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Personal

Born:	October 30, 1958
Family:	Married. Linda A. Matherne
Children:	Gregory James Matherne
	Benjamin Thomas Matherne
	Stephanie Leigh Matherne
	Nicholas Scott 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 University of Virginia	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

Current Academic and Faculty Appointments

Interim Senior Associate Dean for Clinical Affiars	2020-present
Interim Chief medical Officer UVA Health System	2019 - 2020
J. Francis Dammann Endowed Professor of Pediatrics University of Virginia, School of Medicine	2006 - present

Past Academic and Faculty Appointments

Professor, Department of Pediatrics UVA SOM	2001- present
Associate Professor, Department of Pediatrics UVA SOM	1994-2001
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
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
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
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

Other Professional honors

Best Doctors in America®	2009-present

Other Professional Training

UVA SOM Leadership in Academic Medicine	2006
Leadership Development for Physicians in Academic Health Centers Harvard Univ., School of Public Health	2003

Certification

Federal Licensure Examination (FLEX)	1982
American Board of Pediatrics	1986
American Board of Pediatrics Cardiology Sub board	1988, 1995, 2002, 2012

Licensure Virginia Medical License No. 0101042125 -- Issued April 11, 1988

Professional Organizations

American Heart Association Member	1985-present
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- present
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

University/Hospital Services

Member, SOM's New Hires Committee	2019-present
Member, SOM Tenure & Promotion Committee	2015-2018
Member of Patient care Committee	2012-Present
Co-Chair, Children's Hospital practice Committee 2010,	2013-Present
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

Director, AHA Eastern Region	2019-present

Co-Chair AHA Eastern Region Nominating committee	2019-present
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

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 4th 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 4th 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

Current Academic Interests

- Development of business curricula.
- Business of medicine and managing resources.
- Global Health initiatives in Africa serving intellectually disabled children.
- Gift of Life- International Rotary program to train CHD Programs

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*

Summary: *Special Hope Network is an organization in Lusaka, Zambia, dedicated to serving the needs of community children with intellectual and developmental disabilities. This team purposes to work in conjunction with SHN, to provide these children with adaptive mobility devices sourced from a local manufacturer, Zambian Association of Children with Disabilities (ZACD). Using a sustainable, community-driven solution, we aim to increase independence and mobility in a culture that heavily stigmatizes disabilities.*
Students: Sreemoyee Som; Christopher Cai; Usnish Majumdar; Benjamin Harris; Alexa Hazel Pranay Sinha

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

Summary: *Special Hope Network (SHN) is an organization in Lusaka, Zambia that employs and trains Zambian high school graduates as teachers for Zambian children with disabilities. This JPC team will collaborate with SHN to improve executive functioning skills, which are high-level cognitive functions that regulate behavior, such as planning, organizing, and strategizing.*
Students: Emily Nemec; Lauren Baetsen; Amanda Halacy; Joann Judge

Community Service

CMC Turkey Trot		1988-Present
Camp Holiday Trail Board Member		2009-2013
Marriage Preparation Team, Incarnation Church		1988-1997
Little League Assistant Coach	1990-1995	1998-2000
Boy Scout Volunteer		1994-1997
Assistant Scout Master		1997-2001
Member, Long Range Planning Cmttee, Albemarle Co. Schools		2004-2006
Member, Redistricting Cmtee, Albemarle Co. Schools		2004-2005
Member, Albemarle Co. Schools, Budget oversight		2019-present

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* 25:291294, 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_2 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. Maturational 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_1 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 ß-adrenergic stimulation of the *in situ* rabbit heart*. Cardiovasc Res* 31:699-710, 1996

34. Matherne GP, Ely SW, Headrick JP. Maturational 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 A1 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 A1 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 A1 adenosine receptors. *J Mol Cell Cardiol* 30:193-198, 1998.

38. Gauthier NS, Matherne GP, Morrison RR, Headrick JP. Determination of function in the isolated working mouse heart: Issues in experimental design. *J Mol Cell Cardiol* 30:453-461, 1998.

39. Headrick JP, Gauthier NS, Berr SS, Morrison RR, Matherne GP. Transgenic A1 adenosine receptor overexpression improves myocardial energy state during ischemia reperfusion. *J Mol Cell Cardiol* 30:1059-1064, 1998.

