lecturer UNC Kenan Flager- Medical Operations Summer 2018
- GBUS 8030 Challenges in Health Care: A systems overview Fall 2018
- GBUS 8627 Understanding the Nonprofit Sector Fall 2018
- Guest lecturer UNC Kenan Flager- Intro to Medical systems Winter 2019
- eMBA 8030 Challenges in Health Care: A Systems Overview Winter 2019
- GBUS 8500 Solutions and Innovations in Health Care Winter 2019
- *Faculty sponsor Darden Five Independent Studies* Spring 2019
- Guest lecturer UNC Kenan Flager- Medical Operations Spring 2019
- Financial Principles and Business of health SOM elective Spring 2019
- 8530 H: Uganda: Health Care, Entrepreneurship and Development in East Africa

**FY 20**

- GBUS 8030 Challenges in Health Care: A systems overview Fall 2019
- GBUS 8627 Understanding the Nonprofit Sector Fall 2019
- eMBA 8030 Challenges in Health Care: A Systems Overview Winter 2020
- GBUS 8500 Solutions and Innovations in Health Care Winter 2020
- *Faculty sponsor Darden Six Independent Studies* Spring 2020
- Financial Principles and Business of health SOM elective Spring 2020

**FY 21**

- eMBA 7118 EEL Managing in a Pandemic ( 2 sections) Summer 2020
- Guest lecturer UNC Kenan Flager- Intro to Medical systems Summer 2020
- GBUS 7118 EEL Managing in a Pandemic Fall 2020
- GBUS 8030 Challenges in Health Care: A systems overview Fall 2020
- GBUS 8627 Understanding the Nonprofit Sector Fall 2020
- Guest lecturer UNC Kenan Flager MBA 898- Fall 2020
- Guest IU Kelley School of Business MBA Fall 2020
- GBUS 8500 Solutions and Innovations in Health Care Winter 2021
- Guest lecturer UNC Kenan Flager-MBA893 Winter 2021
- Guest lecturer Finan.Principles & Bus. of health SOM elective Winter 2021
- *Faculty sponsor Darden Seven Independent Studies* Spring 2021
- 8500UG Hybrid: Emerging Markets Response to COVID-19 Spring 2021

**FY 22**

- GBUS 8030 Challenges in Health Care: A systems overview Fall 2021
- Guest lecturer UNC Kenan Flager MBA 898- Fall 2021
- GBUS 8627 Understanding the Nonprofit Sector Winter 2022
- GBUS 8500 Solutions and Innovations in Health Care Winter 2022
- Guest lecturer UNC Kenan Flager-MBA893 Winter 2022
- Guest lecturer Finan.Principles & Bus. of health SOM elective Winter 2022
- *Faculty sponsor Darden Seven Independent Studies* Spring 2022

**FY 23**

- GBUS 8030 Challenges in Health Care: A systems overview Fall 2022
- GBUS 8627 Understanding the Nonprofit Sector Winter 2023
- GBUS 8500 Solutions and Innovations in Health Care Winter 2023
- Guest lecturer UNC Kenan Flager-MBA893 Winter 2023
- Guest lecturer Finan.Principles & Bus. of health SOM elective Winter 2023
- *Faculty sponsor Darden Nine Independent Studies* Spring 2023

**On-Line Courses**

- Guest MBA 898 Design and Delivery of Healthcare Systems UNC 2020
- Guest Data Science HarvardX 2020

**IDEAS TO ACTION POSTS**

1. Mission-Focused and Market-Driven: Sustainable Health Care in Haiti BUSINESS, ETHICS & SOCIETY 2019
2. Health Care in the United States: 5 Big Questions on Its Pricey Present, Uncertain Future BUSINESS, ETHICS & SOCIETY 2019
3. The HealthTech Hub Africa: Implementing Digital Strategies BUSINESS, ETHICS & SOCIETY 2023

### ***Business of medicine Talks/conferences***

1. Lifelong Care for Patients with CHD”AAP Webinar Panelist October 22, 2013
2. “RVUs and You” Early Career Session AHA Scientific Sessions Dallas Tx November 16, 2013
3. “ACA and lifelong care for CHD” Quality in ADCHD AHA Scientific Sessions Dallas Tx November 18, 2013
4. “Clinical Scorecards” CHD Breakouts at ACC 2014 CV Summit Las Vegas NV, January 17, 2014
5. Health Reform: Where are we; Where are we going? Senate Health Care Symposium. Panelist. Washington DC, Russel Senate Office Building November 18, 2016
6. US Healthcare System: where does the money go? Physical, Medicine ,and Rehabilitation Department Grand Rounds, . With Ricky Anjorin MPH candidate University of Virginia, Charlottesville VA, July 6, 2017
7. US Healthcare System: where does the money go? Ampel BioSolutions Charlottesville VA. With Ricky Anjorin MPH candidate University of Virginia, Charlottesville VA, August 1, 2017
8. US Healthcare System: where does the money go? Patient-Centered Design Undergrad UVa Lecture, Charlottesville VA. With Ricky Anjorin MPH candidate University of Virginia, Charlottesville VA, November 14, 2017
9. US Healthcare System: where does the money go? UVA SOM Entrepreneurship Club UVa, Charlottesville VA. With Ricky Anjorin MPH candidate University of Virginia, Charlottesville VA, December 8, 2017
10. US Healthcare System: where does the money go? Pediatric grand rounds University of Virginia, Charlottesville VA, March 1, 2018
11. US Healthcare System: where does the money go? Resident lecture Duke University, Durham NC. January 29, 2018
12. US Healthcare System: where does the money go? Children’s medical Center UTSouthweatern, Dallas TX April 12, 2018
13. Africa: Home of the next emerging markets. Panel Discussant- Darden School of Business University of Virginia, Charlottesville VA, February 27, 2019
14. US Health Care System: Why does it cost so much and what do we get? ASPN Lewie Scholar Lecture, Darden Studio, Charlottesville VA March 28, 2019
15. US Health Care System: Why does it cost so much and what do we get? Ochsner Hospital for Children - Grand Rounds April 25, 2019
16. "Managing and Investing in Biotechnology and Health Care" Breakfast Panel Moderator,
17. UVA Darden School of Business, Charlottesville VA. September 26, 2019
18. US Healthcare System: where does the money go? what do we get Pediatrics fellows Conference Charlottesville VA September 2020
19. Speaker UVA Tri-Sector Leadership Program; Managing in a Pandemic, Charlottesville VA October 21, 2020
20. Covid 19 and Health Systems. Dell Medical School Internal Medicine Resident Conference Austin Tx October 30 2020
21. Moderator -*Opportunities in Chinese Healthcare- Asia Business Club at Darden Feb 11, 2021*
22. *High Impact Physician Podcast [High Impact Physician \(buzzsprout.com\)](https://www.buzzsprout.com) March ?? 2021*

