

**PLASTIC SURGERY RESEARCH COUNCIL  
SCIENTIFIC PROGRAM**

**63<sup>rd</sup> Annual Meeting ~ May 17-20, 2018  
Sheraton Birmingham Hotel ~ Birmingham, AL**

**Thursday, May 17, 2018**

- 7:00 am-8:00 am**      **CONTINENTAL BREAKFAST WITH EXHIBITORS**  
*East Ballroom B*
- 7:00 am-4:30 pm**      **EXHIBIT HALL HOURS**  
*East Ballroom B*
- 7:00 am-6:00 pm**      **REGISTRATION**  
*Ballroom Foyer*
- 7:00 am-6:00 pm**      **SPEAKER READY ROOM**  
*East Ballroom Dressing Room*
- 7:30 am-7:45 am**      **WELCOME FROM THE UAB CHAIRMAN OF SURGERY**  
Herb Chen, MD
- 7:45 am-8:00 am**      **HISTORY OF UAB PLASTIC SURGERY**  
Luis Vasconez, MD
- 8:00 am-9:30 am**      **SESSION 1**  
*East Ballroom A*  
**Moderators:**    Gregory H. Borschel, MD  
                         Eric C. Liao, MD, PhD
- 8:00 am**                **1. Change in Payer Mix and Transfer Appropriateness at a Quaternary Hand Trauma Referral Center after Medicaid Expansion under the Affordable Care Act**  
Brian H. Cho, MD1, Charles A. Daly, MD2, Sameer Desale, MS2, Oluseyi Aliu, MD, MS1, Aviram Giladi, MD, MS2  
*1Johns Hopkins University, Baltimore, MD, 2The Curtis National Hand Center at MedStar Union Memorial Hospital, Baltimore, MD*
- 8:10 am**                **2. Geospatial Econometric Exploration of Risk Factors for Loss to Followup in Cleft Care**  
Banafsheh Sharif-Askary , Peter G. Bittar, BA, Alfredo Farjat, PhD, Beiyu Liu, PhD, Joao Vissoci, PhD, Alexander C. Allori, M.P.H  
*Duke University, Durham, NC*
- 8:20 am**                **3. The Global Macroeconomic Burden of Breast Cancer: Implications for Oncologic and Reconstructive Surgery**  
Kavitha Ranganathan, MD1, Puneet Singh, BS2, Edwin G. Wilkins, MD, MS1, Jennifer B. Hamill, MPH1, Oluseyi Aliu, MD, MS3, Lisa Newman, MD, MPH4, David Hutton, PhD2, Adeyiza O. Momoh, MD1  
*1University of Michigan, Ann Arbor, MI, 2University of Michigan School of Public Health, Ann Arbor, MI, 3Johns Hopkins Hospital, Baltimore, MD, 4Henry Ford Health Systems, Detroit, MI*
- 8:30 am**                **4. One Stage Versus Two-Stage Microsurgical Arteriovenous Loop Reconstructions- A 10-Year Experience on 103 Cases from a Single Center**  
Dominic Henn, MD1, Matthias S. T. Waehmann, MD1, Miriam Horsch, BS1, Svetlana Hetjens, PhD2, Thomas Kremer, MD1, Emre Gazyakan, MD1, Christoph Hirche, MD1, Volker J. Schmidt, MD1, Günter Germann, MD3, Ulrich Kneser, MD1

*1Dept. of Hand, Plastic and Reconstructive Surgery, Heidelberg University, BG Trauma Center Ludwigshafen, Ludwigshafen, Germany, 2Dept. of Medical Statistics, University Medicine Mannheim, University of Heidelberg, Mannheim, Germany, 3Ethianum - Clinic for Plastic, Reconstructive & Aesthetic Surgery, Orthopedic Surgery, Heidelberg, Germany*

- 8:40 am**      **5. Efficacy of Phase 1 Clinical trial of Autologous Quality and Quantity Cultured vascular and tissue regenerative cell therapy for Diabetic Patients with Chronic Non Healing Ulcer**  
Rica Tanaka, MD, PhD, Makiko Kado, MD, Satoshi Fujimura, PhD, Kayo Arita, PhD, Rie Hirano, BS, Hiroshi Mizuno, MD, PhD  
*Juntendo University School of Medicine, Tokyo, Japan*
- 8:50 am**      **6. Expediting Tissue Expansion in Implant Based Breast Reconstruction: A Comparative Study of Prepectoral and Subpectoral Expander Placement**  
Blair A. Wormer, MD1, Al C. Valmadrid, BS1, Nishant Ganesh Kumar, MD2, Salam Al Kassis, MD1, Timothy M. Rankin, MD1, Kent K. Higdon, MD1  
*1Vanderbilt University Medical Center, Nashville, TN, 2University of Michigan Health System, Ann Arbor, MI*
- 9:00 am**      **7. Skeletal Stem Cells Acquire Developmental Neural Crest Identity during Distraction Osteogenesis**  
Ryan C. Ransom, BA, Ankit Salhotra, Ava C. Carter, BA, Ruth E. Jones, Deshka S. Foster, Howard Y. Chang, PhD, Derrick C. Wan, Michael T. Longaker, M.BA  
*Stanford University, Stanford, CA*
- 9:10 am**      **8. Risk Factors for Airway-Related Complications Following Primary Palatoplasty: An Analysis of 3,616 Cases**  
Jordan T. Blough, BS, Chad A. Purnell, MD, Ian Chow, MD, Arun K. Gosain, MD  
*Lurie Children's Hospital, Northwestern University, Feinberg School of Medicine, Chicago, IL*
- 9:20 am**      **9. Changing The Paradigm For A Rare Genetic Disease That Is Currently Contraindicated For Surgery and Lacks Alternative Treatments**  
Charles Hwang, BS1, Michael Sorkin, MD1, Serra Ucer, PhD1, Sidra Kader, BS1, Anita Vaishampayan, none1, Michael T. Chung, MD1, Christopher Breuler, BS1, Caitlin Priest, BS1, Nicole Patel, BS1, John Li, MD1, Kaetlin Vasquez, MS1, Haichun Pan, PhD1, Aris Economides, PhD2, Shailesh Agarwal, MD1, Yuji Mishina, PhD1, Benjamin Levi, MD1  
*1University of Michigan, Ann Arbor, MI, 2Regeneron Pharmaceuticals and Genetics Center, Tarrytown, NY*
- 9:30 am-10:00 am**      **COFFEE WITH EXHIBITORS**  
*East Ballroom B*
- 10:00 am-11:30 am**      **SESSION 2**  
*East Ballroom A*  
**Moderators:**    Scott T. Hollenbeck, MD, FACS  
                         Amy M. Moore, MD
- 10:00 am**      **10. Characterizing the Clonal Nature of Cancer Associated Fibroblasts**  
Deshka S. Foster, MA, Ryan C. Ransom, Ruth E. Jones, Ankit Salhotra, Michael S. Hu, MPH, MS, Michael T. Longaker, MBA  
*Stanford University, Stanford, CA*
- 10:10 am**      **11. Osteoporotic Phenotype of Newly Identified Zebrafish Mutant**  
Sophia A. Bidny, BA1,2, Joanna K. Ledwon, PhD1, Jacek Topczewski, PhD3, Arun K. Gosain, MD4, Jolanta Topczewska, PhD1  
*1Northwestern University Feinberg School of Medicine, Department of Surgery Plastic Division, Stanley Manne Children's Research Institute, Chicago, IL, 2University of Illinois at Chicago, Chicago, IL, 3Northwestern University Feinberg School of Medicine, Department of Pediatrics, Chicago, IL, 4Division of Pediatric*

*Plastic Surgery, Ann and Robert H. Lurie Children's Hospital of Chicago and Northwestern University Feinberg School of Medicine, Chicago, IL*

- 10:20 am**      **12. LGR6+ Epithelial Stem Cell Augmentation of Fracture Healing**  
Andrew Klein, BS, Amanda Ross, MD, Ashim Gupta, MS, PhD, Joel Reichensperger, BS, Lauren Hughes, BS, Max Korzec, BS, Michael Neumeister, MD  
*SIU Department of Surgery; Institute for Plastic Surgery, Springfield, IL*
- 10:30 am**      **13. DNA Damage Signaling and Cell Senescence in BRCA1 Mutated Adipose Stem Cells Leads to Breast Cancer Progression**  
Ruya Zhao, BS1, Irene J. Pien, MD2, Victoria L. Seewaldt, MD3, Chuan-yuan Li, PhD4, Scott T. Hollenbeck, MD4  
*1Duke University School of Medicine, Durham, NC, 2UCLA, Los Angeles, CA, 3City of Hope, Duarte, CA, 4Duke Medical Center, Durham, NC*
- 10:40 am**      **14. Treatment Resistant Stem Cell Subpopulation Depletion in Obesity and Diabetes Mellitus**  
Michael W. Findlay, MBBS, PhD, FRACS, FACS.1,2, Melanie Rodrigues, PhD2, Michael Sorkin, MD2, Sacha Khong, PhD2, Robert R. Rennert, MD2, Peter Than, MD2, Michael Januszzyk, MD, PhD2, Christopher Davis, MBBS, MRCS2, Eliza Brett, BSc2, Robert Schier, MD3, Phillip Zimmer, PhD3, Bernhard Riedel, MD, PhD, FANZCA.4, H Peter Lorenz, MD, PhD2, Homero Rivas, MD2, John M. Morton, MD, PhD2, Geoffrey C. Gurtner, MD2  
*1University of Melbourne, Melbourne, Australia, 2Stanford University, Stanford, CA, 3University of Cologne, Cologne, Germany, 4The Peter MacCallum Cancer Centre, Melbourne, Australia*
- 10:50 am**      **15. Motor Denervation Activates Muscle Stem Cells and Leads to Muscle TGFbeta Expression**  
Alvin Wong, MD, Steven Garcia, BS, Solomon Lee, BA, Stanley Tamaki, PhD, Jason Pomerantz, MD  
*University of California San Francisco, San Francisco, CA*
- 11:00 am**      **16. The Use of Paravertebral Nerve Blocks in Immediate Breast Reconstruction following Mastectomy: A Canadian Hospital-Perspective Cost Effectiveness Analysis**  
Michael J. Stein, MD, Angel Arnaout, MD MBA, Kednapa Thavorn, MSc PhD, Patrick Wong, MD, Tim Ramsey, PhD, Jing Zhang, MD PhD  
*University of Ottawa, Ottawa, ON, Canada*
- 11:10 am**      **17. Tibial Nerve Decompression for the Prevention of the Diabetic Foot: A Cost-Utility Analysis Using Markov Model Simulations**  
Samuel Sarmiento, MD, MPH, MBA1, James Pierre, Jr., MD, MPH3, A Lee Dellon, MD, PhD1, Kevin D. Frick, PhD2  
*1Johns Hopkins University School of Medicine, Baltimore, MD, 2Johns Hopkins University School of Business, Baltimore, MD, 3The University of Texas Health Science Center, Houston, TX*
- 11:20 am**      **18. Post-Operative Protocol for Autologous Free Flap Breast Reconstruction Optimizing Resources and Patient Safety**  
Allison Haley, Tobias J. Bos, B.Sc., Brian H. Cho, Deepa Bhat, Hannah M. Carl, Benjamin Ostrander, Michele A. Manahan, Gedge D. Rosson, Justin M. Sacks, M.BA, F.A.C.S  
*Johns Hopkins University, Baltimore, MD*
- 11:30 am-12:00 pm**      **BEST EPSRC PAPERS**  
*East Ballroom A*  
**Moderators:** Brian Gastman, MD  
Summer Hanson, MD, PhD

- 11:30 am**      **EPSRC 1. Skin Rejuvenation through HIF-1 $\alpha$  Upregulation – A New Treatment Paradigm in Anti-Aging Medicine**  
Matthias Aitzetmüller
- 11:40 am**      **EPSRC 2. Mitigation of Postamputation Pain with the Prophylactic Regenerative Peripheral Nerve Interface**  
Carrie A. Kubiak
- 11:50 am**      **EPSRC 3. ITGAV and ITGA5 Diversely Regulate Proliferation and Adipogenic Differentiation of Human Adipose Derived Stem Cells**  
Evi Morandi
- 12:00 pm-1:30 pm**      **LUNCH & BUSINESS MEETING; MEMBERS ONLY**  
*East Ballroom A*
- 12:30 PM – 1:30 PM**      **NON-MEMBER LUNCH**  
*East Ballroom B*
- 1:30 pm-2:30 pm**      **PANEL SESSION: DEVELOPING THE NEXT GENERATION SURGEON SCIENTIST**  
*East Ballroom A*
- Moderator:**      Timothy W. King, MD
- Panel:**      **Basic/Translational Science**  
**Babak J. Mehrara< MD**  
*Memorial Sloan-Kettering Cancer Center, New York, NY*
- Health Services Research**  
**Andrea L. Pusic, MD**  
*Brigham and Women’s Hospital, Boston, MA*
- Entrepreneurship/Starting A Company**  
**Geoffrey C. Gurtner, MD**  
*Stanford University, Stanford, CA*
- 2:30 pm-4:00 pm**      **SESSION 3**  
*East Ballroom A*
- Moderators:**      Arin Greene, MD, MMSc  
                         Benjamin Levi, MD
- 2:30 pm**      **19. Lessons Learned From 40 Years of Traumatic Lower Extremity Free Flaps: Inflow, Outflow, Takebacks, and Failures**  
John T. Stranix, MD1, Z-Hye Lee, MD1, Adam Jacoby, MD1, Lavinia Anzai, MD1, Joseph Ricci, MD1, William J. Rifkin, BA1, Tomer Avraham, MD2, Vishal D. Thanik, MD1, Pierre B. Saadeh, MD1, Jamie P. Levine, MD1  
*1NYU Langone Health, New York, NY, 2Yale University School of Medicine, New Haven, CT*
- 2:40 pm**      **20. Outcomes Following Pediatric Coronary Artery Bypass Grafting with Microsurgery**  
Mark Shafarenko, BSc1, Joseph Catapano, MD PhD2, Shuhua Luo, MD PhD3, Ronald M. Zuker, MD4, Glen Van Arsdell, MD3, Gregory H. Borschel, MD4  
*1University of Toronto, Faculty of Medicine, Toronto, ON, Canada, 2Division of Plastic and Reconstructive Surgery, University of Toronto, Toronto, ON, Canada, 3Division of Cardiovascular Surgery, The Hospital for Sick Children, Toronto, ON, Canada, 4Division of Plastic and Reconstructive Surgery, The Hospital for Sick Children, Toronto, ON, Canada*
- 2:50 pm**      **21. Optimizing Perforator Selection: A Comprehensive, Multivariate Analysis of Fat Necrosis and Abdominal Morbidity in DIEP Flap Breast Reconstruction**

