





Where the world comes for answers

# 13th Annual Harvard Surgery Research Day

MARCH 16, 2024

Brigham and Women's Hospital Founding Member, Mass General Brigham Bounding Member, Mass General Hospital



## 13th Annual HMS Surgery Research Day - March 16, 2024

7:30-8:00 am	REGISTRATION/BREAKFAST
8:00-8:15 am	WELCOME & OPENING REMARKS: Gerard M. Doherty, MD, Steven J. Fishman, MD; Elliot L. Chaikof, MD, PhD; and Keith D. Lillemoe, MD
8:15-9:45 am	SESSION 1: ORAL ABSTRACT PRESENTATIONS: BASIC SCIENCE Moderators: Dr. Uma Sachdeva (MGH) and Dr. Prathima Nandivada (BCH)
8:15 am	<b>Maeva Chauvin, PhD (MGH)</b> (Mentor: David Pepin, MD) The role of cancer-associated mesothelial cells in ovarian tumor microenvironment
8:26 am	Jessica Mroueh, MD (BWH) (Mentor: Indranil Sinha, MD) Highly porous foam scaffolds imprinted with human iPSCs regenerate skeletal muscle and improve function following volumetric muscle loss
8:37 am	<b>Sarah Wang, MD (BCH)</b> (Mentor: Mark Puder, MD,PhD) An engineered medium-chain fatty acid analogue protects against lipopolysaccharide-induced liver injury in a murine model of intestinal failure-associated liver disease
8:48 am	<b>Jingyu Jia, MD (MGH)</b> (Mentor: Xinhui Wang, MD,PhD) Evaluating the prognostic significance and therapeutic potential of glycolysis-related genes in osteosarcoma
8:59 am	<b>Yori Endo, MD, MPhil (BWH)</b> (Mentor: Indranil Sinha,MD) <i>Restoring exercise benefits in aging by targeting</i> <i>PPARd</i>
9:10 am	<b>Thomas Hirsch, MD (BCH)</b> (Mentor: Mark Puder, MD, PhD) Inhibition of runt-related transcription factor 1 im- proved pulmonary function and structure in a murine model of bleomycin-induced pulmonary fibrosis
9:21 am	Leah Ott, MD (MGH) (Mentor: Allan Goldstein, MD) Subcutaneous adipose tissue-derived neural stem cells promote regeneration following peripheral nerve gap injury

9:32 am	Rakhym Annabayev (BWH) (Mentor: Farhad Nezami, PhD)
	CardioVision: Revolutionizing aortic stenosis diag-
	nosis and management through AI-enhanced 3D
	imaging and visualization
9:45-10:15 am	COFFEE BREAK
10:15-11:45 am	SESSION 2: ORAL ABSTRACT PRESENTATIONS:
	CLINICAL/HEALTH SCIENCES
	Moderators: Dr. Christina Minami (BWH) and
	Dr. Heidi Rayala (BIDMC)
10:15 am	Raad Al-Faouri, MD, MMSc (BIDMC) (Mentor: Aria Olumi,
	MD) Methylation of SRD5A2 in the blood as a novel
	biomarker to predict sensitivity to 5-ARI treatment
10:26 am	Taylor Nordan, MD (BWH) (Mentor: Akinobu Itoh, MD, PhD)
	Bridging to heart transplantation using either tem-
	porary or durable mechanical circulatory support:
	Does blood type and body size matter?
10:37 am	Jean Filo (BIDMC) (Mentor: Christopher Ogilvy, MD)
	When is endovascular intervention indicated for
	treatment of extracranial carotid and vertebral
	pseudoaneurysms?
10:48 am	Ajami Gikandi (BWH) (Mentor: Marco Zenati, MD)
	Using deep learning to assess teamwork in the
	operating room
10:59 am	Deepti Srinivasan (MGH) (Mentor: Chi-Fu Jeffrey Yang, MD)
	Evaluating the lung cancer screening eligibility of
	patients undergoing lung cancer operations and
	patients diagnosed with stage IV lung cancer: An
	analysis of the southern community cohort study
11:10 am	Kelsey Romatoski, MD (BIDMC) (Mentor: Teviah Sachs, MD)
	Pandemic delays to diagnosis of gastrointestinal
	cancers widen preexisting disparities
11:21 am	Raja Narayan, MD, MPH (BWH) (Mentor: Harshabad
	Singh, MD)
	Clinical implications of molecular alterations in pan-
	creatic cancer