***Business cases and case-lets published with Darden Business Publishing***

1. E-0439 High Health Care Premiums in Charlottesville: Who Is to Blame? And What Should Be Done?
2. E-0446 COVID-19 (A): How Did We Get Here and What Do We Do Now?
3. E-0447 COVID-19 (B): "It's Like a War"
4. E-0455 COVID-19 Testing: How Hard Can It Be? (A)
5. E-0456 COVID-19 Testing: How Hard Can It Be? (B)
6. E-0462 Translating Personal Tragedy into Action: Starting the Dr. Lorna Breen Heroes' Foundation
7. E-0462TN Translating Personal Tragedy into Action: Starting the Dr. Lorna Breen Heroes' Foundation (TN)
8. E-0467 Generations of Troubles: Is There Hope?
9. E-0468 Tests and Triumphs in Telemedicine (A)
10. E-0468TN Tests and Triumphs in Telemedicine (A) and (B) (TN)
11. E-0469 Tests and Triumphs in Telemedicine (B): Technology before Its Time or a Savior in a Crisis?
12. E-0486 Marketing Patients' Stories: What Is the Truth? (A)
13. E-0487 Marketing Patients' Stories: What Is the Truth? (B)
14. OM-1611 The Virginia Museum of Fine Arts: A Growth Orientation (A)
15. OM-1611TN The Virginia Museum of Fine Arts: A Growth Orientation (A) and (B) (TN)
16. OM-1612 The Virginia Museum of Fine Arts: A Growth Orientation (B)
17. OM-1669 Trying to Do Good: Whom Do I Please?
18. OM-1670 Back Pain
19. OM-1671 Back Pain: How to Pay for Its Treatment?
20. OM-1672 Spreading HOPE: Building Healthy Outcomes through Patient Engagement
21. OM-1673 Cath Lab Catastrophe: Person or Process Issue?
22. OM-1674 The Electronic Medical Record: Whom Does It Serve?
23. OM-1677 To Make a Difference (A)
24. OM-1678 To Make a Difference (B)
25. OM-1679 Hope for Special Hope? (A)
26. OM-1679TN Hope for Special Hope? (A), (B), and (C) (TN)
27. OM-1680 Hope for Special Hope? (B)
28. OM-1681 Hope for Special Hope? (C)
29. OM-1703 Food Runners (A): Nowhere to Run to
30. OM-1704 Food Runners (B): A New Path?
31. OM-1731 A Partner for Mary Washington: Glide with Cerner or Chart a New Path with Epic (A)
32. OM-1731TN A Partner for Mary Washington: Glide with Cerner or Chart a New Path with Epic (A) and (B)
33. OM-1732 A Partner for Mary Washington: Glide with Cerner or Chart a New Path with Epic (B)
34. OM-1742 Where in the World Should You Get Cancer? (A)



35. OM-1742H Where in the World Should You Get Cancer? (A) (HANDOUT)
36. OM-1743 Where in the World Should You Get Cancer? (B): Lu Yong Epilogue
37. OM-1744 Genetic Testing: Where Is the Real Risk?
38. OM-1755 Lumbar Back Pain: How Can We Provide Value for Patients?
39. OM-1758 Technology, Virtual Health, and the Electronic Medical Record: Whom Does It Serve?
40. OM-1764 Uncertainty in Hospital Supplies? A Cardinal Error (A): Decision-Making as a Crisis Unfolds
41. OM-1764TN Uncertainty in Hospital Supplies? A Cardinal Error (A), (B), (C), and (D) (TN)
42. OM-1765 Uncertainty in Hospital Supplies? A Cardinal Error (B): Decision-Making as a Crisis Unfolds
43. OM-1766 Uncertainty in Hospital Supplies? A Cardinal Error (C): Decision-Making as a Crisis Unfolds
44. OM-1767 Uncertainty in Hospital Supplies? A Cardinal Error (D): Uncertainty in Everything as COVID-19 Arrives
45. OM-1787 Keeping Tiny Babies Safe (A): The Problem
46. OM-1788 Keeping Tiny Babies Safe (B): The Solution
47. QA-0822 Neonatal Care at GHSC (A)
48. QA-0823 Neonatal Care at GHSC (B)
49. QA-0882 Martha Jefferson Hospital: Cloudy Future? (B)
50. QA-0909 BKK: Commercializing a New Drug
51. QA-0909TN BKK: Commercializing a New Drug (TN)
52. QA-0909TNX BKK: Commercializing a New Drug (SPREADSHEET TN)
53. QA-0920 *Rough Seas for ChenMed (A)*
54. QA-0921 *Rough Seas for ChenMed (B)*
55. QA-0920TN *Rough Seas for ChenMed (A) and (B) (TN)*
56. S-0314 When Competition Isn't Enough: Rural Health in Southwest Virginia (A)
57. S-0314TN When Competition Isn't Enough: Rural Health in Southwest Virginia (A), (B), and (C) (TN)
58. S-0315 When Competition Isn't Enough: Rural Health in Southwest Virginia (B)
59. S-0316 When Competition Isn't Enough: Rural Health in Southwest Virginia (C)