40. Neumann J, Vahlensieck U, Boknik P, Linck B, Luss H, Muller FU, Matherne GP, Schmitz W. Functional studies in atrium overexpressing A1-adenosine receptors. *Br J Pharmacol* 128:1623-1629, 1999.

41. Headrick JP, Gauthier NS, Morrison RR, Matherne GP. Chronotropic and vasodilatory responses to adenosine and isoproterenol in mouse heart: effects of adenosine A1 receptor overexpression. *Clin Exp Pharmacol Physiol* 27:185-190, 1999.

42. Morrison RR, Jones R, Byford AM, Stell AR, Peart J, Headrick JP, Matherne GP. Transgenic overexpression of cardiac A1 adenosine receptors mimics ischemic preconditioning. *Am J Physiol* 279:H1071-H1078, 2000.

43. Headrick JP, Gauthier NS, Morrison R, Matherne GP. Cardioprotection by K_{ATP} channels in wild-type hearts and hearts overexpressing A1 adenosine receptors. *Am J Physiol* 279(4):H1690-H1697, 2000.

44. Hannan RL, John MC, Kouretas PC, Hack BD, Matherne GP, Laubach VE. Deletion of endothelial nitric oxide synthase exacerbates myocardial stunning in an isolated mouse heart model. *J Surg Res* 93:127-132, 2000.

45. Peart J, Matherne GP, Cerniway RJ, Headrick JP. Cardioprotection with adenosine metabolism inhibitors in ischemic-reperfused mouse heart. *Cardiovasc Res* 52:120-129, 2001.

46. Cerniway RJ, Yang Z, Jacobson MA, Linden J, Matherne GP. Targeted deletion of A3 adenosine receptors improves tolerance to ischemia-reperfusion injury in the mouse myocardium. *Am J Physiol* 281:H1751-1758, 2001.

47. Headrick JP, Peart J, Hack B, Garnham B, Matherne GP. 5'-Adenosine monophosphate and adenosine metabolism, and adenosine responses in mouse, rat and guinea pig heart. *Comp Biochem Physiol*, Part A 130: 615-637, 2001.

48. Headrick JP, Peart J, Hack B, Flood A, Matherne GP. Functional properties and responses to ischaemia-reperfusion in langendorff perfused mouse heart. *Exp Physiol*, 86.6, 703-716, 2001.

49. Peart J, Flood A, Linden J, Matherne GP, Headrick JP. Adenosine mediated cardioprotection in ischemic Reperfused mouse heart. *J Cardiovasc Pharmacol*, 39 (1): 117-29, 2001.

50. Harrison GJ, Cerniway RJ, Peart J, Berr SS, Ashton K, Regan S, Matherne GP, Headrick JP. Effects of A3 adenosine receptor activation and gene knock-out in ischemic-reperfused mouse heart. *Cardiovasc Res*, 53: 147-155, 2002.

51. Zucchi R, Cerniway RJ, Ronca-Testoni S, Morrison RR, Ronca G, Matherne GP. Effect of cardiac A1 adenosine receptor overexpression on sarcoplasmic reticulum function. *Cardiovasc Res*, 53: 326-333, 2002.

52. Yang Z, Cerniway RJ, Byford AM, Berr SS, French BA, Matherne GP. Cardiac overexpression of the A1-adenosine receptor protects intact mice against myocardial infarction. *Am J Physiol*, 282: H949-H955, 2002.

53. Cerniway RJ, Morrison RR, Byford AM, Lankford AR, Headrick JP, Van Wylen DGL, Matherne GP. A1 Adenosine receptor overexpression decreases stunning from anoxia-

reoxygenation: role of the mitochondrial K_{ATP} channel. *Basic Res Cardiol*, 97:232-238, 2002.

