

## Curriculum Vitae

Kathleen Nelle Fenton, MD

Date and Place of Birth: June 1, 1962; Washington, DC

Citizenship: United States

Languages: English (mother), Spanish (fluent), limited reading proficiency in German, Italian, French, Latin

### Staff Positions:

- 2020-present Deputy Branch Chief, Advanced Technologies and Surgery Branch,  
National Heart, Lung, and Blood Institute  
Affiliate Scholar, Department of Bioethics, Clinical Center  
National Institutes of Health
- 2018-2020 Health Scientist/AAAS Science and Technology Policy Fellow  
Center for Translational Research and Implementation Science Health  
Inequities and Global Health Branch  
National Heart, Lung and Blood Institute, National Institutes of Health
- 2018-present Co-Founder, William Novick Global Cardiac Alliance
- 2014-2018 Congenital Heart Surgeon and Co-Founder, William Novick Global  
Cardiac Alliance
- 2006-2014 Congenital Heart Surgeon, International Children's Heart Foundation  
Director, Nicaragua Project
- 2002-2005 Pediatric Cardiac Surgeon, Children's Hospital, Omaha, NE  
Medical Director, ECMO Program  
Surgery Peer Review Committee  
Surgery Committee  
Clinical Assistant Professor of Surgery, University of Nebraska Medical  
Center  
Clinical Assistant Professor of Pediatrics, Creighton University
- 1999-2001 Assistant Professor of Surgery, Division of Cardiothoracic Surgery,  
State University of New York at Stony Brook, Stony Brook, NY

### Postgraduate Education:

- 2014-17 Master of Science in Bioethics, Alden March Bioethics Institute, Albany  
University.
- 2013 Leadership in Health Policy course, Brandeis University
- 2001-02 Fellow, Pediatric Cardiac Surgery, University of Pittsburgh and  
Children's Hospital Pittsburgh
- 1998-99 Fellow, Pediatric Cardiac Surgery, University of California, San Francisco  
and Children's Hospital Oakland
- 1995-98 Resident in Cardiothoracic Surgery, Emory University
- 1994-95 Chief Resident in Surgery, University of Louisville
- 1993-94 Resident in Surgery, University of Louisville
- 1992-93 Research Fellow in Cardiovascular Surgery, University of California, San  
Francisco

1991-92        Research Fellow in Cardiovascular Surgery, Harvard University, The  
                    Children's Hospital  
1989-91        Resident in Surgery, University of Louisville  
1988-89        Straight Surgical Intern, University of Louisville

Medical Education:

University of Maryland School of Medicine, Baltimore, Maryland  
M.D. cum Laude 1988

Undergraduate Education:

The Johns Hopkins University, Baltimore, Maryland  
AB Natural Sciences Area, 1984

Board Certifications and Licensure:

Diplomate, American Board of Thoracic Surgery, 1999  
Diplomate, American Board of Surgery, 1996  
National Board of Medical Examiners, 1989  
Maryland license: D41802  
Nebraska license: 22255 (inactive)  
New York license: 216009 (inactive)  
Georgia license: 040060 (inactive)  
California license: G 074413 (inactive)  
Massachusetts license: 74238 (inactive)  
Kentucky license: 26731 (inactive)  
Federal DEA: BF6564872 (inactive)  
Nicaragua License: 22839 (active; registered in medicine, surgery, cardiothoracic surgery  
and pediatric cardiothoracic surgery.)

Awards:

2014 Cardiothoracic Ethics Forum Scholarship  
2013 Alley-Sheridan Scholarship  
1995 Charles Edelen Research Award  
1994 Best Paper, Kentucky Chapter, American College of Surgeons  
1994 Charles Edelen Research Award  
1993 Hugh C. Williams Traveling Scholar Award  
1992 William Brohm Traveling Scholar Award  
1991 American Heart Association Affiliate Fellowship Grant  
1991 Hugh C. Williams Traveling Scholar Award  
1986 Alpha Omega Alpha (junior)

Association Memberships:

Society of Thoracic Surgeons  
    STS Standards and Ethics Committee, 2010-2016  
    Cardiothoracic Ethics Forum, 2010-present  
Southern Thoracic Surgical Association

Women in Thoracic Surgery; Secretary/Treasurer, 2011-12  
Chairman, International Committee, 2012 –present  
American Society for Bioethics and Humanities

Peer-reviewed Publications:

Fenton KN, Novick WM, Entwistle JW 3rd, Moffatt-Bruce SD, Sade RM; Cardiothoracic Ethics Forum. Global Health Initiatives in Cardiothoracic Surgery: Ethical Considerations and Guidelines. *Ann Thorac Surg* 2020 Oct 14: Online ahead of print.