11:32 am	Jorge Gomez-Mayorga, MD (BIDMC) (Mentor: Benjamin C. James, MD) Examining the financial landscape of cancer: An analysis of debt and bankruptcy among patients in Massachusetts (2010-2019)
11:45 am-1:00 pm	LUNCH & POSTER SESSION Moderators: Organizing Committee Please note that posters are displayed on the ground and 1st floors. All lunch seating is on the 2nd/3rd.
1:00-2:00 pm	VISITING PROFESSOR LECTURE: Liane S. Feldman, MD "Enhanced Recovery After Surgery (ERAS) 2.0: It's all about the R"
2:00-2:30 pm	AWARDS CEREMONY: Gerard M. Doherty, MD; Steven J. Fishman, MD; Elliot L. Chaikof, MD, PhD; and Keith D. Lillemoe, MD
2:30 pm	FAREWELL MESSAGE: Gerard M. Doherty, MD





## Visiting Professor Lecture

*"Enhanced Recovery After Surgery (ERAS) 2.0: It's all about the R"* 

## Liane S. Feldman, MD

Edward W. Archibald Professor of Surgery and Chair, Department of Surgery, McGill University Surgeon-in-chief, McGill University Health Centre

Dr. Feldman is the Edward W. Archibald Professor and chair of the Department of Surgery at McGill University and surgeon-in-chief at the McGill University Health Centre. Her clinical focus is minimally invasive gastrointestinal surgery. Her research program focuses on improving the quality of patient recovery after abdominal surgery; optimizing perioperative care processes; and improving operative performance and technology-enabled assessment.

Dr. Feldman is internationally recognized for her work implementing and evaluating Enhanced Recovery After Surgery (ERAS) programs. Her ERAS program at the McGill University Health Centre was recognized as a leading practice by Accreditation Canada, and she has been contracted by the Quebec Health Ministry to support provincial-wide implementation. Dr. Feldman co-chaired the ERIN (Enhanced Recovery in NSQIP) collaborative at the American College of Surgeons to help hospitals implement care pathways to reduce complications and length of hospital stay.

She is a past-president of the Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) and a member of the Board of Regents of the American College of Surgeons. Additionally, she led the implementation of competency-based education at the Fellowship Council. Dr. Feldman was a James IV Travelling Fellow and received the Canadian Association for Medical Education National Award.

Dr. Feldman is the author of over 300 articles, book chapters and videos and is co-editor of three books, including The SAGES / ERAS<sup>®</sup> Society Manual of Enhanced Recovery Programs for Gastrointestinal Surgery.



## 13th Annual HMS Surgery Research Day Poster Presentation Locations

## GROUND FLOOR LOBBY

BASIC SCIENCE - Thoracic Surgery

1. Joshua Gershlak, PhD (MGH): Directed morphogenesis of an engineered embryonic heart tissue model

2. Hussein Kharroubi, MD (MGH): Preclinical assessment of novel robotic bronchoscope in a living swine model of solitary pulmonary nodules 3. Stacey Kwan, BS (BWH): Exploring the theoretical basis of lung cancer

spread through air spaces with quantitative histology

4. **Niamh McNamee, MD** (MGH): The transcription factor TP63 is a key regulator of metabolism, differentiation, and migration in esophageal cancer cells

5. **Jennifer Pan, MD** (BWH): Understanding epithelial organization of mammalian tissues