### **Peer Review Journal Publications**

1. Matherne GP, Razook JD, Thompson WM, Lane MM, Murray CK, Elkins RC. Senning repair for transposition of the great arteries in the first week of life. *Circulation* 72:840-845, 1985.
2. Matherne P, Matson J, Marks MI. Pertussis complicated by the syndrome of inappropriate antidiuretic hormone secretion. *Clin Ped* 25:46-48, 1986.
3. Matherne GP, Frey EE, Atkins DL, Smith WL. Cine computed tomography for diagnosis of superior vena cava obstruction following the Mustard operation. *Pediatr Radio* 17:246-247, 1987.
4. Nakamura KT, Matherne GP, McWeeny OJ, Smith BA, Robillard JE. Renal hemodynamics and functional changes during transition from fetal to newborn life in sheep. *Pediatr Res* 21:229-234, 1987.
5. Murray D, Vanderwalker G, Matherne GP, Mahoney LT. Pulsed Doppler and two-dimensional echocardiography: comparison of halothane and isoflurane on cardiac function in infants and small children. *Anesthesiology* 67:211-217, 1987.
6. Nakamura KT, Matherne GP, Jose PA, Alden BM, Robillard JE. Ontogeny of renal beta-adrenoceptor mediated vasodilation in sheep: comparison between endogenous catecholamines. *Pediatr Res* 22:465-470, 1987.
7. Nakamura KT, Matherne GP, Jose PA, Alden BM, Robillard JE. Effects of epinephrine on the renal vascular bed of fetal, newborn and adult sheep. *Pediatr Res* 23:181-186, 1988.
8. Matherne GP, Nakamura KT, Robillard JE. Ontogeny of alpha-adrenoceptor responses in renal vascular bed of sheep. *Am J Physiol* 254:R277-R283, 1988.
9. Robillard JE, Nakamura KT, Varille VA, Matherne GP, McWeeny OJ. Plasma and urinary clearance rates of atrial natriuretic factor during ontogeny in sheep. *J Dev Physiol* 10:335-346, 1988.
10. Robillard JE, Nakamura KT, Varille VA, Andresen AA, Matherne GP, Van Orden DE. Ontogeny of the renal response to natriuretic peptide in sheep. *Am J Physiol* 254:F634-F641, 1988.
11. Frey EE, Matherne GP, Mahoney LT, Sato Y, Stanford W, Smith WL. Coronary artery aneurysms due to Kawasaki's disease: Diagnosis with ultrafast CT. *Radiology* 167:725-726, 1988.
12. Robillard JE, Nakamura KT, Matherne GP, Jose PA. Renal hemodynamics and functional adjustments to postnatal life. *Semin Perinatol* 12:143-150, 1988.
13. Nakamura KT, Alden BM, Matherne GP, Jose PA, Robillard JE. Ontogeny of renal hemodynamic response to terbutaline and forskolin in sheep. *J Pharmacol Ex Ther* 247:453-459, 1988.

14. Varille VA, Nakamura KT, McWeeny OJ, Matherne GP, Smith FG, Robillard JE. Renal hemodynamic response to atrial natriuretic factor in fetal and newborn sheep. *Pediatr Res* 25:291-294, 1989.
15. Matherne GP, Nakamura KT, Alden BM, Rusch NJ, Robillard JE. Regional variation of postjunctional alpha-adrenoceptor responses in the developing renal vascular bed of sheep. *Pediatr Res* 25:461-465, 1989.
16. Matherne GP, Headrick JP, Coleman SD, Berne RM. Interstitial transudate purines in normoxic and hypoxic immature and mature rabbit hearts. *Pediatr Res* 28:348-353, 1990.
17. Matherne GP, Headrick JP, Berne RM. Ontogeny of the adenosine response in guinea pig heart and aorta. *Am J Physiol* 259:H1637-1642, 1990.
18. Headrick JP, Matherne GP, Berr SS, Han DC, Berne RM. Metabolic correlates of adenosine formation in stimulated guinea pig heart. *Am J Physiol* 260:H165-H172, 1991.
19. Headrick JP, Matherne GP, Berr SS, Berne RM. Effects of graded perfusion and isovolumic work on epicardial and venous adenosine and cytosolic metabolism. *J Mol Cell Cardiol* 23:309-324, 1991.
20. Headrick JP, Matherne GP, Berne RM. Myocardial adenosine formation during hypoxia: Effects of Ecto-5'-Nucleotidase inhibition. *J Mol Cell Cardiol* 24:295-303, 1992.
21. Northington FS, Matherne GP, Coleman SD, Berne RM. Sciatic nerve stimulation does not increase endogenous adenosine production in hind limb sensory-motor cortex. *J Cereb Blood Flow Metab* 12:835-843, 1992.
22. Northington FS, Matherne GP, Berne RM. Competitive inhibition of nitric oxide synthase prevents the cortical hyperemia associated with peripheral nerve stimulation. *Proc Natl Acad Sci* 89:6649-6652, 1992.
23. Zhu Q, Matherne GP, Curnish RR, Tribble CG, Berne RM. Effect of adenosine deaminase on cardiac interstitial adenosine. *Am J Physiol* 263:H1322-H1326, 1992.
24. Headrick JP, Northington FJ, Hynes MR, Matherne GP, Berne RM. Relative responses to luminal and adventitial adenosine in perfused arteries. *Am J Physiol* 263:H1437-H1446, 1992.
25. Ely SW, Matherne GP, Coleman SD, Berne RM. Inhibition of adenosine metabolism increases myocardial interstitial adenosine concentrations and coronary flow. *J Mol Cell Cardiol* 24:1321-1332, 1992.
26. Headrick JP, Ely SW, Matherne GP, Berne RM. Myocardial adenosine, flow, and metabolism during adenosine antagonism and adrenergic stimulation *Am J Physiol* 264:H61-H70, 1993.
27. Matherne GP, Headrick JP, Ely SW, Coleman SD, Berne RM. Changes in work rate to oxygen consumption ratio during hypoxia and ischemia in immature and mature rabbit hearts. *J Mol Cell Cardiol* 24:1409-1421, 1992.

