Muhammad Aftab, MD, FACS, FACC

Department of Surgery, Division of Cardiothoracic Surgery University of Colorado School of Medicine 12631 E. 17th Avenue, C-310 • AURORA, CO 80045 PHONE 303-724-2799

E-MAIL muhammad.aftab@cuanschutz.edu

ACADEMIC APPOINTMENTS- FACULTY/STAFF POSITIONS

2022 – To date Associate Professor in Cardiothoracic Surgery

Adult Cardiothoracic, Aortic and Endovascular Surgeon

Chief, Cardiothoracic Surgery, Rocky Mountain Regional VA Medical Center

Surgical Director, Lead Extraction Program

Department of Surgery

Division of Cardiothoracic Surgery

University of Colorado, Anschutz Medical Campus

Aurora, Colorado

2016 – 2022 Assistant Professor in Cardiothoracic Surgery

Adult Cardiothoracic, Aortic and Endovascular Surgeon

Surgical Director, Lead Extraction Program

Department of Surgery

Division of Cardiothoracic Surgery

University of Colorado, Anschutz Medical Campus

Aurora, Colorado

2014-2016 Staff Surgeon- Clinical Associate

Advanced Aortic/Endovascular Surgery

Department of Thoracic and Cardiovascular Surgery

Cleveland Clinic Cleveland, Ohio

Chair: Lars G. Svensson, MD, PhD

Program Director: Eric Roselli, MD, FACS

EDUCATION - RESIDENCY & TRAINING

2013 - 2014 Michael E. DeBakey Department of Surgery

Texas Heart Institute/Baylor College of Medicine Thoracic Residency Program,

Houston, TX

Cardiothoracic Surgery Chief Resident, PGY-8

Division of Cardiothoracic Surgery Program Director: Denton A. Cooley MD, Co-program Director: Joseph S. Coselli, MD

2011 - 2014 Michael E. DeBakey Department of Surgery

Texas Heart Institute/Baylor College of Medicine Thoracic Residency Program,

Houston, TX

Cardiothoracic Surgery Resident Division of Cardiothoracic Surgery Program Director: Joseph S. Coselli, MD

2010 - 2011 Hofstra North Shore-LIJ School of Medicine

North Shore / Long Island Jewish Health System, New Hyde Park, NY

General Surgery, Chief Resident PGY-5

Department of General Surgery Chair: Gene F. Coppa MD, FACS

Program Director: Jeffrey M. Nicastro MD, FACS

2006 - 2010	North Shore University/ Long Island Jewish Hospital, New Hyde Park, NY Categorical General Surgery Resident PGY 1-4 Department of General Surgery Chair: Gene F. Coppa MD, FACS Program Director: Jeffrey M. Nicastro MD, FACS
2004 - 2006	Michael E. DeBakey Department of Surgery Baylor College of Medicine, Houston, TX Surgical Research Fellow Supervisor: David H. Berger, MD, FACS (Professor and Vice Chair)
2002 - 2004	Mayo Hospital / King Edward Medical College, Lahore, Pakistan Department of Cardiothoracic Surgery FCPS Post-Graduate Trainee Supervisor: Dr. Haider Zaman FRCS, FRCS-CTh, FCPS Dr. Amir Ijaz MS (Associate Professor)
2001 - 2002	Ripah International University Demonstrator, Department of Pathology Supervisor: Prof. Dr. Muzaffar Ahmad, FRCPath
2000	Mayo Hospital / King Edward Medical College, Lahore, Pakistan General Surgery/Cardiothoracic Surgery House Surgeon Supervisor: Prof. Dr. Mukhtar Ahmad, FRCS Prof. Dr. Syed Tahir Ahmad Shah, MD, FACS
07/1999 - 12/1999	Mayo Hospital / King Edward Medical College, Lahore, Pakistan Department of Internal Medicine/Cardiovascular Disease House Physician Supervisor: Prof. Dr. Tariq Mehmood Malik, MD, FACS Prof. Dr. Mumtaz Hasan, MD, FACP, FRCP, FCPS

EDUCATION (MEDICAL SCHOOL)

1993-1999 King Edward Medical University

Lahore, Pakistan MBBS/MD

MEDICAL LICENSURE & CERTIFICATION

- American Board of Thoracic Surgery (ABTS) (Certificate# 8096), Recertified 01/2024
- American Board of Surgery (ABS) (Certificate# 056774), Recertified 10/2023
- Fellow American College of Surgeons, since 2017
- Fellow American College of Cardiology, since 2016
- Colorado Medical Board, since 2015 (Active)
- State Medical Board of Ohio, since 2014 (Active)
- Texas Medical Board, since 2012 (Active)

MEMBERSHIPS IN PROFESSIONAL ORGANIZATIONS:

- Fellow, American College of Surgeons (ACS), 2017 #03109802
- Fellow, American College of Cardiology (ACC), 2018 #1025004
- Active Member, American Association of Thoracic Surgery (AATS), 6/2024
- Active Member, Society of Thoracic Surgery (STS), since 2016 #242381
- Active Member, Western Thoracic Surgical Association (WTSA), since 2018
- Active Member, Southern Thoracic Surgery Society (STSA), since 2016

- Active Member, Eastern Cardiothoracic Surgical Society (ECTSS), since 2015
- Active Member, American Heart Association (AHA), since 2017
- Active Member, Association of Academic Surgery (AAS) since 2014
- Active Member, American Medical Association (AMA) since 2006

HONOURS/SPECIAL RECOGNITIONS/AWARDS

09/2024	Faculty Mentor for the Best Oral Cardiac Presentation Award Eastern Cardiothoracic Surgical Society (ECTSS) 62 nd Annual Meeting "Enhancing Aorite Surgery Outcomes: Machine Learning-Based RBC Transfusion Prediction" Mentee: Nicolas Chanes, MD
08/2024	5280: Denver's Magazine Top Doctors Recognized for Excellence in Thoracic & Cardiac Surgery
01/2024	STS Leadership Academy Society of Thoracic Surgeons (STS)
10/2022	Faculty Mentor for the Best Oral Cardiac Presentation Award Eastern Cardiothoracic Surgical Society (ECTSS) Annual Meeting 10/09/2022 "An Analysis of Aortic Remodeling in TEVAR for Aortic Dissection: Balloon Flap Fracture vs. the Traditional Method" Mentee: Cenea Kemp, MD
09/2021	Faculty Mentor for Paul C. Samson Resident Manuscript Award Finalist Western Thoracic Surgical Association (WTSA) Annual Meeting 09/30/2021 "Outcomes of Venovenous Extracorporeal Membrane Oxygenation Support in Patients with Severe ARDS from COVID-19: A Multicenter Study" Mentee: Navin Vigneshwar, MD
07/2019	Best Multidisciplinary Research Collaborator Award M-TRAC (Multidisciplinary Translational Research in AKI Collaborative University of Colorado, Anschutz Medical Center, Aurora, Colorado
11/2019	Faculty Mentor for Hawley H. Seiler Resident's Award Recipient Southern Thoracic Surgical Association (STSA) "Clinical Predictors of In-Hospital Mortality in Venoarterial Extracorporeal Membrane Oxygenation in Patients with Refractory Cardiogenic Shock" Mentee: Navin Vigneshwar, MD
05/2019	AATS Leadership Academy American Association for Thoracic Surgery
01/2019	Faculty Mentor for Best Cardiac Surgery Critical Care Poster Award Recipient The Society of Thoracic Surgeons (STS) "Platelet Nadir Following Cardiopulmonary Bypass is Independently Associated with Post-Operative Mortality, Infection, Acute Kidney Injury, and Prolonged ICU Stay" Montan Panismin Criffin MD

Mentee: Benjamin Griffin, MD

08/2018	R-21 Research Grant - National Institute of Health National Institute of Diabetes and Digestive and Kidney Diseases "Immunoparalysis in AKI after cardiac surgery" 08/01/2018-07/31/2021 (with renewal option after one year) R-21Grant (\$223,260) Co-investigator
05/2018	Faculty Co-Mentor for Nicholas Kouchoukos Research Award Recipient American Association for Thoracic Surgery (AATS)/Aortic Symposium 2018 Mentee: Katsuhiro Yamanaka, MD, Ph.D.
07/2017	Faculty Co-Mentor for Norman E. Shumway Research Award Recipient Western Thoracic Surgical Association (WTSA) Mentee: Katsuhiro Yamanaka, MD, Ph.D.
07/2017	Academic Enrichment Funds Seed Grant Committee (AEF) "Augmentation of Spinal Cord 'Precollateralization' to Prevent Paraplegia After Aortic Surgery" Grant (\$25,000) Principal Investigator
06/2017	AATS Graham Foundation Award Graham Surgical Investigator Award (\$100,000) American Association for Thoracic Surgery (AATS) "Augmentation of Spinal Cord 'Precollateralization' to Prevent Paraplegia After Aortic Surgery" 07/01/2017 – 06/30/2022 Principal Investigator
04/2014	Adult Cardiac Surgery Poster Winner, Third position 2014 Cardiothoracic Surgery Resident Poster Competition American Association for Thoracic Surgery (AATS) AATS Annual Meeting in Toronto, Canada, April 27-30, 2014
03/2014	ACC- Surgeon Council Award Travel Award American College of Cardiology Fellow in training (FIT) Award American College of Cardiology 63rd Annual Scientific Session, March 28 – 31, Washington, DC
10/2013	Congenital Cardiac Surgery- Section Editor Operative Dictations in Cardiothoracic Surgery A project of Thoracic Surgery Resident Association (TSRA)/Thoracic Surgery Directors Association (TSDA)
06/2012	Section Editor, TSRA Journal Club "Thoracic Aortic Surgery Section" Thoracic Surgery Residents Association (TSRA) Published 04/2014 Kindle Edition/Apple app.
06/2011	Chief Resident Teaching Award, Albert Einstein College of Medicine (AECOM), Bronx, New York
06/2011	Best Clinical Research Paper Award Annual Research Day Department of Surgery, Hofstra – LIJ School of Medicine Manhasset, New York

03/2011	Travel Fellowship Grant, Awarded by Society of Clinical Vascular Surgery (SCVS) through "SCVS Fellowship Program"
12/2010	Best Research Presentation Award, Annual Meeting of American College of Surgeons (ACS), Brooklyn and Long Island Chapter and Nassau Surgical Society
09/2009	Voting Member of Institutional Review Board Committee (IRB) North Shore Long Island Jewish Health System Feinstein Institute of Medical Research, Manhasset, NY
05/2006	Poster of Distinction Award 2006 American Gastroenterology Association (AGA)/ Digestive Disease Week Award given to top 10% posters and abstracts
10/2005	Scholar in-training Award American Association of Cancer Research (AACR), Conference on Colorectal Cancer: Molecular Pathways and Therapies. One of six awards presented to Research Scholars
08/2000	Primary Fellow of College of Physicians & surgeons of Pakistan (FCPS-1), General Surgery and Allied Specialties
1993 – 1999	National Talent Scholarship King Edward Medical College, Lahore, Pakistan (Based on outstanding academic performance)
1993	Best Graduate of the Year Zaka Ashraf Gold Medal Pre-medical, Sadiq Public School Bahawalpur, Pakistan
1993	Bronze Medal (Third Place) Faculty of Science FSc Board of Intermediate & Secondary Education Bahawalpur, Pakistan
1991 – 1993	National Talent Scholarship (Pre-Medical Level) Board of Intermediate & Secondary Education Bahawalpur, Pakistan.
1991	Gold Medal (First Place) Board of Intermediate & Secondary Education Bahawalpur, Pakistan.
1989-1991	Merit Scholarship (High School Level) Board of Intermediate & Secondary Education Bahawalpur, Pakistan
1991	First Place, Best science student Selected from all students in Bahawalpur Division, Pakistan

MAJOR COMMITTEE AND SERVICE RESPONSIBILITIES / LEADERSHIP (INTERNATIONAL, NATIONAL AND REGIONAL)

09/2024 – present	Member of Executive Council Eastern Cardiothoracic Surgery Society
09/2024 – present	Chair of Innovations and Research Committee Eastern Cardiothoracic Surgery Society
07/2024	Member TSDA In-Training Exam Cardiac Subcommittee Thoracic Surgery Directors Association
11/2023	Member Program and Abstract Review Committee 62 nd Annual meeting, Eastern Cardiothoracic Surgical Society The Ritz-Carlton, Naples, Florida
11/2023	Chair of Program and Abstract Review Committee 62 nd Annual meeting, Eastern Cardiothoracic Surgical Society The Ritz-Carlton, Naples, Florida
11/2023 - 09/2024	Member of Executive Council Eastern Cardiothoracic Surgery Society
11/2023- present	Chair of Program Committee 62nd Annual Meeting of Eastern Cardiothoracic Surgery Society (ECTSS) September 2024
06/2023 – present	Advisory Committee for Faculty Promotion and Tenure Department of Surgery University of Colorado Anschutz Medical Center
03/2023-01/2024	STS Leadership Academy
11/2022-11/2023	Chair of Program Committee (Cardiac) 61st Annual Meeting of Eastern Cardiothoracic Surgery Society (ECTSS) October 2023
10/2022 - 10/2023	
	Member of Executive Council Eastern cardiothoracic Surgery Society
10/2022	
10/2022 2021-2023	Eastern cardiothoracic Surgery Society 2022 AHA Surgery Fellowship Peer Review and Grants Committee
	Eastern cardiothoracic Surgery Society 2022 AHA Surgery Fellowship Peer Review and Grants Committee American Heart Association Member, Career Development Committee
2021-2023	Eastern cardiothoracic Surgery Society 2022 AHA Surgery Fellowship Peer Review and Grants Committee American Heart Association Member, Career Development Committee Eastern Cardiothoracic Surgery Society 2021 AHA Surgery Fellowship Peer Review Grants Committee
2021-2023 11/2021	2022 AHA Surgery Fellowship Peer Review and Grants Committee American Heart Association Member, Career Development Committee Eastern Cardiothoracic Surgery Society 2021 AHA Surgery Fellowship Peer Review Grants Committee American Heart Association Program Committee - Cardiac Surgery Section American College of Surgeons

12/2019	Reviewer, Panelist for Posters Session Pakistan Society of Cardiovascular and Thoracic Surgeons Karachi, Pakistan, December 7, 2019 Aga Khan University, Karachi, Pakistan
10/2019	Member of Program and Abstract Review Committee 57 th Annual meeting Eastern Cardiothoracic Surgical Society The Ritz-Carlton, Naples, Florida
2019-2022	Member of Research and Innovations Committee Eastern Cardiothoracic Surgical Society
10/2019	Program and Abstract Review Committee - Cardiac Surgery Section ACS Clinical Congress 2019, Moscone Convention Center, San Francisco, CA October 28, 2019
05/2019	AATS Leadership Academy American Association for Thoracic Surgery
2018	Reviewer Grants Committee Austrian Science Fund (FWF)
06/2017 - present	Inaugural Member/Investigator M-TRAC - Multidisciplinary Translational Research in AKI Collaborative University of Colorado, Anschutz Medical Center, Aurora, Colorado
11/2016 – present	Surgical Director, Lead Extraction Program University of Colorado Anschutz Medical Campus, Aurora, CO
2016 - 2022	STS Representative Centers for Medicare & Medicaid Services (CMS) Colorado Medicare Contractor Advisory Committee
2014	Delegate - Society of Thoracic Surgery (STS) AMA Interim Assembly Meeting AMA-Resident and Fellow Section's (AMA-RFS) Hilton Anatole, Dallas, TX November 6-8, 2014
2014	Member TSRA Executive Committee Thoracic Surgery Residents Association (TSRA) (Session 2014-2015)
2013	Member TSRA Executive Committee Thoracic Surgery Residents Association (TSRA) (Session 2013-2014)
2012	Member of Education and Projects Committees Thoracic Surgery Residents Association (TSRA) (2012 - 2013)
2009 – 2011	Voting Member of Institutional Review Board Committee Feinstein Institute of Medical Research North Shore - Long Island Jewish Health System, NY
2009 - 2011	Member of Surgery Resident Selection Committee North Shore Long Island Jewish Health System, NY

2009 - 2011	Member of Pharmacy & Therapeutics Committee North Shore Long Island Jewish Health System, NY
2009 - 2011	House Staff Surgical Research Committee General Surgery Residency Program North Shore Long Island Jewish Health System, NY
2009	Selected to House Staff Surgical Research Committee Department of Surgery North Shore Long Island Jewish Hospital, Manhasset, NY
2001- 2002	Faculty Coordinator of the Learning Resource Centre Ripah International University Medical College Pakistan
2001- 2002	Staff Editor of Medical College Annual Gazette Ripah International University Medical College, Pakistan

LEADERSHIP - INSTITUTIONAL COMMITTEE AND SERVICE RESPONSIBILITIES:

University of Colorado/Anschutz Medical Center/RMR VA Medical Center

- Member of Advisory Committee for Faculty Promotion and Tenure, Department of Surgery, University of Colorado Anschutz Medical Center
- University of Colorado Thoracic Aortic Surgery Program, Cardiac Surgery Representative (one of two cardio-aortic surgeons), 2018-present (weekly meeting every Monday)
- **Surgical Director, Lead Extraction Program,** University of Colorado Anschutz Medical Campus, Aurora, CO, 11/2016 to present
- Chief, Cardiothoracic Surgery, Rocky Mountain Regional VA Medical Center
- Lead Cardiac Surgeon, Thoracic Aortic program, RMR VA Medical Center, 2017 to present
- **Lead Cardiac Surgeon**, University of Colorado cardiac/major venous mechanical thrombectomy rescue initiative.
- **Member**, Advanced Cardiac Therapies/Heart Failure Selection Committee (weekly meeting, every Thursday)
- **Member Weekly Cath Multidisciplinary Conference**, 2016-present (weekly meeting every Wednesday)
- Inaugural Member/Investigator Multidisciplinary Translational Research in AKI Collaborative (M-TRAC) at the University of Colorado, Anschutz Medical Campus, Aurora, Colorado, 06/2017 to present
- Cardiothoracic Surgery Fellowship Interview/Selection Committee at the University of Colorado/Anschutz Medical Center, since 2016
- **General Surgery Residency Interview/Selection Committee** at the University of Colorado/Anschutz Medical Center, since 2016
- CU School of Medicine, Medical Students Interview/Selection Committee, University of Colorado, School of Medicine, Denver, CO – since 2020
- Patient Blood management Committee, University of Colorado Hospital, since 2021
- Transfusion Committee, University of Colorado Hospital, Since 2021