54. Throckmorton AL., Allaire PE, Gutgesell HP, Matherne GP, Olsen DB, Wood HG, Allaire JH, Patel SM. Pediatric Circulatory Support Systems. *ASAIO Journal* 48(3):216-21, 2002

55. Everett A.D, Matherne GP, Feasibility of pulmonary artery pressure measurements in infants through aorto-pulmonary shunts using a micromanometer pressure wire. *Pediatric Cardiology,* 24(4):336-7, 2003

56. Lankford A, Byford A, Ashton K, French B, Lee J, Headrick J, Matherne GP, Gene expression profile of mouse myocardium with transgenic overexpression of A1 adenosine receptors. *Physiological Genomics* , 11: (2) 81-89: 2002

57. Neumann J, Boknik P, Begrow F,Hanske I, Justus I, Mat'us M, Reinke U, Matherne GP, Schmitz W. Altered-signal transduction in cardiac ventricle overexpressing A(1)-adenosine receptors. *Cardiovascular Research* 60(3): 529-37, 2003

58. Neumann J, Boknik P, Matherne GP, Lankford A, Schmitz W. Pertussis toxin sensitive and insensitive effects of adenosine and carbachol in murine atria overexpressing A_1-adenosine receptors. *Br J of Pharmacol*, 138 (1): 209-217, 2003

59. Ashton K, Holmgren K, Peart J, Lankford AR, Matherne GP, Grimmond S, Headrick JP. Effects of A1 adenosine receptor overexpression on normoxic and post-ischemic gene expression. *Cardiovascular Research*, 57: 715-726, 2003.

60. Regan SE, Broad M, Byford AM, Lankford AR, Cerniway RJ, Mayo MW, Matherne GP. A1 adenosine receptor overexpression attenuates ischemia-reperfusion-induced apoptosis and caspase 3 activity. *Am J Physiol,*. 284(3):H859-66, 2003.

61. Kirchhof P, Fabritz L, Fortmueller L, Matherne GP, Lankford A, Baba HA, Schmitz W, Neumann J, Boknik P. Altered sinus nodal and atrioventricular nodal function in freely moving mice overexpressing the A1-adenosine receptor. *Am J Physiol*, 285 (1): H 145-153, 2003.

62. Nayeem M, Matherne GP, Mustafa SJ, Ischemic and pharmacological preconditioning induces further delayed protection in transgenic mouse cardiac myocytes over-expressing adenosine A1 receptors (A1AR) role of A_1AR, iNOS, and $K_{ATP.}$ channels. *Naunyn Schmeidelberg's Arch Pharmacol*, (367): 219-226, 2003.

63. Headrick J, Willems L, Ashton K, Holmgren K, Peart J, Matherne GP. Ischaemic tolerance in aged myocardium: the role of adenosine and effects of A_1 adenosine receptor overexpression*. J Physiology (London)* 549(3): 823-833, 2003.

64. Throckmorton, AL, Untaroiu A, Allaire PE, Wood HG, Matherne GP, Lim DS, Peeler BB, and Olsen DB. Computational analysis of an axial flow pediatric ventricular assist device. *Artif Organs* 28: 881-891, 2004.

65. Crawford, M., Ford, S., Henry, M., Matherne GP, and Lankford, AR. Myocardial function following cold ischemic storage is improved by cardiac-specific overexpression of A_1 Adenosine receptors. *Can J Physiol Pharmacol,* , 83(6): 493-498, 2005.

66. Ghelardoni, S, Carnicelli, V., Frascarelli, S., Lankford, A., Masala, I., Ronca-Testoni, S., Matherne GP, Zucchi, R. Effects of A1 Adenosine Receptor Stimulation on the Expression of Genes Involved in Calcium Homeostasis. *J Mol Cell Cardiol*, 39 (6): 964-71, 2005.

67. Lim DS, Peeler BB, Matherne GP, Kron IL, Gutgesell HP. Risk-Stratified Approach to Hybrid Transcatheter-Surgical Palliation of Hypoplastic Left Heart Syndrome. *Pediatric Cardiology*. 27:1-5, 2006

68. Zatta A., Matherne GP, Headrick JP. Adenosine receptor-mediated coronary vascular protection in post-ischemic mouse heart. *Life Sciences*, 78 (21) 2426-2437, 2006

69. Lankford A, Yang J, Rose'meyer R, French B, Matherne GP, Fredholm B, Yang Z. Effect of Modulating Cardiac A_1 Adenosine Receptor Expression on Protection with Ischemic Preconditioning. *Am J Physiol* , Heart & Circ Physiology 290 (4): 1469-1473, 2006