28. Matherne GP, Headrick JP, Berr SS, Berne RM. Metabolic and functional responses of immature and mature rabbit hearts to hypoperfusion, ischemia and reperfusion. *Am J Physiol* 264:H2141-H2153, 1993.
29. Matherne GP, Girling PW, McDaniel NL. Mechanisms of increased sensitivity to A<sub>2</sub> adenosine receptor stimulation in immature rabbit aortic rings. *Dev Pharmacol Ther* 675 (Vol. 20, No. 3-4):121-128, 1993.
30. Holmes G, Epstein ML, Matherne GP. Maturation differences in coronary flow and interstitial transudate adenosine during alteration of perfusate oxygenation in isolated rabbit hearts. *Comp Biochem Physiol* 110A (4):367-373, 1995.
31. Cothran DL, Lloyd TR, Taylor H, Linden J, Matherne GP. Ontogeny of myocardial A<sub>1</sub> receptors. *Biol Neonate* 68:111-118, 1995.
32. Matherne GP, Berr SS, Headrick JP. Integration of vascular contractile and metabolic responses to hypoxia: effects of maturation and adenosine. *Am J Physiol* 270:R895-R905, 1996.
33. Headrick JP, Emerson CS, Berr SS, Berne RM, Matherne GP. Interstitial adenosine and cellular metabolism during  $\beta$ -adrenergic stimulation of the *in situ* rabbit heart. *Cardiovasc Res* 31:699-710, 1996
34. Matherne GP, Ely SW, Headrick JP. Maturation differences in bioenergetic state and purine formation during "supply" and "demand" ischemia. *J Mol Cell Cardiol* 28:1143-1155, 1996.
35. Matherne GP, Byford AM, Gilrain JT, Dalkin AC: Changes in myocardial A<sub>1</sub> adenosine receptor and message levels during fetal development and postnatal maturation. *Biol Neonate* 70:199-205, 1996.
36. Matherne GP, Linden J, Byford AM, Gauthier NS, Headrick JP. Transgenic adenosine A<sub>1</sub> receptor overexpression increases the resistance of the heart to ischemia. *Proc Natl Acad Sci* 94:6541-6546, 1997.
37. Gauthier NS, Headrick JP, Matherne GP. Myocardial function in the working mouse heart overexpressing cardiac A<sub>1</sub> adenosine receptors. *J Mol Cell Cardiol* 30:193-198, 1998.
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**Abstracts:**

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67. Regan, S, Broad M, Byford A, Mayo M, Matherne GP, Lankford A. Overexpression of A<sub>1</sub> adenosine receptors attenuates myocardial ischemia-reperfusion induced apoptosis and Caspase-3 Activity. *Circulation* 106(9): II-134, 2002.
68. Rose'Meyer RB, Lankford AR, Byford AM, Fredholm BB, Matherne GP, Adenosine A<sub>1</sub> receptor knockout mice have diminished protection from ischemia-reperfusion injury. *Circulation* 108(17): IV-127, 2003.
69. Lim, DS, Peeler, B; Matherne, Paul; Kramer C M. Cardiac magnetic resonance of pulmonary artery growth and ventricular function after Norwood Procedure with Sano modification. *J Cardiovasc Magn Reson* 10:34, 2008.
70. Kundu, BK, Locke, LW, Matherne GP. Metabolic Remodeling Precedes Left Ventricular Remodeling in Cardiac Hypertrophy: Early Detection by Non-Invasive Imaging., Late-breaking basic science category in the AHA Scientific sessions, Orlando, Florida, November 14-18, 2009.
71. Providing care and special education for Zambian children with severe intellectual disability: Special Hope Network Community Care Centers in Lusaka. Matherne GP,

Nelson E, Bailey E, Menenberg L, Nemecek E, Baetsen L, Pullen P, Scharf R. 7<sup>th</sup> National Health Research Conference. Lusaka Zambia October 14, 2013

***Invited Presentations -- National***

"Coronary Flow Regulation and Cardiac Metabolism in the Immature Heart" Topics in Clinical Pediatrics Conference, Children's Hospital of Oklahoma, University of Oklahoma, Oklahoma City, Oklahoma, June 8, 1991.

"Common Pediatric Dysrhythmias" Pediatric Grand Rounds, Texas A&M University, College Station, Texas, June 24, 1993.

"Ontogeny of Myocardial Adenosine A1 Receptors in the Developing Heart" American Academy of Pediatrics Section on Cardiology Young Investigator Competition, Washington, D.C., October 30, 1993.

"Ontogeny of Adenosine A1 Receptors in the Heart" Pediatric Cardiology Conference, Stanford University, Palo Alto, California, November 17, 1993.

"Regulation of Adenosine A1 Receptors During Development" University of Cincinnati, Pharmacology and Biophysics Seminar, Cincinnati, Ohio, September 12, 1995.

"Transgenic Overexpression of Cardiac A1 Adenosine Receptors" Pediatric Cardiology Scientific Symposium, University of Iowa, Iowa, October 19, 1996.

"Cardiac Protection with Overexpression of A1 Adenosine Receptors" Cardiology Research Seminar, Medical College of Virginia, Richmond, Virginia, January 6, 1998.

"Congenital Heart Disease and Research" Keynote speaker Children's Heart Foundation Annual Meeting, Chicago, Illinois, June 1, 1998.

"Cardiac Protection with Overexpression of A1 Adenosine Receptors" Research Seminar, Introgen Inc., Houston, Texas, November 6, 1998.

"Mechanisms of A1 Mediated Cardiac Protection" Department of Pediatrics Research Seminar, Case Western Reserve and Rainbow Babies and Children's Hospital, Cleveland, Ohio, June 9, 1999.

"Preconditioning and Transgenic Overexpression of A1 Adenosine Receptors" – State of the Art Symposium: AHA Scientific Sessions, Atlanta, Georgia, Nov 7, 1999.

"Mechanisms of A1 Mediated Cardiac Protection" Department of Pediatrics Research Seminar, University of Colorado, December 19, 2002

"Mission Driven Health Care: Engaging the Problems Facing Academic Pediatrics"  
Texas A&M Health Science Center, May 19, 2009

"Mission Driven Health Care: Engaging the Problems Facing Academic Pediatrics"  
University of Mississippi, April 26, 2010

"Pulse Oximetry Screening: An Introduction to Advocacy Issues"

ACC/Mended Little Hearts Webinar Panelist, July 26, 2011

AHA ABP MOC session  
AHA ABP Scientific Sessions Orlando 2011

AHA ABP MOC session  
AHA ABP Scientific Sessions LA 2012

***Invited Presentations -- International***

"Endocarditis Prophylaxis," 15th Annual Pediatric Uptake - Costa Rica National Children's Hospital, San Jose, Costa Rica, March 12, 1997.

