



12<sup>th</sup> ANNUAL  
HARVARD MEDICAL SCHOOL

# HARVARD SURGERY RESEARCH DAY

SATURDAY, MARCH 25, 2023

Joseph B. Martin Conference Center at Harvard Medical School  
77 Avenue Louis Pasteur, Boston



Beth Israel Deaconess  
Medical Center



**Boston Children's Hospital**

*Where the world comes for answers*



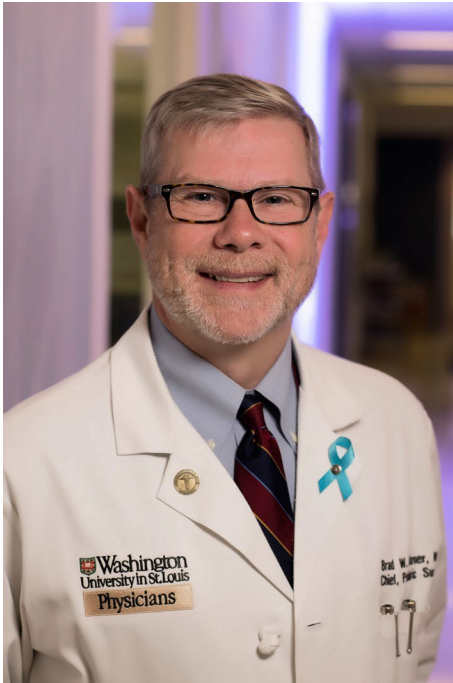
BRIGHAM AND  
WOMEN'S HOSPITAL



MASSACHUSETTS  
GENERAL HOSPITAL

# 12<sup>th</sup> ANNUAL HMS SURGERY RESEARCH DAY March 25, 2023

7:30-8:00 am	<b>REGISTRATION/BREAKFAST</b>
8:00-8:15 am	<b>WELCOME &amp; OPENING REMARKS:</b> Steven J. Fishman, MD; Elliot L. Chaikof, MD, PhD; Gerard M. Doherty, MD; and Keith D. Lillemoe, MD,
8:15-9:45 am	<b>SESSION 1: ORAL ABSTRACT PRESENTATIONS: BASIC SCIENCE</b> <b>Moderators:</b> Shailesh Agarwal, MD & Uma Sachdeva, MD, PhD
8:15 am	<b>Scott Fligor, MD</b> BCH (Mentor: Mark Puder, MD, PhD) <i>SEFA-6179 prevents intestinal failure-associated liver disease in a preterm piglet model</i>
8:26 am	<b>Janna Hagedorn</b> MGH (Mentor: Korkut Uygun, PhD) <i>An Oxygen-sensitive Metalloporphyrin-based device for Ex-vivo Machine Perfusion Monitoring</i>
8:37 am	<b>Erik Reiche, MD</b> BWH (Mentor: Devin Coon, MD) <i>Wound Healing Impairment by Testosterone Involves Disruption of Epithelial-Granulation Equilibrium in Murine and Porcine Models</i>
8:48 am	<b>Tarek Aridi, MD</b> BIDMC (Mentor: Christiane Ferran, MD, PhD) <i>Eye-directed A20 Gene Therapy Protects from Ischemic Proliferative Retinopathy by Reducing Pathologic Neovascularization, Reactive Gliosis and Apoptosis</i>
8:59 am	<b>Hussein Kharroubi, MD</b> MGH (Mentor: Yolonda L. Colson MD, PhD) <i>Local Therapy with Supratherapeutic Paclitaxel-Loaded Nanoparticles Decreases Lung Metastasis in Triple Negative Breast Cancer Model</i>
9:10 am	<b>Ashlyn Whitlock, MD</b> BCH (Mentor: Dario Fauza, MD, PhD) <i>Transamniotic Stem Cell Therapy (TRASCET) Modulates Uterine Natural Killer Cell Activity, Improving Fetal Cardiopulmonary Outcomes in a Model of Intrauterine Growth Restriction (IUGR)</i>
9:21 am	<b>Eleni Panagioti, PhD</b> BIDMC (Mentor: Charles H. Cook, MD) <i>Oncolytic HSV-1 rQNestin34.5v2 sensitizes IDH1-mutated glioma to immunotherapy</i>
9:32 am	<b>Cullen Roberts, MD</b> BWH (Mentor: Eric Sheu, MD, PhD) <i>Sleeve Gastrectomy Inhibits Tumor Formation in a Mouse Model of Familial Adenomatous Polyposis</i>
9:45-10:15 am	<b>COFFEE BREAK</b>
10:15-11:45 am	<b>SESSION 2: ORAL ABSTRACT PRESENTATIONS: CLINICAL/HEALTH SCIENCES</b> <b>Moderators:</b> Tom Jaksic, MD, PhD & Dario Fauza, MD, PhD
10:15 am	<b>Shawn Izadi, MD</b> , BCH (Mentor: Benjamin Zendejas-Mummert, MD, MSc) <i>Diagnostic Accuracy of Ultrasound for Evaluating Vocal Fold Movement Impairment in Children</i>
10:26 am	<b>Jordan Broekhuis, MD, MPH</b> , BIDMC (Mentor: Benjamin James, MD, MS) <i>Association of Patient and Provider Sex Concordance with Specialist Referral in Primary Hyperparathyroidism</i>
10:37 am	<b>Sangmin Kim</b> , BWH (Mentor: M. Blair Marshall, MD) <i>Impact of Conduit Dimensions on Long-Term Quality of Life after Esophagectomy for Malignancy</i>