<u> JOURNAL REVIEWING / EDITORIAL BOARDS/GRANTS REVIEWER</u>

- 1. Editorial Board, Journal of Thoracic Diseases
- 2. Reviewer, AHA Surgery Fellowship Peer Review Grants Committee
- 3. Reviewer Grants committee, Austrian Science Fund (FWF)
- 4. Reviewer, Annals of Thoracic Surgery
- 5. Reviewer, European Journal of Cardiothoracic Surgery
- 6. Reviewer, Journal for Vascular and Endovascular Surgery
- 7. Reviewer, Journal of Thoracic Disease
- 8. Reviewer, Journal of Surgical Research
- 9. Reviewer, Journal of Cardiac Surgery

10. Reviewer, Annals of Cardiothoracic Surgery

INVITED DISCUSSANT/SCIENTIFIC SESSION MODERATOR/COURSE FACULTY

1. Eastern Cardiothoracic Surgical Society 62nd Annual Meeting

CT surgery Fellows Course Faculty, Topic: Endovascular Aortic Surgery-Total Arch Replacement September 18, 2024; Naples, Florida

2. Eastern Cardiothoracic Surgical Society 62nd Annual Meeting

Moderator Expert Session I – Aortic Surgery September 19, 2024; Naples, Florida

3. Eastern Cardiothoracic Surgical Society 62nd Annual Meeting

Moderator Plenary Session I September 19, 2024; Naples, Florida

4. Eastern Cardiothoracic Surgical Society 61st Annual Meeting

Invited Moderator for Cardiovascular Movie Night September 19, 2024; Naples, FL

5. 60th Annual Meeting of The Society of Thoracic Surgeons (STS)

Course Faculty, STS University, Module: Aortic Root Enlargement January 28, 2024; San Diego, CA

6. CT surgery Fellows Course by Terumo Aortic Inc.

Invited Course Faculty, Expert Module: Valve Sparing Root Replacement and Thoracic Endovascular Aortic

December 14-16, 2023; Miami, FL

7. 12th Biennial Conference, Cardiothoracic Surgery Fellows Course

Course Director, Module: Aortic Root Replacement

November 18, 2023; Peshawar, Pakistan

8. Annual Meeting of Pakistan Association of Cardiovascular and Thoracic Surgery (PACVTS)

Course Director on 12th Biennial Aortic Root and Arch Replacement Workshop November 16, 2023; Peshawar, Pakistan

9. Aortic Valve and Root Boot camp for CTS Fellows by Artivion Inc.

Invited Course Faculty, Expert Module: Valve Sparing Root Replacement October 27-28, 2023; Atlanta, GA

10. Eastern Cardiothoracic Surgical Society 61st Annual Meeting

Invited Speaker, Expert Session IV: David Valve Sparing Root Replacement: How I Teach It October 7, 2023; Eau Palm Beach, Manalapan, FL

11. Eastern Cardiothoracic Surgical Society 61st Annual Meeting

Invited Moderator for Expert Session I -- Cardiovascular October 5, 2023; Eau Palm Beach, Manalapan, FL

12. Eastern Cardiothoracic Surgical Society 61st Annual Meeting

Invited Speaker for Plenary Session I

October 5, 2023; Eau Palm Beach, Manalapan, FL

13. Eastern Cardiothoracic Surgical Society 61st Annual Meeting

Invited Moderator for Cardiovascular Movie Night October 5, 2023; Eau Palm Beach, Manalapan, FL

14. Eastern Cardiothoracic Surgical Society 61st Annual Meeting

Course Faculty, Leadership Academy, Topic: Teaching in the Operating Room October 4, 2023; Eau Palm Beach, Manalapan, Florida

15. Eastern Cardiothoracic Surgical Society 61st Annual Meeting

CT surgery Fellows Course Faculty, Topic: Thoracic Endovascular Aortic Repair - Tips and Techniques October 4, 2023; Eau Palm Beach, Manalapan, Florida

16. 59th Annual Meeting of The Society of Thoracic Surgeons (STS)

Course faculty, STS University, Module: Aortic Root Enlargement January 23, 2023; San Diego, CA

17. CT surgery Fellows Course by Terumo Aortic Inc.

Course Faculty, Expert Module: Total Arch Replacement and Thoracic Endovascular Aortic Repair December 8-9, 2022; Miami, FL

18. Aortic Valve and Root Boot camp for CTS fellows by Artivion Inc.

Course Faculty, Expert Module: Valve Sparing Root Replacement October 28-29, 2022; Atlanta, GA

19. American College of Surgeons, Clinical Congress 2022

Course Faculty, Course Session: Aorto-Esophageal and Cardio-Esophageal Fistulae Topic: Intra-Operative Endovascular and Open Management of Aorto-Enteric and Atrio-Esophageal Fistulas October 19, 2022; San Diego, CA

20. Academy, Eastern Cardiothoracic Surgical Society 60th Annual Meeting

Course Faculty, Leadership; Topic: Teaching in the Operating Room October 6, 2022; Eden Roc, Miami, Florida

21. Eastern Cardiothoracic Surgical Society 60th Annual Meeting

Moderator Expert Session IV - Transcatheter Aortic Work October 9, 2022; Eden Roc, Miami, Florida

22. Texas Cardiovascular Innovations Conference 2022

Invited Speaker, Overview of Aortic Aneurysmal Disease and Type A Dissection Contrasting Programs: University of Colorado Aortic Program & Methodist San Antonio Aortic Program August 27, 2022; La Cantera Resort, San Antonio, TX

23. Pakistan Association of Cardiovascular and Thoracic Surgery Annual Meeting 2022

Invited Speaker: Evolution and Innovation in Optimizing the Brain Protection in Aortic Arch Surgery May 21, 2022; Lahore, Pakistan

24. Texas Cardiovascular Innovations Conference 2021

Invited Speaker, Overview of Aortic Aneurysmal Disease December 17, 2021; La Cantera Resort, San Antonio, Texas

25. ACS Virtual Clinical Congress 2021

Moderator Scientific Forum Session SF131 - Cardiac Surgery October 23-27, 2021

26. Eastern Cardiothoracic Surgical Society 59th Annual Meeting

Moderator Expert Session II - Management of Patients in Cardiogenic Shock and Reviewing Advanced Mechanical Circulatory Support October 8, 2021; Eau Palm Beach, Manalapan, Florida

27. Society of Thoracic Surgeons 56th Annual Meeting

Role: Course Faculty, STS University Course: ECMO cannulation January 25, 2020; Ernest N. Morial Convention Center, New Orleans, LA

28. Society of Thoracic Surgeons 56th Annual Meeting

Moderator, Introduction to Cardiothoracic Health Services Research January 27, 2020; Ernest N. Morial Convention Center, New Orleans, LA

29. Pakistan Society of Cardiovascular and Thoracic Surgeons 11th Biennial Conference

Moderator: Plenary Session, Cardiothoracic surgery 2020 and beyond December 07, 2019; Karachi, Pakistan

30. Pakistan Society of Cardiovascular and Thoracic Surgeons 11th Biennial Conference

Invited Core Course Faculty: Workshop 1 - Aortic annular enlargement December 06, 2019; Karachi, Pakistan

31. Pakistan Society of Cardiovascular and Thoracic Surgeons 11th Biennial Conference

Invited Core Course Faculty: Workshop 4 – Catheter Skills for Cardiac Surgeons December 06, 2019; Karachi, Pakistan

32. ACS Clinical Congress 2019

Moderator, Cardiac Surgery I, ACS Clinical Congress 2019 October 28, 2019; Moscone Convention Center, San Francisco, CA

33. Society of Thoracic Surgeons TEVAR Symposium

Session Moderator: Branched Endografts for the Treatment of Aortic Arch Pathology April 5, 2019; Chicago, IL

34. Society of Thoracic Surgeons TEVAR Symposium

Invited Core Course Faculty April 4-5, 2019; Chicago, IL

35. Eastern Cardiothoracic Surgical Society 56th Annual Meeting 2018

Invited Speaker: Hybrid Aortic Arch Repair: Classification, technique, and pitfalls. October 22, 2018; Clearwater Beach, Florida

36. ACS Clinical Congress 2018

Moderator, Cardiac Surgery Session I, ACS Clinical Congress 2018 October 21-23, 2018; Boston Convention and Exhibition Center, Boston, MA

37. ACS Clinical Congress 2017

Invited Discussant, Scientific Forum 18- Cardiac Surgery II October 24, 2017; San Diego Convention Center

38. Eastern Cardiothoracic Surgical Society 55th Annual Meeting

Moderator Expert Session II

October 20, 2017; Omni Amelia Island Plantation Resort, Amelia Island, Florida

39. Aortic Tech Exchange Course (Selected 24 Vascular and CT surgery Fellows in USA)

Core Faculty for the Aortic Simulation Course/Cadaver Laboratory April 20-21, 2017; Center for Surgical Innovation (CSI), University of Colorado, Aurora, CO

40. ACS Clinical Congress 2016

Invited Discussant, Scientific Forum 06 – Cardiac Surgery October 17, 2016; Walter E. Washington Convention Center, Washington, D.C.

RESEARCH GRANTS (INTRAMURAL AND EXTRAMURAL)

08/2018 R-21 Research Grant - National Institute of Health

National Institute of Diabetes and Digestive and Kidney Diseases

"Immunoparalysis in AKI after cardiac surgery"

08/01/2018-07/31/2021 (with renewal option after one year)

R-21Grant (\$223,260) Co-investigator

05/2018 Product only (In-Kind) Grant by WL Gore

"Augmentation of Spinal Cord 'Precollateralization' to Prevent Paraplegia After

Aortic Surgery"

Value of Stent Graft Grant Donation (\$250,000)

Principal Investigator

07/2017 Academic Enrichment Funds Seed Grant Committee (AEF)

"Augmentation of Spinal Cord 'Precollateralization' to Prevent Paraplegia After

Aortic Surgery" Grant (\$25,000) Principal Investigator

06/2017 AATS Graham Foundation

Graham Surgical Investigator Award (\$100,000) American Association for Thoracic Surgery (AATS)

"Augmentation of Spinal Cord 'Precollateralization' to Prevent Paraplegia After

Aortic Surgery"

07/01/2017 – 06/30/2022 Principal Investigator

PUBLICATIONS

Peer-Reviewed Articles (100 publications - 82 original peer reviewed publications and reviews, 18 editorials, invited commentaries and letters to the editor):

- Cotton JL, Makinen J, Park SY, Halpern Mungo A, Aftab M, Hoffman JRH, Cain MT. Spontaneous Coronary Artery Dissection, Takotsubo Cardiomyopathy, and Venoarterial Extracorporeal Membrane Oxygenation in Pregnancy. Innovations (Phila). 2024 Jun 3: 15569845241252443. doi: 10.1177/15569845241252443. Epub ahead of print. PMID: 38828949.
- 2. Carroll AM, Chanes N, Shah A, Dzubinski L, **Aftab M**, Reece TB. Personalizing Patient Risk of a Life-Altering Event: An Application of Machine Learning to Hemiarch Surgery, J Thorac Cardiovasc Surg. 2024 Apr 27; doi: 10.1016/j.jtcvs.2024.04.022. Epub ahead of print. PubMed PMID: 38685466.
- 3. Suarez-Pierre A, Iguidbashian J, Kirsch MJ, Cain MT, **Aftab M**, Reece TB, Fullerton DA, Rove JY, Cleveland JC Jr, Hoffman JRH. Association of Cardiac Preservation Solution with Short-Term Outcomes After Heart Transplantation. J Cardiovasc Med (Hagerstown). 2024 Feb 1; 25(2):158-164. doi: 10.2459/JCM.00000000001575. Epub 2023 Dec 22. PMID: 38149702
- 4. Carroll AM, King RW, Ghincea CV, **Aftab M**, Reece TB. Spinal Cord Protection for Thoracoabdominal Aortic Aneurysm Repair: From Bench to Bedside. Ann Cardiothoracic Surg. 2023 Sep 28; 12(5):438-449. doi: 10.21037/acs-2023-scp-08. Epub 2023 May 15. PMID: 37817853; PMCID: PMC10561340.
- Wilson King R, Carroll AM, Higa KC, Cleveland JC Jr, Rove JY, Aftab M, Brett Reece T. Frozen Elephant Trunk for Acute Type A Dissection: Is Risk from Procedure or Patient Characteristics? Aorta (Stamford). 2023 Jun; 11(3):112-115. doi: 10.1055/s-0043-1768970. Epub 2023 Aug 24. PMID: 37619568; PMCID: PMC10449567.

- Schäfer M, Carroll A, Carmody KK, Hunter KS, Barker AJ, Aftab M, Reece TB. Aortic Shape Variation After Frozen Elephant Trunk Procedure Predicts Aortic Events: Principal Component Analysis Study. JTCVS Open. 2023 Feb 2; 14:26-35. doi: 10.1016/j.xjon.2023.01.015. PMID: 37425456; PMCID: PMC10328758.
- 7. Netsanet A, Cotton J, Suarez-Pierre A, Hoffman J, **Aftab M**, Reece B, Rove JY. Cardiac Surgeons Highlight the Need for Innovation Stewardship: Noteworthy in 2022. Semin Cardiothorac Vasc Anesth. 2023 Jun; 27(2):136-144. doi: 10.1177/10892532231173090. Epub 2023 Apr 25. PMID: 37098029.
- 8. Gergen AK, Kemp C, Ghincea CV, Feng Z, Cleveland JC Jr, Pal JD, Rove JY, Fullerton DA, **Aftab M**, Reece TB. Challenging Paradigm Limits of Retrograde Cerebral Perfusion During Lower Body Circulatory Arrest. J Surg Res. 2022 Nov 30; 283:699-704. doi: 10.1016/j.jss.2022.10.099. Epub ahead of print. PMID: 36462379.
- Vigneshwar NG, Masood MF, Vasic I, Krause M, Bartels K, Lucas MT, Bronsert M, Selzman CH, Thompson S, Rove JY, Reece TB, Cleveland JC, Pal JD, Fullerton DA, Aftab M. Venovenous Extracorporeal Membrane Oxygenation Support in Patients with COVID-19 Respiratory Failure: A Multicenter Study. JTCVS Open. 2022 Sep 8; doi: 10.1016/j.xjon.2022.08.007. [Epub ahead of print] PubMed PMID: 36097635; PubMed Central PMCID: PMC9451935.
- 10. Kemp C, Ghincea CV, Feng Z, Gergen AK, Cleveland JC, Rove JY, **Aftab M**, Fullerton D, Reece TB. Evaluating the Risk of Spinal Cord Ischemia in Zone 2 Frozen Elephant Trunk Replacement. Am J Surg. 2022 Jul 21; doi: 10.1016/j.amjsurg.2022.07.011. [Epub ahead of print] PubMed PMID: 35934556.
- Hoffman JRH, Higa KC, Lin Y, Reece TB, Cleveland JC Jr, Aftab M, Rove JY. Noteworthy Cardiac Literature From 2021: Coronary Guideline Change Without New Data, Heart Transplant Donation After Cardiac Death, Covid Effects on Global Cardiac Surgery, and Attempt to Improve Dissection Remodeling. Semin Cardiothorac Vasc Anesth. 2022 Jun; 26(2):154-161. doi: 10.1177/10892532221101298. Epub 2022 May 19. PubMed PMID: 35591803.
- 12. Gergen AK, Kemp C, Ghincea CV, Feng Z, Ikeno Y, **Aftab M**, Reece TB. Direct Innominate Artery Cannulation versus Side Graft for Selective Antegrade Cerebral Perfusion during Aortic Hemiarch Replacement. Aorta (Stamford). 2022 Feb; 10(1):26-31. doi: 10.1055/s-0042-1744136. Epub 2022 May 31. PubMed PMID: 35640584; PubMed Central PMCID: PMC9179210.
- 13. Reece TB, **Aftab M**. Commentary: Preparing for the Worst, Expecting the Worst Can Make It Better. J Thorac Cardiovasc Surg. 2022 Apr; 163(4):1265-1266. doi: 10.1016/j.jtcvs.2020.11.020. Epub 2020 Nov 19. PubMed PMID: 33341275.
- Ikeno Y, Ghincea CV, Roda GF, Cheng L, Aftab M, Meng X, Weyant MJ, Cleveland JC Jr, Fullerton DA, Reece TB. Optimizing Nicorandil for Spinal Cord Protection in a Murine Model of Complex Aortic Intervention. Semin Thorac Cardiovasc Surg. 2022 Spring; 34(1):28-38. doi: 10.1053/j.semtcvs.2021.01.003. Epub 2021 Jan 12. PubMed PMID: 33444762.
- 15. Griffin BR, Bronsert M, Reece TB, Pal JD, Cleveland JC, Fullerton DA, Faubel S, Aftab M. Creatinine Elevations From Baseline at the Time of Cardiac Surgery Are Associated With Postoperative Complications. J Thorac Cardiovasc Surg. 2022 Apr; 163(4):1378-1387. doi: 10.1016/j.jtcvs.2020.03.174. Epub 2020 Jun 26. PubMed PMID: 32739165; PubMed Central PMCID: PMC7762739.
- 16. **Aftab M**, Reece TB. Commentary: Like Politics, Transfusion Practice is Local. J Thorac Cardiovasc Surg. 2022 Mar; 163(3):1026-1027. doi: 10.1016/j.jtcvs.2020.05.005. Epub 2020 May 14. PubMed PMID: 33268111.
- 17. Reece TB, **Aftab M**. Commentary: Dissection in the Elderly-do the Right Thing, Fix Them! J Thorac Cardiovasc Surg. 2022 Jan; 163(1):13. doi: 10.1016/j.jtcvs.2020.03.136. Epub 2020 Apr 11. PubMed PMID: 32362387.

