

Matthew L. Stone, MD, PhD

Family

Wife: *Charlotte Martin Stone*

Daughters: *Ava Jane* (5 years), *Josephine Charlotte* (2 years)

Professional

Children's Hospital Colorado

University of Colorado School of Medicine

The Meg F. Rady and Family Chair in Congenital Cardiac Surgery

Associate Professor, Department of Surgery, Division of Congenital Cardiac Surgery

Surgical Director, Pediatric Heart Transplantation Program

Surgical Director, Borderline Ventricle Program

July 2019 – current

Professional Training

Children's Hospital Colorado

Fellow Physician in Congenital Cardiac Surgery, July 2018 – June 2019

University of Colorado School of Medicine

Division of Congenital Cardiac Surgery

The University of Virginia Health System

Fellow Physician in Cardiothoracic Surgery, July 2016 – June 2018

University of Virginia School of Medicine

Division of Thoracic and Cardiovascular Surgery

The University of Virginia Health System

Resident Physician, June 2008 – June 2016

Chief Resident in Surgery, June 2015 – June 2016

Administrative Chief of Research

University of Virginia School of Medicine

Department of Surgery

National Institute of Health, University of Virginia

Division of Thoracic and Cardiovascular Surgery

Postdoctoral Research Fellow, T32 Training Grant, July 2010 – June 2013

Education

The University of Virginia

Charlottesville, Virginia

Doctor of Philosophy, PhD, Class of 2016

Molecular Physiology and Biological Physics

Thesis: *Mechanisms of Lung Ischemia-Reperfusion Injury and Donor Lung Rehabilitation*

ETSU James H. Quillen College of Medicine

Johnson City, Tennessee

Doctor of Medicine, Class of 2008

The University of Tennessee

Knoxville, Tennessee

Honors Graduate, Class of 2004

Bachelor of Arts in College Scholars

Thesis: *The Role of Faith in Healing*

Professional Honors and Awards

The Meg F. Rady and Family Chair in Congenital Heart Surgery

University of Colorado School of Medicine, 2025

- Awarded following selection by donating family, inaugural chair holder, and divisional/hospital administration for clinical and research excellence

University of Colorado Department of Surgery Award for Innovative Research

University of Colorado School of Medicine, Department of Surgery, 2025

- Seed grant funding award selected by administrative faculty for innovative research

Children's Hospital Colorado Innovation Award

Center for Children's Surgery, Children's Hospital Colorado, 2025

- Faculty selected institutional award for innovative science

NIH Loan Repayment Program Award Recipient

National Institute of Health/National Heart, Lung, and Blood Institute (NHLBI), 2023-2025

- National scientific award chosen by a rigorous NIH peer review process providing selected applicants support for protected research time and educational debt relief

Children's Hospital Colorado Foundation Ponzio Research Award

Children's Hospital Colorado, 2023

- Faculty selected institutional award for innovative basic science research

NIH Loan Repayment Program Award Recipient

National Institute of Health/National Heart, Lung, and Blood Institute (NHLBI), 2021-2023

- National scientific award chosen by a rigorous NIH peer review process providing selected applicants support for protected research time and educational debt relief

Thoracic Surgery Foundation/Society of Thoracic Surgeons Research Award

Society of Thoracic Surgeons, 2020

- Award granted to an early-career cardiothoracic surgeon with highest-ranking research application as judged by a rigorous peer review process

All-University Teaching Award Honorable Mention

University of Virginia, 2017

- Highest teaching honor awarded to faculty/staff at the University of Virginia

Hugh Shepherd Warren Award for Best Clinical Teacher

University of Virginia, 2016

- Chief resident level award as determined by residents within the Department of Surgery

John Horsley Memorial Prize for Excellence in Medical Research

University of Virginia, 2016

- First surgical resident to be awarded this all-University biennial memorial prize for excellence in medical research

Mulholland Teaching Award for Excellence and Dedication in Educating Medical Students

University of Virginia School of Medicine, Class of 2015 and 2016

- All-University award for teaching excellence and educational contributions as determined by graduating medical student class

Academic Achievement Award

University of Virginia, 2014

- Faculty nominated and awarded honor recognizing a resident for scientific achievement

All-University Young Scientist Award

University of Virginia, 2011

- Awarded in recognition of junior level faculty/staff achievement in scientific research

Arnold P. Gold Foundation Humanism and Excellence in Teaching Award

University of Virginia School of Medicine, Class of 2011

- One of six all-University resident teachers recognized by medical students for exemplary teaching skills and compassionate care of patients, families, and colleagues

Arnold P. Gold Foundation Humanism and Excellence in Teaching Award

University of Virginia School of Medicine, Class of 2010

- One of six all-University resident teachers recognized by medical students for exemplary teaching skills and compassionate care of patients, families, and colleagues

William Dion Outstanding Intern Award

University of Virginia Health System, Department of Surgery, 2009

- Awarded by graduating chief resident class to a single intern for excellence in patient care

College Scholar

University of Tennessee, 2004

- Undergraduate scholastic distinction following successful completion of a self-designed high-level curriculum and senior thesis defense

Additional awards/honors:

Michael Patrick Chapman, MD Endowment Award, 2025

Mentee: Benjamin Borg, MD

American Heart Association Student Scholarship Mentor in Cardiothoracic Surgery, 2021

Mentee: Michal Schafer, PhD

Resident Research Day Oral Presentation Awardee

University of Virginia, Department of Surgery, 2015

Resident Research Day Oral Presentation Awardee

University of Virginia, Department of Surgery, 2014

Outstanding Article of the Year Award

Healthcare Cost and Utilization Project, 2014

C. Walton Lillehei Resident Research Award Finalist

American Association of Thoracic Surgeons, 2013

Top Abstract Award

Mitral Conclave, American Association of Thoracic Surgeons, 2013

Resident Research Day Oral Presentation Awardee

University of Virginia, Department of Surgery, 2013

Young Investigator Award Finalist for Top Scoring Clinical Research Abstract

British Academy of Pediatric Surgeons and the European Pediatric Surgical Association, 2012

All-University Presidential Post-doctoral Research Award Finalist

University of Virginia, 2012

C. Walton Lillehei Resident Research Award Finalist

American Association of Thoracic Surgeons, 2012

Resident Research Day Oral Presentation Awardee

University of Virginia, Department of Surgery, 2012

Medical School Honors and Awards

Senior Class President, Class of 2008

- Leadership position nominated and elected by medical school class

Leonard Tow Humanism in Medicine Senior Award, 2008

- Graduate distinction nominated and elected by medical school class and faculty

Arnold P. Gold Humanism in Medicine Honor Society, 2007-current

- Honors appointment nominated and elected by medical school faculty

College of Medicine Admissions Committee, 2006-2008

- Leadership position nominated and elected by medical school class

College of Medicine Honor Council, President-Elect, 2008

- Leadership position nominated and elected by medical school class

First Place and Student-choice Awards, Appalachian Student Research Forum, 2008

- *Neurochemical Demographics of the Human Anterior Cardiac Fat Pad*

Research Funding

University of Colorado Department of Surgery Seed Grant for Innovative Research

Awardee: Matthew L. Stone, MD PhD

Title: *Ex vivo heart perfusion with sphingosine-targeted immunotherapy as a strategy to mitigate heart transplantation-associated ischemia-reperfusion injury*

Date: 8/1/2025-7/31/2026

Amount: \$50,000

Children's Hospital Colorado Innovation Award

Center for Children's Surgery

Awardee: Matthew L. Stone, MD PhD

Title: *Tissue Engineered Extra-cardiac Ventricle for Fontan Palliation in Single Ventricle Congenital Heart Disease*

Date: 7/1/2025-6/30/2026

Amount: \$25,000

Michael Patrick Chapman, MD Endowment Award

University of Colorado School of Medicine

Mentor: Matthew L. Stone, MD PhD

Awardee: Benjamin Borg, MD

Date: November 2024-November 2025

Amount: \$10,000

University of Colorado School of Medicine StARR Program Award

Center for Children's Surgery

Mentors: Matthew L. Stone, MD PhD; Stephanie Nakano, MD

Awardee: Jason Breithaupt, MD
Date: 6/24/2025-6/23/2026

National Institute of Health, Pediatric Loan Repayment Program Award, 2023

National Heart, Lung, Blood Institute

Principal Investigator: Matthew Stone, MD PhD, University of Colorado School of Medicine
Title: *Improving heart transplantation outcomes with ex vivo perfusion and sphingosine-targeted therapies*
Date: 7/1/2023-6/30/2025