Austin S. Hembd, Min-Jeong Cho, Christopher Venutolo, Sumeet Teotia,  
Nicholas Haddock,  
*UT Southwestern Plastic Surgery, Dallas, TX*

- 3:00 pm**      **22. Corneal Neurotization Improves Ocular Surface Health And Prevents Corneal Scarring In A Rat Model Of Neurotrophic Keratopathy**  
Joseph Catapano, MD, PhD, Kira Antonyshyn, BSc, Gregory H. Borschel, MD  
*University of Toronto, Toronto, ON, Canada*
- 3:10 pm**      **23. FK506 Binding Protein Expression Within the Injured Peripheral Nerve**  
Kasra Tajdaran, MAsc1,2, Jennifer J. Zhang, MD/PhD2, Tessa Gordon, PhD2,  
Gregory H. Borschel, MD1,2 *1University of Toronto, Toronto, ON, Canada, 2The Hospital for Sick Children, Toronto, ON, Canada*
- 3:20 pm**      **24. Successful Control of Virtual and Robotic Hands using Neuroprosthetic Signals from Regenerative Peripheral Nerve Interfaces in a Human Subject**  
Kubiak A. Carrie, Philip P. Vu, BSc., Zachary T. Irwin, Ph.D, Philip T. Henning,  
Theodore A. Kung, Cynthia A. Chestek, Ph.D, Paul S. Cederna, Stephen W.  
Kemp, PhD  
*University of Michigan, Ann Arbor, MI*
- 3:30 pm**      **25. Discovery Of Unique Immune Cell Subsets During The Development Of Capsular Fibrosis**  
Britta A. Kuehlmann, PhD, Melanie Rodrigues, PhD, Geoffrey C. Gurtner, FACS  
*Stanford University School of Medicine, Palo Alto, CA*
- 3:40 pm**      **26. Identifying The Role of and Treatment Targeting Bone Progenitor Cell VEGF Secretion On The Niche Supporting Traumatic Heterotopic Ossification**  
Charles Hwang, BS1, Serra Ucer, PhD1, Michael Sorkin, MD1, Shawn Loder,  
MD1, Michael T. Chung, MD1, Chase Pagani1, John Li, MD1, Caitlin Priest, BS1,  
Christopher Breuler, BS1, Kaetlin Vasquez, MS1, Shuli Li, MD, PhD1, Jiajia Xu,  
PhD2, Aaron James, MD, PhD2, Shailesh Agarwal, MD1, Benjamin Levi, MD1  
*1University of Michigan, Ann Arbor, MI, 2Johns Hopkins University, Baltimore, MD*
- 3:50 pm**      **27. Nerve-dependent Bone Regeneration In Mandibular Fracture Healing**  
Ruth Ellen Jones, 1, Ryan Chase Ransom, BA1,2, Ankit Salhotra, 1, Deshka S.  
Foster, 1, Derrick C. Wan, 1, Michael T. Longaker, M.BA, F.A.C.S.1,2  
*1Hagey Laboratory for Pediatric Regenerative Medicine, Division of Plastic and Reconstructive Surgery, Department of Surgery, Stanford University School of Medicine, Stanford, CA, 2Institute for Stem Cell Biology and Regenerative Medicine, Stanford University, Stanford, CA*
- 4:00 pm-4:30 pm**      **COFFEE WITH EXHIBITORS**  
*East Ballroom B*
- 4:30 pm-6:00 pm**      **SESSION 4**  
*East Ballroom A*  
**Moderators:**    Carisa M. Cooney, MPH, CCRP  
                         Sami Khan, MD
- 4:30 pm**      **28. Pre-Operative Multimodal Analgesia Decreases Opioid Use and Pain Scores in Outpatient Breast Surgery**  
Jenny C. Barker, PhD, Kaitlin Wandell, Corinne Wee, Nicole Andonian,  
Mahmoud Abdel-Rasoul, M.S., M.P.H., Deborah Lowery, Jeffrey Janis,  
*Ohio State University, Columbus, OH*
- 4:40 pm**      **29. Improving Decision Making in Breast Reconstruction Through Use of a Validated Picture Option Grid: A Pilot Study**  
Amanda M. Rizzo, BA, Carrie S. Stern, MD, Jeffrey Arendash, BS, Evan S.  
Garfein, MD, Teresa Benacquista, MD, J. Alejandro Conejero, MD, Lawrence

Draper, MD, Katie E. Weichman, MD  
*Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY*

- 4:50 pm**      **30. Regional Anesthetic Blocks for Donor Site Pain in Burn Patients: A Meta-Analysis on Efficacy, Outcomes and Cost**  
Katherine A. Grunzweig, Ji Son, Anand R. Kumar,  
*University Hospitals Cleveland Medical Center, Cleveland, OH*
- 5:00 pm**      **31. Perioperative Ketorolac and Postoperative Hematoma Formation in Adolescent Reduction Mammoplasty: A Single Surgeon Experience of 500 Consecutive Cases**  
Joseph M. Firriolo, MD, Laura C. Nuzzi, BA, Lauren C. Schmidtberg, PA-C, MMSc, Brian I. Labow, MD *Boston Children's Hospital, Harvard Medical School, Boston, MA*
- 5:10 pm**      **32. Persistent Opioid Use in Body Contouring Patients**  
Katelyn G. Bennett, MD, Brian P. Kelley, MD, Vidhya Gunaseelan, MS, MHA, Jennifer F. Waljee, MD, MS *University of Michigan, Ann Arbor, MI*
- 5:20 pm**      **33. Localized Injection Site Alopecia in Male Patients After Treatment of Submental Fat with ATXCOI01 (Deoxycholic Acid)**  
Sachin M. Shridharani, MD1, Akash Chandarwarkar, MD2  
*1Luxurgery, New York, NY, 2Johns Hopkins, Baltimore, MD*
- 5:30 pm**      **34. Analysis of Scar Forming Fibroblasts Reveals Distinct Changes in Epigenetic Accessibility During Times of Phenotypic Transition**  
Alessandra Moore, MD, Ulrike Litzenburger, PhD, Clement Marshall, MD, Ryan Chase Ransom, BS, Heather desJardins-Parks, AB, Bryan Duoto, BS, Shamik Mascharak, AB, Leandra Barnes, AB, Elizabeth Brett, MS, Mike Hu, MD MS MPH, Howard Chang, PhD, H. Peter Lorenz, MD, Michael T. Longaker, MD MBA FACS  
*Stanford University, Stanford, CA*
- 5:40 pm**      **35. Integrating Tissue Engineering Principles for Skeletal Regeneration of the Radius and Mandible in Translational Models**  
Christopher D. Lopez, BA1,2, Eduardo D. Rodriguez MD, DDS1, Lukasz Witek, MSci, PhD2, Nick Tovar, PhD2, J. Rodrigo Diaz-Siso, MD1, Jonathan M. Bekisz, BA1, Bruce N. Cronstein, MD3, Roberto L. Flores, MD1, Paulo G. Coelho, DDS, PhD2,1  
*1Hansjörg Wyss Department of Plastic Surgery, NYU Langone Health, New York, NY, 2Department of Biomaterials & Biomimetics, NYU College of Dentistry, New York, NY, 3Department of Medicine, NYU Langone Health, New York, NY*
- 5:50 pm**      **36. Neurotization Of A Tissue Engineered Muscle Repair Construct, Potential For Improved Functional Outcomes**  
Kristen Knapp, Juliana Amaral-Passipieri, PhD, Angela Pinerros-Fernandez, George T. Christ, PhD, Patrick S. Cottler, PhD, Christopher A. Campbell,  
*University of Virginia, Charlottesville, VA*
- 6:15 pm-9:00 pm**      **MEMBERS DINNER**  
*Birmingham Museum of Art*



**Friday, May 18, 2018**

- 6:30 am-7:00 am**      **“GRAB AND GO” BREAKFAST**  
*Ballroom Foyer*
- 6:30 am-5:30 pm**      **REGISTRATION**  
*Ballroom Foyer*
- 7:00 am-7:30 am**      **BUSES TO UAB**  
*Sheraton*
- 7:30 am-11:30 am**      **LOCAL PROGRAM**  
*University of Alabama at Birmingham - Hill Student Center, Alumni Theater*
- 7:30 am**      **Welcome to UAB Local Program**  
Timothy W. King, MD, PhD
- 7:40 am**      **Greetings from the Dean**  
**Selwin M. Vickers, MD**  
Dean, UAB Medical School  
James C. Lee, Jr. Endowed Chair  
Professor of Surgery
- 7:50 am**      **Quantifying Living Kidney Donor Risk**  
**Jayne E. Locke, MD, MPH**  
*Vice-Chair, Health Services Research, Department of Surgery*  
*Director, Incompatible Kidney Transplant Program*  
*Director, Transplant Analytics, Informatics & Quality*
- 8:30 am**      **Creating the Culture of a Winning Team**  
**Herbert Chen, MD**  
*Fay Fletcher Kerner Endowed Chair*  
*Chair, Department of Surgery*  
*Surgeon-in-Chief, UAB Hospital*  
*Senior Advisor, UAB Comprehensive Cancer Center*
- 9:15 am**      **Clinical Translation of Xenotransplantation**  
**A. Joseph Tector, III, MD, PhD**  
*Director, Xenotransplantation Program*
- 10:00 am**      **Building Capacity in Health Disparities Research**  
**Mona Fouad, MD, MPH**  
*Senior Associate Dean, Diversity and Inclusion*  
*Professor and Director, Division of Preventive Medicine*  
*Director, UAB Minority Health & Health Disparities Research Center*
- 10:45 am**      **Every Piece Tells a Story: Birmingham’s History in Three Objects**  
**Jim Baggett**  
Head, Department of Archives and Manuscripts  
Birmingham Public Library
- 11:15 am**      **Letter from the Birmingham Jail**  
**Brandon A. McCall (BAM)**  
Actor  
[www.justbeingbam.com](http://www.justbeingbam.com)
- 11:45 pm**      **MEMBERS PHOTOGRAPH**  
*University of Alabama at Birmingham - Hill Student Center, Alumni Theater*

- 12:00 pm-12:15 pm**      **BUSES TO SHERATON**  
*University of Alabama at Birmingham - Hill Student Center, Alumni Theater*
- 12:00 pm-4:00 pm**      **EXHIBITS**  
*East Ballroom B*
- 12:30 pm-2:00 pm**      **ACELITY LUNCH SYMPOSIA**  
*East Meeting Rooms A-C*  
**Surgical Site Management: Traditional Closure and Advanced Technology**  
**Saeed Chowhry, MD**  
*Plastic, Reconstructive & Cosmetic Surgery*  
*Assistant Professor of Surgery*  
*University of Illinois at Chicago College of Medicine*  
*Christ Medical Center*  
*Chicago, IL*
- 12:30 pm-2:00 pm**      **NETWORKING LUNCH**  
*East Ballroom B*
- 12:30 pm-6:00 pm**      **SPEAKER READY ROOM**  
*East Ballroom Dressing Room*
- 2:00 pm-3:30 pm**      **CONCURRENT SESSION 5: BASIC/TRANSLATIONAL SCIENCE**  
*East Ballroom A*  
**Moderators:**    Justine Lee, MD, PhD  
                         Reid A. Maclellan, MD, MMSc
- 2:00 pm**                      **37. Whole Eye Allograft Transplantation And Immunosuppression: Survival Of The Transplanted Rodent Eye Using Tacrolimus Monotherapy**  
Wendy Chen, MD, MS2, Jila Noori, MD9, Lin He, MD1, Chiaki Komatsu, MD2, Maxine R. Miller, MD2,4, Ian A. Rosner, BS10, Wenshang Zhang, MD, PhD2, Kira L. Lathrop, MAMS4,8, Joshua M. Barnett, BS2,11, Yong Wong, MD2, Bing Li, MD2, Mario G. Solari, MD2,7, Charleen T. Chu, MD, PhD5,7, Kia M. Washington, MD2,3,4,6,7  
*1Department of Plastic, Aesthetic and Craniofacial Surgery, The First Affiliated Hospital of Xi'an Jiaotong University, Xi'an, 710061, China, 2University of Pittsburgh Medical Center, Department of Plastic Surgery, Pittsburgh, PA, 3University of Pittsburgh Medical Center, Department of Orthopedic Surgery, Pittsburgh, PA, 4University of Pittsburgh Medical Center, Department of Ophthalmology, Pittsburgh, PA, 5University of Pittsburgh Medical Center, Department of Pathology, Pittsburgh, PA, 6Veterans Administration Pittsburgh Medical Center, 7McGowan Institute for Regenerative Medicine, 8University of Pittsburgh, Swanson School of Engineering, Department of Bioengineering, 9University of Miami Bascom Palmer Eye Institute, 10Carnegie Mellon University, Department of Biological Sciences, 11University of Pittsburgh School of Medicine*
- 2:10 pm**                      **38. Ex Vivo Expanded Regulatory T Cells Combined With Short-term Costimulation Blockade To Prevent Rejection Of Vascularized Composite Allografts**  
Michael J. Grzelak, 1, Byoung Chol Oh, D.V.M., Ph. D.1, Georg J. Furtmüller, 1, Marcos Iglesias, Ph. D.1, Madeline Fryer, M.S.2, Paul J. Akre, 1, Damon S. Cooney, Ph. D.1, W.P. Andrew Lee, 1, Giorgio Raimondi, Ph. D.1, Gerald Brandacher, 1  
*1Johns Hopkins School of Medicine, Baltimore, MD, 2University of Massachusetts Medical School, Worcester, MA*
- 2:20 pm**                      **39. Characterization And Functional Analysis Of Skin Dendritic Cell Subpopulations In Vascularized Composite Allotransplantation**  
WENSHENG ZHANG, PhD1, Chiaki Komatsu, 1, Jiaqing Wu, PhD1, Firuz Feturi, 2, Jeff Walsh, PhD3, Jingjing Li, PhD1, Lin He, PhD1, Maxine Miller, 1, Alicia Mathers, PhD4, Angus Thomson, PhD3, Vijay Gorantla, PhD5, Kia Washington,



1, Mario Solari, 1

*1Dept. Plastic Surgery, University of Pittsburgh, Pittsburgh, PA, 2Dept. Pharmaceutical Science, University of Pittsburgh, Pittsburgh, PA, 3Dept. Surgery, University of Pittsburgh, Pittsburgh, PA, 4Dept. Dermatology, University of Pittsburgh, Pittsburgh, PA, 5Wake Forest Institute for Regenerative Medicine, Wake Forest Baptist Medical Center, Winston Salem, NC*