6. Ahmed Sadek, MD (BWH): The cellular, spatial, and molecular landscape of non-small cell lung cancer

BASIC SCIENCE - Surgical Oncology

7. **Ibrahim Eissa, PhD** (MGH): The ablation of collagen receptor CD49b hinders tumor growth and modulates the infiltration of CD8+ T cells in pancreatic ductal adenocarcinoma

8. **Huiyu Hu, MD, PhD** (MGH): Uncovering macropinocytosis signatures for drug delivery in thyroid cancer

9. **Yun Jee Kang, MD** (BWH): *Liposarcoma tumor and immune reprogramming after radiation* 

10. **Emma Specht, BA** (MGH): *Rare melanoma subtypes' tumors reveal immunosuppressive microenviroment* 

11. **Estelle Tromelin, MD** (MGH): *AMH: A promising early diagnostic marker in ovarian cancer* 

BASIC SCIENCE - Breast Cancer/Breast Surgery

12. **Fengfei Sun, PhD** (MGH): *Turning anecdotal irradiation-induced anti-cancer immune responses into a reproducible in situ cancer vaccine* 

CLINICAL/HEALTH SERVICES - Thoracic Surgery

13. **Alma Burbano, MD** (BIDMC): *Combined endobronchial valve placement and inter-lobar fissure completion for lung volume reduction in*  *emphysema: A pilot randomized controlled trial (COMPLETE-1)* 14. Justin Heidel, MD, MEng (BIDMC): *Tracheobronchoplasty for patients with Mounier-Kuhn Syndrome and severe dynamic central airway collapse improves functional and quality of life outcomes* 

15. Alisa Pugacheva, BS (MGH): Transplant equity: Examining the impact of the 2018 Allocation Policy on white and Black/Hispanic heart transplant recipient mortality and morbidity

CLINICAL/HEALTH SERVICES - Surgical Oncology

16. **Marta Antoniv, MD** (BWH): *Cancer capacity mapping in Ukraine at the time of war* 

17. **Aikaterini Dedeilia, MD** (BWH): Decrypting the biology of mucosal melanomas through genetic and spatial analysis

18. **Derek Effiom, MBBs** (MGH): Patterns of recurrence following adjuvant therapy or active surveillance in Stage III cutaneous melanoma patients and factors predicting recurrence

19. **Peterson Maina, MD, PhD** (BIDMC): *Predicted parathyroid lesions on* 4-D CT imaging moderately match excised intraoperative glands

CLINICAL/HEALTH SERVICES - Breast Cancer/Breast Surgery

20. **Eliza Hersh Lorentzen, MD** (BWH): *Disparities in omission of surgery in older women with high-risk breast cancer* 

21. **Samir Mitri, MD** (BIDMC): Impact of breast cancer surgery on subsequent quality of life: A postoperative analysis

#### CLINICAL/HEALTH SERVICES

22. **Brittany Dacier, MD, MPH** (BWH): Language serving hospitals reduce readmissions for surgical patients who speak non-English languages 23. **Margaret Berrigan, MD, MS** (BIDMC): Integrating ASA PS classification and surgeon risk estimates to create a surgical risk classification system 24. **Gabriella Hyman, MBBCh, DipObst.** (HMS): Article processing charges threaten global health equity: Is open access closed science?

CLINICAL/HEALTH SERVICES - Urology

25. **Agustin Perez-Londono, MD** (BIDMC): The role of repeat transurethral resection in patients with high-grade T1 urothelial carcinoma of the bladder: Contemporary rates of upstaging and association with disease recurrence and progression CLINICAL/HEALTH SERVICES - Colorectal Surgery

26. **Atziri Rubio-Chavez, MD** (MGH): *Geriatric assessments for aging patients facing colorectal surgery: A qualitative study of clinician perspectives* 