Children's Hospital Colorado Foundation Ponzio Research Award

Center for Children's Surgery

Awardee: Matthew L. Stone, MD PhD
Title: *Improving heart transplantation with ex vivo heart perfusion and targeted immunotherapy*
Dates: 9/1/2023-8/31/2025
Amount: \$25,000

University of Colorado School of Medicine StARR Program Award

Stimulating Access to Research in Residency

Mentor: Matthew L. Stone, MD PhD
Awardee: Jack Zakrzewski, MD
Date: 7/1/2023-6/30/2025

University of Colorado School of Medicine StARR Program Award

Stimulating Access to Research in Residency

Mentor: Matthew L. Stone, MD PhD
Awardee: John Iguidbashian, MD
Title: *Improving heart transplantation outcomes with ex vivo perfusion and sphingosine-targeted therapies*
Date: 10/1/2022-6/30/2023
Support: \$20,000

University of Colorado School of Medicine TOTTS Program Award

Colorado Clinical and Translational Sciences Institute

TL1 Program: Team Oriented Training across the Translation of Sciences Spectrum

Mentor: Matthew L. Stone, MD PhD
Awardee: John Iguidbashian, MD
Title: *Improving heart transplantation outcomes with ex vivo perfusion and sphingosine-targeted therapies*
Date: 07/01/2022-06/30/2023
Support: \$75,000

National Institute of Health, R01 Award, 7R01HL149807-03

Principal Investigator: Mehdi Moghari, PhD, University of Colorado School of Medicine
Title: *Simulating Cardiac Surgery for Children with Severe Congenital Heart Disease*
Date: 2/10/2022
Role: Co-investigator

National Institute of Health, Pediatric Loan Repayment Program Award, 2021

National Heart, Lung, Blood Institute

Principal Investigator: Matthew Stone, MD PhD, University of Colorado School of Medicine
Title: *Improving heart transplantation outcomes with ex vivo perfusion and sphingosine-targeted therapies*
Date: 7/1/2021-6/30/2023

American Heart Association Student Scholarship, 2021

Student Investigator: Michal Schafer, PhD, University of Colorado School of Medicine
Mentor Investigator: Matthew Stone, MD PhD, University of Colorado School of Medicine
Grant title/focus: *Applications of MRI in congenital heart disease*
Support: \$2,000

Thoracic Surgery Foundation/Society of Thoracic Surgery Research Award, 2020

Principal Investigator: Matthew Stone, MD PhD, University of Colorado School of Medicine
Funding Source: Thoracic Surgery Foundation Grant
Grant title/focus: *Improving heart transplantation outcomes with sphingosine-targeted therapies*
Support: 2-year award; \$80,000

National Institute of Health, R01 Award, 1R01HL156936-01

Principal Investigator: Jesse Davidson, MD, University of Colorado School of Medicine
Title: *Bovine intestinal alkaline phosphatase infusion to reduce acute kidney injury in a piglet model of infant cardiopulmonary bypass with deep hypothermic circulatory arrest*
Date: 3/2020-2/28/2023
Role: Co-investigator

National Institute of Health, R21 Award, AI163454

Principal Investigator: Laurent Gapin, PhD, University of Colorado School of Medicine
Title: *Transcriptional regulation of innate T cell fate*
Date: 7/1/2021-6/30/2023
Role: Surgical collaborator

Submitted/Pending Grants

National Institute of Health, National Heart, Lung, and Blood Institute, R01 Submission, 2025

Principal Investigator: Matthew Stone, MD PhD University of Colorado School of Medicine
Title: *Improving heart transplantation outcomes with ex vivo heart perfusion and sphingosine-targeted therapies*
Date: 11/2025
Role: Principal Investigator

Grantsmanship

Ex Vivo Perfusion in a Lung Box for Rehabilitation of Donor Lungs, 2013

Principal Investigators: Irving L. Kron, MD; Victor E. Laubach, PhD
University of Virginia Health System

Funding Source: National Institute of Health, RO1 Grant
Bethesda, MD, USA
Support: 5-year award

Improving Lung Transplantation with *Ex Vivo* Lung Perfusion, 2012

Principal Investigator: Irving L. Kron, MD
University of Virginia Health System
Funding Source: Roche Organ Transplantation Research Foundation
6045 Meggen, Switzerland
Support: 2-year award

Professional Training

Invited Trainee, HeartWise™ Leadership and Training Program
Intermountain Health and the University of Utah School of Medicine
Park City, Utah
November 13-16, 2024

Bibliography

Peer Reviewed Publications:

1. Zakrzewski J, Drysdale N, Leahy R, Platnick C, Breithaupt J, Fraser CD, Downs EA, Campbell DN, Jagers J, **Stone ML**. Evaluating Fontan candidacy in patients under 12 kilograms: a focus on anatomic and physiologic variables. *Ann Thorac Surg* 2025. [in press]
2. Maksimuk TE, Mott NM, Dickinson K, Brown LB, Thielen O, Bakhtiyar SS, Cain MT, Hoffman JR, **Stone ML**. ABO-incompatible heart transplantation remains underutilized despite comparable outcomes in pediatric heart transplantation. *World J Pediatr Congenit Heart Surg* 2025. [in press]
3. Jagers J, Winlaw D, Fuller S, Sethi N, Kochilas L, Adachi I, **Stone ML**, Browne L, Khoo N, da Cruz E, Petit C, Lapar DJ, Stout K, Donofrio M, St Louis J. 2025 American Association for Thoracic Surgery Congenital Cardiac Surgery Working Group – Expert consensus document on the management of patients with pulmonary atresia with intact ventricular septum. *J Thorac Cardiovasc Surg* 2025; 170(2):336-52. PMID: 40320005.
4. Iguidbashian J, Zakrzewski J, Lu L, Garcia AM, Nakano S, Khailova L, Deng X, Plenter RJ, Jagers J, Davidson J, **Stone ML**. Targeted immunotherapy with sphingosine-1-phosphate improves myocardial contractility and mitochondrial function in a novel murine *ex vivo* perfusion and transplantation model. *J Thorac Cardiovasc Surg* 2025; S002-5223(25)00181-3. PMID: 40043942.
5. Breithaupt JJ, Fraser CD 3rd, Leahy R, Mejak B, Burkett D, Albertz M, Kim JS, **Stone ML**. Surgical management of a patient with non-Fallot type absent pulmonary valve syndrome. *World J Pediatr Congenit Heart Surg* 2025; 21501351251327214. PMID: 40233133.