- 2:30 pm**      **40. AMD3100 (Plerixafor) As A Single-Dose Stem Cell Mobilizing Agent In Vascularized Composite Tissue Allograft (VCA) Transplantation In A Canine Model**  
Bruce J. Swearingen, Jr., MD<sup>1,2</sup>, Scott S. Graves, PhD<sup>2,3</sup>, Rainer Storb, MD<sup>2,3</sup>, David W. Mathes, MD<sup>1,2</sup> *1University of Colorado School of Medicine, Aurora, CO, 2Fred Hutchinson Cancer Research Center, Seattle, WA, 3University of Washington Medical Center, Seattle, WA*
- 2:40 pm**      **41. Adipose-derived Stem Cell-Based Immunomodulatory Therapy in a Translational Porcine Limb Transplant Model**  
Deokyeol Kim, MD, Matthias Waldner, MD, **Francesco Egro, MD**, Wensheng Zhang, MD, Mario Solari, MD, Kia Washington, MD, Kacey Marra, PhD, J. Peter Rubin, MD  
*Department of Plastic Surgery, University of Pittsburgh, Pittsburgh, PA*
- 2:50 pm**      **42. Trends of Maintenance Immunosuppression in Hand and Facial Transplantation**  
Amit K. Manjunath, BS<sup>1</sup>, Laura L. Kimberly, MSW, MBE<sup>1</sup>, Rami S. Kantar, MD<sup>1</sup>, Michael J. Cammarata, BS<sup>1</sup>, Adam Jacoby, MD<sup>1</sup>, William J. Rifkin, BA<sup>1</sup>, Bruce E. Gelb, MD<sup>2</sup>, Rodrigo Diaz-Siso, MD<sup>1</sup>, Eduardo D. Rodriguez, MD, DDS<sup>1</sup>  
*1Hansjörg Wyss Department of Plastic Surgery, NYU Langone Health, New York, NY, 2NYU Langone Transplant Institute, NYU Langone Health, New York, NY*
- 3:00 pm**      **43. Embryonic Expression of Prrx1 Identifies the Fibroblast Responsible for Scarring in the Mouse Ventral Dermis**  
Michael S. Hu, MD, MPH, MS, Tripp Leavitt, MD, Julia T. Garcia, PhD, Ryan C. Ransom, BS, Ulrike M. Litzemberger, PhD, Graham G. Walmsley, MD, PhD, Clement D. Marshall, MD, Alessandra L. Moore, MD, Shamik Mascharak, BS, Charles K.F. Chan, PhD, Derrick C. Wan, MD, Peter Lorenz, MD, Howard Y. Chang, MD, PhD, Michael T. Longaker, MD, MBA  
*Stanford, Stanford, CA*
- 3:10 pm**      **44. Successful Reduction of Radiation Associated Skin Injury Utilizing Topical DFO in a Murine Breast Reconstruction Model**  
Alicia Snider, MD<sup>1</sup>, Alexis Donneys, MD<sup>2</sup>, Noah Nelson, MS<sup>3</sup>, Russell Ettinger, MD<sup>2</sup>, Kavitha Ranganathan, MD<sup>2</sup>, Jeremy Lynn, BS<sup>2</sup>, Daniel Fergle, BS<sup>2</sup>, Mark Banazak Holl, PhD<sup>2</sup>, Geoffrey Guertner, MD<sup>4</sup>, Steven Buchman, MD<sup>2</sup>  
*1University of South Carolina, Columbia, SC, 2University of Michigan, Ann Arbor, MI, 3University of South Carolina, Ann Arbor, MI, 4Stanford University, Stanford, CA*
- 3:20 pm**      **45. Beyond Antibiotics: Local Doxycycline Administration Reduces Scarring and Improves Wound Healing by Modulating Scarring Fibroblast Behavior**  
Heather E. desJardins-Park, AB<sup>1</sup>, Alessandra L. Moore, MD<sup>1,2</sup>, Matthew P. Murphy, MB BCh BAO MRCS<sup>1</sup>, Dre Irizarry, MD<sup>1,3</sup>, Bryan Duoto, BS<sup>1</sup>, Deshka Foster, MD<sup>1</sup>, Ruth Ellen Jones, MD<sup>1,4</sup>, Shamik Mascharak, BS<sup>1</sup>, Leandra Barnes, AB<sup>1</sup>, Clement Marshall, MD<sup>1</sup>, Gerlinde Wernig, MD<sup>1</sup>, Michael T. Longaker, MD, MBA, FACS<sup>1</sup>  
*1Stanford University School of Medicine, Stanford, CA, 2Brigham and Women's Hospital, Boston, MA, 3Beth Israel Deaconess Medical Center, Boston, MA, 4University of Texas Southwestern Medical Center, Dallas, TX*

2:00 pm-3:30 pm

**CONCURRENT SESSION 5: HEALTH SERVICES RESEARCH**

*East Meeting Rooms A-C*

**Moderators:** Jayant Agarwal, MD  
Christine H. Rohde, MD

- 2:00 pm**      **46. Age-Related Discrepancies in Parent Proxy and Patient-Reported Psychosocial Function of Children with Craniofacial Anomalies**  
**David S. Foulad, MD1**, Julia R. Ayeroff, BA1, Elizabeth J. Volpicelli, BA1, Miles J. Pfaff, MD1, David S. Foulad, MD1, James P. Bradley, MD2, Libby Wilson, MD3, Justine C. Lee, MD, PhD1  
*1Division of Plastic and Reconstructive Surgery, University of California, Los Angeles, David Geffen School of Medicine, Los Angeles, CA, 2Division of Plastic and Reconstructive Surgery, Temple University Hospital, Lewis Katz School of Medicine, Philadelphia, PA, 3Orthopaedic Institute for Children, Los Angeles, CA*
- 2:10 pm**      **47. Utilization of Mammography Prior to Elective Breast Surgery: A National Claims-Based Analysis**  
Erika D. Sears, MD, MS1, Yu-Ting Lu, MPH1, Peter R. Swiatek, BA1, Ting-Ting Chung, MS2, Kevin C. Chung, MD, MS1  
*1University of Michigan, Ann Arbor, MI, 2Chang-Gung Memorial Hospital, Taoyuan, Taiwan*
- 2:20 pm**      **48. Seeing Cleft Lip from a New Angle: Crowdsourcing to Determine Whether Scar Severity or Lip Angle Matters More to the General Public**  
Anne M. Sescleifer, BS1, Tamara A. Osborn, BA1, Jeffrey D. Rector, MA2, Alexander Y. Lin, MD, FACS1 *1Saint Louis University School of Medicine, St. Louis, MO, 2University of California, Davis, Davis, CA*
- 2:30 pm**      **49. Risk Stratification and Evaluation of American College of Surgeons National Surgical Quality Improvement Program Risk Calculator for Patients Undergoing Panniculectomy**  
Visakha Suresh, BSE1, Heather Levites, MD2, Sarah Peskoe, PhD1, Rachel Hein, MD2, Yash Avashia, MD2, Detlev Erdmann, MD, PhD, MHSc2  
*1Duke University School of Medicine, Durham, NC, 2Duke University Medical Center, Durham, NC*
- 2:40 pm**      **50. Development Of A Tailored Web-based Decision Aid And Risk Calculator To Improve Patient Decision-making For Breast Reconstruction**  
Nicholas L. Berlin, MD, MPH1, Jennifer B. Hamill, MPH1, Sarah T. Hawley, PhD, MPH1, Ji Qi, MS1, Hyungjin M. Kim, ScD1, David E. Varon, BA1, Clara N. Lee, MD, MPP2, Edwin G. Wilkins, MD, MS1 *1University of Michigan, Ann Arbor, MI, 2Ohio State University, Columbus, OH*
- 2:50 pm**      **51. WITHDRAWN**
- 3:00 pm**      **52. Health-Related Quality of Life Throughout the Breast Reconstruction Process: A Prospective Cohort of 300 Patients with Long--Term Follow-Up**  
Gedge D. Rosson, MD1, Michael A. Cheah, MD2, Ricardo J. Bello, MD, MPH1, Mohamad E. Sebai, MBBS1, Jeff Aston, BS1, Eric L. Wan, BS1, Charalampos Siotos, MD1, Michele A. Manahan, MD1, Justin M. Sacks, MD, MBA1, Carisa M. Cooney, MPH1  
*1Johns Hopkins University School of Medicine, Department of Plastic Surgery, Baltimore, MD, 2Inova Fairfax Medical Campus, Department of Surgery, Falls Church, VA*
- 3:10 pm**      **53. Prospective Evaluation of Quality of Life for Patients with Breast Cancer Treated with Breast Conserving Surgery, Mastectomy Alone and Mastectomy with Immediate Breast Reconstruction**  
Helene Retrouvey1, Stefan OP Hofer,2 Kelly Metcalfe1, David McCready3, Anne O'Neill2, Kate Butler2, Linda Chan2, Isabel Kerrebijn2, Toni Zhong2  
*1University of Toronto, Toronto, ON, Canada, 2Toronto General Hospital,*

Toronto, ON, Canada, 3Princess Margaret Hospital, Toronto, ON, Canada

- 3:20 pm**      **54. DIEP flaps in Women with Abdominal Scars: A Comparison of Complication Rates between Different Abdominal Incisions**  
Andres Doval, MD1, Lauren Daly, MD2, Bernard Lee, MD, MPH, MBA, FACS1, Arriyan S. Dowlatshahi, MD1  
*1Beth Israel Deaconess Medical Center, Boston, MA, 2University of Massachusetts, Worcester, MA*
- 3:30 pm-4:00 pm**      **COFFEE WITH EXHIBITORS**  
*East Ballroom B*
- 4:00 pm-5:30 pm**      **CONCURRENT SESSION 6: BASIC/TRANSLATIONAL SCIENCE**  
*East Ballroom A*  
**Moderators:**    Alison K. Snyder-Warwick, MD  
                         Alex K. Wong, MD
- 4:00 pm**      **55. Discrepancies In Cellular Composition And Gene Expression In Long Acellular Allografts**  
Deng Pan, **Dan Hunter**, Ellen Larson, Anja Fuch, PhD, Sally Jo, Xueping Ee, M.D/, Katherine Santosa, M.D, Alison Snyder-Warwick, Susan Mackinnon, Matthew Wood, PhD  
*Washington University in St Louis, Saint Louis, MO*
- 4:10 pm**      **56. A Patient Specific Tissue Engineered Biomimetic Platform For High Throughput Analysis Of Breast Cancer Therapeutic Options**  
Yoshiko Toyoda, BA, Karel-Bart Celie, BA, Justin Buro, BA, Alexandra Lin, BA, Jonathan Xu, BA, Andrew Abadeer, MEng, Julia Jin, BS, John Morgan, PhD, Kristy A. Brown, PhD, Jason A. Spector, MD  
*Weill Cornell Medical College, New York, NY*
- 4:20 pm**      **57. Direct Neurotization of Decellularized Muscle Matrix Leads to Enhanced Muscle Regeneration and Neural Tissue Ingrowth**  
Mimi Wu Young, MD1, Hari Iyer, BS2, Seok Hong, PhD1, Robert Galiano, MD1  
*1Northwestern Feinberg School of Medicine, Chicago, IL, 2McGill University School of Medicine, Montreal, QC, Canada*
- 4:30 pm**      **58. Multimodal manipulation of the Skeletal Stem Cell for Articular Cartilage Regeneration**  
Matthew P. Murphy, MD, Lauren S. Koepke, BS, Michael Lopez, BS, Ryan C. Ransome, BS, Rachel Brewer, BS, Owen Marcic, BA, Charles FK Chan, PhD, Michael T. Longaker, MD, MBA  
*Stanford, Stanford, CA*
- 4:40 pm**      **59. Nrf2 Dysfunction Impairs Wound Healing in Diabetes Via Impairments in Re-Epithelialization and Angiogenesis**  
Joshua A. David, BS, Darren L. Sultan, BA, Alvaro Villarreal-Ponce, PhD, Salma A. Abdou, BA, Jennifer Kwong, BA, William J. Rifkin, BA, Piul S. Rabbani, PhD, Daniel J. Ceradini, MD  
*New York University Langone Medical Center, New York, NY*
- 4:50 pm**      **60. Tuning The Immune Response To Improve Musculoskeletal Extremity Trauma Wound Healing Through Macrophage Directed Tgfb1 Modification**  
Michael Sorkin, MD1, Charles Hwang, BS1, Serra Ucer, PhD1, John Li, MD1, David Cholok, BS2, Michael T. Chung, MD3, Shailesh Agarwal, MD1, Shawn Loder, MD4, Chase Pagani, none5, Kaetlin Vasquez, MS1, Shuli Li, MD, PhD1, Aaron James, MD, PhD6, Yuji Mishina, PhD1, Benjamin Levi, MD1  
*1University of Michigan, Ann Arbor, MI, 2Boston University, Boston, MA, 3Stanford University, Stanford, CA, 4University of Pittsburgh, Pittsburgh, PA, 5Colgate University, Hamilton, NY, 6Johns Hopkins University, Baltimore, MD*