70. Lim D.S, Dent J, Gutgesell HP, Matherne GP, Kron IL. Transesophageal Echocardiographic Guidance for Surgical Repair of Aortic Insufficiency in Congenital Heart Disease. *J Am. Soc. Echocardiography*, 20:1080-1085 2007

71. Ashton JA, Peart JN, Morrison RR, Matherne GP, Blackburn MR, Headrick, JP. Genetic Modulation of Adenosine Receptor Function and Adenosine Handling in Murine Hearts: Insights and Issues. *J Mol Cell Cardiol..* Apr ; 42 (4): 693-705. *2007*

72. Lim DS, Matherne GP, Percutaneous device closure of atrial septal defect in a premature infant with rapid improvement in pulmonary status. *Pediatrics,* Feb; 119(2):398-400, 2007

73. Reichelt ME, Willems L, Peart JN, Ashton KJ, Matherne GP, Blackburn MR, Headrick JP. Modulation of ischaemic contracture in mouse hearts: a 'supraphysiological' response to adenosine. *Exp. Physiol*. Jan;92(1): 175-85, 2007

74. Lim DS, Peeler BB, Matherne GP, Kramer CM. Cardiovascular magnetic resonance of pulmonary artery growth and ventricular function after Norwood procedure with Sano modification. *J Cardiovascular Magnetic Resonance.* 10(34): 2008

75. Mahle W, Newburger J, Matherne GP, Smith F, Hoke T, Koppel R, Gidding S, Beekman R, Grosse S. The Role of Pulse Oximetry in Newborn Screening for Congenital Heart Disease. *Pediatrics*;124;823-836. 2009

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Chapters/ Invited Articles

1. Robillard JE, Smith FG, Nakamura KT, Matherne GP. Fetal renal function: regulation of water and electrolyte excretion. In: *Fluid and Electrolyte Physiology*, R. A. Brace (Ed). Perinatology Press, Ithica, NY, 1988.

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3. Everett AD, Matherne GP. Cardiac growth and development in hypertension. In: Handbook of Hypertensive Phenotype Vol 19: *Development of the Hypertensive Phenotype: Basic*

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4. Matherne GP, Headrick JP, Liang BT. Adenosine receptor subtypes and cardioprotection in cardiac myocyte and transgenic models. In: *Cardiovascular Biology of the Purines.* G. Burnstock, J. G. Dobson, B. T. Liang, J. Linden (Eds). Kluwer Academic Publishers, pp. 86-107, 1998.

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12. Scharf RJ, Maphula A, Pullen PC, Shrestha R, Matherne GP, Roshan R, Koshy B. Global Disability: Empowering Children of All Abilities. Pediatric Clinics of North America. August 2017.

Abstracts:
All presented at National and International Meetings

1. Matherne GP, Razook JD, Thompson WM, Lane MM, Murray CK, Elkins RC. Senning repair for transposition of the great arteries during the first week of life. *Circulation* 72 (Suppl III):III- 150,1985.

2. Murray DJ, Vanderwalker G, Matherne GP, Mahoney L, Ponto L. Cardiovascular effects of isoflurane and halothane in infants using pulsed Doppler echocardiography. *Anesthesiology* 65:A441,1986.

3. Matherne GP, Nakamura KT, McWeeny OJ, Alden BM, Robillard JE. Alpha-1 and alpha-2 mediated renal vasoconstriction in fetal and adult sheep: ontogeny of post-junctional alpha-adrenoceptors. *Pediatr Res* 21:238A,1987.

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20. Lloyd TR, Matherne GP, Linden J. Adenosine modulates cAMP in immature myocardium. *Circulation* 84:II-753, 1991.

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49. John MC, Laubach VE, Hannan RL, Kouretas PC, Hack BD, Matherne GP. The effect of targeted deletion of endothelial nitric oxide synthase on myocardial ischemia-reperfusion injury. *FASEB J* 13(5): A1080, 1999.

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53. Boknik P, Schmitz W, Matherne GP, Neumann J. Positive inotropic effects of M-cholinocepter stimulation in mouse atria overexpressing A1-adenosine receptors. *Circulation* 100(18): I558, 1999.

54. Lankford AR, Everett AD, Matherne GP. Activation of p38 MAP kinase in rat neonatal myocytes by ischemia and adenosine A1 receptor activation. *Circulation* 100(18): I563, 1999.