Fenton KN, Novick WM, Entwistle JW 3rd, Moffatt-Bruce SD, Sade RM; Cardiothoracic Ethics Forum. Global Health Initiatives in Cardiothoracic Surgery: Ethical Considerations and Guidelines. *J Thorac Cardiovasc Surg* 2020 Oct 10: Online ahead of print.

Entwistle JWC, Fenton KN. Reply: There are limits to autonomy. *J Thorac Cardiovasc Surg*. 2020 Jul;160(1):e6-e7. Epub 2020 Apr 3.

Drake D, Morrow CD, Kinlaw K, De Bonis M, Zangrillo A, Sade RM. Cardiothoracic Ethics Forum. Cardiothoracic surgeons in pandemics: Ethical Considerations. *J Thorac Cardiovasc Surg* 2020 Aug;160(2):456-459. Epub 2020 Apr 9.

Drake D, Morrow CD, Kinlaw K, De Bonis M, Zangrillo A, Sade RM. Cardiothoracic Ethics Forum. Cardiothoracic surgeons in pandemics: Ethical Considerations. *Ann Thorac Surg* 2020 Aug;110(2):354-358. Epub 2020 Apr 9.

Varghese TK Jr, Entwistle JW 3<sup>rd</sup>, Mayer JE, Moffatt-Bruce SD, Sade RM; Cardiothoracic Ethics Forum. Ethical standards for cardiothoracic surgeons' participation in social media. *J Thorac Cardiovasc Surg*. 2019 Oct;158(4):1139-43.

Varghese TK Jr, Entwistle JW 3<sup>rd</sup>, Mayer JE, Moffatt-Bruce SD, Sade RM; Cardiothoracic Ethics Forum. Ethical standards for cardiothoracic surgeons' participation in social media. *Ann Thorac Surg* 2019 Sep;108(3):666-70.

Entwistle JWC, Fenton KN. Rethinking the ethics of ventricular assist device withdrawal. *J Thorac Cardiovasc Surg* 2020 Apr;159(4):1328-32. Epub 2019 Dec 4.

Mensah Ga, Jaquish C, Srinivas P, Papanicolaou GJ, Wei GS, Redmond N, Roberts MC, Nelson C, Aviles-Santa L, Puggal M, Green-Parker MC, Minear MA, Barfield W, Fenton KN, Boyce CA, Engelgau MM, Khoury MJ. Emerging Concepts in Precision Medicine and Cardiovascular Diseases in Racial and Ethnic Minority Populations. *Circ Res* 2019;125:7-13.

Fenton KN, Molloy F, Novick WM. Ethics in humanitarian efforts: giving due credit to the local team. *Cardiol Young* 2019 Feb;20(2):195-99.

Fenton KN, Huffman GB. The American Association for Thoracic Surgery Ethics Forum: How should a surgeon respond to a patient's request to hasten death? *J Thorac Cardiovasc Surg* 2019 May;157(5):1943-47.

Fenton KN, Cardarelli M, Molloy F, Novick WM. Ethics in humanitarian efforts: when should resources be allocated to paediatric heart surgery? *Cardiol Young* 2019 Jan;29(1):36-39.

Fenton KN, Cardarelli M, Molloy F, Novick W. Establishing sustainable cardiothoracic surgery programs in underserved countries. *Thorac Cardiovasc Surg* 2018 Nov;66(8):661-66.

Fenton, KN. Found in the Translation. *Narrative Inquiry in Bioethics* 2018 Spring 8(1):6-9.

Fenton KN. A Father's Broken Heart. Commentary to: Sade RM. It takes a heart to save a family. *Ann Thorac Surg* 2016;102:1782-9.