- 5:00 pm**      **61. Hyperbaric Oxygen Therapy Does Not Decrease Progression of Skin Flap and Nipple Areolar Ischemia to Necrosis in Nipple-sparing Mastectomy**  
Michael Sosin, MD1, Alex J. Bartholomew, BA, MS2, Lauren Kerivan, BS2, Eleni A. Tousimis, MD1, Shawna C. Willey, MD1, Troy A. Pittman, MD1  
*1Medstar Georgetown University Hospital, Washington, DC, 2Georgetown University School of Medicine, Washington, DC*
- 5:10 pm**      **62. Chlorhexidine Gluconate Surgical Preparation is Associated with Increases in the Proportion of Streptococcus Species and Enterobacteriaceae Genera in Skin Microbiome**  
Sifon Ndon, AB1, Jane Xu, BA1, Tyler Rice, BS2, Biraja Dash, PhD1, Michael Alperovich, MD, MSc1, Elizabeth Grice, PhD3, Noah Palm, PhD2, Henry Hsia, MD, FACS1  
*1Yale University School of Medicine Department of Plastic and Reconstructive Surgery, New Haven, CT, 2Yale University School of Medicine Department of Immunobiology, New Haven, CT, 3University of Pennsylvania Departments of Dermatology and Microbiology, Philadelphia, PA*
- 5:20 pm**      **63. Application of a Novel Suture Anchor to Abdominal Wall Closure**  
Jason L. Green, BS1, Richard Glisson, BS2, Mohamed Ibrahim, MD3, Ken Gall, Ph.D4, Howard Levinson, MD5  
*1Duke University School of Medicine, Durham, NC, 2Department of Orthopedic Surgery, Duke University Medical Center, Durham, NC, 3Division of Plastic, Maxillofacial, and Oral Surgery, Department of Surgery, Duke University Medical Center, Durham, NC, 4Duke University Department of Mechanical Engineering and Materials Science, Durham, NC, 5Division of Plastic and Reconstructive Surgery, Department of Surgery, Duke University Medical Center, Durham, NC*
- 4:00 pm-5:30 pm**      **CONCURRENT SESSION 6: HEALTH SERVICES RESEARCH**  
*East Meeting Rooms A-C*  
**Moderators:**    Janice F. Lalikos, MD, FACS  
                         Reid A. Maclellan, MD, MMSc
- 4:00 pm**      **64. Deterioration of Sensory Perception or Friction & Shear in Low Risk Braden Scores is Associated with Accelerated Development of Hospital Acquired Pressure Ulcers**  
Raysa Cabrejo, BA, Sifon Ndon, BA, Ean Saberski, Carolyn Chuang, Henry C. Hsia,  
*Yale School of Medicine, New Haven, CT*
- 4:10 pm**      **65. Opioid Prescribing and Consumption Trends in Outpatient Plastic Surgery**  
**Katherine Rose, MD,** Lisa Block, MD, Brian Christie, MD, Venkat Rao, MD, MBA, Brett Michelotti, MD  
*University of Wisconsin, Madison, WI*
- 4:20 pm**      **66. Changes to the Cleft Nose Aesthetic After LeFort I Advancement: a 3D analysis**  
Irene T. Ma, MD, Jonathan Y. Lee, MD, Loni M. Brueckmann, BS, Ian Chow, MD, Joseph E. Losee, MD, Jesse A. Goldstein, MD  
*University of Pittsburgh Medical Center, Pittsburgh, PA*
- 4:30 pm**      **67. Real-World Experience with 100 Consecutive Patients Undergoing Injection Adipocytolysis for Neck Contouring with ATXCOI01 (Deoxycholic Acid): An Updated Report with 2-Year Analysis (126)**  
Sachin M. Shridharani, MD, Grace M. Tisch, BA  
*Luxurgery, New York, NY*
- 4:40 pm**      **68. Post Traumatic Stress Disorder and Associated Risk in Breast Cancer Patients**  
Daniel J. Yoho, MD1, Elizabeth Ulrich, BA2, Christel Rushing, BA3, Dunya

Atisha, MD1  
1Henry Ford Health System, Detroit, MI, 2Wayne State University, Detroit, MI,  
3Duke University, Durham, NC

- 4:50 pm**      **69. Does Early Urinary Catheter Removal Decrease Post-Op Urinary Tract Infections in Patients Undergoing Abdominal Free Flap Breast Reconstruction?**  
Banafsheh Sharif-Askary, BS, Eliza Hompe, AB, Ruya Zhao, BS, Rachel Anolik, MD, Scott T. Hollenbeck, MD  
*Duke University, Durham, NC*
- 5:00 pm**      **70. The Impact of Post-Mastectomy Radiation Therapy on Permanent Implants in Direct-to-Implant Breast Reconstruction versus Tissue Expanders in Two-Stage Breast Reconstruction.**  
Alex M. Lin, MS1,2, Joani M. Christensen, MD1, Eric C. Liao, MD, PhD1, Curtis L. Cetrulo, MD1, Alphonse G. Taghian, MD, PhD1, Jonathan M. Winograd, MD1, Barbara L. Smith, MD, PhD1, William G. Austen, Jr., MD1, Amy S. Colwell, MD1  
*1Massachusetts General Hospital, Boston, MA, 2Frank H. Netter MD. School of Medicine at Quinnipiac University, North Haven, CT*
- 5:10 pm**      **71. Postoperative Quality of Life in Patients Undergoing Contralateral Prophylactic Mastectomy with Breast Reconstruction**  
Amanda M. Rizzo, BA, Steven M. Sultan, MD, Evan S. Garfein, MD, Benacquista, MD, Lawrence Draper, MD, J. Alejandro Conejero, MD, Katie E. Weichman, MD  
*Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY*
- 5:20 pm**      **72. Long-term Functional Upper Extremity Outcomes in Adult Apert Syndrome Patients**  
Rachel R. Yorlets, MPH, Michael Doyle, BA, Joseph M. Firriolo, MD, Brian I. Labow, MD, Joseph Upton, MD, Amir H. Taghinia, MD, MPH, MBA  
*Boston Children's Hospital Plastic & Oral Surgery, Harvard Medical School, Boston, MA*
- 6:00 pm**      **BUSES TO BARBER VINTAGE MOTORSPORTS MUSEUM**
- 6:30 pm**      **WELCOME RECEPTION**  
*Barber Vintage Motorsports Museum*
- 9:30 pm**      **BUSES TO SHERATON**

**Saturday, May 19, 2018**

**7:30 am-8:30 am**      **BREAKFAST WITH EXHIBITORS**  
*East Ballroom B*

**7:30 am-3:00 pm**      **EXHIBIT HALL HOURS**  
*East Ballroom B*

**7:30 am-4:30 pm**      **REGISTRATION**  
*Ballroom Foyer*

**7:30 am-4:30 pm**      **SPEAKER READY ROOM**  
*East Ballroom Dressing Room*

**8:00 am-9:30 am**      **CONCURRENT SESSION 7: HEALTH SERVICES RESEARCH**  
*East Ballroom A*

**Moderators:**    Duc T. Bui, MD  
                         Amy M. Moore, MD

**8:00 am**                **73. Multi-Institutional Analysis of Risk Factors for Mortality in Burn Injuries**  
Dmitry Zavlin, 1, Vishwanath Chegireddy, 1, Ludwik K. Branski, 2, Stefanos Boukovalas, 2, Jeffrey D. Friedman, 1, Anthony Echo, 1  
*1Houston Methodist Hospital, Weill Cornell Medicine, Houston, TX, 2The University of Texas Medical Branch, Galveston, TX*

**8:10 am**                **74. Mandibular Distraction Osteogenesis for the Treatment of Pierre Robin Sequence: The University of Pittsburgh Experience**  
Zoe M. MacIsaac, MD, Irene Ma, MD, Ian Chow, MD, Adam Henrie, BA, Wendy Chen, MD, Joseph E. Losee, MD, Jesse A. Goldstein, MD  
*University of Pittsburgh, Pittsburgh, PA*

**8:20 am**                **75. Less is More: A Multimodal Pain Regimen Reduces the Need for Narcotics While Improving Pain Outcomes in Patients Undergoing Autologous Breast Reconstruction**  
Brian Bassiri-Tehrani, MD, Michael L. Marchese, MD, Itay Wisner, MD, Irena Karanetz, MD, Oren Z. Lerman, MD  
*Lenox Hill Hospital, New York, NY*

**8:30 am**                **76. Understanding Patient Expectations of Lymphedema Surgery**  
Artur Fahradyan, MD, Bassim El-Sabawi, BS, Ketan Patel, MD  
*University of Southern California, Los Angeles, CA*

**8:410 am**                **77. Outcomes Analysis of Goldilocks Mastectomy and Breast Reconstruction: The Mayo Clinic Experience**  
Jeremie Oliver, BS, BA, Arif Chaudhry, MD, Saad Alsubaie, MD, Jorys Martinez-Jorge, MD  
*Mayo Clinic, Rochester, MN*

**8:50 am**                **78. Reducing Surgical Site Infection in Implant-Based Breast Reconstruction: A Multidisciplinary Quality Improvement Project**  
Joseph Banuelos, BA, Si-Gyun Roh, MD, Tina J. Hieken, MD, James W. Jakub, MD, Elie F. Berbari, MD, Minh-Doan T. Nguyen, MD, Nho V. Tran, MD, **Basel Sharaf, MD**  
*Mayo Clinic, Rochester, MN*

**9:00 am**                **79. "Like a Normal Person Again:" A Qualitative Analysis of the Impact of Migraine Surgery**  
Jacqueline S. Israel, MD1, Nicole A. Brys, MPH1, Jason Orne, PhD2, Ahmed Salem, MD1, Brooke M. Anderson, MSN3, Alaa A. Ebd-Elseyed, MD1, Jeremy P. Smith, MD1, Cameron L. Macdonald PhD4, Ahmed M. Afifi, MD1  
*1University of Wisconsin - Madison, Madison, WI, USA, 2Drexel University,*



- 9:10 am**      **80. Pre-operative Educational Video In Breast Reconstruction: Impact On Patient Satisfaction And Post-operative Pain Experience**  
Kasandra R. Dassoulas, MD, Jessica Feliz, Alice Chae, Jonathan B. Olenczak, Alessandrina M. Freitas, Rhett Willis, Chris A. Campbell, FACS  
*University of Virginia, Charlottesville, VA*
- 9:20 am**      **81. Psychosocial Dysfunction of Children with Craniofacial Anomalies and Monolingual Spanish Parents in Los Angeles**  
Miles J. Pfaff, MD1, Julia R. Ayeroff, BA1, Elizabeth J. Volpicelli, BA1, **Edward Nahabet, MD1**, David S. Foulad, MD1, James P. Bradley, MD2, Libby Wilson, MD3, Justine C. Lee, MD, PhD1  
*1Division of Plastic and Reconstructive Surgery, University of California, Los Angeles, David Geffen School of Medicine, Los Angeles, CA, 2Division of Plastic and Reconstructive Surgery, Temple University Hospital, Lewis Katz School of Medicine, Philadelphia, PA, 3Orthopaedic Institute for Children, Los Angeles, CA*
- 8:00 am-9:30 am**      **CONCURRENT SESSION 7: BASIC/TRANSLATIONAL SCIENCE**  
*East Meeting Rooms A-C*  
**Moderators:**    Jayant Agarwal, MD  
                         Alison K. Snyder-Warwick, MD
- 8:00 am**      **82. De novo Mutation Burden Reveals Novel Molecular Subtypes of Nonsyndromic Craniosynostosis**  
Andrew T. Timberlake, PhD1, Charuta G. Furey, BS1, Jungmin Choi, PhD2, Carol Nelson-Williams, BS2, Derek M. Steinbacher, DMD MD1, Dawid Larysz, MD3, John A. Persing, MD1, Richard P. Lifton, MD PhD4  
*1Yale University School of Medicine, New Haven, CT, 2Yale University Dept of Genetics, New Haven, CT, 3The Maria Skłodowska Curie Memorial Cancer Centre and Institute of Oncology, Gliwice, Poland, 4The Rockefeller University, New York, NY*
- 8:10 am**      **83. Frustration and Emotional Regulation in Nonsyndromic Craniosynostosis: an fMRI Study**  
Robin T. Wu, BS, Jenny F. Yang, MD, William B. Zucconi, DO, Cheryl Lacadie, BS, Matthew Swallow, BS, Andrew Timberlake, PhD, Alexander H. Sun, BS, Raysa Cabrejo, BS, Jeffrey Eilbott, BS, Carolyn Chuang, MD, Eric Brooks, MD, Derek M. Steinbacher, MD, DMD, Kevin Pelphrey, PhD, John A. Persing, MD  
*Yale University School of Medicine, New Haven, CT*
- 8:20 am**      **84. nAG (a Salamander-Derived Protein) as an Inhibitor of TGF- $\beta$  Signaling and Fibrotic Responses**  
Ahmed Al-Qattan, MBBS, Lucie Lessard, Associate Professor, Anie Philip, Professor  
*McGill, Montreal, QC, Canada.*
- 8:30 am**      **85. Somatic MAP2K1 Mutations in Arteriovenous Malformation Constitutively Activate the RAS/MAPK Pathway**  
Jeremy A. Goss, MD, Patrick J. Smits, PhD, Mohammed H. Alomari, MD, Arin K. Greene, MD, MMSc  
*Boston Children's Hospital, Boston, MA*
- 8:40 am**      **86. Systemic Inhibition of Tgf $\beta$  Signaling Attenuates Trauma-induced Heterotopic Ossification**  
Nicole Patel, BS1, Michael Sorkin, MD1, Charles Hwang, BS1, John Li, MD1, Serra Ucer, PhD1, Sidra Kader, BS1, Kaetlin Vasquez, MS1, Shuli Li, MD, PhD1, Ravi Kumar, PhD2, Yuji Mishina, PhD1, Benjamin Levi, MD1  
*1University of Michigan, Ann Arbor, MI, 2Acceleron Pharma, Inc., Cambridge, MA*

- 8:50 am**      **87. Minimally Processed Adipose-Derived Stem Cells Increase Union Rates in a Murine Model of Irradiated Mandibular Fracture Repair: Enhancing the Translational Application of Cell Based Therapeutics**  
Kavitha Ranganathan, MD, Jeremy V. Lynn, N/A, Kevin Urlaub, BS, Noah S. Nelson, BS, Alex Donneys, MD, Lauren Buchman, Steven R. Buchman, MD  
*University of Michigan, Ann Arbor, MI*
- 9:00 am**      **88. Changes in Mouse Skeletal Progenitor Cells in a Model of Osteoporosis**  
Tom Andrew, MBChB, MSc1, Danielle Struck, BS1, Michael Lopez, BS1, Tatiana Boyko, MD1, Michael Longaker, MD1, Charles Chan, BS PhD1, George Yang, MD PhD1,2  
*1Stanford University, Palo Alto, CA, 2Palo Alto VA Health Care System, Palo Alto, CA*
- 9:10 am**      **89. Graded Balanced Orbital Decompression With Stereotactic Navigation**  
Connor Gilliland1, Amol Bhatki, MD2, Ivan Vrcek, MD1  
*1Texas Ophthalmic Plastic Surgery Assoc., Dallas, TX, 2Baylor University Medical Center, Dallas, TX*
- 9:20 am**      **90. Identification of esrp1 as a novel IRF6 Target Gene and Determining its Role in Palate Development**  
Dawn Truong, BA Candidate, Edward Li, BA, Shawn Hallett, BA, Eric C. Liao, MD-PhD  
*Massachusetts General Hospital, Cambridge, MA*
- 9:30 am-10:00 am**      **COFFEE WITH EXHIBITORS**  
*East Ballroom B*
- 10:00 am-11:30 pm**      **CONCURRENT SESSION 8: HEALTH SERVICES RESEARCH**  
*East Ballroom A*  
**Moderators:**    Carisa M. Cooney, MPH, CCRP  
                         Sami Khan, MD
- 10:00 am**      **91. Gender Imbalance in Invited Speakers at a National Plastic Surgery Meeting**  
Katherine B. Santosa, MD1, Bianca Vannucci, BA1, Jodi Lapidus, BA1, Ellen L. Larson, BA1, Katherine M. Gast, MD, MS2, Erika D. Sears, MD, MS3, Jennifer F. Waljee, MD, MPH3, Susan E. Mackinnon, MD1, Alison Snyder-Warwick, MD1  
*1Washington University, Saint Louis, MO, 2University of Wisconsin, Madison, WI, 3University of Michigan, Ann Arbor, MI*
- 10:10 am**      **92. Immediate Breast Reconstruction in Alberta: A Canadian Perspective**  
Jill P. Stone, MD, FRCSC1, Samuel Sarmiento, MD2, Jingyu Bu, BS1, Deepa Bhat, MD2, Claire Temple-Oberle, MD, MSc, FRCSC1  
*1University of Calgary, Calgary, AB, Canada, 2Johns Hopkins University, Baltimore, MD*
- 10:20 am**      **93. The Impact of the 2010 NY State Breast Cancer Provider Discussion Law on Type of Breast Reconstruction: An Analysis of 42,137 Patients From the NY SPARCS Database**  
Rose H. Fu, MD, MS1, Lu Li, MS2, Onur Baser, MS1, Paul Kurlansky, MD, FACS1, **Yoshiko Toyoda, BA1**, Alexandra Lin, BA1, Christine Rohde, MD, MPH, FACS1  
*1Columbia University Medical Center, New York City, NY, 2StatinMed, Plano, TX*
- 10:30 am**      **94. Parent-Reported Outcomes and Barriers to Care Among Children with Cleft Lip and Palate**  
Katelyn G. Bennett, MD, Kavitha Ranganathan, MD, Michaela S. Baker, BS, Christian J. Vercler, MD, Steven R. Buchman, MD, Jennifer F. Waljee, MD, MS  
*University of Michigan, Ann Arbor, MI*
- 10:40 am**      **95. LGBT Access to Care: Bias in Plastic Surgery**