#### FIRST FLOOR SKYWALK

#### BASIC SCIENCE - General Surgery/Surgery Education

 Yingjia Chen, PhD (BWH): A small intestinal bile acid modulates the gut microbiome to improve host metabolism following bariatric surgery
 Philippe Godin, DMV, PhD (MGH): Gene therapy delivery of Anti-Müllerian hormone in prepubertal cats induces long-term contraception without impairing sexual maturation

Pamela Scalise, MD (BCH): Polyvinyl alcohol sponges reduce intraperitoneal adhesions following abdominal surgery in a murine model
 Matthew Strobel, PhD (BWH): Targeted signaling modifiers for dissecting the function of ciliary cyclic AMP in nuclear chromatin remodeling
 Ea Tulin, PhD (BIDMC): Novel lamprey monoclonal antibodies specific to the H type antigen on mammalian glycoproteins

#### CLINICAL/HEALTH SERVICES - General Surgery/Surgery Education

32. **Shuolun Lai, MD, PhD** (BIDMC): *Evaluation of basic surgical task performance by automatic detection of hand motion* 

33. **Ali Dzhemiliev, MD** (BWH): *Education in adversity: A pioneering initiative to enhance surgical knowledge in wartime Ukraine* 

34. **Chukwuma Eruchalu, MD** (MGH): Disparities in operative experience among racial/ethnic minority general surgery residents: A multi-institutional study from the US ROPE Consortium

35. **Michael Kochis, MD, EdM** (MGH): Development of an inpatient leadership assessment device (I-LEAD) for surgical residents: A modified Delphi study

36. Arian Mansur, BA (MGH): Patient perspectives on optimal surgical resident care: A qualitative analysis of general surgery inpatient experiences
37. Vasundhara Mathur, MD (BWH): Semaglutide use before bariatric

surgery restricts postoperative weight loss

38. **Pourya Medhati, MD** (BWH): Real-world weight loss outcomes of semaglutide: Comparative analysis among patients with and without metabolic/bariatric surgery history

39. **Matthew Parsons, BA** (MGH): *Medical students as surgical educators: A near peer teaching program for the core surgery clerkship* 

40. **Yannick Sillmann, DMD** (MGH): *Empowering surgeons: Will AI change oral and maxillofacial surgery?* 

41. Stefanie Soelling, MD, MPH (BWH): Implementation and perceptions

of a novel intraoperative 360 evaluation for surgeons

#### **ELEMENTS CAFÉ**

#### **BASIC SCIENCE - Transplant**

#### 42. Ahmad Karadagi, MD, PhD

(MGH): Role of human transgenes in prolonging pig kidney xenotransplantation in non-human primates 43. **Thais Boccia da Costa, PhD** (BCH): Adjuvant conditioning reprograms the innate and adaptive immune system through the NLRP3/IL-1 pathway 44. **Feng Chen, MSc, PhD** (MGH): Prevention and treatment of GvHD in humans with B7-H3 CAR T cells-An unexpected finding

45. **Sara De Taeye** (MGH): *Treatment challenges during ex vivo lung xeno perfusion; platelet and leukocyte sequestration, erythrocyte fragmentation* 46. **Victoria Diaz** (MGH): *Ischemia minimization is associated with* 



improved xenograft survival in an ex vivo working heart model 47. **Bradley Ellis, PhD** (MGH): Microvascular endothelial cells are more prone to preservation injury than macrovascular endothelial cells 48. **Irina Filz von Reiterdank, MD** (MGH): Early, pigment-independent rejection assessment of skin-containing transplants in rodents 49. **Madeeha Hassan** (MGH): Subnormothermia is superior to normothermia in 24-hour machine perfusion of porcine kidneys

50. **Rohil Jain, PhD** (MGH): Raman spectroscopy shows comparable functional tissue oxygenation with and without packed RBCs during machine perfused rat livers by measuring mitochondrial redox state in real-time 51. **Anil Kharga, MBBS** (MGH): Oxygenated hemopure in UW solution mitigates ischemic reperfusion injury in simulated liver transplantation 52. **Samantha Landino, MD** (MGH): Comparing delayed versus simultaneous bone marrow transplantation to achieve lung allograft tolerance in non-human primates