55. Jones R, Lankford AR, Byford AM, Matherne GP. Inhibition of p38 MAPK in hearts overexpressing A1 adenosine receptors. *Circulation* 100(18): I563, 1999.

56. Jones R, Morrison R, Jacobson MA, Matherne GP. Targeted deletion of adenosine A3 receptors increases myocardial resistance to ischemia-reperfusion injury. *Circulation* 100(18): I715, 1999.

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58. Neumann J, Begrow F, Boknik P, Reinke U, Schonhalz N, Matherne GP, Schmitz W. Comparison of ventricular and atrial functional effects of A1-receptor-overexpressing hearts. *FASEB J* 14: A158, 2000.

59. Nayeem MA, Matherne GP, Mustafa SJ. A1 adenosine receptor agonists 2-chloro-N^6-cyclopentyladenosine (CCPA) and (2S)-N^6[2-endo-norbornyl]adenosine (S-ENBA) enhances late cellular protection in A1 receptor overexpressed transgenic mice myocytes against simulated ischemia. *Circ Res* 102 (18) II-269-70, 2000.

60. Boknik P, Begrow F, Reinke U, Schonhalz N, Matherne GP, Neumann J, Schmitz W. Positive inotropic effects of A1-adenosine stimulation in cardiomyocytes overexpressing A1-adenosine receptors. *Naunyn-Schmiedeberg's Arch Pharmacol* 361 (suppl 4): R109, 2000.

61. Nayeem MA, Matherne GP, Mustafa SJ. Sub-lethal simulated ischemia further enhances cellular protection in A1 adenosine receptor, over-expressed transgenic mice myocytes against sustained simulated ischemia. *FASEB J* 15(4) A480, 2001.

62. Boknik P, Matherne GP, Neumann J, Schmitz W. Signal transduction of chronotropic effects in atria overexpressing A1-adenosine receptors. *Z Kardiol*, In press, 2001.

63. Boknik P, Matherne GP, Neumann J, Schmitz W. Overexpressed A1-adenosine receptors couple to a pertussis toxin insensitive signal transduction pathway. *Naunyn-Schmiedeberg's Arch Pharmacol* 363 (suppl 4):R103, 2001.

64. Regan S, Cerniway R, Broad R, Byford A, Matherne GP. Transgenic A_1 adenosine receptor over-expression attenuates apoptosis associated with ischemia-reperfusion injury in mouse heart. *Pediatric Research* 51 (4) Part 2, 35A, 36A, 2002.

65. Crawford M, Byford A, Regan S, Matherne GP. Improved Diastolic function following long--term cold ischemic preservation in hearts overexpressing A_1 adenosine receptors. . *Pediatric Research* 51 (4) Part 2, 36A , 2002.

66. Crawford M, Byford A, Regan S, Lankford A, Matherne GP. Overexpression of A1 adenosine receptors protects heart during long-term cold ischemic preservation. *Pediatric Cardiology*, 23 (6): 674, 2002.

67. Regan, S, Broad M, Byford A, Mayo M, Matherne GP, Lankford A. Overexpression of A_1 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_1 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, Nemec E, Baetsen L, Pullen P, Scharf R. 7th 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

“Lifelong Care for Patients with CHD”
AAP Webinar Panelist October 22, 2013

“RVUs and You”
Early Career Session AHA Scientific Sessions
Dallas Tx November 16, 2013

“ACA and lifelong care for CHD”
Quality in ADCHD AHA Scientific Sessions
Dallas Tx November 18, 2013

“Clinical Scorecards”
CHD Breakouts at ACC 2014 CV Summit
Las Vegas NV, January 17, 2014

Health Reform: Where are we; Where are we going? Senate Health Care Symposium. Panelist.
Washington DC, Russel Senate Office Building November 18, 2016

US Healthcare System: where does the money go? Resident lecture Duke University, Durham NC. January 29, 2018

US Healthcare System: where does the money go? Children’s medical Center UTSouthweatern, Dallas TX April 12, 2018

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

US Health Care System: Why does it cost so much and what do we get? Ochsner Hospital for Children - Grand Rounds April 25, 2019

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_1 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- 3rd 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 Witts University Johannesburg Africa , October 20, 2016