- 18. Kemp C, Ikeno Y, **Aftab M**, Reece TB. Cerebrospinal Fluid Drainage in Thoracic Endovascular Aortic Repair: Mandatory Access but Tailored Placement. Ann Cardiothorac Surg. 2022 Jan; 11(1):53-55. doi: 10.21037/acs-2021-taes-12. PubMed PMID: 35211388; PubMed Central PMCID: PMC8807417.
- 19. Gergen AK, Meguid RA, Reece TB, **Aftab M**. Endovascular Aortic Repair of Kommerell Diverticulum Associated with Aberrant Left Subclavian Artery. Ann Cardiothorac Surg. 2021 Nov; 10(6):807-809. doi: 10.21037/acs-2021-taes-11. PubMed PMID: 34926187; PubMed Central PMCID: PMC8640882.
- Ikeno Y, Ghincea CV, Roda GF, Cheng L, Aftab M, Meng X, Weyant MJ, Cleveland JC Jr, Fullerton DA, Reece TB. Direct and Indirect Activation of the Adenosine Triphosphate-Sensitive Potassium Channel to Induce Spinal Cord Ischemic Metabolic Tolerance. J Thorac Cardiovasc Surg. 2021 Oct 23; doi: 10.1016/j.jtcvs.2021.08.085. [Epub ahead of print] PubMed PMID: 34763893.
- Ghincea CV, Anderson DA, Ikeno Y, Roda GF, Eldeiry M, Bronsert MR, Aunkst K, Fullerton DA, Reece TB, Aftab M. Utility of Neuromonitoring in Hypothermic Circulatory Arrest Cases for Early Detection of Stroke: Listening Through the Noise. J Thorac Cardiovasc Surg. 2021 Oct; 162(4):1035-1045.e5. doi: 10.1016/j.jtcvs.2020.01.090. Epub 2020 Feb 19. PubMed PMID: 32204911.
- 22. Lin Y, **Aftab M**, Reece TB. Commentary: Intraoperative Neuromonitoring: FAST to FASTER Response to Neurologic Complication. J Thorac Cardiovasc Surg. 2021 Aug 27; doi: 10.1016/j.jtcvs.2021.08.054. [Epub ahead of print] PubMed PMID: 34531041.
- 23. Kemp CM, Feng Z, **Aftab M**, Reece TB. Preventing Spinal Cord Injury Following Thoracoabdominal Aortic Aneurysm Repair: The Battle to Eliminate Paraplegia. JTCVS Tech. 2021 Aug; 8:11-15. doi: 10.1016/j.xjtc.2021.01.046. eCollection 2021 Aug. PubMed PMID: 34401794; PubMed Central PMCID: PMC8350759.
- Ikeno Y, Ghincea CV, Roda GF, Cheng L, Meng X, Weyant MJ, Cleveland JC Jr, Fullerton DA, Aftab M, Reece TB. Reactive Oxygen Species Mediate Nicorandil-induced Metabolic Tolerance to Spinal Cord Injury. Ann Thorac Surg. 2021 Jul; 112(1):38-44. doi: 10.1016/j.athoracsur.2020.08.038. Epub 2020 Oct 22. PubMed PMID: 33902895.
- 25. Venardos N, Reece TB, Cleveland JC Jr, **Aftab M**, Pal J, Fullerton DA, Rove JY. Training for Multiple Arterial Grafting: A Thoracic Surgery Resident Survey. Ann Thorac Surg. 2021 Jun; 111(6):1901-1907. doi: 10.1016/j.athoracsur.2020.08.017. Epub 2020 Oct 14. PubMed PMID: 33068541.
- Mesher AL, Reece TB, Aftab M. Commentary: 180-180 Repair of Bicuspid Aortic Valve Works Every Time...Except When It Doesn't. JTCVS Tech. 2021 Jun; 7:93-94. doi:10.1016/j.xjtc.2021.01.006. eCollection 2021 Jun. PubMed PMID: 34318213; PubMed Central PMCID: PMC8311446.
- Reece TB, Mesher AL, Aftab M. Commentary: Somewhere Between the Root or No Root Argument: Selective Sinus Replacement. JTCVS Open. 2021 Jun; 6:106-107. doi: 10.1016/j.xjon.2020.12.019. eCollection 2021 Jun. PubMed PMID: 36003562; PubMed Central PMCID: PMC9390585.
- Griffin BR, Teixeira JP, Ambruso S, Bronsert M, Pal JD, Cleveland JC, Reece TB, Fullerton DA, Faubel S, Aftab M. Stage 1 Acute Kidney Injury is Independently Associated With Infection Following Cardiac Surgery. J Thorac Cardiovasc Surg. 2021 Apr; 161(4):1346-1355.e3. doi: 10.1016/j.jtcvs.2019.11.004. Epub 2019 Nov 25. PubMed PMID: 32007252; PubMed Central PMCID: PMC7285820.
- 29. Mesher AL, **Aftab M**, Reece TB. Commentary: Beauty, and Durability, is in the Eye of the Needle Holder. J Thorac Cardiovasc Surg. 2021 Feb; 161(2):479-480. doi: 10.1016/j.jtcvs.2020.03.134. Epub 2020 Apr 11. PubMed PMID: 32387161.
- 30. Venardos N, **Aftab M**, Reece TB. Simple Surveillance Is Not So Simple. Ann Thorac Surg. 2021 Feb; 111(2):621-622. doi: 10.1016/j.athoracsur.2020.07.080. Epub 2020 Oct 17. PubMed PMID: 33080232.

- 31. Ghincea CV, Ikeno Y, Weyant MJ, Mitchell JD, **Aftab M**, Reece TB. Right Thoracoscopic Aberrant Right Subclavian Artery Division and Subclavian-Carotid Transposition. Ann Thorac Surg. 2020 Nov; 110(5):e431-e433. doi: 10.1016/j.athoracsur.2020.03.106. Epub 2020 May 11. PubMed PMID: 32407854.
- Vigneshwar NG, Kohtz PD, Lucas MT, Bronsert M, J Weyant M, F Masood M, Itoh A, Rove JY, Reece TB, Cleveland JC, Pal JD, Fullerton DA, Aftab M. Clinical Predictors of In-Hospital Mortality in Venoarterial Extracorporeal Membrane Oxygenation. J Card Surg. 2020 Oct; 35(10):2512-2521. doi: 10.1111/jocs.14758. Epub 2020 Aug 13. PubMed PMID: 32789912.
- 33. Krause M, Douin DJ, Tran TT, Fernandez-Bustamante A, **Aftab M**, Bartels K. Association Between Procalcitonin Levels and Duration of Mechanical Ventilation in COVID-19 Patients. PLoS One. 2020; 15(9):e0239174. doi: 10.1371/journal.pone.0239174. eCollection 2020. PubMed PMID: 32946466; PubMed Central PMCID: PMC7500634.
- 34. Griffin BR, Reece TB, **Aftab M**. Postoperative Thrombocytopenia: A Novel Prognostic Factor: Reply. Ann Thorac Surg. 2020 Aug; 110(2):752-753. doi: 10.1016/j.athoracsur.2020.01.068. Epub 2020 Mar 5. PubMed PMID: 32147417.
- Griffin BR, Bronsert M, Reece TB, Pal JD, Cleveland JC, Fullerton DA, Gist KM, Jovanovich A, Jalal D, Faubel S, Aftab M. Thrombocytopenia After Cardiopulmonary Bypass Is Associated With Increased Morbidity and Mortality. Ann Thorac Surg. 2020 Jul; 110(1):50-57. doi: 10.1016/j.athoracsur.2019.10.039. Epub 2019 Dec 6. PubMed PMID: 31816284; PubMed Central PMCID: PMC7279614.
- 36. Lin Y, **Aftab M**, Reece TB. Commentary: Obviously Malperfusion in Dissection Is Bad, But Severe Acidosis May Be Unsurmountable. Semin Thorac Cardiovasc Surg. 2020 Winter; 32(4):681-682. doi: 10.1053/j.semtcvs.2020.06.019. Epub 2020 Jun 29. PubMed PMID: 32610189.
- 37. Ghincea CV, Reece TB, **Aftab M**, Cleveland JC Jr, Pal JD. Noteworthy Cardiac Literature 2019: Cerebral Protection, Zone 2 Arch, Intravascular Ultrasonography in Dissection, Heart Allocation, and Mitral Durability. Semin Cardiothorac Vasc Anesth. 2020 Jun; 24(2):187-191. doi: 10.1177/1089253220920146. Epub 2020 Apr 28. PubMed PMID: 32342759.
- 38. Mesher A, **Aftab M**, Gleason TG, Reece TB. Commentary: Steps Toward Understanding the Root of the Issue. J Thorac Cardiovasc Surg. 2020 May; 159(5):1764-1765. doi: 10.1016/j.jtcvs.2019.07.081. Epub 2019 Aug 22. PubMed PMID: 31530370.
- Aleong RG, Zipse MM, Tompkins C, Aftab M, Varosy P, Sauer W, Kao D. Analysis of Outcomes in 8304 Patients Undergoing Lead Extraction for Infection. J Am Heart Assoc. 2020 Apr 7; 9(7):e011473. doi: 10.1161/JAHA.118.011473. Epub 2020 Mar 20. PubMed PMID: 32192410; PubMed Central PMCID: PMC7428595.
- 40. **Aftab M**, Reece TB. Commentary: NO Matter What You Call It, "Conditioning" the Spinal Cord Preventing Paraplegia is Worthwhile. J Thorac Cardiovasc Surg. 2020 Mar; 159(3):825-826. doi: 10.1016/j.jtcvs.2019.04.026. Epub 2019 Apr 24. PubMed PMID: 31126640.
- 41. Griffin BR, Kohtz PD, Bronsert M, Reece TB, Cleveland JC Jr, Fullerton DA, Faubel S, Aftab M. Postoperative Complications Are Not Elevated in Well-Compensated ESRD Patients Undergoing Cardiac Surgery: End-Stage Renal Disease Cardiac Surgery Outcomes. J Surg Res. 2020 Mar; 247:136-143. doi: 10.1016/j.jss.2019.10.032. Epub 2019 Nov 27. PubMed PMID: 31785887; PubMed Central PMCID: PMC7192065.
- 42. **Aftab M**, Reece TB, Svensson LG. Heart Transplantation in Patients with Loeys-Dietz Syndrome: Is It a Novel Cardiomyopathy? Ann Thorac Surg. 2020 Jan; 109(1):306. doi: 10.1016/j.athoracsur.2019.03.107. Epub 2019 May 8. PubMed PMID: 31077663.

- 43. Abrams B, Hoffman J, **Aftab M**, Evers J, Seres T. A Rare Case of Stenosis at the Inferior Vena Cava to Right Atrium Anastomosis After Bicaval Orthotopic Heart Transplantation. Semin Cardiothorac Vasc Anesth. 2019 Dec; 23(4):418-421. doi: 10.1177/1089253219832608. Epub 2019 Feb 27. PubMed PMID: 30810093.
- 44. **Aftab M**, Reece TB. Commentary: Direct Spinal Cord Perfusion: You Need It When You Need It. J Thorac Cardiovasc Surg. 2019 Oct; 158(4):e131-e132. doi: 10.1016/j.jtcvs.2019.04.064. Epub 2019 May 3. PubMed PMID: 31160118.
- 45. Ghincea CV, Reece TB, Eldeiry M, Roda GF, Bronsert MR, Jarrett MJ, Pal JD, Cleveland JC Jr, Fullerton DA, **Aftab M**. Predictors of Acute Kidney Injury Following Aortic Arch Surgery. J Surg Res. 2019 Oct; 242:40-46. doi: 10.1016/j.jss.2019.03.055. Epub 2019 May 4. PubMed PMID: 31063910.
- 46. Eldeiry M, Aftab M, Bergeron E, Pal J, Cleveland JC Jr, Fullerton D, Reece TB. The Buffalo Trunk Technique for Aortic Arch Reconstruction. Ann Thorac Surg. 2019 Sep; 108(3):680-686. doi: 10.1016/j.athoracsur.2019.03.034. Epub 2019 Apr 11. PubMed PMID: 30981849.
- 47. Songdechakraiwut T, **Aftab M**, Chatterjee S, Green SY, Price MD, Preventza O, de la Cruz KI, LeMaire SA, Coselli JS. Tracheostomy After Thoracoabdominal Aortic Aneurysm Repair: Risk Factors and Outcomes. Ann Thorac Surg. 2019 Sep; 108(3):778-784. doi: 10.1016/j.athoracsur.2019.02.063. Epub 2019 Mar 27. PubMed PMID: 30928555.
- 48. Halpern AL, Kohtz PD, Helmkamp L, Eldeiry M, Hodges MM, Scott CD, Mitchell JD, **Aftab M**, Pal JD, Cleveland JC, Reece TB, Meguid RA, Fullerton DA, Weyant MJ. Improved Mortality Associated with the Use of Extracorporeal Membrane Oxygenation. Ann Thorac Surg. 2019 Aug; 108(2):350-357. doi: 10.1016/j.athoracsur.2019.03.057. Epub 2019 Apr 19. PubMed PMID: 31009629.
- 49. Venardos N, Reece TB, **Aftab M**. Commentary: Aortitis Prognosis: Pathologic Diagnosis Independently Adversely Affects Long-Term Survival. Semin Thorac Cardiovasc Surg. 2019 Winter; 31(4):761-762. doi: 10.1053/j.semtcvs.2019.06.010. Epub 2019 Jul 2. PubMed PMID: 31271853.
- 50. Reece TB, **Aftab M**. Commentary: More Is More: Root Stabilization for Regurgitant Aortic Valve Repair. J Thorac Cardiovasc Surg. 2019 Jul; 158(1):24. doi: 10.1016/j.jtcvs.2018.11.074. Epub 2018 Nov 29. PubMed PMID: 31109710.
- 51. **Aftab M**, Reece TB, Cleveland JC, Pal JD. Noteworthy Cardiac Surgical Literature 2018: Value-Based Bundled Payments, Opioid Crisis and Cardiac Surgery, Percutaneous Suction Thrombectomy for Intracardiac/Caval Thrombus and Vegetations, and Minimally Invasive Left Ventricular Assist Device Placement. Semin Cardiothorac Vasc Anesth. 2019 Jun; 23(2):164-170. doi: 10.1177/1089253219845417. Review. PubMed PMID: 31064318.
- Chatfield KC, Sparagna GC, Chau S, Phillips EK, Ambardekar AV, Aftab M, Mitchell MB, Sucharov CC, Miyamoto SD, Stauffer BL. Elamipretide Improves Mitochondrial Function in the Failing Human Heart. JACC Basic Transl Sci. 2019 Apr; 4(2):147-157. doi: 10.1016/j.jacbts.2018.12.005. eCollection 2019 Apr. PubMed PMID: 31061916; PubMed Central PMCID: PMC6488757.
- 53. Yamanaka K, Eldeiry M, **Aftab M**, Ryan TJ, Roda G, Meng X, Weyant MJ, Cleveland JC Jr, Fullerton DA, Reece TB. Pretreatment With Diazoxide Attenuates Spinal Cord Ischemia-Reperfusion Injury Through Signaling Transducer and Activator of Transcription 3 Pathway. Ann Thorac Surg. 2019 Mar; 107(3):733-739. doi: 10.1016/j.athoracsur.2018.09.031. Epub 2018 Nov 2. PubMed PMID: 30395862.
- 54. Ghincea CV, Ikeno Y, **Aftab M**, Reece TB. Spinal Cord Protection for Thoracic Aortic Surgery: Bench to Bedside. Semin Thorac Cardiovasc Surg. 2019 Winter; 31(4):713-720. doi: 10.1053/j.semtcvs.2019.02.025. Epub 2019 Feb 27. Review. PubMed PMID: 30825587.
- 55. **Aftab M**, Cikach FS, Zhu Y, Idrees JJ, Rigelsky CM, Kalahasti V, Roselli EE, Svensson LG. Loeys-Dietz Syndrome: Intermediate-Term Outcomes of Medically and Surgically Managed Patients. J Thorac Cardiovasc Surg. 2019 Feb; 157(2):439-450.e5. doi: 10.1016/j.jtcvs.2018.03.172. Epub 2018 Apr 30. PubMed PMID: 30669217.