53. **Manuela Lopera Higuita, PhD** (MGH): *Ex vivo heart preservation: Retrograde vs. loaded perfusion* 

54. **Akihiro Maenaka, PhD** (MGH): *Gene-edited pigs as a source of red blood cells for clinical transfusion* 

55. JayneMarie Muoio, BS (MGH): Donor chimerism duration correlates

with heart allograft tolerance in combined heart and bone marrow transplantation in non-human primates

56. **Khanh Nguyen, PhD** (MGH): *Mitochondrial recovery from ischemia-reperfusion injury in DCD pig livers detected by resonance raman spectroscopy* 57. **Ozge Ozgur, MD** (MGH): *Ten-day storage of swine livers using partial freezing* 

58. **Weikang Pan, MD, PhD** (BCH): *ILC2s constrain alloreactive CD4+ T cells through MHCII mediated alloantigen presentation in murine cardiac transplantation* 

59. **Amir Sanatkar, MD** (MGH): *Experience with a novel delayed immune tolerance protocol in nonhuman primates based on aCD154, aCD2 and aCD28* 

60. **McLean Taggart, BS** (MGH): *Partial freezing enables ten days functional preservation of the swine kidney* 

61. **Sho Takemoto, MD** (MGH): Combined blockade of the CD154 and CD28 co-stimulation pathways attenuates pathogenic alloimmunity and prolongs survival in cynomolgus cardiac allografts

62. **Bassel Tfayli, MD** (MGH): Administration of docosanoic acid conjugated siRNA targeting JAK1 in a dual ex vivo lung perfusion circuit

63. **Loic Van Dieren, BSc** (MGH): Intragraft sensitization of T cells initiates acute rejection of skin allografts

64. **Takahiro Yokose, MD, PhD** (MGH): *Defensive tolerance results in dysfunction of infiltrating cytotoxic CD8 T cells through in situ reprogramming* 

**BASIC SCIENCE - Neurosurgery** 

65. **Maxence Noel, PhD** (BIDMC): *O-GalNAc glycans are enriched in white matter tracts and influence the size of nodes of Ranvier* 



**BASIC SCIENCE - Vascular Surgery** 

66. **Soheila Ali Akbari Ghavimi, PhD** (BWH): *Targeting integrin-TGF*β interactions to regulate aortic remodeling in marfan syndrome 67. **ShivPatel, BA** (MGH): Evaluation of blood clot-inducing fibrinogen levels in chronic kidney disease patients undergoing lower extremity revascularization

#### CLINICAL/HEALTH SERVICES - Transplant

68. **Raimon Casamitjana Roig, BSc** (BWH): *Real-time heart performance analy*sis using mathematical models to address heart transplantation dilemma 69. **Maria Cote, MD** (MGH): *Enhancing post-transplant outcomes: A guided lifestyle intervention for weight loss and quality of life using connected health services and group support* 

70. **Christian Godfrey, BS** (MGH): Categorical dissection of neutrophil function in transplant recipients using a novel ex-vivo swarming assay

71. **Pratik Koirala, PhD** (BWH): Developing a closed loop, autonomous transcriptional network that increases CCL22 transcription in response to TNF $\alpha$  for Treg recruitment

#### CLINICAL/HEALTH SERVICES - Neurosurgery

72. **Rohan Jha, SB** (BWH): *Preoperative factors influencing antiseizure medication reduction and discontinuation after intracranial EEG* 

73. **Patrick Barhouse, BS** (BIDMC): Anterior choroidal artery aneurysms: A systematic review and meta-analysis of outcomes and ischemic complications following surgical and endovascular treatment

74. **Alejandro Enriquez, MD** (BIDMC): *Defining light transmission aggregometry cut-off values for clopidogrel and aspirin resistance in flow diversion treatment of intracranial aneurysms* 