"Shock for the Pediatrician," 15th Annual Pediatric Uptake - Costa Rica National Children's Hospital, San Jose, Costa Rica, March 13, 1997.

"Pediatric Dysrhythmias," 15th Annual Pediatric Uptake - Costa Rica National Children's Hospital, San Jose, Costa Rica, March 14, 1997.

"Transgenic Overexpression of Cardiac A1 Adenosine Receptors" International Congress of Physiologic Sciences, St. Petersburg Russia, July 2, 1997.

"The Developing Myocardium and Congenital Heart Disease," Guest Lecturer - Clinical Pathology-School of Health Science, Griffith University, Gold Coast, QLD, Australia, February 24, 1998.

"Cardiac Protection," Research Seminar - Visiting Scientist - Rotary Centre for Cardiovascular Research, Griffith University, Gold Coast, QLD, Australia, March 6, 1998.

"Cardioprotective Effects of A1 Adenosine Receptor Overexpression," Biochemistry Research Seminar - University of Pisa, Pisa Italy, May 19, 1998.

"Transgenic Overexpression of A1 Aden. Receptors in the Heart," Plenary Lecture 6th International Symposium on Adenosine and Adenosine Nucleotides, Ferrara Italy, May 22, 1998.

"Cardioprotection and Transgenic Overexpression of A1 Adenosine Receptors," Pharmacology Research Seminar, Institute fur Pharmakologie and Toxikologie, der Westfalischen Wilhelms-Universitat, Muenster Germany, May 26, 1998.

"Transgenic Overexpression of A1 Receptors in the Heart," Physiology Seminar Physiologisches Institute University of Dusseldorf, Dusseldorf Germany, May 28, 1998.

"Myocardial Protection with Transgenic Overexpression of A1 Adenosine Receptors," Keynote Speaker - Symposium: 100 Years of the Langendorff Heart. 4th Congress of Federation of Asian and Oceanic Physiological Societies, Brisbane Australia, September 29, 1998.

"Mechanisms of Cardiac Protection with Overexpression of A<sub>1</sub> Adenosine Receptors" Plenary Lecture 7th International Symposium on Adenosine and Adenosine Nucleotides, Gold Coast, Australia, May 29, 2002

Resident teaching Conference – Cardiac Emergencies  
UTH- Lusaka Zambia October 17, 2013



Screening Newborns for Critical Congenital Heart Disease – Anatomy and Physiology Review  
VHD- HRSA Webinar Co-leader January 28, 2014

Introduction to CHD and cardiac pathology - Clinical officers Lecture  
Kamuzu Central Hospital. Lilongwe Malawi, March 12, 2014

Left to right and right to left shunts- Clinical Officers Lecture  
Kamuzu Central Hospital. Lilongwe Malawi, March 12, 2014

Introduction to cardiac exam in Children- 3<sup>rd</sup> year medical student hands on workshop  
Malawi College of Medicine. Lilongwe Malawi, March 12, 2014

Pediatric ECGs- Clinical officer's Lecture  
Kamuzu Central Hospital. Lilongwe Malawi, March 27, 2015

Pediatric ECGs- Resident Lecture  
UTH Lusaka Zambia, August 26, 2015

Pediatric Grand Rounds- Eliminating error- Is it possible?  
UTH Lusaka Zambia, August 27, 2015

Pediatric Grand Rounds- Eliminating error- Is it possible?  
University of Botswana; Gaborone Botswana; September 18, 2015

The Role of International Partners in Developing a Congenital heart Surgery Program  
Consultative Meeting on the roadmap for development of sustainable cardiac services in  
Zambia; UTH Lusaka Zambia, March 8, 2016

Introduction to Congenital heart Disease  
UTH Medical School lecture; UTH Lusaka Zambia, March 14, 2016

Getting better at what we do: Creating a culture of improvement: A journey to make things better  
in Health Care. San Jose Costa Rica April 25, 2016

Pediatric Grand Rounds- Current Treatment of Congenital heart Disease-  
University of Botswana; Gaborone Botswana; October 17, 2016.

Pulse Oximetry screening for Critical illness in Newborns. What is Possible for Botswana?  
University of Botswana; Gaborone Botswana; October 18, 2016.

Pediatric Cardiology Fellows conference – What is new in Single Ventricle and CHD care?  
Chris Hani Baragwanath Hospital Wits University Johannesburg Africa , October 20,  
2016

Pediatric Grand Rounds -Pulse Oximetry screening for CCHD. Chris Hani Baragwanath  
Hospital Wits University Johannesburg Africa , October 20, 2016

### ***Invited Presentations -- Local/Regional***

"Common Pediatric Dysrhythmias" Birdsong Conference, UVA, April 27, 1989

"Adenosine in the Developing Heart" Physiology Seminar, UVA, July 26, 1989

"Coronary Flow Regulation and Cardiac Metabolism in the Immature Heart" Pediatric Grand Rounds, UVA, August 29, 1991

"ASD, VSD, AV Canal" Echocardiography in Congenital Heart Disease Conference, UVA, November 1, 1991

"Identifying Research Resources" Pediatric Fellows Research Retreat, UVA, April 28, 1994

"Regulation of A1 Receptors" Pediatric Faculty Research Seminar, UVA, September 28, 1995

"Transgenic Expression of A1 Receptors" Cardiovascular Center AEP Seminar, Nov 21, 1996

"Overexpression of A1 Receptors" Transgenic Mouse Seminar, UVA, February 19, 1997

"Cardiac Protection with Overexpression of A1 Adenosine Receptors" Adult Cardiology Research Seminar, UVA, December 5, 1997

"Mechanisms of Cardiac Protection with Overexpression of A1 Adenosine Receptors" Cardiovascular Research Seminar, UVA, March 1, 2000