10:48 am	<b>Alexandra Potter, BS</b> MGH (Mentor: Chi-Fu Jeffrey Yang, MD) <i>The Incidence, Timing, and Predictors of Suicide Among Patients Undergoing Surgery for Cancer in the United States</i>
10:59 am	<b>Margaret Berrigan, MD</b> BIDMC (Mentor: Gabriel Brat, MD, MPH, MSc) <i>Understanding the Prognostic Value of Surgeon Intuition in Predicting Post-Surgery Complications</i>
11:10 am	<b>Zhiyu (Jason) Qian, MD</b> BWH (Mentor: Quoc-Dien Trinh, MD, MBA) <i>Long-Term Impact of Medicaid Expansion on Colorectal Cancer Screening in Its Targeted Population - a National-Level Analysis a Decade after Expansion</i>
11:21 am	<b>Sasha Suarez Ferreira, MD</b> MGH (Mentor: Anahita Dua, MBChB, MBA, MSc) <i>Atorvastatin Effect on Clopidogrel Efficacy in Patients with Peripheral Artery Disease</i>
11:32 am	<b>Katherine He, MD, MS</b> BCH (Mentor: Shawn Rangel, MD, MSCE) <i>Procedure-level Misutilization of Antimicrobial Prophylaxis in Pediatric Surgery: Implications for Improved Stewardship and More Effective Infection Prevention</i>
11:45-1:00 pm	<b>LUNCH &amp; POSTER SESSION</b> <b>Moderators:</b> Organizing Committee <i>Please note that posters are displayed on the ground and 1st floors. All lunch seating is on the 2nd/3rd.</i>
1:00-2:00 pm	<b>VISITING PROFESSOR LECTURE: Brad W. Warner, MD</b> <i>Short Bowel Syndrome in Children: Surgical Options and Scientific Opportunities</i>
2:00-2:30 pm	<b>AWARDS CEREMONY: Steven J. Fishman, MD; Elliot L. Chaikof, MD, PhD; Gerard M. Doherty, MD; and Keith D. Lillemoe, MD</b>
2:30 pm	<b>FAREWELL MESSAGE: Steven J. Fishman, MD</b>



## VISITING PROFESSOR LECTURE

### **Short Bowel Syndrome in Children: Surgical Options and Scientific Opportunities**

#### **Brad W. Warner, MD**

Jessie L. Ternberg, MD, PhD, Distinguished Professor of Pediatric Surgery, Washington University School of Medicine  
Surgeon-in-Chief, St. Louis Children's Hospital

Dr. Warner is the Jessie L. Ternberg, MD, PhD, Distinguished Professor of Pediatric Surgery at Washington University School of Medicine in St. Louis and surgeon-in-chief at St. Louis Children's Hospital. As a busy clinician, Dr. Warner cares for a wide spectrum of surgical diseases in the pediatric population with special expertise in advanced gastrointestinal surgery, to include intestinal lengthening procedures for short gut syndrome as well as management of necrotizing enterocolitis. Dr. Warner's basic science laboratory has been continuously funded by the National Institutes of Health for more than 20 years and has been focused on adaptation responses of the intestine to massive small bowel resection. He has mentored more than 50 graduate, postgraduate, and undergraduate students in the laboratory, and he's published more than 220 peer-reviewed manuscripts and 40 book chapters. Dr. Warner is past president of the Society of University Surgeons, past chairperson of the Surgical Section of the American Academy of Pediatrics, and past governor of the American Pediatric Surgical Association.