6. Soderstrom RJ, Chernuta EC, Chaudhry-Waterman N, Rafter JA, **Stone ML**, Kim JS. Successful use of bivalirudin in neonates for postoperative aortopulmonary shunt thrombosis prevention. *JTCVS Tech* 2025; 31:152-7. PMID: 40641758.
7. Davidson JA, Iguidbashian J, Khailova L, Lehmann T, Suarez-Pierre A, Thomson L, Zakrzewski J, Ali E, Lee S, Frank B, Ing R, **Stone ML**, Osorio-Lujan S, Mancuso C. Cardiopulmonary bypass with deep hypothermic circulatory arrest results in organ-specific transcriptomic responses in pediatric swine. *Transl Res* 2025; 277:63-74. PMID:39827912.
8. Thomson LM, Niemiec S, Mancuso CA, Khailova L, Ali E, Syed A, Wolfe KR, Zakrzewski J, **Stone ML**, Hyslop R, Frank BS, Davidson JA. Disruption of the circulating proteome in neonates receiving extracorporeal membrane oxygenation following congenital heart disease surgery: a nested case-control study. *J Pediatr* 2025; 276:114322. PMID: 39306320.
9. Fraser CD 3rd, Morchi R, **Stone ML**, Jagers J, Campbell DN, Mitchell MB. Donor great vessel free arterial grafts for complex reconstruction during pediatric heart transplantation. *JTCVS Tech* 2024; 28:132-8. PMID: 39669351.
10. Loh L, Carcy S, Krovi HS, Domenico J, Spengler A, Lin Y, Torres J, Prabakar RK, Palmer W, Norman PJ, **Stone ML**, Brunetti T, Meyer HV, Gapin L. Unraveling the phenotypic states of human innate-like T cells: comparative insights with conventional T cells and mouse models. *Cell Rep* 2024; 43(9):114705. PMID: 39264810.
11. Downs EA, Schafer M, Everitt MD, Aubrey M, Mitchell MB, Jagers J, Campbell DN, **Stone ML**. Inclusive ABO-incompatible listing for pediatric heart transplantation results in comparable post-transplant rejection-free survival. *Pediatr Cardiol* 2024. [online ahead of print] PMID: 39115706.
12. Schafer M, Miyamoto S, Everitt M, Campbell DN, Jagers J, Mitchell MB, **Stone ML**. Non-invasive myocardial deformation indices are associated with cardiac allograft vasculopathy in pediatric heart transplantation recipients. *Int J Cardiovasc Imaging* 2024; 40(7):1565-74. PMID: 38780709.
13. Iguidbashian J, Malone LJ, Browne LP, Schafer M, Nguyen M, Liu J, Frank BS, Campbell DN, Mitchell MB, Jagers J, **Stone ML**. Regional arch measurements differ between imaging modalities in infants with aortic coarctation. *Ann Thorac Surg* 2023; 118(1):209-15. PMID: 38072352.
14. Schafer M, Di Maria MV, Jagers J, **Stone ML**, Campbell DN, Ivy DD, Mitchell MB. Hemi-Fontan and bidirectional Glenn operations result in flow-mediated viscous energy loss at the time of stage II palliation. *JTCVS Open* 2023;16:836-43. PMID: 38204687.
15. Schafer M, Mitchell MB, Frank BS, Barker AJ, **Stone ML**, Jagers J, von Alvensleben JC, Hunter KS, Friesen RM, Ivy DD, Jacobsen R, Di Maria MV. Myocardial strain-curve deformation patterns after Fontan operation. *Sci Rep* 2023; 13(1):11912. PMID: 37488167.
16. Ali EA, Syed A, Khailova L, Iguidbashian JP, Suarez-Pierre A, Klawitter J, **Stone ML**, Mancuso CA, Frank BS, Davidson JA. Novel biomarkers of necrotizing enterocolitis in neonates

undergoing congenital heart disease surgery: a pilot cohort study. *J Am Heart Assoc* 2023;12(15):e030712. PMID: 37489765.

17. Palmer WH, Leaton LA, Codo AC, Crute B, Roest J, Zhu S, Tobin RP, Hume PS, **Stone ML**, van Bokhoven A, Gerich ME, McCarter MD, Zhu Y, Janssen WJ, Vivian JP, Trowsdale J, Getahun A, Rossjohn J, Cambier J, Loh L, Norman PJ. Polymorphic KIR3DL3 expression modulates tissue-resident and innate-like T cells. *Sci Immunol* 2023; 8(84):eade5343. PMID: 37390222.
18. Deng XS, Meng X, Fullerton D, **Stone ML**, Iguidbashian J, Jagers J. Complement cross talks with H-K-ATPase to upregulate Runx2 in human aortic valve interstitial cells. *J Surg Res* 2023; 286:118-26. PMID: 36822134.
19. Feng Z, Iguidbashian J, Schofield S, Downs E, Newman S, Campbell DN, Mitchell MB, Jagers J, **Stone ML**. Open chest duration following congenital cardiac surgery increases risk for surgical site infection. *Pediatr Cardiol* 2022; [online ahead of print]. PMID: 36583758.
20. **Stone ML**, Schafer M, von Alvensleben JC, Frank BS, Campbell DN, Mitchell MB, Jagers J. Left ventricular dysfunction following the Ross-Konno reconstruction is independent of the operation. *Pediatr Cardiol* 2023;44(2):463-71. PMID: 36370189.
21. Malone LJ, Browne LP, Morgan GJ, Mitchell MB, Campbell DN, Jagers J, **Stone ML**. Computed tomographic angiography provides reliable coronary artery evaluation in infants with pulmonary atresia intact ventricular septum. *Semin Thorac Cardiovasc Surg* 2022; S1043-0679(22)00255-6. PMID: 36244628.
22. Iguidbashian J, Yoeli D, Everitt MD, Campbell DN, Mitchell MB, Jagers J, **Stone ML**. Pediatric heart transplantation waitlist times during the COVID-19 pandemic within the United States. *JAMA Netw Open* 2022; 5(10):e2234874. PMID: 36206002.
23. Freddo AM, Jacobsen RM, Yeung E, **Stone ML**, Kay JD, Khanna AD. Surgical management and outcomes of endocarditis in adolescents and adults with congenital heart disease. *Int J Cardiol* 2022;8:100364. PMID:39712047.
24. **Stone ML**, Albertz ML, Galambos C, Twite MD, Campbell DN, DiMaria MD, Fonseca B, Miyamoto SD, Ing RJ. Multi-disciplinary management and surgical resection of intra-cardiac fibromas causing bilateral ventricular outflow tract obstructions in an infant. *Semin Cardiothorac Vasc Anesth* 2022; 26(4):315-3122. PMID: 36006828.
25. Javadi E, Laudenschlager S, Kheyfets V, Di Maria M, **Stone ML**, Jamali S, Powell AJ, Moghari MH. Predicting hemodynamic performance of Fontan operation for Glenn physiology using computational fluid dynamics: Ten patient-specific cases. *J Clin Med Case Rep* 2022; 3(6):1916. doi:10.52768/2766-7820/1916. PMID: 36339935.
26. Venardos N, Mangham C, Morgan GJ, Zablah JE, Jagers J, **Stone ML**. Two-stage biventricular repair of complex aortic atresia. *Ann Thorac Surg* 2023; 115(4):e101-e103. PMID: 35378089.

27. Schulick N, Lin Y, Fonseca B, Campbell DN, **Stone ML**. Surgical management of a collateral arch channel and aortic coarctation. *J Card Surg* 2022;37(2):445-8. PMID: 34766377.
28. SooHoo MM, **Stone ML**, von Alvensleben JC, Jacobsen R. Management of Atrial Tachyarrhythmias in Adults with Single Ventricle Heart Disease. *Curr Treat Options Peds* 2021. [in press]
29. **Stone ML**, Schafer M, DiMaria M, von Alvensleben JC, Campbell DN, Jaggars J, Mitchell MB. Diastolic inflow is associated with inefficient ventricular flow dynamics in Fontan patients. *J Thorac Cardiovasc Surg* 2022; 163(3):1195-1207. PMID: 34429192.
30. Darr OA, **Stone ML**, Mitchell MB, Meier J, Kelley P, Prager JD. Slide tracheoplasty for tracheal cartilaginous sleeve in a patient with Apert syndrome. *Ann Thorac Surg* 2021; 112(6):e419-21. PMID: 33676902.
31. Schafer M, DiMaria MV, Jaggars J, **Stone ML**, Ivy DD, Barker AJ, Mitchell MB. High-degree Norwood neo-aortic tapering is associated with abnormal flow conduction and elevated flow-mediated energy loss. *J Thorac Cardiovasc Surg* 2021; 162(6):1791-1804. PMID: 33653609.
32. Deng X, Meng X, Fullerton D, **Stone ML**, Jaggars J. Complement up-regulates Runx-2 to induce pro-fibrogenic change in human aortic valve interstitial cells. *Ann Thorac Surg* 2021; 112(6):1962-72. PMID: 33545156.
33. **Stone ML**, Schafer M, von Alvensleben JC, Browne L, DiMaria M, Campbell DN, Jaggars J, Mitchell MB. Increased Aortic Stiffness and Left Ventricular Dysfunction Exist After Truncus Arteriosus Repair. *Ann Thorac Surg* 2021; 112(3):809-15. PMID: 33307069.
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35. Kim JS, Loi MM, **Stone ML**, VanderPluym CJ. Medical and Invasive Management of Cardiac Thrombosis in Children with Congenital and Acquired Heart Disease. *Curr Treat Options Peds* 2020. [online]
36. Schafer M, Frank BS, Humphries SM, Hunter KS, Carmody KL, Jacobsen R, Mitchell MB, Jaggars J, **Stone ML**, Morgan GJ, Barker AJ, Browne LP, Ivy DD, Younoszai A, DiMaria M. Flow profile characteristics in Fontan circulation are associated with single ventricle dilation and function: principal component analysis study. *Am J Physiol Heart Circ Physiol* 2020; 318(5):H1032-40. PMID: 32167782.
37. Venardos N, **Stone ML**. Surgical considerations and management options in premature and very low birth weight infants with complex congenital heart disease. *Curr Treat Options Peds* 2020. [online]
38. Schafer M, Barker AJ, Morgan GJ, Jaggars J, **Stone ML**, Browne LP, Ivy DD, Mitchell MB. Increased systolic vorticity in the left ventricular outflow tract is associated with abnormal aortic flow formations in tetralogy of Fallot. *Int J Cardiovasc Imaging* 2020;36(4):691-700. PMID: 31907684.