"Shock for the Pediatrician" Lynchburg Baptist Grand Rounds, Lynchburg, VA, May 21, 2000

"Mechanisms of Cardiac Protection with Overexpression of A1 Adenosine Receptors" BME Research Seminar, UVA, January 19, 2001

"Protecting the Myocardium from Ischemic Damage: A Basic Science Approach to a Clinical Problem in Pediatric Cardiology" Pediatric Grand Rounds, INOVA Fairfax Hospital for Children, September 20, 2001

"An Introduction to Pediatric Cardiology" Martha Jefferson Hospital Nursing Days, Charlottesville, VA, October 3, 2001

"Mechanisms of Cardiac Protection with Overexpression of A1 Adenosine Receptors" Anesthesia Research Conference, UVA, Charlottesville, VA, October 9, 2001

"Protecting the Myocardium from Ischemic Damage: A Basic Science Approach to a Clinical Problem in Pediatric Cardiology" Pediatric Grand Rounds, University of Virginia School of Medicine, Charlottesville, VA. November 1, 2001

"The Future of Research in the Department: The Role of the Child Health Research Award Program" Pediatric Grand Rounds, University of Virginia, School of Medicine, Charlottesville, VA, May 2, 2002.

Health Care in Sub-Saharan Africa: High tech and Low tech opportunities to improve the lives of children. Rotary Club of Charlottesville. August 15, 2012

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
Governor's Task force on CCHD Screening. Richmond VA August 21, 2012

"Healthcare Reform: What does it mean to ME?" Panelist Darden health care Conference,  
Charlottesville VA October 26, 2012

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
VDH HRSA Demonstration Project Grant Meeting. Charlottesville VA, November 15, 2012

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
Pediatric Section Meeting Winchester Medical Center, Winchester VA, December 5, 2012

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
Pediatric Section Meeting Augusta medical Center, Fishersville VA, January 8, 2013

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
Pediatric Section Meeting Martha Jefferson Hospital, Charlottesville VA, January 9, 2013

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
Pediatric Section Meeting Virginia Baptist Hospital, Lynchburg VA, January 29, 2013

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
Pediatric Section Meeting Rockingham Memorial Hospital, Harrisonburg VA, January 30, 2013

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
Family Medicine Teaching Conference and Info Mastery session, University of Virginia,  
Charlottesville VA, February 19, 2013

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
Pediatric Resident Noon Conference, University of Virginia, Charlottesville VA, February 20,  
2013

Screening for Critical Congenital Heart Disease: How did we get here? Where do we go?  
Birdsong Pediatric Conference, University of Virginia, Charlottesville VA, April 5, 2013

CCHD Surveillance Webinar Sponsored by VDH (funded by HRSA)  
April 15, 2014

Safety and Quality in Medicine: Lessons from Mann Gulch, UVA undergraduate Health Care  
course. April 9, 2014

Fontan and PE,  
MICU conference. University of Virginia August 28, 2014

"RVUs and You"  
Cardiology Fellows Conference; University of Virginia June 2015

Eliminating error- Is it possible?  
Pediatric Resident Noon Conference, University of Virginia, Charlottesville VA, November 11,  
2015

“Global Medicine- The opportunity that makes you better at your day job”. Blue Ribbon Grand Rounds with Rebecca Scharf. University of Virginia, Charlottesville VA, April 14, 2016.

US Healthcare System: where does the money go?, Resident noon Conference. With Ricky Anjorin MPH candidate University of Virginia, Charlottesville VA, March 13, 2017

Eliminating error- Is it possible?

Physical, Medicine ,and Rehabilitation Department Grand Rounds, University of Virginia, Charlottesville VA, April 13, 2017

US Healthcare System: where does the money go? Development Office Conference. With Ricky Anjorin MPH candidate University of Virginia, Charlottesville VA, April 19, 2017

Eliminating error- Is it possible?

Nursing leadership Conference, University of Virginia, Charlottesville VA, May 1, 2017

### **AHA Courses**

PEARS Scottish Livingston Hospital; Molepolole Botswana Septembers 14-15, 2015

PALS University of Botswana; Gaborone Botswana; September 21-22, 2015

PALS Recertification UVA Hospital Charlottesville VA September 15, 2016

PALS Certification UVA Hospital Charlottesville VA June 21, 2017

### **ABP MOC activities developed**

Critical Congenital Heart Disease Screening Self-Assessment Project. Activity is approved for the period 04/11/2014 - 01/31/2017; reapproved 2017

### **Be Safe Lean workshops**

Savings Children’s Lives Instructor Work shop Scottish Livingston Hospital; Molepolole Botswana Septembers 26, 2015

Getting better at what we do: Creating a culture of improvement: A journey to make things better in Health Care. Hospital Nacional De Ninos San Jose Costa Rica With Paul Helgerson April 25-April 28, 2016

Reducing Error and Patient Harm: Possible? Or Impossible? Letsholathebe 11 Memorial Hospital. Maun Botswana October 11, 2016

### **AHA MAA Board Activities**

“Communicating your story and your passions” Step N2 Leadership Program American Heart Association, Richmond VA April 21, 2016

‘Big Bets to Reach 2020” Charlotte Board of Directors Meeting, Charlotte NC May 19, 2016

‘Big Bets to Reach 2020” Hampton Roads Board of Directors Meeting, Virginia Beach June 3, 2016

‘Big Bets to Reach 2020” Richmond Board of Directors Meeting, Virginia Beach June 24, 2016