75. **Justin Gelman, BS** (BIDMC): *The neurovascular disease management course: A medical student opportunity for early exposure and technical development in vascular neurosurgery* 

76. **Emmanuel Mensah, MD, PharmD** (BIDMC): *Hemodynamic plasticity in the adult circle of Willis post-flow diversion* 

77. **Shohra Qaderi, MD** (BCH): *Prenatal diagnosis and clinical outcomes of isolated congenital aqueductal stenosis: A single-center retrospective cohort study* 78. **Felipe Ramirez-Velandia, MD** (BIDMC): *Thromboembolic events after the coverage of anterior cerebral artery with flow diversion* 

79. Anvitha Sathya, BA (BIDMC): Flow diversion for the treatment of posterior inferior cerebellar aneurysms: A novel classification of PICA origin

80. **Aryan Wadhwa, BA** (BIMDC): *Optimization of dual anti platelet therapy duration following neurointerventions for intracranial aneurysms* 

81. Daniel Sconzo, BA (BIDMC): Thromboembolic events in the posterior

circulation after flow diversion - A closer look at the coverage of the posterior cerebral artery

CLINICAL/HEALTH SERVICES - Vascular Surgery

82. **Sasha Suarez Ferreira** (MGH): *The influence of sex on platelet reponses to aspirin in patients with peripheral artery disease* 

83. **Katherine Morrow, MD** (MGH): Feasibility of the distinctive utilization of antiplatelet (DUA) protocol in decreasing arterial thrombotic rates in patients with post lower extremity revascularization

84. **Ivy Lee, MS** (MGH): The relationship of Hemostatic parameters with ABI values in PAD patients undergoing revascularization

85. Samir Ghandour, MD (MGH): The impact of malignancy status on coagulation profiles in patients with peripheral artery disease post-revascularization 86. James Fitzgibbon, MD (BWH): Regional and center-based variation in forearm arteriovenous fistula placement as a first-time hemodialysis access 87. Tiffany Bellomo, MD (MGH): Leadership characteristics in vascular surgery: A national analysis of attributes, discrepancies, and implications for gender equity

88. Abena Appah-Sampong, MD (BWH): Racial disparities in outcomes after endovascular aortic aneurysm repair (EVAR)

### PECHET ROOM

**BASIC SCIENCE - Pediatric Surgery** 

89. **Kamila Moskowitzova, MD** (BCH): *Perinatal vaccination by transamniotic fetal mRNA delivery: Immunization against human cytomegalovirus in a rodent model* 

90. **Abbie Naus, MD, MPH** (BCH): *Transamniotic fetal delivery of human alpha-1 antitrypsin mRNA in a healthy rodent model* 

91. **Claire Ostertag-Hill, MD** (BCH): Ablation of venous malformations by photothermal therapy with intravenous gold nanoshells

92. **Emily Scire, MD, MBE** (BCH): Transamniotic delivery of coagulation factor VIII mRNA: A potential novel strategy for the perinatal management of hemophilia A

**BASIC SCIENCE - Plastic Surgery** 

93. James Fanning, BS (BIDMC): Collateralization of the upper extremity lymphatic system after axillary lymph node dissection

94. **Charles Hwang, MD** (BWH): Young regenerative muscle exhibits upregulation in peripheral nerve and extracellular matrix transcriptional programs

95. Haizam Oubari, MD (MGH): Sub normothermic machine perfusion

(SNMP) preservation in the non-human primate forearm model: A preliminary study

96. **Siti Rahmayanti, MD, MMSc** (BWH): *Mechanisms of androgen-modulated changes in the immune trajectory of surgical wound repair* 

97. **Ashley Siegel, MD** (BWH): *Topical rosiglitazone improves fibrosis and restores adipogenesis in irradiated ex vivo mouse skin* 