39. Schafer M, Barker AJ, Jagers J, Morgan GJ, **Stone ML**, Truong U, Browne LP, Malone L, Ivy DD, Mitchell MB. Abnormal aortic flow conduction is associated with increased viscous energy loss in patients with repaired tetralogy of Fallot. *Eur J Cardiothorac Surg* 2020;57(3):588-95. PMID: 31535124.
40. **Stone ML**, Kelly J, Mistry M, Buck M, Gangemi JJ, Vergales J. Use of Nicardipine after cardiac operations is safe in children regardless of age. *Ann Thorac Surg* 2018;105(1):181-5. PMID: 28987396.
41. **Stone ML**, Zhao Y, Smith JR, Weiss ML, Kron IL, Laubach VE, Sharma AK. Mesenchymal stromal cell-derived extracellular vesicles attenuate ischemia-reperfusion injury and enhance reconditioning of donor lungs after circulatory death. *Respir Res* 2017;18(1):212. PMID: 29268735.
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43. **Stone ML**, Sharma AK, Zhao Y, Charles EJ, Johnston WF, Kron IL, Lynch KR, Laubach VE. Sphingosine-1-phosphate receptor 1 agonism attenuates lung ischemia-reperfusion injury. *Am J Physiol Lung Cell Mol Physiol* 2015;308(12):L1245-52. PMID: 25910934.
44. **Stone ML**, Sharma AK, Mas VR, Gehrau RC, Mulloy DP, Zhao Y, Lau CL, Kron IL, Laubach VE. *Ex vivo* lung perfusion (EVLP) with adenosine 2A receptor agonist enhances rehabilitation of murine non-heart-beating donor lungs. *Transplantation* 2015;99(12):2494-503. PMID: 26262504.
45. **Stone ML**, LaPar DJ, Benrashid E, Scalzo DC, Ailawadi G, Kron IL, Bergin JD, Blank RS, Kern JA. Ventricular assist devices and increased blood product utilization for cardiac transplantation. *J Card Surg* 2015;30(2):194-200. PMID: 25529999.
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47. Johnston WF, Salmon M, Pope NH, Meher A, Su G, **Stone ML**, Lu G, Owens GK, Upchurch GR Jr., Ailawadi G. Inhibition of interleukin-1 β decreases aneurysm formation and progression in a novel model of thoracic aortic aneurysms. *Circulation* 2014 Sep 9;130(11 Suppl 1):S51-9. PMID: 25200056.
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52. Sharma AK, LaPar DJ, **Stone ML**, Zhao Y, Kron IL, Laubach VE. Receptor for advanced glycation end products (RAGE) on iNKT cells mediates lung ischemia reperfusion injury. *Am J Transplant* 2013;13(9):2255-67. PMID: 23865790.
53. **Stone ML**, Tatum PM, Weitkamp JH, Mukherjee AB, Attridge J, McGahren ED, Rodgers BM, Lake DE, Moorman JR, Fairchild KD. Abnormal heart rate characteristics prior to clinical diagnosis of necrotizing enterocolitis. *J Perinatol* 2013;33(11):847-50. PMID: 23722974.
54. Gillen JR, Zhao Y, Harris DA, LaPar DJ, **Stone ML**, Fernandez LG, Kron IL, Lau CL. Rapamycin blocks fibrocyte migration and attenuates bronchiolitis obliterans in a murine model. *Ann Thorac Surg* 2013;95(5):1768-75. PMID: 23561805.
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58. **Stone ML**, LaPar DJ, Mulloy DP, Rassmusen SK, Kane BJ, McGahren ED, Rodgers BM. Primary payer status is significantly associated with post-operative morbidity, mortality, and hospital resource utilization in pediatric surgical patients within the United States. *J Pediatr Surg* 2013;48(1):81-7. PMID: 23331797.
59. **Stone ML***, Mulloy DP*, Crosby IK, Sharma AK, Webb DV, Lau CL, Laubach VE, Kron IL. *Ex Vivo* rehabilitation of non-heart-beating donor lungs in a preclinical porcine model: delayed perfusion results in superior lung function. *J Thorac Cardiovasc Surg* 2012;144(5):1208-15. PMID: 22944084.
60. Lapar DJ, Mulloy DP, **Stone ML**, Crosby IK, Lau CL, Kron IL, Ailawadi G. Concomitant tricuspid valve operations affect outcomes after mitral operations: a multi-institutional, statewide analysis. *Ann Thorac Surg* 2012;94(1):52-7. PMID: 22607786.
61. LaPar DJ, Stukenborg GJ, Guyer RA, **Stone ML**, Bhamidipati CM, Lau CL, Kron IL, Ailawadi GA. Primary payer status is associated with mortality and resource utilization for coronary artery bypass grafting operations. *Circulation* 2012; 126:S132-9. PMID: 22965973.
62. Mulloy DP, Bhamidipati CC, **Stone ML**, Ailawadi G, Bergin JD, Mahapatra S, Kern JA. Cryoablation during left ventricular assist device implantation reduces postoperative ventricular tachyarrhythmias. *J Thorac Cardiovasc Surg* 2012; 145(5):1207-13. PMID: 22520722.

63. **Stone ML**, Kilic A, Kron IL, Gangemi JJ. Modified Aortoplasty for discrete congenital supraaortic aortic stenosis. *J Thorac Cardiovasc Surg* 2012; 143(6): 1450-1. PMID: 22244559.
64. **Stone ML**, Kilic A, Kennedy JLW, Bergin JD, Kern JA. The Cohn felt plug: an effective HeartMateII® reimplantation technique. *J Card Surg* 2012; 27(1):122-4. PMID: 22321118.
65. **Stone ML**, Kilic A, Jones DR, Lau CL, Kozower BD. A diagnostic consideration for all ages: pseudoachalasia in a 22-year-old. *Ann Thorac Surg* 2012; 93(1):e11-2. PMID: 22186482.
66. **Stone ML**, Julien MA, Dunnington GH, Lau CL. Novel laparoscopic hernia of Morgagni repair technique. *J Thorac Cardiovasc Surg* 2012; 143(3):744-5. PMID: 21924744.
67. Hennessy SA, LaPar DJ, Stukenborg GJ, **Stone ML**, Mylnarek RA, Kern JA, Ailawadi G, Kron IL. Cardiac catheterization within 24 hours of valve surgery is significantly associated with acute renal failure. *J Thorac Cardiovasc Surg* 2010; 140:1011-7. PMID: 20828767.