# 12<sup>th</sup> ANNUAL HMS SURGERY RESEARCH DAY - Poster Presentation Locations

## GROUND FLOOR LOBBY

### Basic Science

1. **Joshua Gershlak, PhD** (MGH) *Design and Fabrication of a Working Tissue Model of the Developing Embryonic Heart*
2. **Adam Nelson, PhD** (BWH) *Immune mediated mechanisms of PARPi resistance in BRCA1-associated triple negative breast cancer (TNBC)*
3. **Lorena Rincon-Cruz, MD** (BCH) *Tight junction proteins are deficient in the ganglionic and aganglionic colon in children with Hirschsprung disease*
4. **Kamila Moskowitsova, MD** (BCH) *Transamniotic Fetal mRNA Therapy: a Potential Novel Strategy for Pulmonary Surfactant Replacement and for Prevention of Cystic Fibrosis-Associated Meconium Ileus*
5. **Haizam Oubari, MD** (MGH) *Oxygenated Subnormothermic Machine Perfusion for extended VCA Preservation*
6. **Andrei Moscalu, MD, MCh** (BWH) *The microbiome is dispensable for weight loss but not diabetes resolution following sleeve gastrectomy*
7. **Pavithra Rajagopalan, PhD** (MGH) *IL-6 inhibition promotes mitochondrial efficiency in esophageal adenocarcinoma*
8. **Phillip Brennan, MD** (BIDMC) *Systemic Administration of Amlexanox, a TBK1/IKKε Inhibitor, Decreases IFN-γ-mediated Phosphorylation of STAT1 Blocking Atherogenic Signaling and Preventing Intimal Hyperplasia After Carotid Artery Balloon Angioplasty*
9. **Xinhui Wang, MD/PhD** (MGH) *Targeting cancer stem cells by disulfiram and copper sensitizes radioresistant chondrosarcoma to radiation*
10. **Weikang Pan, MD, PhD** (BCH) *ILC2s constrain alloreactive CD4+ T cells through MHCII mediated alloantigen presentation in murine heart transplant*

### Clinical/Health Services

11. **Ra'ad Al-Faouri, MD/MMSc** (BIDMC) *SRD5A2 Expression is a Predictor of Response to Finasteride in the MTOPS Trial*
12. **Hamaiyal Sana, MBBS** (BWH) *Financial Hardship Versus Catastrophic Expenditure as Measures of Financial Toxicity after Surgery*
13. **Ali Dzhemiliev, MD** (BWH) *Development of mobile application for peer-to-peer physicians consultations in the war setting in Ukraine*
14. **Anusha Jayaram, MD, MBA** (BIDMC) *The Availability of Parental Leave Policies Among US Surgical Residency Programs*
15. **Shannon L Cramm, MD, MPH** (BCH) *Association between postoperative antibiotic treatment duration and outcomes in children with complicated appendicitis: A multi-center propensity matched analysis*
16. **Vasundhara Mathur, MBBS** (BWH) *Sleeve Gastrectomy is Associated with Longitudinal Improvements in Lung Function and Patient-Reported Respiratory Outcomes*