- 56. Yamanaka K, Eldeiry M, **Aftab M**, Ryan TJ, Meng X, Weyant MJ, Fullerton DA, Reece TB. Synergetic Induction of NGF With Diazoxide and Erythropoietin Attenuates Spinal Cord Ischemic Injury. J Surg Res. 2019 Jan; 233:124-131. doi: 10.1016/j.jss.2018.07.021. Epub 2018 Aug 20. PubMed PMID: 30502238.
- 57. Eldeiry M, Ghincea C, **Aftab M**, Cleveland JC, Fullerton D, Reece TB. Innominate Versus Axillary Artery Cannulation for the Hemiarch Repair. J Surg Res. 2018 Dec; 232:234-239. doi: 10.1016/j.jss.2018.06.018. Epub 2018 Jul 13. PubMed PMID: 30463723.
- 59. Yamanaka K, Eldeiry M, **Aftab M**, Ryan TJ, Mares J, Meng X, Weyant MJ, Cleveland JC Jr, Fullerton DA, Reece TB. Synergistic Reduction of Apoptosis with Diazoxide and Erythropoietin in Spinal Cord Ischemic Injury. Ann Thorac Surg. 2018 Dec; 106(6):1751-1758. doi: 10.1016/j.athoracsur.2018.07.022. Epub 2018 Sep 5. PubMed PMID: 30193997.
- 60. Yamanaka K, Eldeiry M, Roda G, **Aftab M**, Reece TB. Potential Benefit of Pharmacological Induction of Beta Common Receptor. J Thorac Cardiovasc Surg. 2018 Nov; 156(5):1796-1797. doi: 10.1016/j.jtcvs.2018.07.025. PubMed PMID: 30336913.
- 61. Venardos N, Reece TB, **Aftab M**. Perioperative Statins for Ascending Aortic Repairs: Helpful or Hurtful? Semin Thorac Cardiovasc Surg. 2018 Winter; 30(4):427-428. doi: 10.1053/j.semtcvs.2018.09.021. Epub 2018 Sep 29. PubMed PMID: 30278266.
- 62. Reece TB, **Aftab M**. Invited Commentary. Ann Thorac Surg. 2018 Sep; 106(3):776-777. doi: 10.1016/j.athoracsur.2018.04.059. Epub 2018 May 22. PubMed PMID: 29800540.
- 63. Yamanaka K, Eldeiry M, **Aftab M**, Mares J, Ryan TJ, Meng X, Weyant MJ, Cleveland JC Jr, Fullerton DA, Reece TB. Optimized Induction of Beta Common Receptor Enhances the Neuroprotective Function of Erythropoietin in Spinal Cord Ischemic Injury. J Thorac Cardiovasc Surg. 2018 Jun; 155(6):2505-2516. doi: 10.1016/j.jtcvs.2017.12.132. Epub 2018 Feb 9. PubMed PMID: 29523405.
- 64. Ambardekar AV, Weiser-Evans MCM, Li M, Purohit SN, **Aftab M**, Reece TB, Moulton KS. Coronary Artery Remodeling and Fibrosis with Continuous-Flow Left Ventricular Assist Device Support. Circ Heart Fail. 2018 May; 11(5):e004491. doi: 10.1161/CIRCHEARTFAILURE.117.004491. PubMed PMID: 29724722; PubMed Central PMCID: PMC5941935.
- 65. Reece TB, **Aftab M**. No Need to Tailor: Paraplegia Risk is Intrinsic to Complex Aortic Intervention. J Thorac Cardiovasc Surg. 2018 Apr; 155(4):1357. doi: 10.1016/j.jtcvs.2017.12.012. Epub 2017 Dec 9. PubMed PMID: 29370909.
- 66. Aftab M, Idrees JJ, Cikach F, Navia JL, Hammer D, Roselli EE. Open Distal Fenestration of Chronic Dissection Facilitates Endovascular Elephant Trunk Completion: Late Outcomes. Ann Thorac Surg. 2017 Dec; 104(6):1960-1967. doi: 10.1016/j.athoracsur.2017.05.044. Epub 2017 Sep 19. PubMed PMID: 28939200.
- 67. El-Sayed Ahmed MM, Hussain O, Ott DA, **Aftab M**. Severe Aortic Valve Stenosis Due to Alkaptonuric Ochronosis. Semin Cardiothorac Vasc Anesth. 2017 Dec; 21(4):364-366. doi: 10.1177/1089253217720284. Epub 2017 Jul 14. PubMed PMID: 28709382.
- 68. Roselli EE, Hasan SM, Idrees JJ, **Aftab M**, Eagleton MJ, Menon V, Svensson LG. Inoperable Patients with Acute Type A Dissection: Are They Candidates for Endovascular Repair? Interact Cardiovasc Thorac Surg. 2017 Oct 1; 25(4):582-588. doi: 10.1093/icvts/ivx193. PubMed PMID: 28962505.
- 69. **Aftab M**, Plichta R, Roselli EE. Acute DeBakey Type I Dissection Repair Using Frozen Elephant Trunk: The Cleveland Clinic Technique. Semin Cardiothorac Vasc Anesth. 2017 Sep; 21(3):200-205. doi: 10.1177/1089253216676090. Epub 2016 Dec 1. Review. PubMed PMID: 28758558.
- 70. Bergeron EJ, Mosca MS, **Aftab M**, Justison G, Reece TB. Neuroprotection Strategies in Aortic Surgery. Cardiol Clin. 2017 Aug; 35(3):453-465. doi: 10.1016/j.ccl.2017.03.011. Epub 2017 May 26. Review. PubMed PMID: 28683913.

- 71. Zanotti G, Reece TB, **Aftab M**. Aortic Arch Pathology: Surgical Options for the Aortic Arch Replacement. Cardiol Clin. 2017 Aug; 35(3):367-385. doi: 10.1016/j.ccl.2017.03.006. Epub 2017 Jun 4. Review. PubMed PMID: 28683908.
- 72. Eldeiry M, Yamanaka K, Reece TB, **Aftab M**. Spinal Cord Neurons Isolation and Culture from Neonatal Mice. J Vis Exp. 2017 Jul 11; (125). doi: 10.3791/55856. PubMed PMID: 28745627; PubMed Central PMCID: PMC5612298.
- 73. Javadikasgari H, Roselli EE, **Aftab M**, Suri RM, Desai MY, Khosravi M, Cikach F, Isabella M, Idrees JJ, Raza S, Tappuni B, Griffin BP, Svensson LG, Gillinov AM. Combined Aortic Root Replacement and Mitral Valve Surgery: The Quest to Preserve Both Valves. J Thorac Cardiovasc Surg. 2017 May; 153(5):1023-1030.e1. doi: 10.1016/j.jtcvs.2017.01.006. Epub 2017 Jan 31. PubMed PMID: 28262292.
- 74. **Aftab M**, Cleveland JC Jr, Reece TB. Noteworthy Literature Published in 2016 for Cardiac Surgery. Semin Cardiothoracic Vasc Anesth. 2017 Mar; 21(1):30-35. doi: 10.1177/1089253216688694. Epub 2017 Jan 29. Review. PubMed PMID: 28134010.
- 75. Levack MM, Aftab M, Roselli EE, Johnston DR, Soltesz EG, Gillinov AM, Pettersson GB, Griffin B, Grimm R, Hammer DF, Al Kindi AH, Albacker TB, Sepulveda E, Thuita L, Blackstone EH, Sabik JF 3rd, Svensson LG. Outcomes of a Less-Invasive Approach for Proximal Aortic Operations. Ann Thorac Surg. 2017 Feb; 103(2):533-540. doi: 10.1016/j.athoracsur.2016.06.008. Epub 2016 Oct 24. PubMed PMID: 27788942.
- 76. Stephens EH, Shah AA, Robich MP, Walters DM, DeNino WF, Aftab M, Tchantchaleishvili V, Eilers AL, Rice RD, Goldstone AB, Shelstad RC, Malas T, Cevasco M, Gillaspie EA, LaPar DJ. The Future of the Academic Cardiothoracic Surgeon: Results of the TSRA/TSDA In-Training Examination Survey. Ann Thorac Surg. 2016 Aug; 102(2):643-50. doi: 10.1016/j.athoracsur.2016.01.106. Epub 2016 Apr 27. PubMed PMID: 27131899.
- 77. **Aftab M**, Reece TB. Invited Commentary. Ann Thorac Surg. 2016 Aug; 102(2):532-3. doi: 10.1016/j.athoracsur.2016.03.002. PubMed PMID: 27449426.
- Stephens EH, Robich MP, Walters DM, DeNino WF, Aftab M, Tchantchaleishvili V, Eilers AL, Rice RD, Goldstone AB, Shlestad RC, Malas T, Cevasco M, Gillaspie EA, Fiedler AG, LaPar DJ, Shah AA. Gender and Cardiothoracic Surgery Training: Specialty Interests, Satisfaction, and Career Pathways. Ann Thorac Surg. 2016 Jul; 102(1):200-6. doi: 10.1016/j.athoracsur.2016.03.043. Epub 2016 May 5. PubMed PMID: 27157051.
- 79. Shah AA, Aftab M, Tchantchaleishvili V, LaPar DJ, Stephens EH, Walters DM, DeNino WF, Odell DD, Robich M, Cevasco M, Eilers AL, Gillaspie EA, Goldstone A, Malas T, Rice RD, Shelstad RC, Andersen ND. Characterizing the Operative Experience of Cardiac Surgical Trainees: What Are Residents Really Doing in the Operating Room? Ann Thorac Surg. 2016 Jun; 101(6):2341-9. doi: 10.1016/j.athoracsur.2015.12.069. Epub 2016 Mar 26. PubMed PMID: 27021035.
- 80. Plichta RP, **Aftab M**, Roselli EE. Current Management of Aortic Arch Lesions with Hybrid Procedures: A Tailored Approach to a Progressive Disease. J Cardiovasc Surg (Torino). 2016 Jun; 57(3):437-47. Epub 2016 Mar 3. Review. PubMed PMID: 26939046.
- 81. Ghanta RK, Green SY, Price MD, Arredondo CC, Wainwright D, Preventza O, de la Cruz KI, **Aftab M**, LeMaire SA, Coselli JS. Midterm Survival and Quality of Life After Extent II Thoracoabdominal Aortic Repair in Marfan Syndrome. Ann Thorac Surg. 2016 Apr; 101(4):1402-9; discussion 1409. doi: 10.1016/j.athoracsur.2015.10.018. Epub 2016 Jan 13. PubMed PMID: 26794897.
- 82. Robich MP, Flagg A, LaPar DJ, Odell DD, Stein W, Aftab M, Berfield KS, Eilers AL, Groth SS, Lazar JF, Shah AA, Smith DA, Stephens EH, Stock CT, DeNino WF, Tchantchaleishvili V, Soltesz EG. Understanding Why Residents May Inaccurately Log Their Role in Operations: A Look at the 2013 In-Training Examination Survey. Ann Thorac Surg. 2016 Jan; 101(1):323-8. doi: 10.1016/j.athoracsur.2015.07.047. Epub 2015 Oct 9. PubMed PMID: 26453419.

- 83. Tchantchaleishvili V, LaPar DJ, Odell DD, Stein W, **Aftab M**, Berfield KS, Eilers AL, Groth SS, Lazar JF, Robich MP, Shah AA, Smith DA, Stephens EH, Stock CT, DeNino WF, Nguyen TC. Predictors of Career Choice Among Cardiothoracic Surgery Trainees. Ann Thorac Surg. 2015 Nov; 100(5):1849-54; discussion 1853. doi: 10.1016/j.athoracsur.2015.04.073. Epub 2015 Jul 7. PubMed PMID: 26163358.
- 84. Idrees JJ, Roselli EE, Wojnarski CM, Feng K, **Aftab M**, Johnston DR, Soltesz EG, Sabik JF 3rd, Svensson LG. Prophylactic Stage 1 Elephant Trunk for Moderately Dilated Descending Aorta in Patients with Predominantly Proximal Disease. J Thorac Cardiovasc Surg. 2015 Nov; 150(5):1150-5. doi: 10.1016/j.jtcvs.2015.07.077. Epub 2015 Jul 30. PubMed PMID: 26433635; PubMed Central PMCID: PMC5150218.
- 85. El-Sayed Ahmed MM, Almanfi A, **Aftab M**, Singh SK, Mallidi HR, Frazier OH. Aspergillus Mediastinitis after Orthotopic Heart Transplantation: A Case Report. Tex Heart Inst J. 2015 Oct; 42(5):468-70. doi: 10.14503/THIJ-14-4732. eCollection 2015 Oct. PubMed PMID: 26504444; PubMed Central PMCID: PMC4591890.
- 86. Stephens EH, Odell D, Stein W, LaPar DJ, DeNino WF, Aftab M, Berfield K, Eilers AL, Groth S, Lazar JF, Robich MP, Shah AA, Smith DA, Stock C, Tchantchaleishvili V, Mery CM, Turek JW, Salazar J, Nguyen TC. A Decade of Change: Training and Career Paths of Cardiothoracic Surgery Residents 2003 to 2014. Ann Thorac Surg. 2015 Oct; 100(4):1305-13; discussion 1313-4. doi: 10.1016/j.athoracsur.2015.04.026. Epub 2015 Jul 11. PubMed PMID: 26169046.
- 87. Nguyen TC, Terwelp MD, Stephens EH, Odell DD, Loor G, LaPar DJ, DeNino WF, Wei B, **Aftab M**, Macke RA, Nelson JS, Berfield KS, Lazar JF, Stein W, Youssef SJ, Tchantchaleishvili V. Resident Perceptions of 2-Year Versus 3-Year Cardiothoracic Training Programs. Ann Thorac Surg. 2015 Jun; 99(6):2070-5; discussion 2075-6. doi: 10.1016/j.athoracsur.2015.01.031. Epub 2015 Apr 8. PubMed PMID: 25863731.
- 88. El-Sayed Ahmed MM, Al-Najjar RM, **Aftab M**, Anton JM, Colen JS, Reul RM. Early Detection of a Cavopulmonary Tumor Embolus with the Use of Transesophageal Echocardiography. Tex Heart Inst J. 2015 Feb; 42(1):66-9. doi: 10.14503/THIJ-13-3731. eCollection 2015 Feb. PubMed PMID: 25873804; PubMed Central PMCID: PMC4378050.
- 89. **Aftab M**, Songdechakraiwut T, Green SY, Zarda S, Price MD, Nalty CC, Preventza O, de la Cruz KI, LeMaire SA, Coselli JS. Contemporary Outcomes of Open Thoracoabdominal Aortic Aneurysm Repair in Octogenarians. J Thorac Cardiovasc Surg. 2015 Feb; 149(2 Suppl):S134-41. doi: 10.1016/j.jtcvs.2014.09.038. Epub 2014 Sep 18. PubMed PMID: 25439781.
- Aftab M, Coselli JS. Reprint of: Renal and Visceral Protection in Thoracoabdominal Aortic Surgery. J Thorac Cardiovasc Surg. 2015 Feb; 149(2 Suppl):S130-3. doi: 10.1016/j.jtcvs.2014.12.039. PubMed PMID: 25726074.
- 91. El-Sayed Ahmed MM, **Aftab M**, Al-Najjar RM, de la Cruz KI, Lerner SP, Coselli JS. Renal Cell Carcinoma Extending into the Retrohepatic Inferior Vena Cava. Tex Heart Inst J. 2014 Dec; 41(6):671-2. doi: 10.14503/THIJ-13-3826. eCollection 2014 Dec. PubMed PMID: 25593540; PubMed Central PMCID: PMC4251347.
- 92. **Aftab M**, Coselli JS. Renal and Visceral Protection in Thoracoabdominal Aortic Surgery. J Thorac Cardiovasc Surg. 2014 Dec; 148(6):2963-6. doi: 10.1016/j.jtcvs.2014.06.072. Epub 2014 Jul 21. Review. PubMed PMID: 25135232.
- 93. El-Sayed Ahmed MM, **Aftab M**, Al-Najjar RM, de la Cruz KI, Benjamin RS, Hallman CH. Pulmonary Artery Sarcoma Mimicking Pulmonary Embolism. Tex Heart Inst J. 2014 Oct; 41(5):515-7. doi: 10.14503/THIJ-13-3735. eCollection 2014 Oct. PubMed PMID: 25425986; PubMed Central PMCID: PMC4189355.
- 94. El-Sayed Ahmed MM, **Aftab M**, de la Cruz KI, Delgado RM 3rd, Mallidi HR. Circular Air-Filled Space in the Aortic Knob: A Rare Radiologic Finding. Tex Heart Inst J. 2014 Oct; 41(5):560-1. doi: 10.14503/THIJ-13-3966. eCollection 2014 Oct. PubMed PMID: 25425997; PubMed Central PMCID: PMC4189366.

- 95. El-Sayed Ahmed MM, **Aftab M**, Singh SK, Mallidi HR, Frazier OH. Left Ventricular Assist Device Outflow Graft: Alternative Sites. Ann Cardiothorac Surg. 2014 Sep; 3(5):541-5. doi: 10.3978/j.issn.2225-319X.2014.09.03. PubMed PMID: 25452918; PubMed Central PMCID: PMC4229468.
- 96. El-Sayed Ahmed MM, **Aftab M**, Singh SK, Mallidi HR, Frazier OH. Triple Bridge to Simultaneous Heart and Kidney Transplantation. Ann Thorac Surg. 2014 Aug; 98(2):e45-6. doi: 10.1016/j.athoracsur.2014.04.136. PubMed PMID: 25087831.
- 97. Preventza O, Aftab M, Coselli JS. Hybrid Techniques for Complex Aortic Arch Surgery. Tex Heart Inst J.2013; 40(5):568-71. Review. PubMed PMID: 24391324; PubMed Central PMCID: PMC3853841.
- Belaguli NS, Aftab M, Rigi M, Zhang M, Albo D, Berger DH. GATA6 Promotes Colon Cancer Cell Invasion by Regulating Urokinase Plasminogen Activator Gene Expression. Neoplasia. 2010 Nov; 12(11):856-65. doi: 10.1593/neo.10224. PubMed PMID: 21076612; PubMed Central PMCID: PMC2978909.
- 99. Agaba EA, Zaidi RM, Ramzy P, **Aftab M**, Rubach E, Gecelter G, Ravikumar TS, DeNoto G. Laparoscopic Hartmann's Procedure: A Viable Option for Treatment of Acutely Perforated Diverticulitis. Surg Endosc. 2009 Jul; 23(7):1483-6. doi: 10.1007/s00464-009-0380-z. Epub 2009 Mar 5. PubMed PMID: 19263127.
- 100.Belaguli NS, Zhang M, Rigi M, **Aftab M**, Berger DH. Cooperation Between GATA4 and TGF-beta Signaling Regulates Intestinal Epithelial Gene Expression. Am J Physiol Gastrointestinal Liver Physiol. 2007 Jun; 292(6):G1520-33. doi: 10.1152/ajpgi.00236.2006. Epub 2007 Feb 8. PubMed PMID: 17290010.

Published Peer-Reviewed Abstracts:

- 1. Mohamed Eldeiry, Patrick Kohtz, Allison Halpern, Joseph C Cleveland, David Fullerton, T. B Reece, **Muhammad Aftab,** Abstract 16777: Augmentation of Spinal Cord Pre-Collateralization to Prevent Paraplegia After Aortic Surgery, Originally published 5 Nov 2018 Circulation. 2018;138: A16777.
- 2. Katsuhiro Yamanaka, **Muhammad Aftab**, Marshall T Bell, Lisa S Foley, Joshua Mares, David A Fullerton, Brett T Reece. Pharmacological Induction of Beta Common Receptor Amplifies Erythropoietin Attenuation of Spinal Cord Injury. *Circulation*, November 11, 2016, Volume 134, Issue Suppl 1.
- 3. **Muhammad Aftab**, Shabana Perveen, Sandeep A. Sathyanaraana, MD, Gary Deutsch, MD, Barak Friedman, MD, Frank Manetta, MD, Gary Giangola, MD, and Kambhampaty V. Krishnasastry, MD Endovascular Repair for Mycotic Aneurysms and Aortovisceral Fistula: A Durable Treatment or Just the Bridge to Survival? *Journal of Vascular Surgery*, Volume 54, Issue 3, Page 918, September 2011.
- 4. **Muhammad Aftab**, Vijay Kamath, Rajeev Gupta, Frank Manetta, Alan Hartman, Richard Schutzer, Mihai Rosca, Kambhampaty Krishnasastry. Hybrid Thoracic Endovascular Aortic Repair (TEVAR) for Complex Aortic Pathology Early and Mid-term Outcomes. *Journal of Vascular Surgery* Volume 53, Issue 6, Supplement, Pages 42S-44S, June 2011.
- N. Belaguli, M. Aftab, M. Zhang, F. Ayanbule, M. Rigi, A. Sakar, D.H. Berger. Post-transcriptional Regulation of GATA6 Expression in Colon Cancer. *Journal of Surgical Research*, 151(2):296, February 2009.
- 6. N.S. Belaguli, M. Zhang, **M. Aftab**, M. Rigi, D.H. Berger. P73: TGF□1 signaling and GATA6 cooperatively regulate the urokinase plasminogen activator (uPA). *Journal of Surgical Research*, 137(2):266, February 2007.
- 7. Narasimhaswamy S. Belaguli, Mao Zhang, **Muhammad Aftab**, David H. Berger. PIAS-1 Promotes GATA4 Sumoylation and Potentiates Gata4 Mediated Transcriptional Activation of Intestinal Promoters. Supplement to *Gastroenterology*, 130(2), April 2006.