98. **Matthew Vivero, MD** (BCH): *GNAQ-p.R183Q mutant endothelial cells recapitulate capillary malformation in-vitro and in-vivo* 

99. **Samerender Nagam Hanumantharao, PhD** (BWH): *Genetically modified autologous adipocyte cell therapy for managing secondary lymphedema* 

BASIC SCIENCE - Cardiac Surgery

100. **Emmanuella Ajenu, BS** (MGH): Assessment of extended criteria donor hearts with resonance raman spectroscopy during normothermic machine perfusion

101. **Gurjit Singh, PhD** (MGH): *Expanding the horizon: Using fatty acids and mannitol as alternative fuels and oncotic agents for normothermic ex vivo heart perfusions in adult rats* 

102. **Maya Bolger-Chen, BS** (MGH): *The effects of different perfusion parameters on cardiac graft behavior during Langendorff* 

**BASIC SCIENCE - Trauma** 

103. **Alexandria Byskosh, MD** (BWH): Untamed immunity: Using "dirty" mice as a new paradigm for translatable trauma immunology research

CLINICAL/HEALTH SERVICES - Pediatric Surgery

104. **Megan Chiu, MD** (BCH): *Outcomes after diaphragmatic plication: Open versus minimally invasive approaches* 

105. **Priyanka Chugh, MD, MS** (BCH): *Risk factors and treatment strategies for symptomatic anastomotic ulcers in children with short bowel syndrome* 106. **Nicole Cimbak, MD** (BCH): *Mediastinal shift index: validation of a postnatal measurement of mediastinal movement that predicts survival in neonates with congenital diaphragmatic hernia on extracorporeal membrane oxygenation* 

107. Haley Etskovitz, DO, MBS (BCH): Long-term clinical outcomes for patients with small intestinal Hirschsprung disease

108. **MianArsamHaroon, MBBS** (BCH): *Predictors of surgical intervention in children with very early onset inflammatory bowel disease* 

109. **Shawn Izadi, MD** (BCH): *Effectiveness of intraoperative nerve monitoring in reducing rates of recurrent laryngeal nerve injury in aerodigestive and cardiovascular pediatric surgery* 

110. **Donna Koo, MD** (BCH): *Effect of citizenship status on pediatric liver and kidney transplantation* 

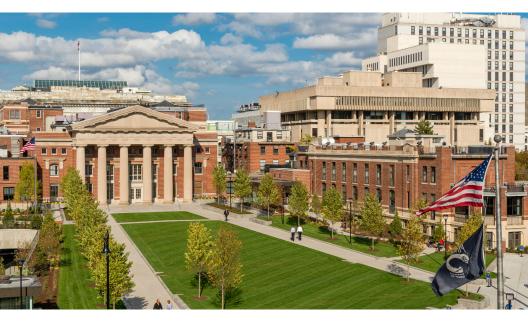
111. **Kerri McKie, MD, MPH** (BCH): *Population-based validation of clinically relevant and resource-focused disease severity criteria for pediatric appendicitis* 112. **Emily Nes, MD** (BCH): *Prevalence and predictors of gallbladder disease in pediatric intestinal failure* 

113. **Alyssa Stetson, MD, MPH** (MGH): *Changing the paradigm for managing pediatric non-adhesive small bowel obstructions - Should we operate?* 

#### CLINICAL/HEALTH SERVICES - Plastic Surgery

114. Jonathan Cornacchini, MD (Shriners Hospital): A swine burn model for investigating the healing process in multiple depth burn wounds 115. Sophia Hu, BA (BWH): *Moving to 3D: Post-surgical cephalometric changes and virtual surgical planning accuracy using volumetric analysis in facial feminization surgery* 

116. Joao Monteiro, DDS, MS, PhD (MGH): Orthobiologics intra-articular injection for temporomandibular joint osteoarthritis



117. **John Park, PharmD** (BIDMC): *Comparison of the double cranial stairstep incision technique to traditional wound closure among neuro-oncologic patients undergoing craniotomy* 