John Henry Y. Pang, MD, Jordan Fishman, MD, Francesco Egro, MD, Xiao Zhu, BA, Joseph Losee, MD, Vu Nguyen, MD  
*University of Pittsburgh Medical Center, Pittsburgh, PA*

- 10:50 am**      **96. Acellular Dermal Matrix Sterility: Does it Affect Microbial and Clinical Outcomes Following Implantation for Breast Reconstruction**  
Gabriel M. Klein, MD, MS, **Jocellie Marquez, MD**, Gurtej Singh, PhD, Matthew Gebre, BS, Robert Barry, BA, Michael Trostler, MD, Tara L. Huston, MD, Jason C. Ganz, MD, Sami U. Khan, MD, Alexander B. Dagum, MD, Duc T. Bui, MD  
*Stony Brook University Hospital, Stony Brook, NY*
- 11:00 am**      **97. Unilateral versus Bilateral Mastectomy and Reconstruction: A 1- and 5-Year Cost Analysis**  
Jesse R. Smith, MD, MS1, Jennifer Jaffe, MPH, CCRP2, Jaclyn Pruitt, MA, CCRP2, Katharine Yao, MD2, Mark Sisco, MD3, Kristine Kuchta, MS4, Chi Ed Wang, PhD4, Michael A. Howard, MD3  
*1Section of Plastic Surgery, University of Chicago Medicine & Biological Sciences, Chicago, IL, 2Department of Surgery, NorthShore University HealthSystem, Evanston, IL, 3Division of Plastic Surgery, NorthShore University HealthSystem, Evanston, IL, 4Biostatistics and Research Informatics, NorthShore University HealthSystem, Evanston, IL*
- 11:10 am**      **98. A CTA Guided Algorithm for Double-pedicle Abdominal Based Breast Reconstruction: Perforator Selection and Anastomosis**  
Min-Jeong Cho, MD, Austin Hembd, MD, Christopher Venutolo, B.S., Nicholas T. Haddock, MD, Sumeet S. Teotia, MD  
*University of Texas Southwestern Medical Center, Dallas, TX*
- 11:20 am**      **99. Impact and Cost-Analysis of Routine Mastectomy Scar Surveillance in Two-Stage Implant-Based Reconstruction**  
Jordan E. Fishman, MD, MPH, John Henry Pang, MD, Carolyn De La Cruz, MD  
*UPMC - Plastic Surgery, Pittsburgh, PA*
- 10:00 am-11:30 pm**      **CONCURRENT SESSION 8: BASIC/TRANSLATIONAL SCIENCE**  
*East Meeting Rooms A-C*  
**Moderators:**      Keith T. Paige, MD  
                                 June Wu, MD
- 10:00 am**      **100. Osteoclast Activity Required For Cranial Suture Patency**  
Jolanta M. Topczewska, PhD1,2, Joanna K. Ledwon, PhD1,2, Cecil S. Qiu, 1, Andrew S. Bi, 1, Jacek Topczewski, PhD1,2, Arun K. Gosain, 1,2  
*1Northwestern Feinberg School of Medicine, Chicago, IL, 2Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL*
- 10:10 am**      **101. Bone Tissue Engineering of the Pediatric Calvarium and Alveolus using Dipyridamole-coated 3D-Printed Bioactive Ceramic Scaffolds**  
Samantha G. Maliha, BA1, Christopher D. Lopez, BA2, Madison E. Cox, HSD3, Lukasz Witek, MSci, PhD4, Fady G. Gendy, HSD5, Andrea Torroni, MD, PhD6, Bruce N. Cronstein, MD7, Roberto L. Flores, MD6, Paulo G. Coelho, DDS, PhD4  
*1New York University School of Medicine, New York, NY, 2Icahn School of Medicine at Mount Sinai, New York, NY, 3Columbia University, New York, NY, 4New York University College of Dentistry, Department of Biomaterials, New York, NY, 5Baruch College, New York, NY, 6New York University Langone Health, Hansjörg Wyss Department of Plastic Surgery, New York, NY, 7New York University Langone Health, Department of Translational Medicine, New York, NY*
- 10:20 am**      **102. Scaffolding the Scaffold: Mitigating Loss of Volume and Topography of Engineered Auricular Cartilage Using 3D Printed Contour Matching Cages**  
Alexandra Lin, BA1, Jaime Bernstein, BS1, Benjamin Cohen, BS2, Justin Buro,

BA1, Karel-Bart Celie, BA1, Yoshiko Toyoda, BA1, Andrew Miller, BS1, Alice Harper, BA1, Lawrence J. Bonassar, PhD2, John P. Morgan, PhD1, Jason A. Spector, MD FACS1

*1Laboratory of Bioregenerative Medicine and Surgery, New York, NY, 2Meinig School of Biomedical Engineering, Ithaca, NY*

- 10:30 am**      **103. A Novel Pharmaceutical Therapy Preserves Bone Cellularity in an Irradiated Model of Distraction Osteogenesis**  
Kevin M. Urlaub, BS, Jeremy V. Lynn, BS, Edward G. Carey, BS, Noah S. Nelson, MPH, Yekaterina Polyatskaya, MD, Alexis Donneys, MD, MS, Steven R. Buchman, MD  
*University of Michigan, Ann Arbor, MI*
- 10:40 am**      **104. Conformity of the Actual to Planned Result in Orthognathic Surgery**  
Kyle Gabrick, MD, MHS, Alexander Wilson, BS, Andrew T. Timberlake, PhD, Rajendra Sawh-Martinez, MD, MHS, Robin Wu, BS, Sarika Madari, BS, Derek Steinbacher, MD, DMD  
*Yale University, New Haven, CT*
- 10:50 am**      **105. Deferoxamine: A Regenerative Therapeutic with Antitumorigenic Potential**  
Alexis Donneys, MD, Jeremy V. Lynn, N/A, Kevin Urlaub, BS, Kevin Kovatch, MD, Halil Safak Uygur, MD, Jessie Hoxie, N/A, Lauren Buchman, N/A, Kavitha Ranganathan, MD, Alicia Snider, MD, Noah S. Nelson, BS, Chitra Subramanian, PhD, MBA, Mark S. Cohen, MD, Steven R. Buchman, MD  
*University of Michigan, Ann Arbor, MI*
- 11:00 am**      **106. Impact of Diabetes On Microsurgical Free Tissue Transfer Outcomes: Analysis Of 6,030 Cases**  
**Joshua A. David, BS**, Rami S. Kantar, MD, William J. Rifkin, BA, Michael J. Cammarata, BS, J. Rodrigo Diaz-Siso, MD, Alyssa R. Golas, MD, Jamie P. Levine, MD, Daniel J. Ceradini, MD  
*NYU Langone Health, New York, NY*
- 11:10 am**      **107. Requirement Of ALX1 Homeobox Transcription Factor In Craniofacial Development**  
Jonathan PINI, PhD, Eric C. Liao, MD, PhD  
*Massachusetts General Hospital, Center for Regenerative Medicine, Harvard Medical School, Harvard Stem Cell Institute, Boston, MA*
- 11:20 am**      **108. Effect of Obesity and Its Associated Cost in Autologous Breast Reconstruction**  
Bao Ngoc Tran, MD1, Ryan Cauley, MD2, Abbas Peymani, MD2, Bernard Lee, MD, MPH, MBA2  
*1Division of Plastic & Reconstructive Surgery, Rutgers New Jersey Medical School, Newark, NJ, 2Division of Plastic & Reconstructive Surgery, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA*
- 11:30 am-1:00 pm**      **LUNCH POSTER SESSION**  
*East Ballroom B*
- 1:00 pm-2:30 pm**      **CONCURRENT SESSION 9: HEALTH SERVICES RESEARCH**  
*East Ballroom A*  
**Moderators:** Christina P. Camargo, MD  
Summer Hanson, MD, PhD
- 1:00 pm**      **109. Effect of Obesity and Its Associated Cost in Autologous Breast Reconstruction**  
Bao Ngoc Tran, MD1, Ryan Cauley, MD2, **Abbas Peymani, MD2**, Bernard Lee, MD, MPH, MBA2

*<sup>1</sup>Division of Plastic & Reconstructive Surgery, Rutgers New Jersey Medical School, Newark, NJ, <sup>2</sup>Division of Plastic & Reconstructive Surgery, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA*

- 1:10 pm**      **110. Application Of LEAN Methodology Reveals Patient Modifiable Factors To Be The Prime Source of Delay in “First Start” Cases**  
Srikanth Kurapati, MD MBA CPHQ, Ali Kilic, MD MSHA, Jorge De La Torre, MD MSHA FACS  
*UAB, Birmingham, AL*
- 1:20 pm**      **111. Redefining the Role of Resection Weight Prediction in Breast Reduction Surgery**  
Stefanos Boukoulas, MD, Pablo L. Padilla, MD, Jacquelynn P. Tran, BS, Heidi Spratt, PhD, Linda G. Phillips, MD  
*The University of Texas Medical Branch, Galveston, TX*
- 1:30 pm**      **112. Systematic Review and Meta Analysis of Complications and Patient Reported Outcomes in Male to Female Vaginoplasty- Where We Are Today**  
Oscar J. Manrique, MD1, Kian Adabi, BA1, Kidakorn Kiranantawat, MD1, Jorys Martinez-Jorge, MD1, Pedro Ciudad, MD, PhD2, Zhen Wang, PhD1  
*1Mayo Clinic Rochester, Rochester, MN, 2China Medical University Hospital, Taichung, Taiwan*
- 1:40 pm**      **113. Malpractice Litigation in Plastic Surgery: Can We Identify Patterns?**  
Samuel Sarmiento, MD, MPH, MBA, Michael Cheah, MD, Charles Wen, BS, Stacey B. Lee, JD, Gedge D. Rosson, MD  
*Johns Hopkins University, Baltimore, MD*
- 1:50 pm**      **114. Impact of Combined Gynecologic Procedures on Two Staged Implant-Based Breast Reconstruction in Patients with Genetic Cancer Risks**  
Savanah N. Hampton, BSA1, **Avinash P. Jayaraman, BA1**, Lekshmi A. Nair, BS2, Christopher Venutolo, BA1, Min-Jeong Cho, MD1, Sumeet S. Teotia, MD1, Nicholas T. Haddock, MD1  
*1The University of Texas Southwestern Medical Center, Dallas, TX, 2Texas Tech University Health Science Center, Lubbock, TX*
- 2:00 pm**      **115. Effect of Surgical Complications on Health-Related Quality of Life Outcomes in Adolescents and Young Women Following Reduction Mammoplasty**  
Joseph M. Firriolo, MD, Laura C. Nuzzi, BA, Carolyn M. Pike, MPH, Brian I. Labow, MD  
*Boston Children's Hospital, Harvard Medical School, Boston, MA*
- 2:10 pm**      **116. Literacy Analysis of Spanish Online Resources for Breast Reconstruction**  
Andres F. Doval, MD1, Luis Riba, MD1, **Anna Rose Johnson, MPH1**, Bao Ngoc N. Tran2, Bernard T. Lee, MD, MBA, MPH1  
*1Division of Plastic & Reconstructive Surgery, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, 2Division of Plastic & Reconstructive Surgery, Rutgers New Jersey Medical School, Newark, NJ*
- 2:20 pm**      **117. Opioid Prescribing Practices in Plastic Surgery: A Juxtaposition of Attendings and Trainees**  
Walter J. Joseph, MD1, Ian Chow, MD1, Nicholas Cuccolo, BS2, Emily H. Beers, MD1  
*1University of Pittsburgh Medical Center, Pittsburgh, PA, 2Rutgers University - Robert Wood Johnson Medical School, New Brunswick, NJ*
- 1:00 pm-2:30 pm**      **CONCURRENT SESSION 9: BASIC/TRANSLATIONAL SCIENCE**  
*East Meeting Rooms A-C*  
**Moderators:**    Damon Cooney, MD, PhD  
                         Justine Lee, MD, PhD