Clarke MJ, Fenton KN, Sade RM. Does Declaration of Brain Death Serve the Best Interest of Organ Donors Rather Than Merely Facilitating Organ Transplantation? *Ann Thorac Surg*. 2016 Jun;101(6):2053-8.

Fenton KN. Ethical Dilemmas at the Bedside: How Do We Decide? *Thorac Cardiovasc Surg* 2016 Jan;64(1):15-6.

Fenton K Ellis J, Sade RM. Should a Thoracic Surgeon Transfer a Complicated Case to a Competing Medical Center Against the Hospital's Order? *Ann Thorac Surg*. 2015 Aug;100(2):389-93.

Fenton KN, Cardarelli M. Different Paths to the Same End: A Response to the Question: Quo Vadis? *Thorac Cardiovasc Surg* 2015;63:80-82.

Fenton K. Commentary 1: Pediatric Cardiac Surgeon. In: Wingate JR, Adachi I, Mossad EB. Tetralogy of Fallot with Severe Cyanosis in an Infant with Trisomy 18: Ethical Dilemmas in the Perioperative Period. *J Cardiothorac Vasc Anesth* 2014 Dec;28(6):1677-85.

Sade RM; American Association for Thoracic Surgery Ethics Committee; Society of Thoracic Surgeons Standards and Ethics Committee. Standards for relations of cardiothoracic surgical organizations with industry. Collaborators: Sade RM, Akins CW, D'Amico TA, Jones JW, McKneally M, Naunheim K, Wechsler AS, Bridges CR, Campbell DN, Fenton KN, Ferguson MK, Guyton SW, Hammon JW Jr, Kohman LJ, Kramer JB, Levitsky S, Murray GF, Orringer MB, Ungerleider RM, Whyte RI. *Ann Thorac Surg*. 2011 Jul;92(1):3-8.

Fenton KN, Hernandez SH, Duarte C, Novick WM. Teamwork and Program Organization in Developing Countries. *World J for Pediatric and Congenital Heart Surgery* 2011 Apr; 2:219-24.

Novick WM, Stidham GL, Karl TR, Arnold R, Anic D, Baum VC, Fenton KN. Paediatric cardiac assistance in developing and transitional countries: the impact of a fourteen year effort. *Cardiol Young*. 2008 Jun;18(3):316-23. Epub 2008 Apr 14.

Fenton KN, Lessman K, Glogowski K, Fogg S, Duncan KF. Cerebral Oxygen Saturation Does Not Normalize Until After Stage 2 Single Ventricle Palliation. *Ann Thorac Surg* 2007;83:1431-1436.

Fenton KN, Freeman K, Glogowski K, Fogg S, Duncan KF. The significance of Baseline Cerebral Oxygen Saturation in Children Undergoing Congenital Heart Surgery. *Am J Surgery* 2005;190(2):260-3.

Deptula JJ, Fogg SK, Glogowski KR, Fenton KN, Hunt P, Duncan KF. A Technique for Performing Antegrade Selective Cerebral Perfusion without Interruption of Forward Flow or Cannula Relocation for Pediatric Aortic Arch Reconstruction. *JECT* 2004;36:324-8.

Deptula JJ, Fogg SK, Glogowski KR, Fenton KN, Duncan KF. Extended Support with the Terumo BABY-RX Oxygenator. *JECT* 2004;36:364-7.

Fenton KN, Pigula FA, Gandhi SK, Russo L, Duncan KF. Interim Mortality in Pulmonary Atresia with Intact Ventricular Septum. *Annals of Thoracic Surgery* 2004; 78(6):1994-8.

Fenton KN, Webber S, Danford DA, Gandhi SK, Pereira J, Pigula FA. Long Term Survival after Pediatric Cardiac Transplantation and Postoperative ECMO Support. *Annals of Thoracic Surgery* 2003;76:843-7.

Fenton KN, Siewers RD, Rebovich B, Pigula FA. Interim Mortality in Infants with Systemic-to-Pulmonary Artery Shunts. *Annals of Thoracic Surgery* 2003;76:152-7.

Fenton KN, Miller JJ, Lee RB, Mansour KA. The Belsey Mark IV Procedure for Complicated Gastroesophageal Reflux Disease. *Annals of Thoracic Surgery* 1997; 64(3):790-4.