## FIRST FLOOR LOBBY

### Basic Science

17. **Shijie He, PhD** (MGH) *Stiffness Restricts the Stemness of the Intestinal Stem Cells and Skews Their Differentiation Towards Goblet Cells*
18. **Cynthia L. Miller, MD** (MGH) *Use of anti-IL-6 or anti-IL-6R mAb therapy in a mixed chimerism protocol to achieve heart allograft tolerance in non-human primates*
19. **Takahiro Ohkura, MD/PhD** (MGH) *Generation and characterization of mice with Hirschsprung disease that have light-sensitive cholinergic neurons in the gut*
20. **Savas T. Tsikis, MD** (BCH) *Direct Thrombin Inhibitors Incompletely Reverse the Negative Effects of Heparin on Lung Growth and Function after Murine Left Pneumonectomy*
21. **Maeva S. Chauvin, PhD** (MGH) *The role of cancer-associated mesothelial cells in the tumor microenvironment*
22. **Marie Meinsohn, PhD** (MGH) *AMH regulates pregranulosa cell differentiation and oocyte activation in primordial follicles*
23. **Sharif A. Sabe, MD** (BIDMC) *Sitagliptin Therapy Improves Myocardial Perfusion and Arteriolar Collateralization in Chronically Ischemic Myocardium*
24. **Ana Sofia Ore, MD, MSc, MPH** (BIDMC) *Comparative Early Histological Healing Quality of Magnetic Versus Stapled Small Bowel Anastomosis*
25. **Jessica Mroueh, MD** (BWH) *Androgenic Steroids Induce Pathologic Scarring in a Preclinical Swine Model Via Dysfunctional ECM Deposition*
26. **Christina Sharkey, MA** (BIDMC) *Alternate androgen-independent pathways for prostate growth in the absence of SRD5A2*
27. **James Nawalaniec, MD** (MGH) *Heart and thymus en bloc transplantation in a mixed chimerism protocol to achieve heart allograft tolerance in non-human primates*
28. **Peng Lei, PhD** (MGH) *The glucose transporter GLUT1 is indispensable for intestinal stem cell function*
29. **Richard Cheng, PhD** (BIDMC) *Bioinspired fabrication of small-diameter blood vessels*
30. **Philippe Godin, DVM, PhD** (MGH) *Single injection of an AAV9 vector delivering AMH induces durable contraception in the female domestic cat*
31. **Samantha Landino, MD** (MGH) *MTOR Inhibitor Nanoimmunotherapy Prolongs Cardiac Allograft Survival in Non-human Primates (NHPs)*

## 12<sup>th</sup> ANNUAL HMS SURGERY RESEARCH DAY - Poster Presentation Locations (cont.)

### Clinical/Health Services

32. **Dane C. Paneitz, MD, MPH** (MGH) *Was the 2020 Guideline Update for Increased Risk Donors Associated with Increased Donor Organ Utilization?*
33. **Kelsey S. Romatoski, MD** (BIDMC) *Delays and Disparities in the Observed Versus Predicted Incidence Rates of Screening Cancers During the COVID-19 Pandemic*
34. **Michael Young, DO** (BIDMC) *Intracranial aneurysms treated with Pipeline Embolization Device with incomplete occlusion at one year: strategies to enhance delayed occlusion?*
35. **P. Nina Scalise, MD** (BCH) *Failed Extubation after Primary Repair of Type C Esophageal Atresia: Frequency and Risk Factors*
36. **Donna C. Koo, MD** (BCH) *Immediate Extubation After Pediatric Liver Transplantation*
37. **Ryan P. Hall, MD** (MGH) *Using Thromboelastography with Platelet Mapping to Assess the Effect of Direct Oral Anticoagulants on the Coagulation Profile and Thrombotic Rates in Patients with Peripheral Artery Disease Post-Revascularization*
38. **Emily Nes, MD** (BCH) *Predictors of mortality in very low birth weight neonates with congenital diaphragmatic hernia*
39. **Sasha Tunsiricharoenkul, BA** (MGH) *Genetic and Histopathological factors affect the Survival and Recurrence in High-Risk Stage II Melanoma Patients*
40. **Shannen B. Kizilski, PhD** (BCH) *Systematic Analysis of PTFE Monocusp Leaflet Design in a Disease-specific In-vitro Model of Tetralogy of Fallot*
41. **Maria P. Cote, MD** (BIDMC) *Social Vulnerability and Time to Surgeon Evaluation for Primary Hyperparathyroidism*
42. **Mohammad Abdallat, MD** (BWH) *Analysis of Recurrence in Lung Adenocarcinoma with Spread Through Air Spaces*
43. **Jorge Gomez-Mayorga, MD** (BIDMC) *Opportunistic Screening in Primary Hyperparathyroidism: Using 4-D CT to Estimate Bone Mineral Density*
44. **Qais AbuHasan, MD** (BWH) *The Utility of the 5-Item Frailty Index in Assessing the Risk of Complications and Mortality Following Surgical Management of Non-traumatic Subarachnoid Hemorrhage*
45. **Megan L. Sulciner, MD** (BWH) *Pregnancy-associated desmoid tumors: an observational study on the interplay of pregnancy and disease progression and a survey study of the impact of diagnosis on pregnancy-related decisions*
46. **Emily Witt, MD, MSc** (MGH) *Patient Satisfaction with Women vs Men Surgical Interns and Senior Residents*
47. **Muhieddine Labban, MD** (BWH) *Institutional Trends and Safety Profile of Same-Day Discharge for Robot-Assisted Laparoscopic Radical Prostatectomy: A Retrospective Analysis*
48. **Adriana Montalvan, MD** (BIDMC) *Outcomes of solid organ transplantation recipients following Tixagevimab/Cilgavimab treatment*
49. **Kristen Jogerst, MD, MPH** (MGH) *Are Patient Satisfaction Ratings Reliable? Implications for Holistic Resident Assessment*
50. **Rafal D. Mazur, BS** (MGH) *Racial-Ethnic Disparities in Liver Transplant Waitlist Outcomes in Patients with Hepatocellular Carcinoma Before and After the MMaT-3 Policy*