Invited Commentaries:

1. Waldman JC, Ing RJ, **Stone ML**. Current Practice Management Guidelines in Neonates and Infants with Isolated Coarctation of the Aorta. *J Cardiothorac Vasc Anesth* 2025; 39(3):573-5. PMID: 39753499.
2. Downs EA, Everitt M, **Stone ML**, Jagers J, Miyamoto S. The dynamic equilibrium of heart valve transplantation: a balance of similarities and differences. *JACC* 2025; 85(8):870-2. PMID: 40010932.
3. Clopton R, **Stone ML**, Ing RJ. Editorial: In children with congenital heart disease should the left or right internal jugular vein be used for central venous access? *J Cardiothorac Vasc Anesth* 2022; 36(8):2488-9. PMID: 35537971.
4. Schafer M, Di Maria MV, **Stone ML**, Jagers J, Mitchell MB. Reply: The unbearable weight of shape and flow quality. *JTCVS Open* 2022;10:352-3. PMID: 36004238.
5. Schafer M, **Stone ML**, Jagers J, Browne LP, Mitchell MB. Commentary: In vortices veritas-quantitative approach. *J Thorac Cardiovasc Surg* 2022; 163(3):946-66. PMID: 32768303.
6. **Stone ML**, Choi R, Ing RJ. Commentary: Optimization of right internal jugular central venous catheter length in pediatric cardiac surgical patients. *J Cardiothorac Vasc Anesth* 2020; 34(9):2392-4. PMID: 32534878.
7. **Stone ML**, Ing RJ, Schwartz L. Commentary: Risk stratification for prolonged mechanical ventilation after cardiac surgery in children. *J Cardiothorac Vasc Anesth* 2020; 34(4):949-50. PMID: 31937480.
8. Jagers J, **Stone ML**. Commentary: Intraventricular conduit repair for double-outlet right ventricle with noncommitted ventricular septal defect: how bright is the light at the end of the tunnel? *J Thorac Cardiovasc Surg* 2020; 159(6):2404-05. PMID: 31669028.

9. **Stone ML**, Everitt M. Commentary: Primary graft dysfunction: worry less about organ quality and do more to improve candidate condition. *J Heart Lung Transplant* 2019; 38(6):609-10. PMID: 30885530.
10. **Stone ML**, Ing R. Commentary: Transthoracic ventricular septal defect closure in children: an evolving treatment strategy as an alternative to open surgical repair. *J Cardiothorac Vasc Anesth* 2019; 33(5):1267-68. PMID: 30217586.
11. Ing R, **Stone ML**. Commentary: Optimal positioning of the inferior vena cava cannula during cardiac surgery in children. *J Cardiothorac Vasc Anesth* 2019; 33(5): 1260-1. PMID: 30655201.

Manuscripts Under Consideration

1. Zakrzewski J, Lu L, Iguidbashian J, Khailova L, Davidson J, Plenter RJ, Jaggars J, **Stone ML**. A novel technique for murine heart *ex vivo* perfusion and heterotopic transplantation. *Lab anim* 2025.
2. **Stone ML**, Taylor AC. Rewriting the 10 commandments: Fontan candidacy in the modern era. *Semin Thorac Cardiovasc Surg* 2025.
3. Drysdale ND, Shad JM, Fujiwara Park S, Fraser CD 3rd, Leahy RA, Jaggars J, Mitchell MB, Barker AJ, **Stone ML**. Longitudinal cardiac magnetic resonance imaging demonstrates differential pulmonary artery growth in patients with bilateral bidirectional Glenn circulations. *J Thorac Cardiovasc Surg* 2025.
4. Kucuk M, Dvorchak L, Soszyn N, **Stone ML**, Zablah J. Virtual reality as a method of sizing left ventricular assist devices in pediatric patients. 2025.

Video Publications

1. Rosenberger LH, Kilic A, **Stone ML**, Daniel TM, Jones DR. *Radiotracer Guided Thoracoscopic Lung Biopsy*. CTSNet 2013.

Audio Publications

1. Eldeiry M, **Stone ML**. Aortic coarctation. *Thoracic Surgery Residents Association Teaching Module*. 2022.
2. Cain M, Lin Y, **Stone ML**. Tetralogy of Fallot. *Thoracic Surgery Residents Association Teaching Module*. 2022.
3. Lin Y, Venardos N, **Stone ML**. Atrial and ventricular septal defects. *Thoracic Surgery Residents Association Teaching Module*. 2021.

Book Chapter Authorship

1. **Stone ML**, Younoszai A, Moon-Grady AJ (2021). Pentalogy of Cantrell and Ectopia Cordis.

In *Fetal and Neonatal Surgery: Diagnosis and Management of the Fetal and Neonatal Patient*. New York, NY: McGraw Hill. Release date: 2025.

2. **Stone ML**, Serraf A, Jagers J (2020). Congenitally Corrected Transposition of the Great Arteries. In *Pediatric and Congenital Cardiology, Cardiac Surgery, and Intensive Care, Second Edition*. New York, NY: Springer Publishing Company. Release date: pending.
3. Nelson J, **Stone ML**, Gangemi JJ (2017). Coarctation of the Aorta and Interrupted Aortic Arch. In R.M. Ungerleider, K. Nelson, D.S. Cooper, J. Meliones, and J. Jacobs (Eds.), *Critical Heart Disease in Infants and Children, Third Edition*. Philadelphia, PA: Elsevier. Release date: Nov 29, 2018.
4. **Stone ML**, Gangemi JJ (2016) Anatomic Considerations for the Pulmonary Valve. In G. Ailawadi, I.L. Kron (Eds.), *Catheter Based Valve and Aortic Surgery*. New York, NY: Springer. Release date: 2016.
5. **Stone ML**, Kron IL. (2013) Ascending Aortic Aneurysm Repair. In L. Kaiser, I.L. Kron, and T.L. Spray (Eds.), *Mastery of Cardiothoracic Surgery*. Philadelphia, PA: Lippincott Williams & Wilkins. Release date: Nov. 18, 2013.
6. **Stone ML**, Kern JA (2013) Descending Thoracic and Thoracoabdominal Aortic Aneurysms. In L. Kaiser, I.L. Kron, and T.L. Spray (Eds.), *Mastery of Cardiothoracic Surgery*. Philadelphia, PA: Lippincott Williams & Wilkins. Release date: Nov. 18, 2013.
7. **Stone ML**, Lau CL. (2013) Morgagni and Bochdalek Hernias in the Adult. In L. Sirgedas and S.C. Yang (Eds.), *Current Therapy in Thoracic and Cardiovascular Surgery*. Maryland Heights, MO: Mosby. Release date: pending.
8. Sharma AK, **Stone ML**, Lau CL, Laubach VE (2012) Pulmonary Transplantation and Ischemia-Reperfusion Injury. In P.F. Guerreiro (Ed.) *Topics in Thoracic Surgery*. Manhattan, NY: InTech.
9. **Stone ML**, Kern JA. (2011) Chronic Type B Aortic Dissections. In K.L. Franco & V.H. Thourani (Eds.), *Cardiothoracic Surgery Review*. Philadelphia, PA: Lippincott Williams & Wilkins. Release date: Dec. 16, 2011.

Commercial Children's Book Publications

1. Baimas-George M, **Stone ML** (2025). Heart Transplant: All Aboard My New Heart. TerryBooks LLC.

International Presentations

International Society for Heart and Lung Transplantation

Oral Presentation, Boston, MA, 2022

Inclusive ABO-incompatible Listing for Pediatric Heart Transplantation Results in Comparable Post-Transplant Rejection-Free Survival

Downs EA, Schafer M, Aubrey M, Mitchell MB, Jagers J, Campbell DN, Everitt MD, **Stone ML**

British Association of Pediatric Surgeons

Oral Presentation, Bournemouth, UK, 2013

Patient and Hospital Factors are Associated with the Allocation of Laparoscopic Surgical Techniques for Children within the United States

Stone ML, LaPar DJ, Shada AL, Rasmussen SK, Kane BJ, McGahren ED, Rodgers BM

British Association of Pediatric Surgeons/European Pediatric Surgical Association

Peter Paul Rickham Young Investigator Award Finalist, Oral Presentation, Rome, Italy, 2012

The Effect of Race and Gender on Pediatric Surgical Outcomes within the United States

Stone ML, LaPar DJ, Rasmussen SK, Kane BJ, McGahren ED, Rodgers BM

National Presentations

Western Thoracic Surgical Association

51st Annual meeting, Oral Presentation, Congenital Cardiac Surgery Session, Dana Point, CA, 2025