**FUNDED GRANTS****National  
Title****Period****Amount**

HRSA , Moline PI (Virginia Department of Health) Critical Congenital Heart Disease Newborn Demonstration program. (10% Medical Advisor)	2012-2016	\$900,000
NRSA (NHLBI), Matherne PI Pediatric Cardiovascular Research Training Program 5 T32 -- HLO7956-10 KO2 (NHLBI) Independent Scientist Award Mechanisms of Cardiac Protection with A1 Overexpression HL67823-05	2000-2012	\$ 851,078
NIH NCRR, Berr PI 9.4 Tesla MR scanner for murine imaging 1S10RR019911 (co-investigator)	2001-2006	\$ 518,805
RO1 (NHLBI) Myocardial Protection with A1 Receptor Overexpression -- HL59419-06	2005-2006	\$ 1,980,000
American Heart Association Established Investigator Grant -- 9740135N	1998-2005	\$1,400,000
NRSA (NHLBI), Dulling PI Basic Cardiovascular Research Training Grant 5 T32HLO7284-23 (Fellowship for Sara Regan, MD)	1998-2001	\$ 300,000
NRSA (NHLBI) Anesthetic Effects on Cardiac KATP Channels F32HLO09825 (Fellowship for Amy Lankford, PhD)	2000-2001	\$ 41,000
March of Dimes, Phase-in-Grant	1999	\$ 30,000
March of Dimes Basil O'Connor Starter Scholar Research Award Coronary Blood Flow During Development: Role of Adenosine	1993-1994	\$ 7,000
Clinical Investigator Award (NHLBI) Coronary Blood Flow During Development: Role of Adenosine	1991-1993	\$ 60,000
Clinician Scientist Award (AHA) Coronary Blood Flow During Development:	1990-1995	\$ 381,184
	July-Aug 1990	\$ 8,467

**Foundations**

CHRB- Evaluation of metabolic remodeling in the prevention of left ventricular hypertrophy with A1 adenosine receptors	2006-2008	\$150,000
Children's Heart Foundation Cardiac Protection with Transgenic Overexpression of A1 Adenosine Receptors in the Heart	1997-1998	\$ 48,601
Jeffress Trust -Overexpression of Myocardial A1 Receptors	1996-1997	\$ 11,988
Wyeth Training Fellowship (Donna Cothran)	1994-1995	\$ 2,800
Jeffress Trust Ontogeny of Coronary Vascular Control	1989-1993	\$ 47,000

**State**

American Heart Association, Virginia Affiliate Cardiac Protection with Transgenic Overexpression of A1 Adenosine Receptors in the Heart	1997-1999	\$ 70,000
American Heart Association, Virginia Affiliate Fellowship Grant for Ray Morrison, MD Tolerance to Regional Cardiac Ischemia with Transgenic Overexpression of A1 Adenosine Receptors in the Heart	1997-1999	\$ 58,000
American Heart Association, Virginia Affiliate Fellowship Grant for Naomi S. Gauthier, MD Myocardial Protection from Hypoxia and Demand Ischemia with Transgenic Overexpression of A1 Adenosine Receptors	1997-1999	\$ 58,000
American Heart Association, Virginia Affiliate Ontogeny and Regulation of Myocardial A1 Receptors	1995-1997	\$ 65,000
American Heart Association, Virginia Affiliate Ontogeny of Myocardial Adenosine A1 Receptors: Adenosine's Role as a Counter Regulatory Hormone	1993-1995	\$ 55,000
American Heart Association, Virginia Affiliate Adenosine Formation and Energy Metabolism in the Developing Heart	1991-1993	\$ 51,181
American Heart Association, Virginia Affiliate Ontogeny of Coronary Vascular Control	1989-1991	\$ 50,000

**School of Medicine**

UVA Children's Hospital Career Enhancement Award	2006- 2007	\$70,000
UVa CMC Committee	2002-2003	\$12,500

Effect of A<sub>1</sub> Receptor Overexpression on Mitochondria  
 Sponsor: G. Paul Matherne, MD

CMC Grant-In-Aid "Tolerance to long-term cold ischemic cardiac preservation with transgenic overexpression of A1 adenosine receptors in the heart" 2001-2002 \$6,320  
 (Sponsor: Marguerite Crawford, MD, UVa Postdoc)

CVRI Seed Grant  
 A Helper Dependent Adenoviral Method of Delivery of Adenosine A1 Receptor in the Mouse 2001-2002 \$ 13,800

UVa CVRC & R&D Grants  
 Micro Array Analysis to Determine Mechanisms of Myocardial Protection in A1 Overexpression 2000-2001 \$ 11,000

UVa CMC Committee  
 The Role of Apoptosis in Myocardial Protection in Transgenic Mice Overexpressing A1 Adenosine Receptors 2001-2002 \$ 5,000  
 (Sponsor: Sara Regan, UVa Fellow, PI)

UVa CMC Committee  
 Tolerance to Regional Cardiac Ischemia with Transgenic Overexpression of A1 Adenosine Receptors in the Heart 1997-1998 \$ 4,400  
 (Sponsor: R. Ray Morrison, UVa Fellow, PI)

UVa CMC Committee  
 Myocardial Protection from Hypoxia and "Demand" Ischemia in Transgenic Hearts with Overexpression of A1 AR 1997-1998 \$ 4,400  
 (Sponsor: Naomi Gauthier, UVa Fellow, PI)

UVa CMC Committee  
 Overexpression of A3 Adenosine Receptors in the Heart 1997-1998 \$ 7,000

UVa CMC Committee  
 Pharmacologic Upregulation of Myocardial A1 Receptors and the Effects of Myocardial Protection 1996-1997 \$ 6,750  
 (Sponsor: Naomi Gauthier, UVa Fellow, PI)

UVa CMC Committee  
 Myocardial Protection and Overexpression A1 Receptors 1996-1997 \$ 6,000  
 (Co-investigator: John Headrick, PhD, Visiting Scientist, PI)

Scholarly Activities Fund University of Virginia  
 Ontogeny and Regulation of Myocardial A1 Receptors 1996-1997 \$ 15,000

UVa CMC Committee  
 Overexpression of Myocardial A1 Receptors 1995-1996 \$ 10,000

UVa CMC Committee  
 Ontogeny of Myocardial  $\beta$  Receptors in Rat Myocardium 1994-1995 \$ 5,930  
 (Sponsor: Donna Cothran, UVa Fellow, PI)