### ELEMENTS CAFÉ

### Clinical/Health Services

51. **Priyanka V. Chugh, MD, MS** (BCH) *Risk of neurodevelopmental disability and healthcare needs in extremely low birth weight infants with necrotizing enterocolitis or spontaneous intestinal perforation*
52. **Deanna Palenzuela, MD** (MGH) *Hiatal hernia reporting- Time to remove subjectivity?*
53. **Maximiliano Servin-Rojas, MD** (MGH) *Identification of High-Risk Features in Mucinous Cystic Neoplasms of the Pancreas*
54. **Zhi Ven Fong, MD, MPH, DrPH** (MGH) *Tolerability, Attrition Rates, and Survival Outcomes of Neoadjuvant FOLFIRINOX for Non-Metastatic Pancreatic Adenocarcinoma: An Intent-to-Treat Analysis*
55. **Dominic Recco, MD** (BCH) *Modified Micro Vascular Plug Utilized as a Transcatheter Pulmonary Artery Flow Restrictor: A Case Series and In-Vitro Evaluation*
56. **Hannah Ananda Bougleux Gomes, MD** (MGH) *A Single-Center Experience with Non-Metastatic Gallbladder Cancer*
57. **Reagan A. Collins, BA** (MGH) *The Cost of Early Diagnosis of Thyroid Carcinoma with Calcitonin Tests*
58. **Ahmed A. Sadek, MD** (BWH) *Venous Thromboembolism and Mesothelioma*
59. **Sarabeth A. Spitzer, MD** (BWH) *The Impact of Redlining on Modern-Day Firearm Injuries: A Nationwide Study of Federal Policy*
60. **Tiffany R. Bellomo, MD** (MGH) *Does Size Really Matter in the Long Term? Association Between Popliteal Artery Aneurysm Size and Adverse Limb Outcomes*
61. **Zachary Whaley, MD** (MGH) *Mindsets of General Surgery Residents and Faculty*
62. **Elaine P. X. van Ee, BSc, MSc** (MGH) *In-hospital outcomes after Thoracic Endovascular Aortic Repair for Blunt Thoracic Aortic Injury in the Pediatric Population*
63. **Emanuele Lagazzi, MD** (MGH) *The Burden of Income Disparity and Behavioral Factors on Infectious Complications in Emergency General Surgery*
64. **Max Riley, MD** (BWH) *Assessment of Real-World Surgical Safety Checklist Performance Utilizing the OR Black Box*
65. **Ivy Lee, BS** (MGH) *Platelet Inhibition in Patients with Peripheral Artery Disease on Mono-Antiplatelet Therapy and Dual Antiplatelet Therapy*