MRI-derived flow parameters and clinical outcomes are equivalent between unilateral and bilateral bi-directional Glenn circulations

Drysdale N, Shad J, Fujiwara T, Park S, Fraser CD, Leahy R, Jaggars J, Mitchell MB, Barker A,

Stone ML

Academic Surgical Congress

20th Annual meeting, Oral Presentation, Las Vegas, NV, 2025

Patient weight and extra-cardiac conduit size remain important considerations for timing of Fontan palliation

Zakrzewski J, Leahy R, Drysdale N, Platnick C, Fraser CD, Downs EA, Campbell DN, Mitchell

MB, Jaggars J, **Stone ML**

Congenital Heart Surgeons' Society

51st Annual meeting, Scientific Poster Presentation, Chicago, IL, 2024

CMR derived measurements of ventricular function determine the predictive power of VO₂ max for Fontan failure

Drysdale ND, Zakrzewski J, Platnick C, Schafer M, van der Geest RJ, Browne L, DiMaria M,

Moghari M, Jaggars J, Mitchell MB, **Stone ML**

American Association of Thoracic Surgeons Mechanical Support and Transplantation Summit

Poster Competition, Toronto, ON, Canada, 2024

A novel technique for murine ex vivo heart perfusion and cervical transplantation

Zakrzewski J, Iguidbashian J, Lu L, Khailova L, Jaggars J, **Stone ML**

Western Thoracic Surgical Association

49th Annual meeting, Oral Presentation, Congenital Cardiac Surgery Session, Vail, CO, 2024

Hypothermic, acellular ex vivo heart perfusion results in improved graft function compared to cold static preservation within a murine transplantation model

Zakrzewski J, Iguidbashian J, Lu L, Deng XS, Drysdale N, Khailova L, Jaggars J, Davidson J,

Garcia A, **Stone ML**

Western Thoracic Surgical Association

49th Annual meeting, ePoster Presentation, Congenital Cardiac Surgery Session, Vail, CO, 2024

Multi-disciplinary management of prosthetic pulmonary valve endocarditis should include the selective application of transcatheter pulmonary valve replacement

Solano ER, Soszyn N, Shad J, Morgan G, Leahy R, Fraser C, Downs E, Mitchell MB, Jaggars J,

Zablah J, **Stone ML**

American Association of Thoracic Surgeons

104th Annual Meeting, C. Walton Lillehei Resident Research Forum Oral Presentation, Toronto, ON, Canada, 2024

Sphingosine-1-phosphate improves heart function in a novel ex vivo perfusion murine heart transplantation model

Iguidbashian J, Zakrzewski J, Li L, Garcia AM, Khailova L, Deng X, Jain S, Plenter R, Jani A, Jagers J, Davidson J, **Stone ML**

Western Thoracic Surgical Association

49th Annual Meeting, Podium Presentation Session, Coeur d'Alene, ID, 2023

Non-invasive myocardial deformation indices are associated with cardiac allograft vasculopathy in pediatric heart transplantation recipients

Schafer M, Miyamoto S, Everitt M, Campbell DN, Jagers J, Mitchell MB, **Stone ML**

American Association of Thoracic Surgeons

103rd Annual Meeting, Oral Presentation, Los Angeles, CA, 2023

Regional Arch Measurements Differ Between Imaging Modalities in Infants with Aortic Coarctation

Iguidbashian J, Malone LJ, Browne LP, Schafer M, Nguyen M, Liu J, Frank BS, Campbell DN, Mitchell MB, Jagers J, **Stone ML**

Western Thoracic Surgical Association

48th Annual Meeting, Oral Presentation, Congenital Cardiac Surgery Session, Koloa, HI, 2022

Computed Tomographic Angiography Provides Reproducible and Reliable Identification of Right Ventricular Dependent Coronary Circulation in Infants with Pulmonary Atresia and Intact Ventricular Septum

Malone LJ, Browne LP, Morgan GJ, Mitchell MB, Campbell DN, Jagers J, **Stone ML**

Congenital Heart Surgeons' Society

48th Annual Meeting, Scientific Poster Presentation, Chicago, IL, USA, 2021

Left Ventricular Dysfunction and Electromechanical Discoordination Following the Ross-Konno Operation are Independent of the Surgical Reconstruction

Stone ML, Schafer M, von Alvensleben JC, Frank BS, Campbell DN, Mitchell MB, Jagers J

Western Medical Research Conference

Virtual Medical Student Oral Presentation, January 29, 2021

Open Chest Duration Following Congenital Cardiac Surgery Increases Risk for Surgical Site Infection

Feng Z, Schofield S, Downs E, Newman S, Campbell DN, Mitchell MB, Jagers J, **Stone ML**

American Association of Thoracic Surgeons

Congenital Session Oral Presentation: Heart Function, Failure, Transplantation, Virtual Program, 2020

Inefficient Flow Patterns Predominate within the Systemic Ventricle of Children with Hypoplastic Left Heart Syndrome

Stone ML, Schafer M, DiMaria M, Browne L, Campbell DN, Jagers J, Mitchell MB.

Society of Thoracic Surgeons

53rd Annual Meeting, Scientific Poster Presentation, Houston, TX, USA, 2017

Post-cardiac Surgery Utilization of Nicardipine is Safe in Children Regardless of Age

Stone ML, Kelly J, Mistry M, Buck ML, Gangemi JJ, Vergales J

American Association of Thoracic Surgeons

C. Walton Lillehei Resident Research Award Finalist, Oral Presentation, Minneapolis, MN, USA, 2013

Ex Vivo Lung Perfusion with Concomitant Adenosine 2A Receptor Agonism Treatment Provides a Superior Strategy for Non-heart-beating Lung Rehabilitation

Stone ML, Sharma AK, Mulloy DP, Fernandez LG, Lau CL, Laubach VE, Kron IL

American Association of Thoracic Surgeons

General Thoracic Surgery Forum, Oral Presentation, Minneapolis, MN, USA, 2013

A Novel Sphingosine 1-Phosphate Analog Provides Protection from Lung Ischemia-Reperfusion Injury

Stone ML, Sharma AK, Johnston WF, Zhao Y, Lynch KR, Kron IL, Laubach VE

American Association of Thoracic Surgeons Mitral Conclave

Plenary Top 10 Abstract Oral Presentation, New York, NY, USA, 2013

Annuloplasty for Functional Mitral Regurgitation: Ischemic versus Non-ischemic Outcomes are Different

Stone ML, LaPar DJ, Wade SM, Mulloy DP, Kern JA, Kron IL, Ailawadi GA

American Association of Thoracic Surgeons Mitral Conclave

ePoster Presentation, New York, NY, USA, 2013

Impact of Systolic Anterior Motion Following Mitral Valve Repair in the Modern Era.

LaPar DJ, **Stone ML**, Lau CL, Ailawadi G, Kern JA, Kron IL.