- 8. **M. Aftab**, N.S. Belaguli, M. Mushtaq, D.H. Berger. Transforming growth factor □1 (TGF□1) differentially regulates protease production and cellular invasion in human colon cancer. *Journal of Surgical Research*, Volume 130(2):168-169, February 2006.
- 9. N.S. Belaguli, **M. Aftab**, M. Zhang, M.A. Helmrath, D.H. Berger. Cardiac ankyrin repeat protein (CARP) is an intestinal epithelium expressed TGF Beta1 target gene. *Journal of Surgical Research*, Volume 130(2):253, February 2006.
- N.S. Belaguli, M. Aftab, M. Zhang, D.H. Berger. GATA factors regulate urokinase plasminogen activator (uPA) gene expression in in intestinal epithelial cells. *Journal of Surgical Research*, Volume 130(2):193, February 2006.

Book Chapters (total number 14):

- 1. Hoffman J, **Aftab M**, Fullerton DA: Management of Aortic Valve Diseases STS Adult Cardiac Surgery (E-Book 10/2020).
- 2. **Aftab M**, Umakanthan R, Heinle JS et al: Bilateral Sequential Lung Transplantation, *Operative Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 3. **Aftab M**, Umakanthan R, Heinle JS et al: Pulmonary valve replacement and reconstruction of right ventricle outflow tract, *Operative Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 4. **Aftab M**, Preventza O: Aortic Root Replacement with Homograft for Aortic Root Abscess (native and or prior Bentall), *Operative Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 5. **Aftab M**, Umakanthan R, Heinle JS et al: Infra-cardiac Total Anomalous Pulmonary Venous Return (TAPVR) repair, *Operative Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 6. **Aftab M**, Umakanthan R, Heinle JS et al: Extra-cardiac (non-fenestrated) completion Fontan procedure, *Operative Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 7. **Aftab M**, Fraser CD et al: Arterial Switch procedure Repair of Transposition of Great Arteries, *Operative Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 8. **Aftab M**, Salas de Armas IA Fraser CD et al: Repair of Aortic Coarctation, *Operative Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 9. **Aftab M**, Salas de Armas IA, Dean McKenzie Eet al: Repair of Tetrology Transatrial approach, *Operative Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 10. **Aftab M**, Salas de Armas IA, Dean McKenzie E. et al: Creation of Bi-directional Glenn, Operative *Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 11. **Aftab M**, Salas de Armas IA, Mery CM E. et al: Creation of Modified Blalock-Taussig Shunt, Operative *Dictations in Cardiothoracic Surgery*, Ed, Odell D, Lapar D, TSRA/TSDA Chicago, IL (Published 07/2014).
- 12. **Aftab M**, Salas de Armas IA, Bakaeen FG et al: Aortic Root Aneurysm, *TSRA Clinical Scenarios in Cardiothoracic Surgery*, Edited by Nguyen TC, Loor G, TSRA/TSDA Chicago, IL, 2013.

- 13. **Aftab M**, Pocock E, Fraser CD et al: Transposition of Great Arteries, *TSRA Clinical Scenarios in Cardiothoracic Surgery*, Edited by Nguyen TC, Loor G, TSRA/TSDA Chicago, IL, 2013.
- 14. **Aftab M**, *Cardiothoracic Surgery*, *First Aid for the Surgery Clerkship*, 2nd Edition. A student-to-student Guide. Edited by Matthew Kaufman, Latha Stead, S. Matthew Stead, Nitin Mishra published by Mc-Graw Hill, 2009.

PUBLISHED BOOKS (EDITOR):

1. Operative Dictations in Cardiothoracic Surgery

Section Editor – Congenital Cardiac Surgery TSRA/TSDA Chicago, IL (Published 07/2014).

2. Cardiothoracic Surgery Journal Club

Issue Editor: Thoracic Aortic Surgery

A project of Thoracic Surgery Residents Association (TSRA). TSRA/TSDA Chicago, IL (07/2015).

INVITED LECTURES / GRAND ROUNDS/ PRESENTATION AT NATIONAL AND REGIONAL MEETINGS

Grand Rounds:

1. Optimizing Renal Outcomes After Cardiac Surgery - Why Should This Matter?

Sponsored by The Department of Surgery University of Colorado, Anschutz Medical Center Presented on 10/26/2020

2. Acute Type I Aortic Dissection: New Perspectives and Treatment Paradigms

Sponsored by The Department of Surgery University of Colorado, Anschutz Medical Center Presented on 11/27/2017

3. Thoracic Endovascular Aortic Repair (TEVAR) Redefines the Therapy for Acute Distal Aortic Dissection

Sponsored by The Department of Surgery University of Colorado, Anschutz Medical Center Presented on 10/31/2016

4. Severe Intraprocedural Complications after Transcatheter Aortic valve Implantation (TAVI)

Michael E. DeBakey Department of Surgery Grand rounds Sponsored by Baylor College of Medicine, Houston, TX Presented on 01/08/2014

5. Topic: Should Laparoscopic Colon Resection be the Standard of Care for Colorectal Cancer - What is the Evidence?

Sponsored by Department of Surgery North-Shore Long Island Jewish Health System New Hyde Park, NY. Presented on 08/26/2010

<u>ORAL PRESENTATIONS AT INTERNATIONAL/NATIONAL/REGIONAL CONFERENCES/INVITED</u> <u>LECTURES:</u>

1. Spinal Drain Management in Thoracic Endovascular Aortic Repair (TEVAR) and Open Repair of Thoracoabdominal Aortic Aneurysm (TAAA)

Invited Lecture, Surgical ICU Core Conference November 11, 2024; University of Colorado Hospital, Aurora, CO

2. Aortopathies – Connective Tissue Disorders

Invited Speaker -- ASC Cardiology/Cardiac Surgery Curriculum MS-II: Aortic Disease November 11, 2024; CU School of Medicine

3. Endovascular Repair of a Residual Aortic Dissection on an Elderly High-Risk Patient

Invited Speaker – Focus of Aortic Diseases Bologna Heart Surgery Symposium October 29, 2024; Bologna, Italy

4. TEVAR for Type B Aortic Dissection 101

Invited Speaker, Expert Session – Aortic, Surgery Eastern Cardiothoracic Surgery Society 62nd Annual Meeting September 19, 2024; Naples, FL

5. How I Do It: Vegectomy and Transcatheter Techniques for Endocarditis

Invited Speaker, Expert Session – Aortic, Surgery Eastern Cardiothoracic Surgery Society 62nd Annual Meeting September 21, 2024; Naples, FL

6. Contemporary Approaches to Brain Protection with Hypothermic Circulatory Arrest in Aortic Surgery

Invited Speaker, Annual Meeting of Association of Surgical Technologists May 31, 2024; Denver, CO

7. ECMO Cannulation, Decannulation and Management

Invited Lecture, Cardiology Fellows Core Conference January 9, 2024; University of Colorado/Anschutz Medical Center, Aurora, CO

8. Hemiarch Replacement at 28°C using Retrograde Cerebral Perfusion with High Flow and Pressure is Safe and Effective

Invited Speaker, Expert Session, Annual Meeting of Pakistan Association of Cardiovascular and Thoracic Surgery (PACVTS)

November 17, 2023; Peshawar, Pakistan

9. State of the Art – Hybrid Aortic Surgery and Building a Complex Endovascular/Aortic Program

Keynote Speaker, Plenary Session, Annual Meeting of Pakistan Association of Cardiovascular and Thoracic Surgery (PACVTS)

November 17, 2023; Peshawar, Pakistan

10. Debate: Transcatheter Approaches to Valvular Disease – Surgeon Perspective

Annual Meeting of Pakistan Association of Cardiovascular and Thoracic Surgery (PACVTS) November 17, 2023; Peshawar, Pakistan

11. David Valve Sparing Root Replacement: How Do I Teach It?

Invited Speaker for the Expert Plenary Session, Eastern Cardiothoracic Surgery Society (ECTSS) Annual Meeting 2023

October 7, 2023; Eau Palm Beach, Manalapan, FL

12. Teaching Cardiac Surgery in the Operating Room

Invited Speaker for the ECTSS Leadership Academy, Eastern Cardiothoracic Surgery Society (ECTSS) Meeting 2023

October 7, 2023; Eau Palm Beach, Manalapan, FL

13. Endovascular Aortic Repair Surgery (TEVAR): How to Preform?

Course Faculty for Advanced Cardiac Course, Eastern Cardiothoracic Surgery Society (ECTSS) Meeting 2023

October 04, 2023; Eau Palm Beach, Manalapan, FL

14. ECMO Cannulation, Decannulation and Management

Invited Lecture, Cardiology Fellows Core Conference May 16, 2023; University of Colorado/Anschutz Medical Center, Aurora, CO

15. Strategies for the Prevention of Acute Kidney Injury

Invited Quality Lecture, Faculty of Division of Urology, Department of Surgery May 16, 2023; University of Colorado/Anschutz Medical Center, Aurora, CO

16. Protocol for Renal Protection in Cardiovascular Patients

Invited Quality Lecture, Faculty of Division of Cardiac and Vascular, Department of Surgery March 22, 2023; University of Colorado/Anschutz Medical Center, Aurora, CO

17. Contemporary Management of Type B Aortic Dissection – A Case Based Review

Cardiothoracic Surgery Fellows Course, by Terumo Aortic Inc.

December 9-10, 2022; Miami, FL

18. Intra-Operative Endovascular and Open Management of Aorto-Enteric and Atrio-Esophageal Fistulas

Invited Faculty for Course Session: Aorto-Esophageal and Cardio-Esophageal Fistulae American College of Surgeons, Clinical Congress 2022 October 19, 2022; San Diego, CA

19. Transcatheter Approaches for The Valvular Disease (Debate - Cardiac Surgeon's Perspective)

Invited Speaker for the expert session in Multidisciplinary Cardiothoracic Surgery Eastern Cardiothoracic Surgery Society (ECTSS) 60th Annual Meeting 2022 October 07, 2022; Miami, FL

20. An Analysis of Aortic Remodeling in TEVAR for Aortic Dissection: Balloon Flap Fracture vs the Traditional Method

Invited Speaker, Eastern Cardiothoracic Surgical Society Annual Conference October 7, 2022; Miami, FL

21. Expert Session II: Multidisciplinary Cardiothoracic Surgery

Invited Speaker

Eastern Cardiothoracic Surgical Society Annual Conference October 7, 2022; Miami, FL

22. Teaching Cardiac Surgery in the Operating Room

Invited Speaker for the ECTSS Leadership Academy Eastern Cardiothoracic Surgery Society (ECTSS) Meeting 2022 October 06, 2022; Miami, FL

23. Overview of Aortic Aneurysmal Disease and Type A Dissection

Invited Speaker, Texas Cardiovascular Innovations Conference 2022 August 27, 2022; La Cantera Resort in San Antonio, TX

24. Overview of Aortic Aneurysmal Disease

Invited Speaker, Texas Cardiovascular Innovations Conference 2021 December 17, 2021; La Cantera Resort in San Antonio, TX

25. Management of Acute Aortic Dissection

Invited Lecture, Cardiology Fellows Core Conference April 05, 2021; University of Colorado/Anschutz Medical Center, Aurora, CO

26. Spinal Drain Management in Thoracic Endovascular Aortic Repair (TEVAR) and Open Repair of Thoracoabdominal Aortic Aneurysm (TAAA)

Invited Lecture, Surgical ICU Core Conference

February 22, 2021; Rocky Mountain Regional VA Medical Center, Aurora, CO

27. Great Debates in Cardiology: Non-Functional ICD Lead: Leave 'Er In

Invited Speaker for the Session

5th Annual "Colorado Heart Failure Summit" with the *American College of Cardiology, Colorado Chapter* December 13, 2019; Colorado Spring, CO

28. Transcatheter Aortic Valve Replacement (TAVR)- Current Status and Future Perspectives

Invited Speaker, Pakistan Society of Cardiovascular and Thoracic Surgeons 11th Biennial Conference Cardiothoracic Surgery 2020 and Beyond

December 07, 2019; Agha Khan University Hospital, Karachi, Pakistan

29. Contemporary Experience Using Hemiarch Technique for Repair of Acute Type-A Aortic Dissection

Invited Speaker, Pakistan Society of Cardiovascular and Thoracic Surgeons 11th Biennial Conference Cardiothoracic Surgery 2020 and Beyond

December 07, 2019; Agha Khan University Hospital, Karachi, Pakistan

30. Use of Intravascular Ultrasound for Management of Acute Type A Dissection

Invited, Speaker, Pakistan Society of Cardiovascular and Thoracic Surgeons 11th Biennial Conference Cardiothoracic Surgery 2020 and Beyond

December 07, 2019; Agha Khan University Hospital, Karachi, Pakistan

31. Branched Endovascular Arch Repair – Is this the Future of Arch Surgery?

Invited Speaker, Expert Session I, Eastern Cardiothoracic Surgical Society 57th Annual Meeting 2019 October 17, 2019; Naples, FL

32. Brain Protection Strategies in Aortic and Cardiac Surgery

Invited Core Didactic Lecture, Neurology Stroke Fellowship June 06, 2019; University of Colorado/Anschutz Medical Center, Aurora, CO

33. Aortic Arch Repair: Classification, Technique, and Pitfalls.

Invited Speaker, Expert Session I, Eastern Cardiothoracic Surgical Society 56th Annual Meeting 2018 October 22, 2018; Clearwater Beach, FL

34. Thoracoabdominal Aortic Dissection (Type B / DeBakey III) Dissection

Invited Lecture, Vascular Surgery Conference

March 26, 2018; University of Colorado, Denver, CO

35. Cannulation and Decannulation for ECMO

Invited Lecture, ECMO Specialists Annual Training Course

January 11, 2018; University of Colorado/Anschutz Medical Center, Aurora, CO

36. Role of Cardiac Surgery in the Management of Atrial Fibrillation

Guest Speaker, Colorado Arrhythmia Symposium 2017

September 16, 2017; Boulder, CO

37. Sizing for Thoracic Endovascular Aortic Repair

Invited Lecture/Core Course Faculty, Aortic Tech Exchange Course (Selected 24 Vascular and CT surgery Fellows in USA)

April 20-21, 2017; Center for Surgical Innovation (CSI), University of Colorado, Aurora, CO

38. Management of Acute Type B Aortic Dissection – New Treatment Paradigm.

Invited Lecture, Combined Cardiac Surgery/Vascular & Endovascular Surgery/Interventional Radiology Conference

October 14, 2016; University of Colorado Hospital, Aurora, CO

39. Total Endovascular Repair of Aortic Arch Using Inner Branched Arch Endograft

Oral Presentation at the 96th Annual Meeting of American Association for Thoracic Surgery May 14-18, 2016; Baltimore, MD

40. Open Distal Fenestration of Chronic Dissection Facilitates Endovascular Elephant Trunk Completion: Late Outcomes

Oral presentation at the STS 52ⁿ Annual Meeting and STS/AATS Tech-Con 2016 January 23-27, 2016; Phoenix, Arizona

41. Endovascular Stent Grafting for Leaking Ascending Aortic Pseudo-Aneurysms.

Oral presentation at the 53rd Annual Meeting of the Eastern Cardiothoracic Surgical Society (ECTSS) October 15, 2015; Palm Beach, FL

42. Ventricular Embolization of the Valve Prosthesis During Transapical Transcatheter Aortic Valve Implantation

Oral presentation at the Southern Thoracic Surgical Association (STSA) 61st Annual Meeting November 5, 2014; Tucson, Arizona

43. Contemporary Outcomes of Open Thoracoabdominal Aortic Aneurysm Repair in Octogenarians

Cardiothoracic Surgery Resident Poster Competition, American Association of Thoracic Surgery (AATS) April 27, 2014; Toronto, Canada

44. Contemporary Outcomes of Open Thoracoabdominal Aortic Aneurysm Repair in Octogenarians

Plenary Session, American Association of Thoracic Surgery (AATS) Aortic Symposium 2014 April 24-26, 2014; New York, NY

45. Surgical Management of Transapical Aortic Valve Migration - A Case Presentation

Invited Speaker, Challenging TAVI Cases by the Fellows, Edwards Lifesciences Cardiac Fellows Program November 7-9, 2013; Irvine, CA

46. Complication of Intra-Aortic Balloon Pump Therapy

Invited Lecture, Cardiothoracic and Vascular Surgery Service April 17, 2014; Texas Heart Institute at Baylor St. Luke's Medical Center, Houston, TX

47. Alkaptonuria- A Rare Etiology of Aortic Valve Stenosis

Invited Lecture, Mortality and Morbidity Conference
June 05, 2014; Texas Heart Institute at Baylor St. Luke's Medical Center, Houston, TX

48. Contemporary Outcomes of Open Thoracoabdominal Aortic Aneurysm Repair in Octogenarians

2nd Annual Resident, Research Day Symposium

June 04, 2014; Michael E. DeBakey Department of Surgery, Houston, TX

49. Marfan Syndrome – A Surgical Disease

Invited Lecture, Cardiothoracic and Vascular Surgery Service May 2, 2013; Texas Heart Institute at Baylor St. Luke's Medical Center, Houston, TX

50. Triple Valve Surgery

Invited Lecture, Cardiothoracic and Vascular Surgery Service May 2, 2013; Texas Heart Institute at Baylor St. Luke's Medical Center, Houston, TX

51. Management of Sternal Fractures

Cardiothoracic, Vascular and General Surgery February 8, 2013; Ben Taub General Hospital/Baylor College of Medicine, Houston, TX

52. Thoracic Outlet Syndrome

Invited Lecture, Department of Thoracic and Cardiovascular Surgery April 2012; Texas Heart Institute at Baylor St. Luke's Medical Center, Houston, TX

53. Endovascular Repair for Mycotic Aneurysms and Aortovisceral Fistula: A Durable Treatment or Just the Bridge to Survival?