## 12<sup>th</sup> ANNUAL HMS SURGERY RESEARCH DAY - Poster Presentation Locations (cont.)

66. **Julia N. Shanno, BS** (MGH) *Positive nipple margins in nipple sparing mastectomy: Management of cancer and atypia at the margin*
67. **Adaobi Ahanotu, BS** (BWH) *Improving Measurement Efficiency Of Dysphagia With Item Response Theory*
68. **Grigory A Manyak, BA** (MGH) *The significance of N1 lymph node involvement by direct extension for non-small cell lung cancer*
69. **Andrew Sanders, MD** (BIDMC) *Trends in Carotid Revascularization During the 21st Century*
70. **Sahaj Shah, BA** (BIDMC) *Unraveling the Clinical Value of Trauma Activation Pages using Natural Language Processing*
71. **Jake Awtry, MD, MA** (BWH) *Concomitant Tricuspid Valve Surgery with Mitral Valve Surgery for Moderate Tricuspid Regurgitation*
72. **William C. Lau, BA** (BWH) *Evaluating associations between socio-clinical characteristics and patient satisfaction with facial appearance after Mohs micrographic surgery*
73. **Francis Joshua Beloy, MD, MBA, Jillian Reeze Medina MD** (BIDMC) *Artificial Intelligence in Cardiac Surgery: A Systematic Review*
74. **Dwight Harris, MD** (BIDMC) *Transition to Total Arterial Revascularization: A Large Single Surgeon Experience*
75. **Hadley Johnson, BS** (MGH) *Metal Allergy Testing in Patients Listed for Temporomandibular Joint Replacement at Massachusetts General Hospital*
76. **Briana June Burris, DDS** (MGH) *Utilization of Endoscopic and Exoscopic Assistance during Approach and Excision of Temporomandibular Joint Pathologies with Skull Base Extension: Review of Six Cases from (MGH)*
77. **Rodrigo Arean Sanz, MD** (BIDMC) *Is stapler brand associated with anastomotic leakage? A single center retrospective cohort study.*
78. **Tarika Srinivasan, BSA, BA** (BIDMC) *Quality of Life Among Social Circle Members of Patients with Hearing Loss: A Qualitative Focus Group Study*
79. **Allan A. Weidman, BS** (BIDMC) *Where Do Patients in Rural Communities Undergo Autologous Breast Reconstruction? A Comparison of Patient Demographics and Outcomes with Implications for Rural Health Policy*
80. **Isabella Faria, MD** (BIDMC) *Pre-Liver Transplantation Locoregional Therapy in Patients with Hepatocellular Carcinoma*
81. **Anupama Singh, MD** (BWH) *Difference in Lung Cancer Management in Patients Older than 80 Years*
82. **Vanessa Mroueh, MD** (BWH) *Hormone Therapy Alters Scar Formation in Gender-Affirming Mastectomy*
83. **Raisa Rauf, MD** (BCH) *Validity of Visual Appraisal of Ankle Dorsiflexion in Clubfoot Patients*
84. **Rosie Friedman, BS** (BIDMC) *Quantifying Radiation at the Site of Immediate Lymphatic Reconstruction*
85. **Jacquelyn Kinney, BA** (BIDMC) *Edematous dermal thickening as a biomarker for lymphatic surgical outcomes*
86. **Erin J. Kim, BA** (BIDMC) *Impact of Financial Well-Being on Gender Affirmation Surgery Access and Hospital Course*
87. **Thomas Xu, MD** (BIDMC) *Age alone is not associated with major morbidity in inflammatory bowel disease (IBD) surgery*
88. **Lauren Valentine, BS** (BIDMC) *A National Analysis of Targeted Muscle Reinnervation Following Major Upper Extremity Amputation*
89. **Saeed Nazemidashtarjandi, PhD** (MGH) *Microbial stimulation of human monocytes mimics morphological changes of monocytes in burn injury patients*
90. **Carolina Vigna, MD** (BIDMC) *Implementation of a Patient-Centered Core Outcome Set to Evaluate Long-term Functional Outcomes following Ileal Pouch Anal Anastomosis*
91. **Angelica Hernandez Alvarez, MD** (BIDMC) *Optimizing Social Media Algorithms: An Evaluation of the Public's Preferences for Plastic Surgery Social Media Content*
92. **Frederick A Godley IV, MD, MBA, MS** (MGH) *Cognitive Load in Robotic Simulation*
93. **Jose Foppiani, MD** (BIDMC) *Comparing Microsurgical Breast Reconstruction Outcomes following Post-Operative Monitoring Techniques: A Systematic Review and Meta-analysis of 2529 Patients*
94. **Tina Bharani, MD** (BWH) *Safety of Same Day Discharge after Bariatric Surgery: A Retrospective Six Year National Analysis*
95. **Ali Basil Ali, MD** (BWH) *Retrospective Analysis of Endoluminal Vacuum Therapy for The Management of Esophageal Leaks*
96. **Victor Sanchez Alemany, MD** (BCH) *Mitochondrial Transplantation In Pediatric And Neonatal Porcine Hearts In A Model Of DCD Heart Transplantation*
97. **Minjee Kim, BA** (BWH) *Psychological Status as an Effect Modifier of the Association Between Inner Ear Instrument and Audiometric Results*
98. **Fernanda Brasil Daura Jorge Boos-Lima, DDS/MSc/PhD** (MGH) *Histopathologic Analysis of Condylectomy Specimens in Patients with Active Idiopathic Condylar Resorption*