- 1:00 pm**      **118. Nrf2 Deficiency is Associated with Endothelial Dysfunction in Pathologic Wound Environments**  
Darren Sultan, BA, Joshua A. David, BS, Salma Abdou, BA, Jennifer Kwong, BA, Jasmine Lee, BA, Chen Shen, BA, Piul S. Rabbani, PhD, Daniel J. Ceradini, MD  
*NYU School of Medicine, New York, NY*
- 1:10 pm**      **119. Designing a Murine Model of the Foreign Body Reaction**  
Jagannath Padmanabhan, PhD, Zachary A. Stern-Buchbinder, MS, Teruyuki Dohi, MD, PhD, Peter Than, MD, Geoffrey C. Gurtner, MD, FACS  
*Stanford University School of Medicine, Stanford, CA*
- 1:20 pm**      **120. Lymph Node Transplantation Decreases Local Immunosuppression In Lymphedema**  
Catherine L. Ly, MD, Raghu P. Kataru, PhD, Babak J. Mehrara, MD  
*Memorial Sloan Kettering Cancer Center, New York, NY*
- 1:30 pm**      **121. Novel Antibiotic Thin Films Prevent Surgical Implant Infections**  
Jennifer Baker, MD<sup>1</sup>, Ahmed Beydoun, BS<sup>1</sup>, Ryan Boudreau, MD<sup>1</sup>, Aaron Seitz, MD<sup>1</sup>, Michael J. Edwards, MD<sup>1</sup>, Charles Caldwell, PhD<sup>1</sup>, Erich Gulbins, PhD<sup>2</sup>, Ryan Gobble, MD<sup>1</sup>  
*<sup>1</sup>University of Cincinnati, Cincinnati, OH, <sup>2</sup>University Duisburg-Essen, Essen, Germany*
- 1:40 pm**      **122. Lymphatic Endothelial Cell Tubule Formation in 3D Culture is Inhibited by Increased Matrix Pressure**  
Wan Jiao, PhD, Gene K. Lee, Sun Young Park, M.S., Brian Shaw, Cynthia Sung, Bo Han, PhD, Young-Kwong Hong, PhD, Alex K. Wong,  
*Keck School of Medicine of USC, Los Angeles, CA*
- 1:50 pm**      **123. Functional Characterization of Fibroblasts Differentiated from Adipose-Derived Stem Cells**  
Ivona Percec, MD, PhD, Catherine Calvert, MD, Robert Gersch, PhD  
*University Of Pennsylvania, Philadelphia, PA*
- 2:00 pm**      **124. Multi-Scale Modeling of Tissue Expansion: Genome Expression Patterns in the Acute Stretch Scenario**  
Sergey Y. Turin, MD<sup>1</sup>, Joanna K. Ledwon, PhD<sup>1</sup>, Hanah Bae, MEd<sup>2</sup>, Taeksang Lee, MS<sup>3</sup>, Adrian Buganza Tepole, PhD<sup>4</sup>, Jolanta M. Topczewska, PhD<sup>1</sup>, Arun K. Gosain, MD<sup>1</sup>  
*<sup>1</sup>Northwestern University Feinberg School of Medicine, Stanley Manne Children's Research Institute, Chicago, IL, <sup>2</sup>Ann and Robert H Lurie Children's Hospital of Chicago, Chicago, IL, <sup>3</sup>School of Mechanical Engineering, Purdue University, West Lafayette, IN, <sup>4</sup>Weldon School of Biomedical Engineering, Purdue University, West Lafayette, IN*
- 2:10 pm**      **125. Reflexive Visual Inspection of Cleft Lip Faces - Analysis of Lookzone Focus Over Time**  
Thanapoom Boonipat, MD<sup>1</sup>, Soravis Prakkamakul, BS<sup>2</sup>, Kevin Fleming, PhD<sup>3</sup>, Mitchell Stotland, MD, MPH<sup>4</sup>  
*<sup>1</sup>Mayo Clinic, Rochester, MN, <sup>2</sup>University of California, Berkeley, Berkeley, CA, <sup>3</sup>Norwich University, Norwich, VT, <sup>4</sup>Weill Cornell Medical College in Qatar and Sidra Medical Center, Doha, Qatar*
- 2:20 pm**      **126. Improving Post-Operative Monitoring of Autologous Breast Reconstruction: A Novel, Oxygen-Sensing Liquid Bandage First-in-Human Trial**  
**Alexandra Bucknor, MBBS, MSc<sup>1</sup>**, Parisa Kamali, MD<sup>1,2</sup>, Haley Marks, PhD<sup>3</sup>, Emmanuel Roussakis, PhD<sup>3</sup>, Nicholas H. Nowell, BS<sup>3</sup>, Conor L. Evans, PhD<sup>3</sup>, Samuel J. Lin, MD, MBA<sup>1</sup>  
*<sup>1</sup>Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA,*



<sup>2</sup>Radboud University Medical Center, Nijmegen, Netherlands, <sup>3</sup>Wellman Center for Photomedicine, Massachusetts General Hospital, Boston, MA

- 2:30 pm-3:00 pm**      **COFFEE WITH EXHIBITORS**  
*East Ballroom B*
- 3:00 pm-4:30 pm**      **CONCURRENT SESSION 10: BASIC/TRANSLATIONAL SCIENCE**  
*East Ballroom A*  
**Moderators:** Benjamin Levi, MD  
Mario G. Solari, MD
- 3:00 pm**      **127. A New Hernia Mesh Precisely Engineered to Prevent Hernia Recurrence**  
Mohamed M. Ibrahim, MD, Richard R. Glisson, BS, Jason L. Green, BS, Ken Gall, PhD, Howard Levinson, MD  
*Duke University Medical Center, Durham, NC*
- 3:10 pm**      **128. Poly-caprolactone Nanofiber Nerve Wrap Improves Nerve Regeneration and Rodent Functional Outcomes after Delayed Nerve Repair**  
Joseph Lopez, MD MBA, Kevin Xin, BS, Amy Quan, MD MPH, Kimberly Xinan, BS, Angelo A. Leto Barone, MD, Joshua Budihardjo, BS, Zuhaib Ibrahim, MD, Hai-Quan Mao, MD, WP A. Lee, MD, Gerald Brandacher, MD  
*Johns Hopkins Hospital, Baltimore, MD*
- 3:20 pm**      **129. The Osseointegrated Neural Interface (ONI): A Rabbit Model for Chronic Peripheral Nerve Interfacing in Bone with Percutaneous Osseointegrated Connectors**  
Aaron M. Dingle, PhD1, Jared P. Ness, MS1, Joseph Novello, MS2, Weifeng Zeng, MD1, Jacqueline S. Israel, MD1, Conner Feldman, BS1, Brett Nemke, BS1, Yan Lu, MD1, Aaron J. Suminski, PhD1, Mark D. Markel, DVM1, Justin C. Williams, PhD1, Sameul O. Poore, MD, PhD1  
*1University Wisconsin, Madison, WI, 2University Wisconsin, Madison, AB*
- 3:30 pm**      **130. A Novel Animal Model of Optic Nerve Transection with Preservation of the Retinal Viability**  
Vahe Fahradyan, MD, Eliana Duraes, MD, PhD, Cagri Cakmakoglu, MD, Maria Madajka, PhD, Grzegorz Kwiecien, MD, Michaela Edmond, BS, Chris Link, BS, Addison Barnett, BS, Bell Allen Brent, BS, Neal Peachey, PhD, Antonio Rampazzo, MD, PhD, Alex Yuan, MD, PhD, Bahar Bassiri Gharb, MD, PhD, Frank Papay, MD  
*Cleveland Clinic, Cleveland, OH*
- 3:40 pm**      **131. Characterization of Motor, Sensory, and Mixed Nerve Regenerative Peripheral Nerve Interfaces (RPNIs) for Prosthetic Control**  
Scott W. Sabbagh, BSc., Ali L. vanBelkum, BSc., Nathan G. Lawera, BSc., Vincent Thieu, BSc., Paul S. Cederna, Stephen W. Kemp, PhD  
*University of Michigan, Ann Arbor, MI*
- 3:50 pm**      **132. Local Administration of FK506 with Impregnated Nerve Wraps Accelerates Nerve Regeneration**  
Joshua M. Barnett, BS1, Bo Xiao, BS1, Firuz Feturi, BS1, Yolandi van der Merwe, BS2, Xinzhu Gu, PhD3, Evan Katzel, MD1, Raman Venkataramanan, PhD4, Mario Solari, MD1, William Wagner, PhD3, Daniel Simons, PhD1, Michael B. Steketee, PhD2, Kia M. Washington, MD1  
*1University of Pittsburgh School of Medicine, Pittsburgh, PA, 2University of Pittsburgh, Pittsburgh, PA, 3McGowan Institute for Regenerative Medicine, Pittsburgh, PA, 4University of Pittsburgh School of Pharmacy, Pittsburgh, PA*
- 4:00 pm**      **133. Autologous Unpurified Adipose Tissue Enhances Peripheral Nerve Regeneration Through Long (30 + 40 mm) Autografts**  
Brian P. Cleary, BSc., Carrie A. Kubiak, Scott W. Sabbagh, BSc., Vincent Thieu, BSc., Paul S. Cederna, Stephen W. Kemp, PhD

- 4:10 pm**      **134. Macrophages are Integral to Neuromuscular Junction Reinnervation after Nerve Injury**  
Katherine B. Santosa, MD, Alexandra M. Keane, BA, Bianca Vannucci, BA, Albina Jablonka-Shariff, PhD, Alison Snyder-Warwick, MD  
*Washington University, Saint Louis, MO*
- 4:20 pm**      **135. Correlation Between Fellowship Applications and Work Hour Restrictions on Microsurgical Performance**  
Edward I. Chang, MD, FACS<sup>1</sup>, Matthew M. Hanasono, MD<sup>1</sup>, Stefanos Boukoulas, MD<sup>2</sup>, Jun Liu, PhD<sup>1</sup>, Patrick B. Garvey, MD<sup>1</sup>, Charles E. Butler, MD<sup>1</sup>, Jesse C. Selber, MD<sup>1</sup>  
*1The University of Texas MD Anderson Cancer Center, Houston, TX, 2The University of Texas Medical Branch, Galveston, TX*
- 3:00 pm-4:30 pm**      **CONCURRENT SESSION 10: MIXED SESSION**  
*East Meeting Rooms A-C*  
**Moderators:**    Loree K. Kallianen, MD  
                         Justin M. Sacks, MD, MBA
- 3:00 pm**      **136. Novel Alterations in Chromatin Structure during Aging Reveal Cell-Specific Differential Expression of SUMO Proteins**  
Xiaoyin Shan, PhD, Cleresa Roberts, BS, Catherine Calvert, MD, Yemin Lam, PhD, Ivona Percec, PhD  
*University Of Pennsylvania, Philadelphia, PA*
- 3:10 pm**      **137. Fat Grafting Improves Foot Pain Associated with Fat Pad Atrophy of the Heel: Early Findings from a Randomized Controlled Clinical Trial**  
Isaac James, MD, Beth Gusenoff, DPM, Sheri S. Wang, BS, Gabriella DiBernardo, BS, Danielle T. Minteer, PhD, Jeffrey Gusenoff, MD  
*University of Pittsburgh, Pittsburgh, PA*
- 3:20 pm**      **138. Interrogating the Metabolic Interactions Between Adipocytes and Breast Cancer in a Patient-Derived Tissue Engineered Platform-- Implications for the safety of autologous fat transfer in the setting of breast ductal carcinoma**  
Yoshiko Toyoda, BA, Karel-Bart Celie, BA, Justin Buro, BA, Alexandra Lin, BA, Jonathan Xu, BA, Andrew Miller, BA, John Morgan, PhD, Kristy A. Brown, PhD, Jason A. Spector, MD  
*Weill Cornell Medical College, New York, NY*
- 3:30 pm**      **139. Vascularized Bone Grafting for Reconstruction of Oncologic Defects in the Spine: A Systematic Review and Pooled Analysis of the Literature**  
Rachel Pedreira, BA<sup>1</sup>, Charlampos Siotos, MD<sup>2</sup>, Brian H. Cho, MD<sup>2</sup>, Stella Seal, MLS<sup>2</sup>, Hannah M. Carl, BS<sup>1</sup>, Michelle Seu, BA<sup>2</sup>, Justin M. Sacks, MD, MBA<sup>2</sup>  
*1Johns Hopkins School of Medicine, Baltimore, MD, 2Johns Hopkins Department of Plastic and Reconstructive Surgery, Baltimore, MD*
- 3:40 pm**      **140. Structural Analysis of Murine Versus Human Adipose Tissue Via Three-Dimensional Confocal Microscopy (408)**  
Charles Blackshear, **Ethan Shen**, Ryan Chase Ransom, Natalie Chung, BA, John Flacco, Dre Irizarry, Cristhian Montenegro, M.S., Stephanie Vistnes, BA, Elizabeth Brett, M.S., Michael T. Longaker, MBA, Derrick C. Wan,  
*Stanford University, Stanford, CA*
- 3:50 pm**      **141. Proximal and Distal Recipient Vessels Are Associated with Equivalent Outcomes in Lower Extremity Trauma Free Flap Reconstruction: A 312 Patient Series and Systematic Review**  
William J. Rifkin, BA, John T. Stranix, MD, Zachary M. Borab, MD, Adam Jacoby, MD, Z-Hye Lee, MD, Lavinia Anzai, MD, Daniel J. Ceradini, MD, Vishal Thanik, MD, Pierre B. Saadeh, MD, Jamie P. Levine, MD *Hansjörg Wyss Department of*

MD, Pierre B. Saadeh, MD, Jamie P. Levine, MD *Hansjörg Wyss Department of Plastic Surgery, NYU Langone Health, New York, NY*

- 4:00 pm**      **142. Timing of Traumatic Lower Extremity Free Flap Reconstruction: Does Time to Coverage Impact Outcomes?**  
William J. Rifkin, BA, John T. Stranix, MD, Zachary M. Borab, MD, Adam Jacoby, MD, Z-Hye Lee, MD, Lavinia Anzai, MD, Joshua M. Cohen, BS, Daniel J. Ceradini, MD, Vishal Thanik, MD, Pierre B. Saadeh, MD, Jamie P. Levine, MD *Hansjörg Wyss Department of Plastic Surgery, NYU Langone Health, New York, NY*
- 4:10 pm**      **143. Comparative Analysis of Single versus Stacked Free Flap Breast Reconstruction: A Single Center Experience**  
Min-Jeong Cho, Austin Hembd, Christopher Venutolo, Sumeet S. Teotia, Nicholas T. Haddock,  
*University of Texas Southwestern Medical Center, Dallas, TX*
- 4:20 pm**      **144. Which Is More Ideal To Monitor And Detect Flap Vascular Compromise: Intradermal Or Subcutaneous Tissue Oxygen Tension?**  
Mohamed M. Ibrahim, MD<sup>1</sup>, Hysem Eldik, BS<sup>1</sup>, Mahmoud M. Mohammed, B.ENG<sup>1</sup>, Zi Jun Wu, MD<sup>1</sup>, Timothy King, MD, PhD<sup>2</sup>, Bruce Klitzman, PhD<sup>1</sup>  
*1Duke University Medical Center, Durham, NC, 2University of Alabama, Birmingham, AL*
- 4:30 pm-5:00 pm**      **Mentorship Committee Meeting**  
*East Meeting Rooms A-C*
- 5:00 pm-6:00 pm**      **Mentorship Reception**  
*East Meeting Rooms A-C*
- 6:00 pm-7:00 pm**      **Women in Plastic Surgery Research Reception**  
*East Meeting Room O, 3<sup>rd</sup> Floor*

**Sunday, May 20, 2018**

**7:30 am-8:30 am**

**BREAKFAST**  
*Ballroom Foyer*

**7:30 am-1:00 pm**

**REGISTRATION**  
*Ballroom Foyer*

**7:30 am-1:00 pm**

**SPEAKER READY ROOM**  
*East Ballroom Dressing Room*

**8:00 am-10:02 am**

**SESSION 11 QUICK SHOTS**  
*East Ballroom A*  
**Moderators:** Bernard T. Lee, MD, MBA, MPH, FACS  
David Mathes, MD  
Justin M. Sacks, MD, MBA