Oral Presentation at Annual Meeting of Eastern Vascular Society (EVS) September 2011; Pittsburgh, PA

54. Remote Wireless Sensing for Aneurysm Sac Pressure Measurements after Thoracic Endovascular Aneurysm Repair (TEVAR) - An Initial Experience and a Midterm Follow Up

Oral Presentation at plenary session of Annual Meeting of Eastern Vascular Society (EVS) September 2011; Pittsburg, PA

55. Primary Esophageal Melanoma- A Case Report and Review of Literature

Cardiothoracic Surgery Conference

September 27, 2011; The University of Texas MD Anderson Cancer Center, Houston, TX

56. Hybrid Thoracic Endovascular Aortic Repair (TEVAR) for Complex Aortic Pathology - Early and Mid-term Outcomes

Poster presentation at Annual Meeting of Society of Vascular Surgery (SVS) June 2011; Chicago, IL

57. Should Endovascular Stent Grafting Be the Standard of Care in Multi-Trauma Patients with Blunt Thoracic Aortic Injury (BTAI)?

Poster presentation at the Society of Clinical Vascular Surgery (SCVS) 39th Annual Symposium March 2011; Orlando, FL

58. Endovascular Treatment of Blunt Thoracic Aortic Injuries- A Mid-Term Follow-Up

Annual Clinical Day of American College of Surgeons – Brooklyn & Long Island Chapter. September 2011; San Francsico, CA

59. Central Nervous System Abscess: A Rare Complication of Diverticulitis

Contribution: Co-author, Annual Clinical Congress, American College of Surgeons October 2010; Washington, D.C.

60. Surgical Management of Advanced Obstructing Duodenal Cancer: A Palliative Treatment

Presenter at the Mortality and Morbidity Conference

August 13, 2009; Long Island Jewish Hospital, New Hyde Park, NY

61. Management of Retained Bile Duct Stones After Uncomplicated Laparoscopic Cholecystectomy

Presenter at the Mortality and Morbidity Conference

August 13, 2009; Long Island Jewish Hospital, New Hyde Park, NY

62. Management of Anastomotic Leak after Loop Ileostomy Reversal and Total Abdominal Hysterectomy

Presenter at the Mortality and Morbidity Conference

August 13, 2009; Long Island Jewish Hospital, New Hyde Park, NY

63. Pediatric Surgery- A Review of Complex Surgical Conditions

Presenter at the Surgical Conference

February 23, 2009; Long Island Jewish Hospital, New Hyde Park, NY

64. Management of Benign and Malignant Surgical Breast Conditions

Presenter

January 13, 2009; North Shore University Hospital, Manhasset, NY

65. Challenges in Surgical Treatment of Perforated Diverticulitis in Immuno-compromised Patients

Presenter at the Mortality and Morbidity Conference

January 27, 2009; North Shore University Hospital, Manhasset, NY

66. Posttranscriptional Regulation of GATA6 Expression in Colon Cancer

Contribution: Co-author, Association of Academic Surgery (AAS) / 4th Academic Surgical Congress 2009 February 2009; Chicago, IL

67. Surgical Management of Liver Tumors

Presenter at the Surgical Conference

December 16, 2008; North Shore University Hospital, Manhasset, NY

68. Management of Surgical Conditions of Appendix

Presenter at the Surgical Conference

November 11, 2008, North Shore University Hospital, Manhasset, NY

69. Management of Critical Patients with Various Forms of Shock - An Algorithm

Presented at Long Island Jewish Hospital

August 17, 2007; New Hyde Park, NY

70. Cytokines – the Mediators of Inflammation in Critically Ill Patients

Presented at Long Island Jewish Hospital, New Hyde Park, NY

August 7, 2007; New Hyde Park, NY

71. Management of Patients with Transfusion Related Acute Lung Injury (TRALI)

Presented at Long Island Jewish Hospital

July 20, 2007; New Hyde Park, NY

72. Management of Splenic Trauma

Presented at North Shore University Hospital

April 3, 2007; Manhasset, NY

73. TGF \(\beta \) and GATA6 Cooperatively Regulate the Urokinase Plasminogen Activator

Primary Presenter, Association of Academic Surgery (AAS) / 3rd Academic Surgical Congress February 2007; Phoenix, AZ

74. Management of Spinal Cord Injuries

Presented at North Shore University Hospital

October 16, 2006; Manhasset, NY

75. Management of Cervical Cord Injuries

Presented at North Shore University Hospital

October 23, 2006; Manhasset, NY

76. PIAS-1 Promotes GATA4 Sumolyation and Potentiates GATA4 Mediated Transcriptional Activation of Intestinal Promoters

Digestive Disease Week (DDW) - 2006 American Gastroenterological Association (AGA)

Poster of Distinction Award – Awarded to Top 10% poster of DDW

May 2006; Los Angeles, CA

77. Transforming Growth Factor Beta1 (TGFβ1) Differentially Regulates Protease and Cellular Invasion in Human Colon Cancer

Primary Presenter at the Association of Academic Surgery (AAS) 1st Academic Surgical Congress February 2006; San Diego, CA

78. GATA Factors Regulate Urokinase Plasminogen Activator (uPA) Gene Expression in Intestinal Epithelial Cells

Presenter at the Association of Academic Surgery (AAS), 1st Academic Surgical Congress 2006 February 2006; San Diego, CA

79. Cardiac Ankyrin Repeat Protein (CARP) is an Intestinal Epithelium Expressed TGF-β Target Gene

Oral poster presentation at the Society of University Surgeons (SUS), 1st Academic Surgical Congress February 2006; San Diego, CA

80. Urokinase Gene Expression in Colon Cancer Cells is Regulated by GATA Factors

Poster Presentation at Molecular Surgeon Research Day 11/2005

November 2005; Michael E. DeBakey Department of Surgery, Baylor College of Medicine, Houston, TX

81. Urokinase Gene Expression in Colon Cancer is Regulated by GATA4 and GATA6

Poster presentation presented at the Baylor Cancer Center Research Symposium November 2005; Houston, TX

82. Urokinase Gene Expression in Colon Cancer Cells is Regulated by GATA4 and GATA6

Oral Poster Presentation at AACR (American Association of Cancer Research) Meeting "Colorectal

Cancer: Molecular pathways and therapies" October 19-23, 2005; Dana Point, CA

Awarded Scholar-in-Training Award by AACR

NATIONAL AND REGIONAL CONFERENCES - ORAL AND POSTER PRESENTATIONS WITH PUBLISHED ABSTRACTS (BY MENTEES - RESIDENTS/FELLOWS)

September 2024

1. Operative Management of Aorto-Pulmonary Fistulas and an Algorithm for Treatment

Presented at the 62nd Eastern Cardiothoracic Surgical Society

Presenter: Tylor Thai, MS-II

Oral Presentation, Scientific Session II Role: Principal Investigator/Mentor

2. Urgent Zone 0 Arch Repair with Thoracic Branched Endoprosthesis Following Aortic Debranching: Case Video

Presented at the 62nd Eastern Cardiothoracic Surgical Society

Presenter: BC Brian Wu, MD Oral Presentation, Movie Night Role: Principal Investigator/Mentor

3. Impact of Concomitant Coronary Artery Bypass Grafting on Risk of Major Adverse Cardiovascular Events in Elective Aortic Arch Surgery

Presented at the 62nd Eastern Cardiothoracic Surgical Society

Presenter: BC Brian Wu, MD

Oral Presentation, Scientific Session I Role: Principal Investigator/Mentor

4. History of Previous Circulatory Arrest Does Not Increase the Risk for Stroke or Other Complications in Subsequent Total Arch Replacement

Presented at the 62nd Eastern Cardiothoracic Surgical Society

Presenter: BC Brian Wu, MD

Poster Presentation

Role: Principal Investigator/Mentor

5. Enhancing Aortic Surgery Outcomes: Machine Learning-Based RBC Transfusion Prediction

Presented at the 62nd Eastern Cardiothoracic Surgical Society

Presenter: BC Brian Wu, MD

Poster Presentation

Role: Principal Investigator/Mentor

6. Thoracic Branched Endoprosthesis: Initial Experience at a High-Volume Center

Presented at the 62nd Eastern Cardiothoracic Surgical Society

Presenter: BC Brian Wu, MD

Poster Presentation

Role: Principal Investigator/Mentor

April 2024

1. Forecasting Post-operative Stroke Risk in Operative Management of Urgent and Emergent Type A Aortic Dissection

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

2. A Case Series of Aorto-Pulmonary Fistula: Review of Operative Management, and an Algorithm for Treatment

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

3. Acute Kidney Injury of Any Degree in Total Arch Surgery Contributes to Stepwise Increase in Post Operative Morbidity and Mortality

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

4. Adjunctive Ring Annuloplasty in Valve Sparing Root Replacement

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

5. Advancing Post-Surgical Care: Machine Learning Prediction of Red Blood Cell Transfusion After Elective Aortic Surgery

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

6. Alternative Surgical Management for Patients Requiring Complex Cardiac Procedures but Unable to Receive Blood Products

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

7. An Adjunct Strategy to Address Severe Aortic Tortuosity in Endovascular Management of Aortic Aneurysm

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

8. Aortic Root Replacement in Type A Aortic Dissection is Protective from Distal Reintervention

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

9. Assessment of Wound Infection Risks Post-Hemiarch Surgery: A Logistic Regression Approach

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

10. Cerebral Protection in Circulatory Arrest Patients: The "Shaggy Aorta" Protocol

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

11. Decreased Long-Term Survival After Severe Acute Kidney Injury in Hemiarch Surgery

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

12. Destruction of the Button: Unplanned CABG in Aortic Root Replacement Significantly Increases Mortality

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

13. Development and Management of Aortic Pseudoaneurysm After Stenting for Aortic Coarctation

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

14. Effect of Renal Recovery on Long-Term Survival After Aortic Arch Surgery

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

15. Evaluating Patient Outcomes and Access to Care in Aortic Surgery Based on Ethnicity and Social Vulnerability

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

16. Exploring the Impact of Socioeconomic Vulnerability on Elective Aortic Valvular Surgery

Presentation and Outcomes

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

17. Increased Risk of Major Adverse Cardiovascular Events in Elective Aortic Arch Surgery Undergoing Concomitant Coronary Artery Bypass Grafting

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

18. Institutional Experience of Post-Dissection Repair Aortic Root Pseudoaneurysms and an Algorithm for Treatment

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

19. Logistic Regression as a Predictive Tool of Post-Operative Mortality in Hemiarch Surgery

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

20. Management and Outcomes of Endocarditis-Related Aortic Root Pseudoaneurysms

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

21. Mitochondrial Transplantation is Feasible in an In Vitro Neuronal Cell Model and Ameliorates Ischemia-Reperfusion Injury

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

22. Operative Urgency in Total Arch Replacement: Urgent Patients Benefit from Pre-Operative Optimization

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

23. Optimizing Aortic Coverage with Zone 2 Arch Replacement and a Short-Stent Cuff: the "Buff Cuff" Procedure

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

24. Optimizing Postoperative Surveillance Imaging Following Elective Aortic Hemiarch Replacement

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

25. Pulmonary Artery Injury is Inconsequential in Re-Do Aortic Arch Surgery

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

26. Re-Do Aortic Root Replacement has Comparable Morbidity and Mortality to New Root Replacement with Previous Sternotomy

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

27. Residual Flow in Covered Area After Elephant Trunk Predicts Unplanned Endovascular Extension

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

28. Subclavian Artery Aneurysms in Marfan Syndrome: A Clinical Dilemma

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

29. Temporal Trends in Aortic Valve Surgery: Preserving the Valve

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

30. The Application of Aortic Debranching to Facilitate Zone 0 Coverage with Thoracic Branched Endograft

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

31. Thoracic Branched Endograft for the Treatment of Blunt Thoracic Aortic Injury with Retroesophageal Aberrant Right Subclavian Artery

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

32. Predicting Renal Replacement Therapy After Total Arch Surgery Using Machine Learning

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

33. Prior Circulatory Arrest is Not a Risk Factor for Stroke or Other Adverse Outcomes in Total Arch Replacement

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

34. Personalizing Patient Risk of a Life Altering Event: An Application of Machine Learning to Hemiarch Surgery

Presented at the Aortic Symposium 2024, American Association for Thoracic Surgery

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

November 2023

1. Left Ventricular Remodeling and Diastolic Dysfunction Following TEVAR Therapy for the Descending Thoracic Aortic Aneurysm

Presented at the 70th Annual Meeting Southern Thoracic Surgical Association

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

2. The Impact of Social Vulnerability on Aortic Arch Surgery

Presented at the American Heart Association Scientific Session 2023

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

3. Type A Aortic Dissection with Malperfusion Syndrome: Comparing Immediate Repair Outcomes for Hemiarch Versus Total Arch and Frozen Elephant Trunk

Presented at 12th Biennial Conference of Pakistan Association of Cardiovascular and Thoracic Surgeons

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

4. Hemiarch Replacement at 28 Degrees Celsius Using Retrograde Cerebral Perfusion with High Flow and Pressure is Safe and Effective

Presented at the 12th Biennial Conference of Pakistan Association of Cardiovascular and Thoracic Surgeons

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

5. Advanced Stage CKD Patients Have Inferior Outcomes Compared to Dialysis Dependent ESRD Patients in Cardiac Surgery

Presented at the 12th Biennial Conference of Pakistan Association of Cardiovascular and Thoracic Surgeons

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

October 2023

1. Risk Factors and Short- and Long-Term Outcomes Associated with Acute Kidney Injury in Total Arch Replacement

Presented at the 60th Annual Eastern Cardiothoracic Surgical Society Meeting

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

2. Prolonged Cardiopulmonary Bypass and Circulatory Arrest Times are Associated with Worsening Acute Kidney Injury in Hemiarch Surgery

Presented at the 60th Annual Eastern Cardiothoracic Surgical Society Meeting

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

3. False Lumen Thrombosis Predicts Need for Unplanned Endovascular Extension After Elephant Trunk Surgery

Presented at the 60th Annual Eastern Cardiothoracic Surgical Society Meeting

Presenter: Adam M. Carroll, MD

Oral Poster Presentation

Role: Principal Investigator/mentor

June 2023

1. High Flow, High Pressure Retrograde Cerebral Perfusion at 28 Degrees Celsius is Safe and Effective for Hemiarch Replacement of the Ascending Aorta

Presented at the 49th Annual Meeting, Western Thoracic Society Association (WTSA)

Presenter: R. Wilson King, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

February 2023

1. A Minimally Invasive Hybrid Approach and Algorithm for Aberrant Subclavian and Kommerell's Diverticulum

Presented at the 19th Annual Academic Surgical Congress

Presenter: Adam Carroll, MD (General Surgery Research Resident)

Oral Poster Presentation

2. Stable ESRD Patients have Superior Outcomes to Advanced Stage CKD Patients in Cardiac Surgery

Presented at the 19th Annual Academic Surgical Congress

Presenter: Adam Carroll, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

June 2022

1. Frozen Elephant Trunk for Acute Type A Dissection: Is Risk from Procedure or Patient Characteristics?

Presented at the 48th Annual Meeting of Western Thoracic Society Association Conference

Presenter: Robert King, MD (General Surgery Research Resident

Oral Poster Presentation

Role: Principal Investigator/mentor

May 2022

1. A Clinical Algorithm for Management of the Left Subclavian Artery in Aortic Arch Repair

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Adam Carroll, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

2. Arch Replacement to Eliminate Stroke from Residual Dissection Flap

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

3. Comparison of Access Site Complications Using Percutaneous Access vs. Surgical Cutdown for Thoracic Endovascular Aortic Repair and Transcatheter Aortic Valve Replacement

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Adam Carroll, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

4. Complete Neurological Recovery After Treatment of Type I Aortic Dissection Presenting with Paraplegia

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Leighton McCabe, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

5. Contemporary Institutional Experience with Elective Hemiarch Aortic Repair

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

6. Development of De Novo Graft Thrombus after Thoracic Endovascular Aortic Repair for Blunt Thoracic Aortic Injury: A Case Series and Algorithm for Treatment

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Adam Carroll, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

7. Discerning True Deficits from the Noise – Interpretation of Neuromonitoring Abnormalities during TEVAR

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

8. Do Warmer Nadir Circulatory Arrest Temperatures Still Provide Neurologic Protection During Total Aortic Arch Replacement

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

9. Does a Diagnosis of a Connective Tissue Disorder Carry an Increased Risk for Postoperative Complications Following Aortic Intervention?