Duarte I, Fenton KN, Brown WM 3rd. Video-assisted Removal of Left Ventricular Mass. *Annals of Thoracic Surgery* 1997; 63(3):833-5.

Fenton KN, Richardson JD. Diagnosis and Management of Malignant Pleural Effusions. *American Journal of Surgery* 1995; 170(1):69-74.

Fenton KN, Zinn HE, Heinemann MK, Liddicoat JR, Hanley FL. Long Term Survivors of Fetal Cardiac Bypass in Lambs. *Journal of Thoracic and Cardiovascular Surgery* 1994; 107(6):1423-7.

Fenton KN, Heinemann MK, Hickey PR, Klautz RJM, Liddicoat JL, Hanley FL. Inhibition of the Fetal Stress Response Improves Cardiac Output and Gas Exchange after Fetal Cardiac Bypass. *Journal of Thoracic and Cardiovascular Surgery* 1994; 107(6): 1416-22.

Heinemann MK, Hanley FL, Van Praagh S, Fenton KN, Jonas RA, Mayer JE Jr., Castaneda AR. Total Anomalous Pulmonary Venous Drainage in Newborns with Visceral Heterotaxy. *Annals of Thoracic Surgery* 1994; 57(1): 88-91.

Fenton KN, Heinemann MK, Hanley FL. Fetal Cardiac Bypass Using Cross-Circulation. *Cor Europeum* 1993; 2(1-2): 48-53.

Hanley FL, Fenton KN, Jonas RA, Mayer JE, Cook NR, Castaneda AR. Surgical Repair of Complete Atrioventricular Canal Defects in Infancy: 20 Year Trends. *Journal of Thoracic and Cardiovascular Surgery* 1993; 106(3): 387-94.

Fenton KN, Heinemann MK, Hanley FL. Exclusion of the Placenta During Fetal Cardiac Bypass Augments Systemic Flow and Provides Important Information about the Mechanism of Placental Dysfunction. *Journal of Thoracic and Cardiovascular Surgery* 1993; 105: 502-12.

Heinemann MK, Hanley FL, Fenton KN, Jonas RA, Mayer JE, Castaneda AR. Fate of Small Homograft Conduits after Early Repair of Truncus Arteriosus. *Annals of Thoracic Surgery* 1993; 55(6): 1409-11.

Fenton KN, Heinemann MK, Hickey PR, Hanley FL. The Stress Response During Fetal Surgery is Blocked by Total Spinal Anesthesia. *Surgical Forum* Volume 1992; XLIII:631-4.

#### Abstracts, Presentations and Other Publications:

Fenton KN. Consent for Fetal Tissue Donation: Answering Questions Women are Afraid to Ask. Reproductive Ethics Conference, Alden March Bioethics Institute, Albany, 2018

Fenton KN. Consent for Fetal Tissue Donation: Answering Questions Women are Afraid to Ask. American Association for Bioethics and Humanities, Kansas City, 2017.

Fenton KN. Contraceptive Access and Declining Teen Birth Rates: A Connection Still Unproven. Public Discourse, Witherspoon Institute, 2017.

Fenton KN. Establishing Sustainable Cardiothoracic Surgery Programs in Underserved Countries. Society of Thoracic Surgeons International Symposium, Houston, 2017.

Fenton KN. My Patient Wants to Die. How Can I Help? American Association for Thoracic Surgery Surgical Ethics Course, Baltimore, 2016.

Fenton KN. Should We Abandon the Dead Donor Rule? American Association for Thoracic Surgery Surgical Ethics Course, Seattle, 2015.

Fenton KN. Telemedicine (Including Live Broadcast). American Association for Thoracic Surgery Surgical Ethics Course, Toronto, 2014.

Fenton K (pro), Ellis J (con), Sade RM (moderator). Ethics Debate: Should a Thoracic Surgeon Transfer a Complicated Case to a Competing Medical Center Against the Hospital's Order? Southern Thoracic Surgical Association, Tucson, November 2014.

Fenton KN, Rodriguez H, Novick WM. Whose Patient Is It? Responsibility and Ethics in "Medical Mission Trip" Surgery. Fourth Scientific Meeting of the World Society for Pediatric and Congenital Heart Surgery, Sao Paulo, July 2014.