Pediatric Grand Rounds -Pulse Oximetry screening for CCHD. Chris Hani Baragwanath Hospital Witts 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, UVA, November 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 A_1 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 Rockinginham 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

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

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

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

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

US Healthcare System: where does the money go? Pediatric grand rounds University of Virginia, Charlottesville VA, March 1, 2018

Africa: Home of the next emerging markets. Panel Discussant- Darden School of Business University of Virginia, Charlottesville VA, February 27, 2019

"Managing and Investing in Biotechnology and Health Care" Breakfast Panel Moderator, UVA Darden School of Business, Charlottesville VA. September 26, 2019

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	2000-2012	$ 851,078
KO2 (NHLBI) Independent Scientist Award Mechanisms of Cardiac Protection with A1 Overexpression HL67823-05	2001-2006	$ 518,805
NIH NCRR, Berr PI 9.4 Tesla MR scanner for murine imaging 1S10RR019911 (co-investigator)	2005-2006	$ 1,980,000
RO1 (NHLBI) Myocardial Protection with A1 Receptor Overexpression -- HL59419-06	1998-2005	$1,400,000
American Heart Association Established Investigator Grant -- 9740135N	1998-2001	$ 300,000
NRSA (NHLBI), Dulling PI Basic Cardiovascular Research Training Grant 5 T32HLO7284-23 (Fellowship for Sara Regan, MD)	2000-2001	$ 41,000
NRSA (NHLBI) Anesthetic Effects on Cardiac KATP Channels F32HLO09825 (Fellowship for Amy Lankford, PhD)	1999	$ 30,000

March of Dimes, Phase-in-Grant	1993-1994	$ 7,000
March of Dimes Basil O'Connor Starter Scholar Research Award Coronary Blood Flow During Development: Role of Adenosine	1991-1993	$ 60,000
Clinical Investigator Award (NHLBI) Coronary Blood Flow During Development: Role of Adenosine	1990-1995	$ 381,184
Clinician Scientist Award (AHA) Coronary Blood Flow During Development: Role of Adenosine	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
Jeffrress 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 Effect of A_1 Receptor Overexpression on Mitochondria Sponsor: G. Paul Matherne, MD	2002-2003	$12,500
CMC Grant-In-Aid "Tolerance to long-term cold ischemic cardiac preservation with transgenic overexpression of A1 adenosine receptors in the heart" (Sponsor: Marguerite Crawford, MD, UVa Postdoc)	2001-2002	$6,320
UVa CMC Committee Identification of the Intermediates of Adenosine Mediated Cardiac Protection Using Micro Array Analysis (Sponsor: Amy Lankford, UVa Postdoc, PI)	2001-2002	$ 7,500
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 (Sponsor: Sara Regan, UVa Fellow, PI)	2001-2002	$ 5,000
UVa CMC Committee Tolerance to Regional Cardiac Ischemia with Transgenic Overexpression of A1 Adenosine Receptors in the Heart (Sponsor: R. Ray Morrison, UVa Fellow, PI)	1997-1998	$ 4,400
UVa CMC Committee Myocardial Protection from Hypoxia and "Demand" Ischemia in Transgenic Hearts with Overexpression of A1 AR (Sponsor: Naomi Gauthier, UVa Fellow, PI)	1997-1998	$ 4,400

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 (Sponsor: Naomi Gauthier, UVa Fellow, PI)	1996-1997	$ 6,750
UVa CMC Committee Myocardial Protection and Overexpression A1 Receptors (Co-investigator: John Headrick, PhD, Visiting Scientist, PI)	1996-1997	$ 6,000
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 β Receptors in Rat Myocardium (Sponsor: Donna Cothran, UVa Fellow, PI)	1994-1995	$ 5,930
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	2000-2001	$ 17,500

Scientist, David Van Wylen, PhD

TEACHING SUMMARY

Honors

Nominated for McLemore Birdsong Teaching Award, 1988

POSTDOCTORAL FELLOWS/GRADUATE STUDENTS

	Fellow	***Present Position***
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	Preety 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)

1988-1999		
	Pediatric Cardiology Clinic	Monday afternoons
	Pediatric Cardiology Service	two months
	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- present		
	Pediatric Cardiology Clinic	one afternoon/week

TEACHING ACTIVITIES OTHER THAN CLASSROOM OR CLINICAL CONF

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