118. **Iulianna Taritsa, BA** (BIDMC): *Three-dimensional printing of the epineurium for peripheral nerve repair: A systematic review of novel scaffold techniques for nerve conduits* 

119. Krishna Vyas, MD, PhD, MHS (MGH): *Micro-coring: A novel approach to perioral rejuvenation* 

120. **Alessandra Zaccardelli, BS** (BWH): *Vascularized composite allotransplantation complicated by post-transplant lymphoproliferative disorder* 

CLINICAL/HEALTH SERVICES - Cardiac Surgery

121. **Jake Awtry, MD, MA** (BWH): Assessing the impact of red blood cell transfusion during open thoracoabdominal aortic surgery

122. **Thais Faggion Vinholo, MD, MSc** (BWH): *Racial disparities in the management of mitral valve disease* 

123. **Selena Li, MD** (MGH): Going the distance: Impact and implications of the continuous distribution allocation policy in lung transplantation on organ travel efficiency

124. **Emmanuel Odekunle, BS** (MGH): *Hematocrit levels during direct procurement and perfusion associated with higher inotrope requirements and longer ICU stay* 

125. **Dominic Recco, MD** (BCH): Arch size matters: Undersized isthmus or any arch dimension after patch augmentation significantly increases risk of reintervention 126. **Robert Semco, BS** (BWH): Extracorporeal femoro-carotid shunt for transcarotid transcatheter aortic valve replacement

127. Adham Makarem, MD, MPH (MGH): Randomized controlled trial of new oral anticoagulants versus warfarin for post cardiac surgery atrial fibrillation: The NEWAF trial

CLINICAL/HEALTH SERVICES - Trauma

128. **Isaac Alty, MD** (BWH): A trauma system for 1.4 billion people: Consensus recommendations for trauma systems in India/LMICs from the Transdisciplinary Research, Advocacy, and Implementation Network for Trauma in India (TRAIN Trauma India) Symposium

129. **Saeed Nazemidashtarjandi, PhD** (MGH): *Monitoring monocyte anisocytosis changes as a burn injury recovery marker: Insights from a clinical study* 130. **Adriana Montalvan, MD** (BIDMC): *Current state of trauma registries' implementation in LMICs and facilitators to implementation barriers* 



## Chairs, Departments of Surgery

**Beth Israel Deaconess Medical Center** Elliot L. Chaikof, MD, PhD Johnson and Johnson Professor of Surgery, HMS

#### **Boston Children's Hospital**

Steven J. Fishman, MD Robert E. Gross Professor of Surgery, HMS

#### Brigham and Women's Hospital

Gerard M. Doherty, MD Moseley Professor of Surgery, HMS

#### Massachusetts General Hospital

Keith D. Lillemoe, MD W. Gerald Austen Professor of Surgery, HMS

## **Organizing Committee**

**Event Co-Chair** Dr. Elizabeth Mittendorf

### **Beth Israel Deaconess Medical Center**

Dr. Dhruv Singhal Dr. Heidi Rayala

#### **Boston Children's Hospital**

Dr. Alex Cuenca Dr. Prathima Nandivada

#### **Brigham and Women's Hospital**

Dr. Christina Minami Dr. Shailesh Agarwal

#### Massachusetts General Hospital

Dr. Uma Sachdeva Dr. Danielle Cameron

## **Previous Visiting Professors**

2012 Thomas M. Krummel, MD
2013 Yuman Fong, MD
2014 Michael T. Longaker, MD,
MBA, FACS
2015 John D. Birkmeyer, MD
2016 Timothy R. Billiar, MD
2017 Melina R. Kibbe, MD, FACS,
FAHA

2018 Gail E. Bresner, MD
2019 Steven K. Libutti, MD, FACS
2021 Eun-Sil Shelley Hwang, MD, MPH
2022 Carla Pugh, MD, PhD

2023 Brad W. Warner, MD







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