Fenton KN. Which Patient to Operate? The Ethics of Providing Heart Surgery in Developing Countries. 23<sup>rd</sup> World Congress of the World Society of Cardio-Thoracic Surgeons, Split, September 2013.

Fenton KN, Hernandez S, Duarte C, Berrios N, Novick WM. Palliative versus Corrective Surgery in New Cardiac Programs. 23<sup>rd</sup> World Congress of the World Society of Cardio-Thoracic Surgeons, Split, September 2013.

Fenton KN, Hernandez S, Duarte C, Berrios N, Novick WM. Cost Effectiveness Analysis of Congenital Heart Surgery in Developing Countries. Sixth World Congress of Pediatric Cardiology and Cardiac Surgery, Cape Town, February 2013.

Fenton KN, Hernandez S, Duarte C, Novick WM. Mentoring Cardiac Surgery in Developing Countries: Five Year Progress Report and Exit Strategy. Sixth World Congress of Pediatric Cardiology and Cardiac Surgery, Cape Town, February 2013.

Fenton KN, Hernandez S, Duarte C, Berrios N, Novick WM. Are There Clinically Important Racial Differences in Atrial Septal Defect Morphology? Sixth World Congress of Pediatric Cardiology and Cardiac Surgery, Cape Town, February 2013.

Gilbert C, Novick W, Murtheyn RM, Kaushal S, Iguidbahian J, Fenton K, Ochoa J, Buchneva O, Dodge Khatami A. Worldwide Experience with Porcine Small Intestine Sub-mucosal Extracellular Matrix Graft (Cormatrix) in Congenital Heart Surgery: Our International Experience. Sixth World Congress of Pediatric Cardiology and Cardiac Surgery, Cape Town, February 2013.

Fenton KN, Hernandez Castillo S, Duarte Claro C, Novick WM. Teamwork and Program Organization in Developing Countries. Joint Congress Dedicated to Aldo Castaneda, Antigua, July 2010.

Fenton KN, Hernandez SI, Novick WM. Mentoring Pediatric Cardiac Surgery in Developing Countries. Fifth World Congress of Pediatric Cardiology and Cardiac Surgery, Cairns, June 2009.

Fenton KN. Role of natriuretic peptides in cGMP production in fetal cardiac bypass: invited commentary. *Ann Thorac Surg*. 2009 Mar;87(3):847-8.

Fenton KN. Why is there no Heart Surgery in Nicaragua? Fourth Global Forum on Humanitarian Medicine, Boca Chica, December 2008.

Fenton KN. Fetal stress response to fetal cardiac surgery. Invited commentary. *Ann Thor Surg*. 2008 May;85(5):1727-8.

Fenton KN, Freeman K, Glogowski K, Fogg S, Felix D, Hanson K, Duncan KF. Low Cerebral Oxygen Saturation Persists Postoperatively in Infants with Single Ventricle Physiology. European Association of Cardiothoracic Surgeons, Barcelona, September 2005.

Fenton KN, Freeman K, Glogowski K, Fogg S, Felix D, Hanson K, Duncan KF. Cerebral Oxymetry in Infants with Single Ventricle Physiology. World Congress of Pediatric Cardiology and Cardiac Surgery, Buenos Aires, September 2005.

Fenton K. Killing versus Allowing to Die. *Ethics and Medics* 2005 (Mar); 30(2).

Fenton KN, Freeman K, Glogowski K, Fogg S, Duncan KF. The significance of Baseline Cerebral Oxygen Saturation in Children Undergoing Congenital Heart Surgery. Kentucky Chapter of the American College of Surgeons, Louisville, February 2005.

Fenton KN, Pigula FA, Gandhi SK, Duncan KF. Interim Mortality in Pulmonary Atresia Intact Ventricular Septum. European Association of Cardiothoracic Surgeons, Vienna, October 2003.

Fenton KN, Duncan KF, Gandhi SK, Pigula FA. Interim Mortality in Pulmonary Atresia Intact Septum. Midwest Pediatric Cardiology Society, Rochester, MN September 2003.

Fenton KN. Update on Prospects for Prenatal Cardiac Intervention. *Oracle*, Summer 2003:3.