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

10. Early Thoracic Endovascular Aortic repair (TEVAR) in Acute Type B Aortic Dissection with Malperfusion

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

11. Evaluating Differences in Aortic Arch Intervention Outcomes Based on Gender

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

12. Does Aortic Intervention Pose Increased Risk to Patients 70 Years of Age and Older?

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

13. Evaluating Postoperative Outcomes in Total Aortic and Hemiaortic Arch Repairs Based on Cardiothoracic Surgery Fellow Year in Training

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

14. Evolution of Cannulation Strategy and Temperature Management in Hemiarch Aortic Repair

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

15. Female Sex is an Independent Risk Factor for Stroke after Aortic Arch Surgery

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

16. From "Shaggy Aorta" Protocol to Retrograde for All – Utility of Retrograde Cerebral Perfusion in Open Aortic Arch Repair for Potential Washout of Thromboembolic Debris

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

17. Goal-Directed Bilateral Antegrade Cerebral Perfusion During Hemiarch Repair in a Patient with Moyamoya Disease

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Adam Carroll, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

18. Impact of Higher Target Nadir Temperature on Intraoperative Transfusions During Open Aortic Arch Surgery

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

19. Long-Term Outcomes Following Open Aortic Arch Operations with Descending Thoracic Aortic Stent Placement

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

20. Management of Left Ventricular Outflow Tract Pseudoaneurysms

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

21. Management of Peripartum Aortic Dissection – A Case Studies

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Jacob Edwards, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

22. Maturation of Operative Strategy in Total Arch Replacement with Frozen Elephant Trunk

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

23. Neuromonitoring is a Useful Adjunct for Early Detection of Stroke in Hypothermic Circulatory Arrest Cases

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

24. Non-Operative Management of Iatrogenic Aortic Dissection

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Adam Carroll, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

25. Outcomes Following Bicuspid Aortic Valve Repair During Hemiarch Replacement

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

26. Outcomes Following Cabrol Coronary Reimplantation During Root Replacement in Open Aortic Arch Surgery

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

27. Outcomes Following Hemiarch Repair for Acute Type A Dissection

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

28. Outcomes Following Re-operative surgery in Patients with a History of Previous Ascending Aortic or Hemiarch Repair

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Leighton McCabe, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

29. Postoperative Surveillance Imaging Following Elective Aortic Hemiarch Replacement

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

30. Pre-Collateralization of Spinal Cord Blood Flow in a Large Animal Model

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

31. Psychiatric Support Following Aoropathy Diagnosis

Presented at the 102^{nd} annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Jacob Edwards, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

32. Successful Total Arch Replacement with LVAD Implantation: The VADA (ch) Procedure

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

33. The Safety of Delayed Sternal Closure for Bleeding After Aortic Surgery

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

34. Utilization of Percutaneous Embolization for the Management of Postoperative Aortic Root Pseudoaneurysm

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

35. Warmer Nadir Temperatures Do Not Adversely Affect Neurologic Outcomes in Aortic Hemiarch Replacement

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

36. You Should've Put a Ring on It: Evaluating Serial Mean Aortic Valve Gradients after Bicuspid Aortic Valve Repair with Ring Annuloplasty

Presented at the 102nd annual meeting of American Association for Thoracic Surgery: Aortic Symposium Workshop

Presenter: Leighton McCabe, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

February 2022

1. Postoperative Surveillance Imaging Following Elective Aortic Hemiarch Replacement

Presented at the 18th Annual Academic Surgical Congress

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

January 2022

1. Outcomes of Immediate Repair of Type A Aortic Dissection with Malperfusion Syndrome: Comparison of Total Arch Frozen Elephant Trunk vs Hemiarch Replacement

Presented at the Society of Thoracic Surgeons 58th Annual Meeting Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

November 2021

1. Overexposed? Evaluation the Need for Serial Surveillance Imaging Following Elective Aorti Hemiarch Replacement

Presented at the American Heart Association Scientific Sessions

Oral Poster Presentation

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Role: Co-Investigator

October 2021

1. Early Thoracic Endovascular Aortic Repair (TEVAR) in Acute Type B Dissection with Malperfusion Syndrome Mitigates the Risks of Severe Complications

Presented at the 59th annual meeting of Eastern Cardiothoracic Surgery Society Meeting

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

2. Intraoperative IVUS During Arch Repair for Type A Dissection Facilitates Accurate True Lumen Stent Deployment

Presented at the 59th annual meeting of Eastern Cardiothoracic Surgery Society Meeting

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Oral Poster Presentation

Role: Principal Investigator/mentor

3. Outcomes of Venovenous Extracorporeal Membrane Oxygenation Support in Patients with Severe ARDS from COVID-19: A Multicenter Study

Presented at the 47th Annual Meeting of Western Thoracic Surgical Association

Oral Presentation in Plenary Session

Presenter: Navin G. Vigneshwar, MD (General Surgery Resident)

Role: Principal Investigator/Mentor

4. Utilizing Nicorandil in the Protection of Neuronal Cells from Hypoxic Injury. A Basic Science Mode.

Presented at the 47th Annual Meeting of Western Thoracic Surgical Association

Oral Presentation at Concurrent Forum on 10/02/2021

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Role: Co- Investigator/Co-mentor

September 2021

1. Evaluating the Risk of Spinal Cord Ischemia in Zone 2 Frozen Elephant Trunk Replacement

Presented at the Society of Black Academic Surgeons 2021 Annual Meeting

Oral Poster Presentation

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Role: Co-Investigator

January 2021

1. Distal Intervention for Frozen Elephant Trunk in the Current Era

Presented at the 57th Virtual Annual Meeting of Society of Thoracic Surgeons

Oral Poster Presentation

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Role: Co-Investigator

2. "Shaggy Aorta Protocol" – Utilizing the Benefits of Both Antegrade and Retrograde Cerebral Perfusion for All Open Arch Operations

Presented at the Virtual 57th Annual Meeting of Society of Thoracic Surgeons

Oral Poster Presentation

Presenter: Cenea Kemp, MD (General Surgery Research Resident)

Role: Co-Investigator

November 2020

1. The Use of Percutaneous Vacuum-Assisted Suction Thrombectomy for Removal of Intracardiac and Intravascular Thrombi: A Single-Center Experience

Accepted for Oral Presentation Meeting cancelled due to COVID-19 Pandemic STSA 67th Annual Meeting Southern Thoracic Surgical Association (STSA)

Presenter: Kenaz Bakdash, MD (Interventional Radiology Resident)

Role: Principal Investigator/Primary Research Mentor

March 2020

1. Evidence of Lead Perforation on Electrocardiogram-gated Computed Tomography May Predict Risk of Tamponade and Need for Cardiac Surgery in Patients Undergoing Transvenous Lead Extraction

Presented at the Virtual Presentation of American College of Cardiology

Pathway: Arrhythmias and Clinical EP: Devices

Presenter: Andrew Nickel, MD (cardiology EP fellow).

Role: Co-investigator

January 2020

1. Reactive Oxygen Species Mediate Nicorandil-Induced Metabolic Tolerance to Spinal Cord Ischemia-Reperfusion Injury

Presented at the 56th Annual Society of Thoracic Surgeons 2020

Presenter: Yuki Ikeno, MD (Research Fellow)

Oral Presentation Role: Co-mentor

February 2020

1. Utility of Intravascular Ultrasound in Acute Type A Dissection

Presented at the 15th Annual Academic Surgical Congress 2020

Presenter: Devon Anderson, BS (Medical Student)

Oral Presentation Role: Co-Mentor

2. Outcomes Following Deep Sternal Infection

Presented at the 15th Annual Academic Surgical Congress 2020

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Presentation

Role: Co Investigator/Co-mentor

3. Outcomes Following Delayed Sternal Closure for Bleeding After Aortic Surgery

Presented at the 15th Annual Academic Surgical Congress 2020

Presenter: Gavriel Roda, MS (Medical Student)

Oral Presentation

Role: Co-Investigator/Co-mentor

4. Outcomes of Hemiarch Repair for Acute Type A Dissection

Presented at the 15th Annual Academic Surgical Congress 2020

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Presentation

Role: Principal Investigator

October 2019

1. Cardiopulmonary Bypass Time Better Predicts Post-Operative Morbidity and Mortality in Aortic Arch Surgery than the Circulatory Arrest Time

e-Poster Presentation the American College of Surgeons Clinical Congress 2019

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Role: Principal Investigator

2. Female Sex is Associated with Worse Outcomes after Aortic Arch Surgery

Presented at the American College of Surgeons Clinical Congress 2019

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Presentation

Role: Co-Principal Investigator

3. Endovascular Repair of Rapidly Enlarging Ascending Aortic Pseudoaneurysm

Presented at the Eastern Cardiothoracic Surgical Society 2019

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Presentation

Role: Mentor/Principal Investigator

4. Aortic Arch Thromboembolectomy for Thrombus in Transit: Utility of Both Antegrade and Retrograde Cerebral Perfusion with Moderate Hypothermic Circulatory Arrest

Presented at the Eastern Cardiothoracic Surgical Society 2019, October 16-19, 2019

Presenter: Vincent Valero, MD (Cardiothoracic Surgery Fellow)

Oral Presentation

Role: Mentor/Principal Investigator

5. "Shaggy Aorta" – Protocol Early Institutional Experience with Retrograde Cerebral Perfusion in Open Aortic Arch Repair for Washout of Thromboembolic

Accepted for presentation at the Eastern Cardiothoracic Surgical Society 2019

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Presentation Role: Co-Mentor

June 2019

1. Utility of Neuromonitoring in Hypothermic Circulatory Arrest Cases for Early Detection of Stroke Listening through the Noise

Presented at the Western Thoracic Surgical Association 2019

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Presentation

Role: Mentor/Principal Investigator

2. Preoperative Creatinine Elevation Increases the Risk of Mortality, Post-Operative Infection, and Prolonged ICU Stay Following Cardiac Surgery

Presented at the Western Thoracic Surgical Association 2019 Presenter: Benjamin R Griffin, MD (Nephrology Fellow)

Plenary Session Oral Presentation Role: Principal Investigator

November 2018

1. A Multidisciplinary Heart Team Approach to High Risk Transvenous Pacemaker and Defibrillator Lead Extraction Improves Mortality

Presented at the American Heart Association Scientific Sessions

Poster Presentation

Presenter: Ryan G. Aleong, MD (EP Cardiology Attending)

Role: Co-Investigator

2. Experience with Cardiac and Vascular Complications of Lead Extractions

Presented at the American Heart Association Scientific Sessions

Presenter: Alexis Z Tumolo, MD (EP Cardiology Fellow)

Poster Presentation

Role: Co-mentor and Principal Investigator

3. Augmentation of Spinal Cord Pre-Collateralization to Prevent Paraplegia After Aortic Surgery

Presented at the American Heart Association Scientific Sessions

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Poster Presentation

Role: Principal Investigator and Mentor

4. Erythropoietin Protection of Neurons Mediated Through Preservation of Erythropoietin Receptor by Albumin

Presented at the American Heart Association Scientific Sessions

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Poster Presentation Role: Co-mentor

5. Improved Mortality Associated with the Use of Extracorporeal Membrane Oxygenation as a Bridge to Lung Transplantation

Presented at the 65th Southern Thoracic Surgical Association Annual Meeting Presenter: Alison L. Halpern, MD (General Surgery Research Resident)

Oral Presentation Role: Co-mentor

October 2018

1. The Effects of Moderate Hypothermia on Outcomes in Hemiarch Repairs

Presented at the American College of Surgeons Clinical Congress

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Oral Presentation Role: Co-mentor

2. Buffalo Trunk: Utilizing Available Materials to Mimic the Benefits of a Hybrid Elephant Trunk

Presented at the American College of Surgeons Clinical Congress

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Oral Presentation

Role: Co-investigator and Mentor

3. Clinical Predictors of In-Hospital Mortality and Overall Survival for Venoarterial Extracorporeal Membrane Oxygenation in Patients with Refractory Cardiogenic Shock

Presented at the American College of Surgeons Clinical Congress Presenter: Patrick Kohtz, MD (General Surgery Research Resident)

Poster Presentation

Role: Principal Investigator and Mentor

4. Neuronal Protection Through Erythropoietin Receptor and the Role of Albumin

Presented at the American College of Surgeons Clinical Congress

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Poster Presentation

Role: Co-Investigator and Mentor

June 2018

1. Clinical Predictors of Successful Weaning from Veno-arterial Extracorporeal Membrane Oxygenation in patients with Refractory Cardiogenic Shock

Presented at the WTSA 44th Annual Meeting

Presenter: Patrick Kohtz, MD (General Surgery Research Resident)

Oral Presentation

Role: Principal Investigator and Mentor

May 2018

1. Loeys-Dietz Syndrome: Intermediate-term Outcomes of Medically and Surgically Managed Patients

Presented at the AATS 98th Annual Meeting Presenter: Frank Cikach, Jr (Medical Student)

Oral Presentation - Aortic/Endovascular Simultaneous Session

Role: Research Mentor and Primary author

April 2018

1. Lessons Learned and Challenges in Developing a Spinal Cord Pre-collateralization Model for Thoracoabdominal Aortic Aneurysm Repair

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Principal Investigator

2. Endovascular Repair of Blunt Thoracic Aortic Injury in a Patient with Aberrant Right Subclavian Artery - An Uncommon Presentation

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Principal Investigator

3. Staged Repair to Deal with Inability to Transfuse Ross Revision

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Co-Research Mentor and Principal Investigator

4. Alternative Approach to TEVAR Extension of Collapsed True Lumen

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Co-principal Investigator

Revised 11.26.2024

5. Type A Aortic Dissection Repair in Situs Inversus Totalis

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Co-principal Investigator

6. Bridge to Definitive Surgery for Aorta-Atrial Fistula Repair

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Co-principal Investigator

7. Moderate Hypothermia for Hemiarch Repairs: Refining the Ranges

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Co-principal Investigator

8. Morbidity with Hypothermia for Hemiarch Repairs

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Co-principal Investigator

9. Neurologic Outcomes Following Hypothermic Circulatory Arrest in Hemiarch Repair

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Co-principal Investigator

10. Delayed Type A Repair: Rehabilitation from Inoperable to Definitive Therapy

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Co-principal Investigator

11. Wheat vs Root in Hemiarch: Does Valve Replacement Affect Outcomes

Presented at the AATS Aortic Symposium

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Presentation on Demand

Role: Research Mentor and Co-principal Investigator

February 2018

1. Platelet Nadir Following Cardiopulmonary Bypass is Independently Associated with Post-Operative Mortality, Infection, Acute Kidney Injury, and Prolonged ICU Stay

Presented at STS 55th Annual Meeting

Presenter: Benjamin Griffin, MD (Nephrology Fellow)

Poster Presentation

Role: Research Mentor and Principal Investigator

2. Are Post-Cardiac Surgery Outcomes Worse in End-Stage Renal Disease or Acute Kidney Injury Patients?

Presented at the 14th Annual Academic Surgical Congress

Presenter: Patrick Kohtz, MD (General Surgery Research Resident)

Oral Presentation - Clinical/Outcomes: Cardiothoracic QuickShot Session

Role: Research Mentor and Principal Investigator

3. Predictors of Renal Dysfunction Following Hypothermic Circulatory Arrest

Presented at the 14th Annual Academic Surgical Congress

Presenter: Christian Ghincea, MD (General Surgery Research Resident)

Oral Presentation - Clinical/Outcomes: Cardiothoracic Oral Session 1

Role: Research Mentor and Principal Investigator

4. Predictors of Post-Operative Transfusions for Hemiarch Replacement

Presented at the 14th Annual Academic Surgical Congress

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Oral Presentation - Clinical/Outcomes: Cardiothoracic QuickShot Session

Role: Research Mentor and Principal Investigator

January 2018

1. The Effects of Glucose and B27 Deprivation on Astrocyte Expression of Erythropoietin Receptor.

Presented at the 18th Academic Surgical Congress

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Oral Presentation -Basic Science Host Inflammatory Response

Role: Research Mentor/Co-investigator

2. NGF Upregulation by Diazoxide and Erythropoietin Treatment Attenuates Spinal Cord Ischemic Injury

Presented at the 18th Academic Surgical Congress

Presenter: Katsuhiro Yamanaka, MD, PhD (Research Fellow)

Oral Presentation -Basic Science Cardiothoracic and Vascular Oral Session

Role: Research Mentor/Co-investigator

3. Innominate versus Axillary Artery Cannulation for Hemiarch Repair.

Presented at the 18th Academic Surgical Congress

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Quick Shot Presentation -Clinical/Outcomes Cardiothoracic Session 1

Role: Research Mentor

4. Diazoxide Attenuates Spinal Cord Ischemia-Reperfusion Injury Through STAT3 Pathway

Presented at the Society of Thoracic Surgeons 54th Annual Meeting

Presenter: Katsuhiro Yamanaka, MD, PhD (Research Fellow)

Oral Presentation - Basic Science Research: Adult Cardiac Session

Role: Research Mentor/Co-investigator

5. The Effects of Glucose Starvation and B27 Depletion on the Expression of Erythropoietin Receptor in Neurons.

Presented at 42nd Annual Meeting Southern Association for Vascular Surgery

Presenter: Mohamed Eldeiry, MD (General Surgery Research Resident)

Oral Poster

Role: Research Mentor/Co-investigator

October 2017

1. Pretreatment with Diazoxide Attenuates Injury in a Mouse Model of Spinal Cord Ischemia Scientific Forum 18- Cardiac Surgery II

Presented at the ACS Clinical Congress 2017

Presenter: Katsuhiro Yamanaka (Research Fellow)

Role: Research Co-Mentor

June 2017

1. Pretreatment with Diazoxide Enhances the Neuroprotective Function of Erythropoietin Against Spinal Cord Ischemia and Reperfusion Injury Through Upregulation of Beta Common Receptor

Presented at the Western Thoracic Surgical Association Presenter: Katsuhiro Yamanaka (Research Fellow)

Role: Research Co-Mentor

November 2016

1. Pharmacological Induction of Beta Common Receptor Amplifies Erythropoietin Attenuation of Spinal Cord Injury

Presented at the American Heart Association 2016 Scientific Sessions and Resuscitation Science

Symposium

Presenter: Katsuhiro Yamanaka (Research Fellow)

Role: Research Mentor

May 2016

1. Combined Aortic Root and Mitral Valve Surgery: The Quest to Preserve Both Valves

Presented at the American Association of Thoracic Surgery (AATS) Aortic Symposium 2016

Presenter: Hoda Javadikasgari, MD

Presentation on Demand

Role: Research Supervisor to the Primary Presenter/Primary Author

January 2016

1. Outcomes of a Less Invasive Approach in Proximal Aortic Surgery

Presented at the STS 52ⁿ Annual Meeting and STS/AATS Tech-Con 2016

Poster presentation

Contribution: Co-author

2. Gender and Cardiothoracic Surgery Training: Specialty Interests, Satisfaction, and Career Pathways

Presented at the STS 52ⁿ Annual Meeting and STS/AATS Tech-Con 2016

Oral presentation

Contribution: Co-author

November 2015

1. Characterizing the Operative Experience of Cardiothoracic Surgery Residents in the United States: What are Residents Really Doing in the Operating Room?