Southeastern Surgical Association

Pediatric Surgery Poster Session, Jacksonville, FL, USA, 2013

Rigid Bronchoscopy and Post-procedural Chest Radiography in Children

Stone ML, Tillou JD, Rasmussen SK, Kane BJ, McGahren ED, Rodgers BM

American Pediatric Surgical Association

Oral Presentation, San Antonio, TX, USA, 2012

Primary Payer Status is Significantly Associated with Postoperative Mortality, Morbidity, and Hospital Resource Utilization in Pediatric Surgical Patients within the United States

Stone ML, LaPar DJ, Mulloy DP, Rasmussen SK, Kane BJ, McGahren ED, Rodgers BM

American Pediatric Surgical Association

Oral Presentation, San Antonio, TX, USA, 2012

Abnormal Heart Rate Characteristics are Associated with the Severity of Necrotizing Enterocolitis in NICU Patients

Stone ML, Kane BJ, Lake DE, Moorman JR, McGahren ED, Rodgers BM, Fairchild KD

American Association of Thoracic Surgeons

C. Walton Lillehei Resident Research Award Finalist, Oral Presentation, San Francisco, CA, USA, 2012

CD11c+ Dendritic Cells and Macrophages Mediate Lung Ischemia-Reperfusion Injury through IL-23/IL-12 Dependent Mechanisms

Stone ML, Sharma AK, Fernandez LG, Li L, LaPar DJ, Hajzus VA, Mulloy DP, Zhao Y, Lau CL, Laubach VE, Kron IL

American Association of Thoracic Surgeons

C. Walton Lillehei Resident Research Award Finalist, Oral Presentation, San Francisco, CA, USA, 2012

Ex vivo Reconditioning of Non-heart-beating Donor Lungs in a Preclinical Porcine Model: Delayed Perfusion Results in Superior Lung Function

Mulloy DP*, **Stone ML***, Crosby IK, LaPar DJ, Lau CL, Laubach VE, Kron IL

Pediatric Academic Society

Poster Presentation, Boston, MA, USA, 2012

Heart Rate Characteristics Index (HeRO Score) Increases in NICU Patients Prior to Diagnosis of Necrotizing Enterocolitis

Stone ML, Tatum P, Rodgers B, Lake D, Moorman R, Fairchild K

American Heart Association Resuscitation Science Symposium

Best Original Resuscitation Science Poster Session, Orlando, FL, USA, 2011

The Impact of Ventricular Assist Devices on Blood Product Utilization for Cardiac Transplantation

Stone ML, LaPar DJ, Benrashid E, De Souza DG, Ailawadi G, Kron IL, Blank RS, Kern JA

Regional Presentations

University of Colorado School of Medicine Resident Research Day

Selected Presentation, Aurora, CO, 2023

Hypothermic, acellular ex vivo heart perfusion results in superior post-transplantation function to standard cold, static preservation in a novel murine preservation-transplantation model
Iguidbashian J, Lu L, Khailova L, Deng X, Jain S, Plenter R, Jani A, Jagers J, Davidson J, **Stone ML**

University of Colorado School of Medicine Student Research Forum

Virtual Presentation, Aurora, CO, 2020

Open Chest Duration Following Congenital Cardiac Surgery Increases Risk for Surgical Site Infection
Feng Z, Schofield S, Downs E, Newman S, Campbell DN, Mitchell MB, Jagers J, **Stone ML**

University of Colorado Department of Surgery Resident Research Day

Selected Oral Presentation, Aurora, CO, 2019

Inefficient Flow Patterns Predominate within the Systemic Ventricle of Children with Hypoplastic Left Heart Syndrome

Stone ML, Schafer M, Browne L, DiMaria M, Campbell D, Jagers J, Mitchell M

University of Virginia Department of Surgery Resident Research Day

Selected Oral Presentation, Charlottesville, VA, 2015

CD11+ Dendritic Cells and Macrophages Mediate Lung Ischemia-Reperfusion Injury through IL-23/IL-12 Dependent Mechanisms

Stone ML, Sharma AK, Li L, Kim TS, Zhao Y, Lau CL, Kron IL, Laubach VE

University of Virginia Department of Surgery, Resident Research Day

Selected Oral Presentation, Charlottesville, VA, 2014

A Novel Sphingosine 1-Phosphate Analog Provides Protection from Lung Ischemia-Reperfusion Injury

Stone ML, Sharma AK, Johnston WF, Zhao Y, Lynch KR, Kron IL, Laubach VE

University of Virginia Department of Surgery, Resident Research Day

Selected Oral Presentation, Charlottesville, VA, 2013

Ex Vivo Lung Perfusion with Concomitant Adenosine 2A Receptor Agonism Treatment Provides a Superior Strategy for Non-heart-beating Lung Rehabilitation

Stone ML, Sharma AK, Mulloy DP, Fernandez LG, Lau CL, Laubach VE, Kron IL

24th Annual University of Virginia Children's Hospital Research Symposium

Selected Oral Presentation, Charlottesville, VA, 2012

Heart Rate Characteristics Index (HeRO Score) Increases in NICU Patients Prior to Diagnosis of Necrotizing Enterocolitis

Stone ML, Tatum P, Rodgers B, Lake D, Moorman R, Fairchild K

Virginia Surgical Society, American College of Surgeons Chapter

Oral Presentation, Fairfax, VA, 2012

Primary Payer Status is a Significant Predictor of Post-operative Mortality, Morbidity, and Resource Utilization in Pediatric Surgical Patients within the United States

Stone ML, LaPar DJ, Mulloy DP, Rasmussen SK, Kane BJ, McGahren ED, Rodgers BM

University of Virginia Department of Surgery, Resident Research Day

Selected Oral Presentation, Charlottesville, VA, 2012

Ex vivo Reconditioning of Non-Heart-Beating Donor Lungs in a Preclinical Porcine Model: Delayed Perfusion Results in Superior Lung Function

Stone ML, Mulloy DP, Crosby IK, LaPar DJ, Lau CL, Laubach VE, Kron IL

University of Virginia Graduate Medical Education Research Symposium

Selected Oral Presentation, Charlottesville, VA, 2011

Ex vivo Reconditioning of Non-Heart-Beating Donor Lungs in a Preclinical Porcine Model

Stone ML, Mulloy DP, Crosby IK, LaPar DJ, Lau CL, Laubach VE, Kron IL

23rd Annual University of Virginia Children's Hospital Research Symposium

Poster Session Presentation, Charlottesville, VA, 2011

Post-procedure Chest Radiography Does Not Alter the Clinical Treatment Course for Children After Rigid Bronchoscopy

Stone ML, Tillou JD, Guidry CA, Rasmussen SK, Kane BJ, McGahren ED, Rodgers BM.

Virginia Surgical Society, American College of Surgeons Chapter

Oral Presentation, Richmond, VA, 2011

Tracheoesophageal Fistula: A Two-Decade Surgical Experience

Stone ML, LaPar DJ, Stukenborg GJ, Kane BJ, McGahren, ED, Rodgers BM

Virginia Surgical Society, American College of Surgeons Chapter

Oral Presentation, Richmond, VA, 2011

Peritoneal Dialysis Catheter Function within a Rural Region

Stone ML, LaPar DJ, McGahren ED, Rodgers BM, Kane BJ

Appalachian Student Research Forum

Oral Presentation, Johnson City, TN, 2007

Neurochemical Demographics of the Human Anterior Cardiac Fat Pad

Stone ML, Hoard JL, Hoover DB

Invited International Lectures

CSI Frankfurt: Structural, Valvular, and Congenital Heart Interventions, 2024

Frankfurt, Germany

Left ventricular assist devices for children

June 20, 2024

Invited National Lectures

Society of Pediatric Radiology Advanced Course in Cardiac MRI, 2025

Aurora, CO, USA

Under the Hood: Cross-sectional Guidance for Surgical Planning in AV Valve Repair

October 10, 2025

Pediatric Perfusion Society Retreat, 2025

Denver, CO, USA

Cardiopulmonary bypass and surgical considerations for conjoined twins

October 3, 2025

American Academy of Pediatrics, 2025

Denver, CO, USA

It's all in the delivery: surgery in premature infants with congenital heart disease

September 26, 2025

American Association for Thoracic Surgery, 2025

Seattle, WA, USA

Rewriting the 10 commandments of the Fontan operation

May 3, 2025

University of Virginia Department of Surgery Muller-Jones-Kron Surgical Society, 2024

Charlottesville, VA, USA

Innovations and Advancements within Congenital Heart Surgery: A Personal Experience

March 21, 2025

American Heart Association Scientific Sessions, 2022

Chicago, IL, USA

3-dimensional echocardiography is needed for presurgical planning in atrioventricular septal defects

November 7, 2022

Congenital Cardiac Anesthesia Society, 2021

Virtual Seminar

Mechanical Circulatory Support for the Congenital Cardiac Patient

December 13, 2021

CSI America: Structural, Valvular, and Congenital Heart Interventions, 2021

Denver, CO, USA

Until what age is surgery generally preferred?