**8:00 am**

**QS1. Trigger Finger Corticosteroid Injections With And Without Local Anesthetic; A Randomized, Double Blind Controlled Trial - A Preliminary Data Analysis**  
James R. Patrinely, Jr., BS, Brian C. Drolet, MD  
*Vanderbilt University, Nashville, TN*

**8:04 am**

**QS2. A National Longitudinal Comparison of Strip Craniectomy and Whole Vault Cranioplasty**  
**Robin T. Wu, BS\***, Blake Shultz\*, BA, Kyle Gabrick, MD, Raysa Cabrejo, BS, Paul Abraham, BS, *John Persing, MD*, Michael Alperovich, MD, MSc  
*Yale University School of Medicine, New Haven, CT*  
*\*These authors contributed equally to this work*

**8:08 am**

**QS3. Risk Factors Associated with Post-operative Complications Following Complex Sacrectomy: Outcomes Analysis**  
Emma Vartanian, MD1, Jeremy Lynn, BA2, David Perrault, BS3, Erik Wolfswinkel, MD1, Ketan Patel, MD1, Patrick Hsieh, MD4, Alex Wong, MD1  
*1USC Plastic and Reconstructive Surgery, Los Angeles, CA, 2University of Michigan, Ann Arbor, MI, 3USC Keck School of Medicine, Los Angeles, CA, 4USC Neurological Surgery, Los Angeles, CA*

**8:12 am**

**QS4. Osteogenic Differentiation Of Msc As A Model Study Of The Postnatal Progressive Crouzon Syndrome**  
Joanna K. Ledwon, PhD1, Yekaterina Galat, BS2, Jolanta M. Topczewska, PhD1, Arun K. Gosain, MD1  
*1Northwestern University Feinberg School of Medicine, Department of Surgery Plastic Division, Stanley Manne Children's Research Institute, Ann and Robert H. Lurie Children's Hospital of Chicago., Chicago, IL, 2Department of Pediatrics, Developmental Biology Program, Stanley Manne Children's Research Institute, Ann and Robert H. Lurie Children's Hospital of Chicago, Chicago, IL.*

**8:16 am**

**QS5. Osseous Genioplasty: Prevention of Witch's Chin Deformity with Custom-Milled Plates**  
Alex G. Lambi, MD, PhD1, Rosemarie Byrd, BS2, Connor Bradley, BS2, Ellie Volpicelli, BS2, James P. Bradley, MD2  
*1UCLA Health, Los Angeles, CA, 2Temple University School of Medicine, Philadelphia, PA*

**8:20 am**

**QS6. Comparison Between Oximetry and Polysomnography in Identifying Airway Obstruction in Infants with Robin Sequence**  
Rafael Galli, MD, Mirko Gilardino, MD, Lucie Lessard, MD, Aurore Côté, MD  
*McGill University, Montreal, QC, Canada*

**8:24 am**

**QS7. Outcomes of Prenatally Identified Congenital Anomalies in a Hospital-Based Consult Service**

Emily J. Ji, BA1,2, Nikhil Sobti, BS1, Karen M. Parsons, RN1, Chien-Wei Liao, MD PhD1  
*1Massachusetts General Hospital, Boston, MA, 2Harvard Medical School, Boston, MA*

- 8:30 am**      **QS8. The Impact of Preoperative Antibiotic Use in Primary Palatoplasty: An Outcome Study Utilizing the Pediatric Health Information System (PHIS) Database**  
Diana S. Jodeh, MD1, James J. Cray PhD2, S. Alex Rottgers, MD1  
1Division of Plastic and Reconstructive Surgery, Johns Hopkins All Children's Hospital; St. Petersburg, FL, 2Department of Oral Health Sciences, Medical University of South Carolina, Charleston, SC
- 8:34 am**      **QS9. Analyzing the Ophthalmological Exam in the Association Between Ocular Injuries and Orbital Fractures**  
Matthew Mino, MD, Bin Song, MD, Joseph Zahkary, MD, Tim King, MD, PhD, Jorge de la Torre, MD, MSHA  
*University of Alabama Birmingham, Birmingham, AL*
- 8:38 am**      **QS10. Comparing Reconstructive Outcomes in Patients with Gustillo Type IIIB Fractures and Concomitant Arterial Injuries**  
Joseph A. Ricci, MD, John T. Stranix, MD, Z-Hye Lee, MD, Adam Jacoby, MD, Lavinia Anzai, MD, Vishal Thanik, MD, Pierre Saadeh, MD, Jamie P. Levine, MD  
*New York University, New York, NY*
- 8:42 am**      **QS11. Stem Cell Therapy Enriched Fat Graft Reconstruction of Craniofacial Deficits**  
Debra A. Bourne, MD1, **Francesco M. Egro, MD, MSc, MRCS1**, Jacqueline Bliley, MS2, Isaac James, MD1, Gretchen L. Haas, PhD1, E Michael Meyer, PhD3, Vera Donnenberg, PhD4, Albert Donnenberg, PhD4, Barton Branstetter, MD1, Kacey Marra, PhD5, Sydney Coleman, MD6, J Peter Rubin, MD  
*1University of Pittsburgh Medical Center, Pittsburgh, PA, 2Carnegie Mellon University, Pittsburgh, PA, 3University of Pittsburgh Medical McGowan Institute of Regenerative Medicine, Pittsburgh, PA, 4University of Pittsburgh McGowan Institute of Regenerative Medicine, Pittsburgh, PA, 5University of Pittsburgh, Pittsburgh, PA, 6New York Langone Medical Center, New York, NY*
- 8:46 am**      **QS12. Quantitative Tissue Oximetry in Simulated Venous Occlusion**  
Prasanth Patcha, MD, MEng1, Donald Browne, BS2, Hanzhou Li, BA2, Chien-Wei Wang, BS2, Kristina Falkenstrom, MD2, Jack Yu, MD, DMD, MS Ed, FACS, FADI2  
*1University of Alabama at Birmingham, BIRMINGHAM, AL, 2Medical College of Georgia, Augusta, GA*
- 8:50 am**      **QS13. Bridging The Gap: Extending Free Flap Pedicle Length With Interposition Vein Grafts And Arteriovenous Loops**  
Tobias J. Bos, BSc1, **Nicholas A. Calotta, MD1**, Michelle Y. Seu, BA1, Brian H. Cho, MD1, Aladdin H. Hassanein, MD, MMSc2, Gedge D. Rosson, MD1, Damon S. Cooney, MD, PhD1, Justin M. Sacks, MD, MBA, FACS1  
*1Johns Hopkins University School of Medicine, Baltimore, MD*
- 8:54 am**      **QS14. WITHDRAWN**
- 8:58 am**      **QS15. Evaluating the Best Use of 3D CT Angiograms in Free Abdominal Breast Reconstruction: Do fewer perforators correlate larger vessels?**  
Joseph M. Zakhary, MD, Abby Threet, BS, Tim King, MD, PHD, Jorge de la Torre, MD, MSHA, Matt Mino, MD, Ashley Thorburn, MD, R. Jobe Fix, MD  
*University of Alabama at Birmingham, Birmingham, AL*
- 9:02 am**      **QS16. Co-culturing Human Adipose Derived Stem Cells And Schwann Cells On Spider Silk - A New Approach In Nerve Regeneration After Peripheral Nerve Injury**

Annika Resch, MD, Alexandra-Larissa Stetco, MSc, Tamara Weiss, PhD, Markus Kerbl, MD, Paul Liebmann, MD, Christine Radtke, MD, FEBOPRAS, MBA  
*Medical University of Vienna, Vienna, Austria*

- 9:06 am**      **QS17. WITHDRAWN**
- 9:10 am**      **QS18. Adipose Derived Stem Cells Isolated from Premature Aging Mice Show Sustained Stemness: Implications for Regenerative Medicine**  
Sudheer K. Ravuri, PhD1, Xiaodong Mu, PhD2, Wanqun Chen, PhD2, Johnny Huard, PhD2  
*1Steadman Philippon Research Institute, Vail, CO, 2Department of Orthopaedic Surgery, University of Texas Health Science Center, Houston, TX*
- 9:14 am**      **QS19. 3D-Printed Hyperelastic Bone in a Rat Critical Sized Calvarial Defect**  
Sumanas W. Jordan, MD, PhD1, Yu-hui Huang, MS2, Adam E. Jakus, PhD3, Zari Dumanian, BS2, Linping Zhao, PhD2, Kelly Parker, BS3, Ramille N. Shah, PhD3, Pravin K. Patel, MD2  
*1The Ohio State University, Columbus, OH, 2University of Illinois at Chicago, Chicago, IL, 3Northwestern University, Chicago, IL*
- 9:18 am**      **QS20. WITHDRAWN**
- 9:22 am**      **QS21. Increased Rates of Wound Complications in Type II Diabetes Mellitus and Pre-Diabetes Following Ventral Hernia Repair and Abdominal Wall Reconstruction**  
Joshua A. David, BS, Lauren K. Rangel, BA, Jasmine Lee, BA, Salma A. Abdou, BA, William J. Rifkin, BA, Sonali Sharma, HS, Alyssa R. Golas, MD, Daniel J. Ceradini, MD, Steven M. Cohen, DO, Jaime P. Levine, MD  
*New York University Langone Medical Center, New York, NY*
- 9:26 am**      **QS22. Breast Implant Infections After First Stage Breast Reconstruction: A Case-Control Study of 135 Infections**  
**Joseph Banuelos, BA**, M. Diya Sabbagh, MD, Si-Gyun Roh, MD, Valerie Lemaine, MD, Minh-Doan T. Nguyen, MD, Nho V. Tran, MD, Judy Boughey, MD, Elie Berbari, MD, Basel Sharaf, MD  
*Mayo Clinic, Rochester, MN*
- 9:30 am**      **QS23. Longevity of Outcomes After Reduction Mammoplasty**  
Jennifer Bai, BA, Colton H.L. McNichols, MD, Silviu C. Diaconu, MD, Chinezimuzo Ihenatu, BS, Sara AlFadil, MD, Arthur J. Nam, MD, MS, Sheri S. Slezak, MD, Yvonne M. Rasko, MD  
*University of Maryland Medical Center, Baltimore, MD*
- 9:34 am**      **QS24. Outcomes in Patients Receiving Neoadjuvant Chemotherapy Undergoing Immediate Breast Reconstruction: Effect of Timing and Postoperative Complications**  
Christopher J. Venutolo, BA, Min-Jeong Cho, MD, Austin Hembd, MD, Savannah N. Hampton, BSA, Avinash P. Jayaraman, BA, Nicholas T. Haddock, MD, Sumeet S. Teotia, MD  
*Department of Plastic Surgery, UT Southwestern Medical Center, Dallas, TX*
- 9:38 am**      **QS25. Patient Reported Satisfaction and Quality of Life in Post-Mastectomy Radiated Patients: A Comparison between Delayed and Delayed Immediate Autologous Breast Reconstruction in a Predominantly Minority Patient Population**  
George Kamel, MD, David Nash, MD, Robin Berk, BA, Amanda Rizzo, BA, Teresa Benacquista, MD, Evan Garfein, MD, Katie Weichman, MD  
*Montefiore Medical Center, Bronx, NY*
- 9:42 am**      **QS26. A Prospective Pilot Study of Robotic-Assisted Harvest of the Latissimus Dorsi Muscle for FDA 510(K) Approval**



John Shuck, MD, Mark W. Clemens, MD, Jesse C. Selber, MD, MPH  
MD Anderson Cancer Center, Houston, TX

- 9:46 am**      **QS27. Utilizing Statistical Process Control to Study the Progression of Institutional Situational Awareness Through Anonymous Incident Reporting**  
Srikanth Kurapati, MD MBA CPHQ, Timothy King, MD PhD  
*UAB, Birmingham, AL*
- 9:50 am**      **QS28. Additive Drilling Significantly Improves Mechanically-Tested Bony Stabilization in Translational Spine Models**  
Fady G. Gendy, HSD1,2, Gregory Kurgansky, HSD3,2, Leyla Y. Cavdar, BA4, Christopher D. Lopez, BA5,2, Lukasz Witek, MSci, PhD2, Paulo G. Coelho, DDS, PhD5,2, Andrea Torroni, MD, PhD5  
*1Baruch College, Manhattan, NY, 2Department of Biomaterials and Biomimetics, New York University College of Dentistry, New York, NY, 3Macaulay Honors College at Hunter College, Manhattan, NY, 4New York Medical College, Valhalla, NY, 5Hansjörg Wyss Department of Plastic Surgery, New York University Langone Medical Center, Manhattan, NY*
- 9:54 am**      **QS29. Study of the Retinochoroidal Circulation with Fluorescein Angiography in a Rodent Orthotopic Whole Eye Transplantation Model**  
Chiaki Komatsu, MD1, Jila Noori, MD1,2, Maxine R. Miller, MD1, Yong Wang, MD1, Touka Banaee, MD1, Bing Li, MD1, Joshua Barnett, BS1, Wendy Chen, MD, MS1, Kira L. Lathrop, MAMS2,3, Ian A. Rosner, BS1, Wensheng Zhang, MD1, Mario G. Solari, MD1, Joel S. Schuman, MD4, Andrew W. Eller, MD2, Kia M. Washington, MD5,6  
*1University of Pittsburgh Medical Center, Department of Plastic Surgery, Pittsburgh, PA, 2University of Pittsburgh Medical Center, Department of Ophthalmology, Pittsburgh, PA, 3University of Pittsburgh, Swanson School of Engineering, Department of Bioengineering, Pittsburgh, PA, 4New York University Medical Center, Department of Ophthalmology, New York, NY, 5University of Pittsburgh Medical Center, Departments of Plastic Surgery, Ophthalmology, Orthopedic, Pittsburgh, PA, 6VA Pittsburgh Medical Center, Pittsburgh, PA, Pittsburgh, PA*
- 9:58 am**      **QS30. E2f1 Represses M1 And M2 Macrophages Transformation To Effect Wound Healing Process**  
Min Wu, PHD,MD, Hui Xiao, Master, Changchun Yang, Master, Zhen Yi, Master, Pei Deng, MD, Haiping Wang, MD, Ning Zeng, Phd, MD, Yiping Wu, Phd, MD  
*Tongji Hospital, Wuhan, China*
- 10:02 am-10:30 am**      **COFFEE WITH EXHIBITORS**  
*Ballroom Foyer*
- 10:30 am-12:30 pm**      **SESSION 12 QUICK SHOTS**  
*East Ballroom A*  
**Moderators:**    Bernard T. Lee, MD, MBA, MPH, FACS  
                         David Mathes, MD  
                         Justin M. Sacks, MD, MBA
- 10:30 am**      **QS31. Micropatterned Microsphere Scaffolds: Optimizing the Performance of Engineered Dermal Substitutes**  
Karel-Bart Celie, BA1, Yoshiko Toyoda, BA2, Justin S. Buro, BA3, Alexandra J. Lin, BA1, Jonathan Xu, BA1, Andrew Miller, BA2, John Morgan, PhD2, Jason A. Spector, MD F.A.C.S.2.  
*1Columbia University College of Physicians and Surgeons, New York, NY, 2Weill Cornell Medicine, New York, NY, 3George Washington University School of Medicine & Health Sciences, Washington, D.C., DC*
- 10:34 am**      **QS32. Autologous Fat Transfer for Scar Prevention and Remodeling (AFT-SPAR): Could Saline be as Efficacious as Fat?**