Presented at the 62nd Annual Meeting of Southern Thoracic Surgical Association (STSA)

Oral presentation

Contribution: Co-author

2. The Future of the Academic Cardiothoracic Surgeon: Results of the TSRA/TSDA In-training Exam Survey

Presented at the 62nd Annual Meeting of Southern Thoracic Surgical Association (STSA)

Oral presentation

Contribution: Co-author

January 2015

1. A Decade of Change: Training and Career Paths of Cardiothoracic Surgery Residents 2003-2014

Presented at the STS 51st Annual Meeting and STS/AATS Tech-Con 2015

Oral Presentation

Contribution: Co-author

2. Understanding Why Residents May Inaccurately Log Their Role in Operations: A Look at the 2013 In-Training Exam Survey

Presented at the STS 51st Annual Meeting and STS/AATS Tech-Con 2015

Oral Poster Presentation
Contribution: Co-author

3. Predictors of Career Choice among Cardiothoracic Surgery Trainees

Presented at the STS 51st Annual Meeting and STS/AATS Tech-Con 2015

Oral Presentation

Contribution: Co-author

November 2014

1. Residents' Perceptions of Two- vs. Three-year Cardiothoracic Training Programs (2013 and 2014 TSRA/TSDA In-training Exam Survey)

Presented at the Southern Thoracic Surgical Association (STSA) 61st Annual Meeting

Contribution: Co-author

October 2014

1. Paraesophageal Hiatal Hernia with Nonischemic Perforation of the Gastric Fundus in the Left Thorax. A Case Report

Presented at the ACS Clinical Congress

Contribution: Co-author

April 2014

1. Respiratory Failure Requiring Tracheostomy after Thoracoabdominal Aortic Aneurysm Repair: Predictors and Consequences

Presented at the American Association of Thoracic Surgery (AATS) Aortic Symposium 2014

Presentation on demand Contribution: Co-author

TEACHING/EDUCATIONAL ACTIVITIES

National/International/Regional

1. CT Surgery Fellows Course on Total Arch Replacement with Frozen Elephant Trunk Repair

Invited Faculty for hands on course, Division of Cardiothoracic Surgery

University of Colorado, Denver, CO; March 21, 2024

2. CT surgery Fellows Course 2023 by Terumo Aortic

Invited Faculty for course on Comprehensive Treatment of Thoracic Aortic Diseases Ft. Lauderdale Harbor Beach, FL; December 15-16, 2023

3. Thoracic Endovascular Aortic Repair Workshop

Course Director, Pakistan Association of Cardiovascular and Thoracic Surgery (PACVTS) Peshawar, Pakistan; November 19, 2023

4. Aortic Root and Arch Workshop

Course Director, Pakistan Association of Cardiovascular and Thoracic Surgery (PACVTS) Peshawar, Pakistan; November 17, 2023

5. Aortic Valve and Root Boot Camp for CT Surgery Fellows by Artivion 2023

Invited Faculty for Course on Aortic Root Replacement, Valve Sparing Root and Ross Procedure Atlanta, GA October 27-28, 2023

Revised 11.26.2024

6. Eastern Cardiothoracic Surgery Society (ECTSS) Meeting 2023

Moderator of Cardiovascular: Movie Night Friday October 5th, 2023

7. Eastern Cardiothoracic Surgery Society (ECTSS) Meeting 2023

Moderator of Expert Session I: Cardiovascular Friday October 5th, 2023

8. Eastern Cardiothoracic Surgery Society (ECTSS) Meeting 2023

Moderator of Plenary Session I Friday October 5th, 2023

9. CT surgery Fellows Course 2022 by Terumo Aortic

Invited Faculty for course on Comprehensive Treatment of Thoracic Aortic Diseases Ft. Lauderdale Harbor Beach, FL; December 9-11, 2022

10. Aortic Valve and Root Boot Camp for CT Surgery Fellows by Artivion 2022

Invited Faculty for Course on Aortic Root Replacement, Valve Sparing Root and Ross Procedure Atlanta, GA; October 27-28, 2023

11. Aortic Valve and Root Boot Camp for CT Surgery Fellows by Artivion 2022

Invited Faculty for Course on Aortic Root Replacement, Valve Sparing Root and Ross Procedure Atlanta, GA; October 27-28, 2022

12. American College of Surgeons, Clinical Congress 2022

Course Session: Aorto-Esophageal and Cardio-Esophageal Fistulae Title: Intra-Operative Endovascular and Open Management of Aorto-Enteric Fistula October 19, 2022

13. Eastern Cardiothoracic Surgery Society (ECTSS) Meeting 2022

Invited Speaker for the ECTSS Leadership Academy Title: Teaching cardiac Surgery in the Operating Room Miami, FL; October 06, 2022

14. Eastern Cardiothoracic Surgery Society (ECTSS) Meeting 2022

Invited Speaker for the expert session in Multidisciplinary Cardiothoracic Surgery October 07, 2022 Title: Transcatheter Approaches for Valvular Disease

15. Texas Cardiovascular Innovations Conference 2022

Invited Speaker, Overview of Aortic Aneurysmal Disease and Type A Dissection Saturday, August 27, 2022, 1:00 pm – 1:15 pm, 1:30 pm – 1:45 pm La Cantera Resort in San Antonio, Texas

16. Texas Cardiovascular Innovations Conference 2021

Invited Speaker, Overview of Aortic Aneurysmal Disease Friday, December 17, 2021, 1:20 pm – 1:40 pm La Cantera Resort in San Antonio, Texas

17. Eastern Cardiothoracic Surgical Society 59th Annual Meeting

Moderator of Expert Session II Friday October 8th, 2021

Management of patients in cardiogenic shock/advanced mechanical circulatory support

18. STS University Course: ECMO Cannulation

Role: Course Faculty STS 56th Annual Meeting, New Orleans Ernest N. Morial Convention Center January 25th, 2020

19. Society of Thoracic Surgeons TEVAR Symposium

Invited Core Course Faculty April 4- 5th, 2019

20. Developed the program proposal for STS 56th Annual Meeting

moderated the session on "Introduction to Cardiothoracic Health Services Research"

21. Pakistan Society of Cardiovascular and Thoracic Surgeons 11th Biennial Conference

Invited Core Course Faculty: Workshop 1 - Aortic annular enlargement Cardiothoracic surgery 2020 and beyond December 06, 2019

22. Pakistan Society of Cardiovascular and Thoracic Surgeons 11th Biennial Conference

Invited Core Course Faculty: Workshop 4 – Catheter Skills for Cardiac Surgeons Cardiothoracic surgery 2020 and beyond December 06, 2019

23. Eastern Cardiothoracic Surgical Society 56th Annual Meeting 2018

Invited Speaker: Hybrid Aortic Arch Repair: Classification, technique, and pitfalls. Monday, October 22, 2018, 11:30 am – 1:00 pm Clearwater Beach, Florida

24. Aortic Tech Exchange Course (Selected 24 Vascular and CT surgery Fellows in USA)

Core Faculty for the Aortic Simulation Course/Cadaver Laboratory Center for Surgical Innovation (CSI), University of Colorado, Aurora, CO April 20-21, 2017

25. American Board of Thoracic Surgery (ABTS) Self-Education and Self-Assessment in Thoracic Surgery (SESATS)

Question Review Bank Question editor 2016-2017

26. Co-editor of the surgical textbook titled "Operative Dictations in Cardiothoracic Surgery" Summarizes the indications, details of surgery steps, techniques, and pitfalls of 106 major cardiothoracic surgical procedures (39 major general thoracic, 39 adult cardiac, and 28 congenital cardiac procedures)

Clinical Teaching: University of Colorado, Anschutz Medical Campus, Rocky Mountain Regional VA Medical Center and School of Medicine:

- 1. I actively participate as a **teaching faculty in the weekly cardiac surgery (every Tuesday), thoracic surgery (every Wednesday), core curriculum conferences**, and **multidisciplinary aortic conferences (every Monday)** with the goal of out-of-the-operating room teaching and training of cardiothoracic and general surgery residents as well as medical students rotating on the cardiac surgery service.
- 2. In addition to teaching residents at the bedside, ICU, and operating room, I have conducted more than 20 wet lab and dry simulations with cardiothoracic surgery fellows, general surgery residents, and medical students over the last five years. I remain one of the core faculty for their surgical simulation sessions.
- 3. These simulation sessions provide hands-on training to all levels of trainees outside of the operating room on complex procedures such as the aortic arch and root replacement, thoracic endovascular aortic repair, aortic root enlargement, use of surgical hemostasis adjuncts, TEVAR case planning, 3 D reconstruction of CT images for surgical planning.
- 4. I developed the proposal to prepare the webcast for all surgical grand rounds in the department of surgery. I have worked in collaboration with the administrative staff of the department of surgery and the Audiovisual department to advance this proposal. As a result of these efforts, all the grand round presentations since 2018 are now available at the website of the Department of Surgery. This has become a source of continued medical education for the faculty, residents, fellows, medical students, nurses, and physician assistants alike. Since COVID-19 pandemic, these presentations are being video-taped via zoom and remain available as a source of continued education for everyone.

Core Cardiac Surgery Teaching Faculty for Cardiothoracic Surgery Fellowship:

- 1. I have **mentored 17 cardiothoracic surgery fellowship graduates** from the program from 2016-2024. They are currently serving as a cardiothoracic surgeon in academic and private practice in the United States.
- 2. I am currently **training and mentoring 6 cardiothoracic surgery fellows**, including bedside and ICU teaching as well as training them in the operating room on adult cardiac surgical procedures, e.g., valve surgery, coronary artery bypass grafting, and highly complex aortic surgery, including root, arch surgery, endovascular aortic surgery, and heart transplantation.
- 3. **Weekly Teaching Conferences:** As a teaching faculty I actively participate in the weekly core curriculum conferences with the goal of out-of-the-operating room teaching and training of cardiothoracic and general surgery residents as well as medical students rotating on the cardiac surgery service.
 - a. Cardiac Surgery Teaching Lecture (every Tuesday)
 - b. General Thoracic surgery (every Wednesday),
 - c. Multidisciplinary aortic conference (every Monday)

Research Mentorship of Residents and Fellows:

- 1. **Mentored and co-mentored 10 cardiothoracic surgery research residents/fellows**, including two international fellows, who currently serve as cardiothoracic surgery fellows or cardiothoracic surgeons national and internationally
- 2. Mentees have presented over 65 national or regional oral and poster presentations at scientific meetings over the last five years
- 3. **Best Cardiac Surgery Oral Presentation Award**, October 2022, (Mentee: Cenea Kemp, MD) by Eastern Cardiothoracic Surgery Society (ECTSS)
- 4. **Hawley H. Seiler Resident's Best Paper Award** on 10/2019 (Mentee: Navin Vigneshwar, MD) by the Southern Thoracic Surgical Association (STSA)
- 5. **Best Cardiac Surgery Critical Care Poster Award** on 01/2019 (Mentee: Benjamin Griffin, MD) by the Society of Thoracic Surgeons (STS)
- 6. **Nicholas Kouchoukos Research Award** on 2018 (Co. Mentee: Katsuhiro Yamanaka, MD, Ph. D) by the American Association for Thoracic Surgery (AATS)
- 7. **Norman E. Shumway Award** on 2017 (Co. Mentee: Katsuhiro Yamanaka, MD, Ph. D) by the Western Thoracic Surgical Association (WTSA)

Invited Lecturer/Teaching:

- 1. "Career in Cardiothoracic Surgery," quarterly lecture for students
- 2. SURG 5005: "Introduction to Cardiothoracic Surgery course" (every quarter since 2021-2024)
- 3. Invited Lecturer **to cardiology fellows** at the UCH-AMC on "Management of VA and VV ECMO" (05/2023)
- 4. Invited Lecturer for medical students, general surgery residents, cardiothoracic surgery fellows in their curriculum conferences, journal clubs, and grand rounds.
- 5. Annual **classroom lecture** to the first-year medical students on Cardiothoracic Surgery Service in 2016, 2017, and 2018.
- 6. Invited Lecturer to cardiology fellows at the UCH-AMC on "Management of Acute Aortic dissection."

- 7. Invited Lecturer to cardiology fellows at the UCH-AMC on "Management of VA and VV ECMO."
- 8. Invited Lecturer for the **Stroke neurology fellows** at the UCH-AMC on "Brian Protection Strategies in Cardiac Surgery."
- Invited Lecturer for Annual course of ECMO specialists (nurses, physician assistants and perfusionists) at UCH-AMC
- 10. Teaching **Cardiology (Electrophysiology) Fellows** on high-risk lead extraction procedures in the operating room and in multidisciplinary monthly lead extraction meetings.
- 11. Teaching Vascular surgery fellows and residents on thoracic endovascular aortic surgical procedures in the operating room.
- 12. Teaching and mentoring **Interventional radiology fellows/residents** on high-risk suction thrombectomy (AngioVAC) procedures in the operating room and on multidisciplinary research projects.
- 13. Teaching and mentoring **first year**, **second year**, **and fourth year General Surgery residents** on the cardiothoracic surgery service at the UCH-AMC.
- 14. Teaching and mentoring medical students.
- 15. Invited Lecturer to the ICU nurses, mid-level practitioners, CT surgery and ICU fellows, residents, medical students, ICU intensivists on the ICU management of cardiac surgery patients.

Public Speaking/Public Health Education Seminars:

1. Title: How to Pursue a Career in Medicine?

A community lecture and discussion with Q/A session with the high school student (medicine interest group) at the Crescent View Academy School on 04/26/2017

2. **Title: COVID-19 Preparing for What Comes Next and Its Health Implications (via Zoom)** A community lecture and discussion with Q/A session with the community on COVID-19 pandemic (duration 2 hours) 05/17/2020

3. Title: COVID vaccine Facts, Myths and Concerns! (via Zoom)

A community lecture and discussion with Q/A session with the community to address common questions and concerns about COVID-19 vaccination (duration 2 hours) 05/01/2021

CLINICAL & RESEARCH INTERESTS

- Spinal cord, Brain, and Renal protection during aortic surgery
- Techniques of myocardial and cerebral protection during cardiac surgery
- Aortic root and arch repair
- Endovascular aortic arch and proximal aortic surgery
- Thoracic Endovascular Aortic Repair (TEVAR)
- Coronary Artery Bypass grafting
- Thoracoabdominal Aortic Aneurysm Repair
- End organ protection in Thoracoabdominal Aortic Aneurysm (TAAA) Repair
- Surgical outcomes research
- Surgical education/Resident's training

CLINICAL TRIALS / IRB APPROVED RESEARCH PROJECTS

1. The Physician-Initiated Improve-AD (Aortic Dissection) Study

Role: Co-investigator, 2024

2. Presevere Trial by Artivion

Role: Co-investigator, 2023-present

3. Relay Pro Dissection (Pro D) Pivotal Trial

Role: Co-investigator, 2021-2023

4. Triomphe Study Multi-Center Non-Randomized Clinical Trial for NEXUS Aortic Arch Stent Graft

Role: Co-investigator, 2022-present

5. Multicenter Registry for ECMO Outcomes in COVID-19 ARDS

Role: National Principal Investigator, 12/2020 - 2023

6. Aortic Trauma Foundation Prospective Blunt Thoracic Aortic Injury Registry

Role: Site Principal Investigator 05/2018 – Present

7. National Institutes of Health-Immunoparalysis in Acute Kidney Injury After Cardiac Surgery

Role: Co-Principal Investigator 02/2018 – 2023

8. Registry for Cardiogenic Shock: Utility and Efficacy of Device Therapy (RESCUE)

Role: Principal Investigator 02/2018 - Present

9. A Prospective, Multicenter, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Safety and Efficacy of Preoperative Antithrombin Supplementation in Patients Undergoing High-Risk Cardiac Surgery with Cardiopulmonary Bypass

Role: Co-investigator 03/2016

10. Medtronic PERIcardial SurGical Aortic Valve ReplacemeNt Pivotal Trial (PERIGON)

A multi-center, non-randomized trial to determine the safety and effectiveness of the Model 400 aortic valve bioprosthesis in patients with aortic valve disease.

Role: Co-investigator 04/2016 Heart Mate III trial.

Role: Co-investigator 07/2016

11. HemoBlastTM Bellows Pivotal Clinical Trial

Member Data Safety Monitoring Board

Role: Chair, Clinical Events Committee (CEC) 07/2016 – 11/2017

RELATED MEDICAL CERTIFICATION

- 1. Diplomate American Board of Thoracic Surgery (ABTS), Re-certified 01/2024
- 2. Diplomate American Board of Thoracic Surgery (Certificate# 8096) Re-certified 11/2023
- 3. American Heart Association Basic Life Support (BLS) recertification, valid till 06/2026
- American Heart Association Advanced Cardiovascular Life Support (ACLS) recertification, valid until 06/2026
- 5. Transcatheter Heart Valve Fundamentals Training Program (S3), 9/2017
- 6. CoreValve Evolut R Product & Procedure Training, 1/2017
- Heart Mate II Left Ventricular Assist Device (LVAD) Surgical Training Certificate (St Jude Medical) 08/10-11/2016
- 8. Recertification, Human Subjects Research Curriculum Collaborative Institutional Training Initiative Course (CITI)
- 9. HeartWare Left Ventricular Assist Device (LVAD) Surgical Training Certificate (HeartWare Inc.)

- 10. Certified Fundamentals of Laparoscopic Surgery (FLS) by American College of Surgeons (ACS) and Society of American Gastrointestinal and Endoscopic Surgeons (SAGES)
- 11. Human Subjects Research Curriculum, Collaborative Institutional Training Initiative Course (CITI)
- 12. Biomedical Research, Collaborative Institutional Training Initiative Course (CITI)
- 13. Ultrasound for Surgeons Course Certification, American College of Surgeons
- 14. Sedation Education and Training Course Certification
- 15. PALS Pediatric Advanced Life Support Certification
- 16. Human Subjects Protection Tutorial Certification
- 17. ATLS Advanced Trauma and Life Support Certification
- 18. Patient Safety Institute Central Line Insertion Course Certification
- 19. Hernia Repair 2006 Optimal Utilization of Biomaterials and Laparoscopy Course
- 20. Identification & Reporting of Child Abuse, Neglect and Maltreatment Course Certification
- 21. Fundamentals of Surgical Research Course, Academic Surgical Congress, Houston, TX; Association of Academic Surgery / Society of University Surgeons

HOBBIES & INTERESTS

- Traveling the world
- Reading
- Playing cricket
- Spending time with the family
- Cooking
- Hiking

LANGUAGE SKILLS (OTHER THAN ENGLISH)

- Fluent in Urdu, Punjabi, and Hindi
- Able to read and write Arabic