### PECHET ROOM

#### Clinical/Health Services

99. **Claire A. Ostertag-Hill, MD** (BCH) *Development of a High-Fidelity Anorectal Malformation Surgical Simulator*
100. **Anam N Ehsan** (BWH) *The Longitudinal Impact and Predictors Of Catastrophic Expenditure on Surgical Trauma Patients*
101. **Martin R. Buta, MD, MBA** (MGH) *A Classification System and Surgical Algorithm for Pediatric Postburn Ear Deformities*
102. **Estefania Roldan-Vasquez, MD** (BIDMC) *Patient-Reported Outcomes Following Breast Cancer Surgery*
103. **Raja R Narayan, MD, MPH** (MGH) *Outcomes from Selective Hyperthermic Intraperitoneal Chemotherapy for Colorectal Cancer Patients in the Post-PRODIGE7 Era*
104. **Jorge Ruiz de Somocurcio, MD** (BIDMC) *Abdominal Effort as a Marker for Efficient Expiratory Maneuver in the Assessment of Airway Collapse*

## 12<sup>th</sup> ANNUAL HMS SURGERY RESEARCH DAY - Poster Presentation Locations (cont.)

### PECHET ROOM

#### Basic Science

105. **Benjamin B. Scott, MD** (MGH) *A Photosealed Cap Prevents Disorganized Axonal Regeneration and Neuroma Following Nerve Transection in Rats*
106. **Hyshem Lancia, MSC** (MGH) *P2X7R Inhibition Impairs Training of Macrophages and Prolongs skin allograft survival in mice.*
107. **Ahmad Karadagi, MD, PhD** (MGH) *Pre- And Post-transplant Donor Specific Anti-porcine Antibodies In Transplantation Of Kidney Xenografts With Triple Knock-out With Or Without Multiple Human Transgenes In Nonhuman Primates*
108. **John Tomeo, BS** (BIDMC) *Integrating spatial and single-nuclei transcriptome analysis to identify early injury pathways following arterial venous bypass*
109. **Austin Shamlou, MS** (MGH) *Intermittent Flow for Extended Subnormothermic Machine Perfusion of Fasciocutaneous Flaps in Swine*
110. **Jason E. Chen, DMD** (MGH) *Regeneration of Osteochondral Defects in the Rabbit Temporomandibular Joint*
111. **Amir Rouhollahi, PhD** (BWH) *A fully automatic, AI-powered modular framework for anatomical characterization of aortic stenosis*
112. **Kathryn G. Henshaw, BS** (BCH) *Biophysical crowding of in vitro culture media alters the growth rate and collagen production of cells used for seeding tissue-engineered heart valves (TEHV)*
113. **Takahiro Yokose, MD/PhD** (MGH) *Infiltrating cytotoxic CD8 T cells are reprogramed to an exhausted/regulatory phenotype in spontaneously accepted kidney allografts in mice*
114. **Mohammadmostafa Asheghan, PhD** (BWH) *Outcome prediction using pre-op images and machine learning in patients undergoing valve replacement*
115. **Niamh McNamee, PhD** (MGH) *Metabolic differences in esophageal cancer subtypes*
116. **Nyah Patel, BA** (BIDMC) *A20 (Tnfrsf25) Knockdown Protects from Abdominal Aortic Aneurysms by Limiting Extra-Cellular Matrix Degradation and Maintaining Aortic SMC Mass*
117. **Feng Chen, PhD Candidate** (MGH) *Targeting Radiation-Resistant Prostate Cancer Stem Cells by B7-H3 CAR T Cells*
118. **Maria Bejar-Chapa, MD** (MGH) *Photochemical Tissue Bonding with Commercial Amniotic Membranes for Nerve Regeneration*
119. **Aikaterini Dedeilia, MD** (MGH) *Decrypting the Biology, Microenvironmental Interactions and Therapeutic Candidates of Mucosal and Acral Melanoma*