Fenton KN, Siewers RD, Rebovich B, Pigula FA. Interim Mortality in Infants with Systemic-to-Pulmonary Artery Shunts. American Heart Association 75th Scientific Sessions, Chicago, November 2002.



Fenton KN, Webber S, Danford DA, Gandhi SK, Pereira J, Pigula FA. Long Term Survival after Pediatric Cardiac Transplantation and Postoperative ECMO Support. Southern Thoracic Surgical Association 49th Annual Meeting, Miami Beach, November 2002.

Fenton KN, Siewers RD, Rebovich B, Pigula FA. Interim Mortality in Infants with Systemic-to-Pulmonary Artery Shunts. European Association for Cardiothoracic Surgery 16th Annual Meeting, Monte Carlo, September 2002.

Fenton KN, Noonan JA. Criteria for Pediatric Heart Transplantation. *Accel* 50(1): Side 4, 1998.

Fenton KN, Tam VKH, Vincent R, Kanter KR. Too Sick to Transplant? A Critique of Selection Criteria. Second World Congress of Pediatric Cardiology and Cardiac Surgery, Honolulu, May 1997.

Fenton KN, Tam VKH, Kanter KR, Murphy KA, Williams WH. Minimizing Mortality in Aortic Coarctation Repair in Newborns with and without Associated Congenital Heart Disease. Second World Congress of Pediatric Cardiology and Cardiac Surgery, Honolulu, May 1997.

Fenton KN, Mansour KA. The Belsey Mark IV Procedure for the Management of Complicated Gastroesophageal Reflux Disease. Southern Thoracic Surgical Association, Cancun, November 1996.

Fenton KN. Diagnosis and Management of Malignant Pleural Effusions. Cardiothoracic Surgery Grand Rounds, Emory University, August 1995.

Fenton KN. Fetal Cardiac Surgery. Surgical Grand Rounds, University of Louisville, June 1995.

Fenton KN, Liddicoat JR, Hanley FL. Cardiac Bypass in 100-day Fetal Lambs: Preferential Efficacy of Methylprednisolone over Indomethacin in Preserving Fetal Gas Exchange. Society of University Surgeons Residentis Section, Denver, February 1995.

Fenton KN, Richardson JD. Diagnosis and Management of Malignant Pleural Effusions. Surgical Grand Rounds, University of Louisville, December 1994.

Fenton KN, Hanley FL. Chronic Survivors of Fetal Cardiac Bypass. Kentucky Chapter, American College of Surgeons, Louisville, November 1994.

Fenton KN, Heinemann MK, Liddicoat JR, Hanley FL. Fetal Cardiac Bypass. American Society of Extracorporeal Technologists Region VIII, Santa Fe, October 1994.

Fenton KN, Heinemann MK, Hickey PR, Hanley FL. Inhibition of the Fetal Stress Response Improves Cardiac Output and Gas Exchange after Cardiac Bypass in Fetal Lambs. World Congress of Pediatric Cardiology and Cardiac Surgery, Paris, June 1993.

Fenton KN, Zinn HE, Heinemann MK, Hickey PR, Hanley FL. Inhibition of the Fetal Stress Response (Using Spinal Anesthesia) and Prostaglandin Synthesis Inhibition (with Indomethacin) Permit Chronic Survival after Cardiac Bypass in Fetal Lambs. International Fetal Medicine and Surgery Society, Whistler, British Columbia, May 1993.

Fenton KN, Heinemann MK, Hanley FL. Fetal Cardiac Bypass Using Cross-Circulation. Third World Congress of the International Society of Cardio-Thoracic Surgeons, Salzburg, January 1993.

Fenton KN, Heinemann MK, Hickey PR, Hanley FL. The Stress Response During Fetal Surgery is Blocked by Total Spinal Anesthesia. American College of Surgeons Surgical Forum, New Orleans, October 1992.

Fenton KN, Heinemann MK, Hanley FL. Exclusion of the Placenta During Fetal Cardiac Bypass Augments Systemic Flow and Provides Important Information about the Mechanism of Placental Dysfunction. Western Thoracic Surgical Association, Kauai, June 1992.

Soares JH, Fenton KN, Beecher GR, Bodwell CE, Smith JC. The Effect of Dietary Zinc and Vitamin D Steroids on Different Aged Female Rats. Society of Bone and Mineral Research, 1983.