Coarctation of the aorta; Neonatal to Elderly

December 3, 2021

American Heart Association Scientific Sessions, 2021

Virtual and Live Broadcasting Event

Establishing Your Research While Starting Your Clinical Career: The Surgeon's Perspective

Jump-starting Your Career in Cardiovascular Surgery and Anesthesia

November 13, 2021

American Society of Extracorporeal Technology

59th International Conference – A Virtual Experience

...or not to MUF; The Appetizer and Desert Session/A Surgical Debate

May 2, 2021

Invited Institutional Lectures

University of Colorado Department of Surgery Annual Research Retreat

Invited Presentation, Aurora, CO

Ex vivo heart perfusion (EVHP) and sphingosine-1-phosphate therapeutics in heart transplantation

October 13, 2025

University of Colorado Department of Surgery Research Seminar Series

Invited Presentation, Aurora, CO

Hypothermic ex vivo heart perfusion (EVHP) and targeted immunotherapy in heart transplantation

September 12, 2025

Children's Hospital Colorado Ventricular Assist Device Symposium

Invited Presentation, Aurora, CO

Indications for implant, timing, and device selection

August 21, 2025

Children's Hospital Colorado Heart Institute Symposium

Invited Presentation, Aurora, CO

Surgical management of pulmonary atresia, ventricular septal defect, MAPCAs

January 24, 2025

Children's Hospital Colorado Cardiovascular Nursing Education Series

University of Colorado, Aurora, CO

Pediatric Heart Transplantation

September 23, 2024

Children's Hospital Colorado Ventricular Assist Device Symposium

Invited Presentations, Aurora, CO

Indications for implant, timing, and device selection

Surgical VAD implantation

August 6, 2024

Children's Hospital Colorado Center for Children's Surgery Research Symposium

Invited Presentation, Aurora, CO

Ex vivo Heart Perfusion and Sphingosine-Targeted Therapies in Heart Transplantation

February 16, 2024

The University of Virginia Department of Surgery Residency Research Lecture

Virtual Presentation, Charlottesville, VA

How to Navigate through your Research Years

July 17, 2023

University of Colorado Department of Surgery Grand Rounds

University of Colorado, Aurora, CO

Advancements in Pediatric Mechanical Circulatory Support as a Bridge to Heart Transplantation

May 3, 2021

Cardiac Intensive Care Unit Lecture Series

Children's Hospital Colorado, Aurora, CO

Surgical Valve Replacement

October 7, 2020

Advanced Care of Young Athlete Symposium

Children's Hospital Colorado, Aurora, CO

Cardiac and Thoracic Trauma

November 15, 2019

University of Virginia Department of Surgery Grand Rounds

University of Virginia Health System, Charlottesville, VA

The Triple Crown of Immunotherapy

May 25, 2016

Invited Moderator

Western Thoracic Surgical Association

51st Annual Meeting, Congenital Cardiac Surgery Session, Dana Point, CA, 2025

Western Thoracic Surgical Association

49th Annual Meeting, Congenital Cardiac Surgery Session, Coeur d'Alene, ID, 2023

American Association of Thoracic Surgeons

103rd Annual Meeting, Congenital Poster Session III, Los Angeles, CA, 2023

Western Thoracic Surgical Association

48th Annual Meeting, Congenital Cardiac Surgery Session, Koloa, HI, 2022

Board Certifications

American Board of Surgery

Certificate no.: 062528

Expiration: December 31, 2027

American Board of Thoracic Surgery

Certificate no.: 8588

Expiration: December 31, 2029

American Board of Thoracic Surgery

Congenital Cardiac Surgery Sub-specialization

Certificate no.: 238
Expiration: December 31, 2031

Licensing and Additional Certifications

State of Colorado Medical License

Issue date: May 18, 2018

License no.: DR.0060563

Advanced Cardiac Life Support, American Red Cross

Issue date: July 13, 2017

Advanced Trauma Life Support, American Red Cross

Issue date: June 12, 2009

Fundamentals of Laparoscopic Surgery, Society of American Gastrointestinal and Endoscopic Surgeons

Issue date: December 18, 2013

Editorial Board Membership

Frontiers in Pediatrics, Pediatric Critical Care

Invited Reviewer

Science Advances

Journal of Thoracic and Cardiovascular Surgery

Pediatrics

Pediatric Cardiology

Annals of Thoracic Surgery

Cardiology in the Young

Journal of Pediatric Surgery

Frontiers in Pediatrics

Heart Surgery Forum

Professional Service

Colorado Clinical and Translational Sciences Institute Grant Program Review Committee, 2025

Abstract reviewer for Department of Surgery Resident Research Day, Basic Science, 2025

Thoracic Surgery Foundation/Society of Thoracic Surgeons Award Review Committee, 2024

Abstract reviewer and selection for Society of Thoracic Surgeons 60th Annual Meeting, 2024

Abstract reviewer for Department of Surgery Resident Research Day, Basic Science, 2024

American Association of Thoracic Surgeons Expert Consensus on Pulmonary Atresia with Intact Ventricular Septum, 2024

Colorado Clinical and Translational Sciences Institute Grant Program Review Committee, 2024

Thoracic Surgery Directors Association (TSDA) In-Training Exam Committee, 2021-2023

Thoracic Surgery Foundation/Society of Thoracic Surgeons Award Review Committee, 2023

Abstract reviewer and selection for Society of Thoracic Surgeons 59th Annual Meeting, 2023

Congenital Heart Surgeon's Society, Work Weekend, Toronto, CA, 2023

Children's Hospital Colorado Leadership Conference, 2023

Children's Hospital Colorado Center for Children's Surgery Symposium Abstract Reviewer, 2022

Colorado Clinical and Translational Sciences Institute Grant Program Review Committee, 2022
Children's Hospital Colorado, Longitudinal Integrated Clerkship Preceptor, 2022-current
Abstract reviewer and selection for Society of Thoracic Surgeons 58th Annual Meeting, 2022
Abstract reviewer for Center for Children's Surgery Symposium, Children's Hospital Colorado, 2021
Colorado Clinical and Translational Sciences Institute Grant Program Review Committee, 2021
Abstract reviewer and selection for Society of Thoracic Surgeons 57th Annual Meeting, 2021

Professional Associations

Fellow, Academy of Medical Educators (AME), University of Colorado SOM
American Heart Association, AHA
Arnold P. Gold Humanism in Medicine Honor Society
International Society for Heart and Lung Transplantation, ISHLT
Pediatric Heart Transplant Society, PHTS
Society of Thoracic Surgeons, STS
Western Thoracic Surgical Association, WTSA

Mentorship

University of Colorado School of Medicine PhD Mentor, 2023-current

Committee chair and primary research mentor

Mentee: Nicolas Drysdale, MD

University of Colorado School of Medicine Research Track Program, 2021-current

Primary Research Mentor

Mentees: Michal Schäfer, PhD, MD, Class of 2023
Zihan Feng, MD, Class of 2023

University of Colorado Department of Surgery Scientific Mentorship Program, 2021-current

Primary Research Mentor

Mentees: John Iguidbashian, MD, PGY-5 (2021-present)
Jack Zakrzewski, MD, PGY-3 (2023-present)
Nicolas Drysdale, MD, PGY-3 (2023-present)
Benjamin Borg, MD, PGY-3 (2025-present)

Children's Hospital Colorado, Longitudinal Integrated Clerkship Preceptor, 2022-current

Clinical Preceptor

Mentees: Amita Kashyap, MS-3, 2025-current
Karima Osman, MS-1, 2022-2023
Joanna Shad, MS-2, 2023-current

Institutional Committee Leadership and Participation

Children's Hospital Colorado Perioperative Performance Improvement and Patient Safety Committee
Children's Hospital Colorado Heart Transplantation Selection Committee
Children's Hospital Colorado Transplant Directors Committee
Children's Hospital Colorado Heart Institute Morbidity and Mortality Review Committee

Congenital Cardiothoracic Surgical Site Infection Committee

Philanthropy

Member, Cherry Creek Presbyterian Church, Denver, Colorado, 2021-current

Member, Medical mission effort in Haiti and Dominican Republic, 2007-2008

Project Leader, Habitat for Humanity, Johnson City, Tennessee, 2008

Member, Medical mission effort in Amazon Region of Brazil, 2001-2004

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