120. **Leah C. Ott, MD** (MGH) *Neuromedin U Attenuates Inflammation in a Murine Model of Hirschsprung-Associated Enterocolitis*
121. **Adnan A. Khan, MD** (BIDMC) *Role of Purinergic Dysfunction in Worsened Outcomes for Females Undergoing Cardiac Surgery*
122. **Amanda Franceschini Ghilardi, PhD** (BIDMC) *In silico analysis of indole-containing aryl hydrocarbon receptor agonists for the development of a new drug class to fight inflammatory bowel disease (IBD)*
123. **Yao Xiao, MD** (BWH) *Delineation of Sex-Specific Alloimmunity at Single Cell Resolution*
124. **Stacey Kwan, BS** (BWH) *Novel method for rapid en-face isolation of vascular endothelial cells*
125. **Avril Coley, MD** (MGH) *Relationship of Repeat RNA Expression in Cancer Metastasis*
126. **Zhuqing Li, PhD** (BIDMC) *Protocol for xenotransplantation of human skin and streptozotocin diabetes induction in immunodeficient mice to study impaired wound healing*
127. **Raphaella Imbriani Bento, PhD** (MGH) *Genetic modification of Rat Liver Using Lentiviral Vectors During Ex Vivo Machine Perfusion*
128. **Antonia T Dinicu, MS** (MGH) *Extended Preservation Using Supercooling Preservation of Vascularized Composite Allografts in Rodents and Swine*
129. **Irina Filz von Reiterdank, MD** (MGH) *Ex Vivo Machine Perfusion of Vascularized Composite Allografts Reduces Rejection Response in Rodents*
130. **Purva Joshi, PhD** (MGH) *Cryopreservation of Anopheles Larvae by Vitrification*
131. **Michelle McCarthy, MD, MS** (MGH) *Decellularization of Whole Human Digits - Creation of Decellularized Composite Allografts for Non-Immunogenic Transplantation*
132. **Anil Kharga, MBBS** (MGH) *Utilization of CEPT polypharmacological cocktail in machine perfusion promotes whole-organ resuscitation from warm ischemic damage*
133. **Eleftheria Angeliki Valsami, PhD** (BIDMC) *The Yucatan minipig as a model for human skin wound healing through the lens of single-cell RNA-seq.*
134. **Prabh Pannu, MD (MBBS)** (MGH) *Understanding the Racial Disparities in Disease Severity in Inflammatory Bowel Disease*
135. **Justyna Jaskiewicz, DVM/PhD** (MGH) *Rapid vitrification as an approach to cryopreservation of infectious Cryptosporidium hominis oocysts*
136. **Ziya Isiksacan, PhD** (MGH) *Long-term preservation of red blood cells through deep supercooling*

## CHAIRS, DEPARTMENTS OF SURGERY

BETH ISRAEL DEACONESS MEDICAL CENTER <b>Elliot L. Chaikof, MD, PhD</b> Johnson and Johnson Professor of Surgery, HMS	BOSTON CHILDREN'S HOSPITAL <b>Steven J. Fishman, MD</b> Professor of Surgery, HMS
BRIGHAM AND WOMEN'S HOSPITAL <b>Gerard M. Doherty, MD</b> Moseley Professor of Surgery, HMS	MASSACHUSETTS GENERAL HOSPITAL <b>Keith D. Lillemoe, MD</b> W. Gerald Austen Professor of Surgery, HMS

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BRIGHAM AND WOMEN'S HOSPITAL <b>Shailesh Agarwal, MD</b> Assistant Professor of Surgery, HMS <b>Christina Minami, MD, MS, FACS</b> Assistant Professor of Surgery, HMS	MASSACHUSETTS GENERAL HOSPITAL <b>Motaz Qadan, MD, PhD</b> Associate Professor of Surgery, HMS <b>Uma Sachdeva, MD, PhD</b> Assistant Professor of Surgery, HMS

## PREVIOUS VISITING PROFESSOR LECTURES

- 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



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