UVa CMC Committee Regulation of Adenosine A1 Receptors	1994-1995	\$ 6,000
UVa R&D Grant Overexpression of Myocardial A1 Receptors	1994-1995	\$ 11,000
UVa CMC Committee Ontogeny of Myocardial Adenosine A1 Receptors: Adenosine's Role as a Counter Regulatory Hormone	1993-1994	\$ 6,510
UVa CMC Committee Cellular Basis of Developmental Changes in Adenosine's Role in Coronary Flow Regulation	1991-1992	\$ 3,500
UVa CMC Committee Regional Differences in the Cerebral Blood Flow Responses to Hypoxia and Asphyxia in the Newborn Piglet: (Co-sponsor: Frances Northington, UVa Fellow, PI)	1991-1992	\$ 8,000
UVa CMC Committee Adenosine Formation and Energy Metabolism in the	1990-1991	\$ 8,000
UVa R&D Grant Ontogeny of Coronary Vascular Control	1988-1989	\$ 12,000
Industry Support for Robert Berne Visiting Scientist, John Headrick, PhD	1996-1997	\$ 7,000
Medical School & Cardiovascular Institute Support for Visiting Scientist, David Van Wylen, PhD	2000-2001	\$ 17,500

## **TEACHING SUMMARY**

### **Honors**

Nominated for McLemore Birdsong Teaching Award, 1988

## **POSTDOCTORAL FELLOWS/GRADUATE STUDENTS**

	<b>Fellow</b>	<b>Present Position</b>
1988-1989	Nancy McDaniel, Cardiology Fellow	Associate Professor, UVa Medical School
1988-1990	Allen Everett, Cardiology Fellow	Associate Professor, Johns Hopkins
1990-1993	Daniel Rowland, Cardiology Fellow	Associate Professor, Ohio State
1990-1992	Frances Northington, Research Fellow	Professor, John Hopkins School of Medicine
1991-1995	Bill Hammill, Cardiology Fellow	Associate Professor, UVa Medical School
1993-1994	Claire Emerson, Graduate Student	James Cook University



1993-1995	Donna Cothran, Research Fellow	Neonatologist, Roanoke, Virginia
1993-1997	Felice Heller, Cardiology Fellow	Associate Professor, University of Connecticut
1995-1998	Naomi Gauthier, Cardiology Fellow	Associate, Boston Children's Hospital
1996-1999	Ray Morrison, Research Fellow	Associate Professor, St Judes Children's Hospital
1998-1999	Ben Hack, Graduate Student	Graduate School, Griffith University
1998-2000	Jennifer Lindsey, Cardiology Fellow	Private Practice, Fairfax Hospital
1999	Glenn Harrison, Visiting Postdoctoral Fellow	Lecturer, Griffith University
1998-2001	Rachael Jones, Postdoctoral Fellow	Editor, American Cancer Institute Journal
1999-2001	Amy Roscoe Lankford, Postdoctoral Fellow	Staff Scientist Adenosine Therapeutics
2000-2004	Sara Regan, Cardiology Fellow	Assistant Professor, Brown University
2001-2004	Marguerite Crawford, Cardiology Fellow	Private Practice
2006-2009	Shetarra Walker- Cardiology Fellow	

### **STUDENT ADVISOR**

1991-1992	James Grover, 4th Year Medical Student
1994-1995	Qynh Van Dong, undergraduate student in Honors Biology Course Paul Nordyke, undergraduate student in Honors Biology Course
1995-1997	Ed Xavier, undergraduate student in Honors Biology Course
1996	Glenn Harrison, Thesis Examiner, Griffith University
1996-1998	Xin Qi, undergraduate student in Honors Biology Course
1997-1998	Preeti George, undergraduate student in Honors Biology Course
1998-1999	Allie Stell, undergraduate student in Honors Biology
1998-1999	Vanessa Rogowsky, undergraduate student in Honors Biology
Summer 2000	Matt Traynor, Summer Research Student
Summer 2002	Jeniter Hughes and Neehar Parikh, Summer Research Students
2013-2014	Two student groups submitting JPC applications for work in Zambia
2013-2014	Advisor BME Capstone project- Designing Automatic RHD detection by U/S

### **CLASSROOM TEACHING**

1988-1991	Introduction to Clinical Medicine Pediatric Case Discussion	1 session/year
1990-1993	Physiology Teaching Lab	3 sessions/year
1993-1994	Coordinator, Physiology Teaching Lab	
1994-2000	Biology 496 Introduction to Research	1-2 students/year

### **CLINICAL TEACHING DESCRIPTIONS**

Pediatric Cardiology Clinic is attended by one fellow, one resident, two or three medical students, and eight patients are scheduled.

Pediatric Cardiology Service requires daily teaching rounds for one fellow, one resident, and two or three medical students. All pediatric ECGs and echocardiograms are reviewed.

### **CLINICAL TEACHING (Where teaching occurred: Ward, Clinic, OR)**

1988-1989	Pediatric Cardiology Clinic Pediatric Cardiology Service	Monday afternoons two months
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	Pediatric Intensive Care Unit Attending	one month
	Pediatric Cardiac Catheterization	Attending
1989-1990		
	Pediatric Cardiology Clinic	Monday afternoons
	Pediatric Cardiology Service	two months
	Pediatric Cardiac Catheterization	Attending
1990-1994		
	Pediatric Cardiology Clinic	Monday afternoons
	Pediatric Cardiology Service	two months
	Pediatric Ward Student Attending	one month
	Pediatric Cardiac Catheterization	Attending
1994-2000		
	Pediatric Cardiology Clinic	Monday afternoons
	Pediatric Cardiology Service	one month
	Pediatric Ward Attending	one month
	Pediatric Cardiac Catheterization	Attending
2002 - 2018		
	Pediatric Cardiology Clinic	one afternoon/week
	Pediatric Cardiology Service	
	Pediatric Echo Service	
2018- 2022		
	Pediatric Cardiology Clinic	one afternoon/week

**TEACHING ACTIVITIES OTHER THAN CLASSROOM OR CLINICAL CONF**

1988-2005 Approximately six-ten lectures/year to house staff, fellows and students on various topics related to congenital heart disease.

***International Student Projects supervised***

***2014 Jefferson Public Citizens Award- Hope through Mobility: next steps-Assistive Mobility Devices in Urban Communities Served by Special Hope Network in Lusaka, Zambia***

***2014 Jefferson Public Citizens Award Ku-Punzitsa Apunzitsi: Creating a Professional Skills Program for Teachers in Lusaka, Zambia***