James C. Brown, MD, Hulan Shang, MS, Ning Yang, PhD, Adam J. Katz, MD, FACS

*University of Florida, Gainesville, FL*

- 10:38 am**      **QS33. Composite-Mediated Angiogenesis for Soft Tissue Regeneration in a Large Animal Defect Model**  
Michelle Seu, BA, Xiaowei Li, PhD, Zhengbing Zhou, MD, Russell Martin, PhD, Kevin Colbert, MS, Chi Zhang, BS, **Sashank Reddy MD, PhD**, Hai-Quan Mao, PhD, Justin Sacks, MD, MBA  
*Johns Hopkins School of Medicine, Baltimore, MD*
- 10:42 am**      **QS34. Prospective Isolation of a Functional Human Cartilage Progenitor Capable of Forming Hyaline Cartilage In Vivo**  
Lauren S. Koepke, BS, Matthew P. Murphy, MD, Rachel Brewer, BS, Michael Lopez, BS, Charles FK Chan, PhD, Michael T. Longaker, MD, MBA  
*Stanford, Stanford, CA*
- 10:46 am**      **QS35. Use Of Nicotine Replacement Therapy In Active Smokers Is th Increased Complication Rate In Breast Surgery**  
Zhenzhen Xu, BA, **Sifon Ndon, BA**, Rance JT Fujiwara, BS, Lisa Fucito, PhD, Steven Bernstein, PhD, Henry C. Hsia, MD  
*Yale School of Medicine, New Haven, CT*
- 10:50 am**      **QS36. Quantitative Orthopaedic Spine Benefits Post Breast Reduction - Preliminary Results**  
Constantine Papanastasiou, MD, Jean Ouellet, MD, FRCSC, Maryse Fortin, PhD, Lucie Lessard, MD, FRCSC, FRCSC, FACS  
*McGill University, Montreal, QC, Canada*
- 10:54 am**      **QS37. The Efficacy of Closed Incision Negative Pressure Therapy in Complex Abdominal Reconstruction in High-Risk Patients**  
Bao Ngoc N. Tran<sup>1</sup>, **Anna Rose Johnson, MD<sup>2</sup>**, Changyu Shen, PhD<sup>2</sup>, Edward S. Lee, MD<sup>1</sup>, Bernard T. Lee, MD, MBA, MPH<sup>2</sup>  
*<sup>1</sup>Division of Plastic & Reconstructive Surgery, Rutgers New Jersey Medical School, Newark, NJ, <sup>2</sup>Division of Plastic & Reconstructive Surgery, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA*
- 10:58 am**      **QS38. Is 3-D Fascial Reinforcement with "Silo" Technique the Answer for Complex Parastomal Hernia?**  
Vishwanath Chegireddy, MD, Dmitry Zavlin, MD, Warren Ellsworth, IV, MD, Tue Dinh, MD  
*Houston Methodist Hospital, Houston, TX*
- 11:02 am**      **QS39. Patient Reported Satisfaction and Quality ofLife in Predominantly Minority Obese Patients: A Comparison Between Microsurgical and Prosthetic Implant Recipients**  
George Kamel, MD, David Nash, MD, Robin Berk, BA, Amanda Rizzo, BA, Teresa Benacquista, MD, Evan Garfein, MD, Katie Weichman, MD  
*Montefiore Medical Center, Bronx, NY*
- 11:06 am**      **QS40. Absorbable Onlay Mesh in Complex Abdominal Wall Reconstruction**  
Adam S. Levy, MD<sup>1</sup>, Jaime L. Bernstein, BS<sup>2</sup>, Kerry A. Morrison, MD<sup>2</sup>, Alfons Pomp, MD<sup>2</sup>, Christine H. Rohde, MD<sup>3</sup>, David M. Otterburn, MD<sup>2</sup>, Jason A. Spector, MD<sup>2</sup>  
*<sup>1</sup>New York-Presbyterian Hospital - Cornell/Columbia, New York, NY, <sup>2</sup>New York-Presbyterian Hospital - Weill Cornell Medicine, New York, NY, <sup>3</sup>New York-Presbyterian Hospital - Columbia, New York, NY*
- 11:10 am**      **QS41. Delayed DIEP Flap Loss: A Complication of Microsurgical Advancement and Earlier Discharge**  
Alicia A. Heelan Gladden, MD, Becky B. T. King, MD, Alexandra Kovar, MD,

Kristen Ohe, BA, Colleen Murphy, MD, Joyce Aycock, MD, David W. Mathes, MD, Tae Chong, MD. University of Colorado, Aurora, CO

- 11:14 am**      **QS42. Neo - Adjuvant Chemotherapy is Not Associated With Increased Risk of Complications in Immediate Autologous Breast Reconstruction**  
Efstathios Karamanos, MD, Ilya Rakitin, MD, Ilan Rubinfeld, MD, FACS, Dunya Atisha, MD  
*Henry Ford Hospital/Wayne State University, Detroit, MI*
- 11:18 am**      **QS43. Blepharophimosis Ptosis Epicanthus Inversus Syndrome Caused by a ZC3H13 Gene Mutation**  
Daniel M. Balkin, MD, PhD1, Carol Nelson-Williams, BS, MS2, Brandon J. Sumpio, BA2, Daryl A. Scott, MD, PhD3, Pierre Le Pabic, PhD4, Thomas F. Schilling, PhD4, Richard P. Lifton, MD, PhD5, Deepak Narayan, MD2  
*1University of California, San Francisco, San Francisco, CA, 2Yale University School of Medicine, New Haven, CT, 3Baylor College Of Medicine, Houston, TX, 4University of California, Irvine, Irvine, CA, 5The Rockefeller University, New York, NY*
- 11:22 am**      **QS44. Characteristics of International Medical Graduates Who Successfully Matched in a U.S. Plastic Surgery Program. A National Survey**  
Angelo A. Leto Barone, MD, George Kokosis, MD, **Michael Grezлак, BS**, Sara Alfadil, MD, Edward Davidson, MBBS, Scott Lifchez, MD, Amir H. Dorafshar, MBBS  
*Johns Hopkins, Baltimore, MD*
- 11:26 am**      **QS45. Component Restoration in the Unilateral Cleft Tip Rhinoplasty: Technique and Longevity**  
Julia R. Ayeroff, BA1, Elizabeth J. Volpicelli, BA1, Rachel S. Mandelbaum, MD1, Samuel Asanad, MD1, Miles J. Pfaff, MD1, Alex Lambi, MD1, David S. Foulad, MD1, Thomas Willson, MD1, James P. Bradley, MD2, Justine C. Lee, MD, PhD1  
*1Division of Plastic and Reconstructive Surgery, University of California, Los Angeles, David Geffen School of Medicine, Los Angeles, CA, 2Division of Plastic and Reconstructive Surgery, Temple University Hospital, Lewis Katz School of Medicine, Philadelphia, PA*
- 11:30 am**      **QS46. Schwann Cell-like Cells (iMDSC) Differentiated from Muscle-Derived Stem Cells (MDSC) Improve Neuromuscular Re-innervation and Functional Outcomes After Rodent Upper Extremity Peripheral Nerve Trauma**  
Joseph Lopez, MD, Helen Xun, BS, Pooja Yesantharao, BS, MS, Leila Musavi, BS, Kim X. Sinan, BS, Howard D. Wang, MD, Amy Quan, MD, Markus Tammia, PhD, Aysel Cetinkaya-Fisgin, PhD, Ahmet Hoke, MD PhD, Gerald Brendacher, MD, WP Andrew Lee, MD, Anand Kumar, MD  
*Johns Hopkins School of Medicine, Baltimore, MD*
- 11:34 am**      **QS47. Wide Propeller Posterior Thigh Flap to Reconstruct Perineal Defects post Abdominoperineal Resection**  
Carlos X. Ordenana, MD1, Edoardo Dalla Pozza, MD1, Sayf Said, MD1, Francis Papay, MD1, Hermann Kessler, MD, PhD2, Antonio Rampazzo, MD, PhD1, Bahar Bassiri, MD, PhD1  
*1Plastic Surgery Department, Cleveland Clinic, Cleveland, OH, 2Digestive Disease and Surgery Institute, Cleveland Clinic, Cleveland, OH*
- 11:38 am**      **QS48. Quantifying Lymphatic Contraction Using ICG Lymphography: A Novel Approach to Lymphedema Assessment**  
Bao Ngoc Tran, MD1, Echoe Bouta, PHD2, **Anna Rose Johnson, MPH1**, Bernard Lee, MD, MPH, MBA1, Timothy Padera, PhD2, Dhruv Singhal, MD1  
*1Division of Plastic & Reconstructive Surgery, Rutgers New Jersey Medical School, Newark, NJ, 2Division of Plastic & Reconstructive Surgery, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA*

- 11:42 am**      **QS49. Effect of Post-Operative Heparin on Digit Replant and Revascularization Success**  
Helene Retrouvey, MDCM1, Ogi Solaja, BSc2, Heather Baltzer, MSc, MD, FRCSC3  
*1University of Toronto, Toronto, ON, Canada, 2Queen's University, Kingston, ON, Canada, 3Toronto Western Hospital, Toronto, ON, Canada*
- 11:46 am**      **QS50. Dermal Lymphatic Backflow Pattern in Rat Hind Limb Chronic Lymphatic Dysfunction Model**  
Vahe Fahradyan, MD, Edoardo Dalla Pozza, MD, Grzegorz Kwiecien, MD, Cagri Cakmakoglu, MD, Maria Madajka, PhD, Charlie Androjna, PhD, Bahar Bassiri Gharb, MD, PhD, James Zins, MD, Graham Schwarz, MD  
*Cleveland Clinic, Cleveland, OH*
- 11:50 am**      **QS51. Skeletal Muscle Regeneration by Fibromodulin Reprogrammed Cells without Tumorigenic Risks**  
Pin Ha, MD, DDS, MS, Chenshuang Li, DDS, PhD, Jong Kil Kim, BS, Wenlu Jiang, DDS, PhD, Grace Xinlian Chang, BS, SukMin Yoon, DDS, Eric Chen, DDS, Xinli Zhang, PhD, Kang Ting, DMD, DMEDSC, Chia Soo, MD, FACS, Zhong Zheng, PhD  
*UCLA, Los Angeles, CA*
- 11:54 am**      **QS52. Musculoskeletal Polytrauma In The Setting of Ischemia/reperfusion Results In Increased Intramuscular Inflammation and Recruitment of Circulatory Macrophages**  
Michael Sorkin, MD, Charles Hwang, BS, John Li, MD, Nicole Patel, BS, Shuli Li, MD, PhD, Kaetlin Vasquez, MS, Shailesh Agarwal, MD, Benjamin Levi, MD  
*University of Michigan, Ann Arbor, MI*
- 11:58 am**      **QS53. WITHDRAWN**
- 12:02 pm**      **QS54. What is the Difference Between Sagittal with Metopic and Isolated Sagittal Craniosynotosis? A Whole Brain Intrinsic Connectivity and Diffusion Tensor Imaging Study**  
Raysa Cabrejo, BA1, Cheryl Lacadie, B.S.1, Carolyn Chuang, MD, MHS1, Jenny Yang, MD, MHS1, Alexander Sun, BS1, Eric Brooks, MD, MHS1, Joel Beckett, MD, MHS1, Kyle Gabrick, MD1, Derek Steinbacher, DMD, MD1, Michael Alperovich, MD, MSc1, Kevin Pelphrey, PhD2, Todd Constable, PhD1, John Persing, MD1  
*1Yale School of Medicine, New Haven, CT, 2George Washington University, Washington, DC*
- 12:06 pm**      **QS55. Revisiting Reconstruction of Posterior Mandibulectomy Defects in the Modern Era of CAD/CAM Technology**  
Stefanos Boukovalas, MD1, Edward I. Chang, MD, FACS2, Jun Liu, PhD2, Rene D. Largo, MD2, Patrick B. Garvey, MD, FACS2, Matthew M. Hanasono, MD, FACS2  
*1The University of Texas Medical Branch, Galveston, TX, 2The University of Texas MD Anderson Cancer*
- 12:10 pm**      **QS56. Persistent Opioid Use Among Children, Adolescents, and Young Adults After Common Cleft Operations**  
Katelyn G. Bennett, MD, Calista M. Harbaugh, MD, Hsou Mei Hu, PhD, Christian J. Vercler, MD, Steven R. Buchman, MD, Jennifer F. Wajee, MD, MS  
*University of Michigan, Ann Arbor, MI*
- 12:14 pm**      **QS57. Normal Metopic Closure Proceeds Similarly Between Different Ethnicities: A Temporal Closure Curve Analysis**  
Alexander Y. Lin, MD, Kashyap Tadisina, MD  
*Saint Louis University School of Medicine, St. Louis, MO*

- 12:18 pm**      **QS58. Indications and Outcomes of Single-Pedicle versus Two-Pedicle Thigh Free Flaps in Head and Neck Reconstruction**  
Becky King, MD, Ivan E. Rodriguez, MD, Frederic W.B. Deleyiannis, MD, MPhil, MPH, FACS  
*University of Colorado, Aurora, CO*
- 12:22 pm**      **QS59. Resident Needs Assessment And Development Of A High Fidelity Porcine Model For Autologous Breast Reconstruction**  
Jill P. Stone, MD, FRCSC, George Kokosis, MD, John A. Rose, MD, MPH, Justin M. Sacks, MD, MBA  
*Johns Hopkins, Baltimore, MD*
- 12:26 am**      **QS60. The Plastic Surgery Prisoner's Dilemma: The Relationship Between Applications and Match Rate**  
Felipe Molina Burbano, BA, Amy Yao, BS, Jeffrey Stock, MD, Peter Taub, MD, FACS, FAAP  
*Mount Sinai Hospital, New York, NY*
- 12:30 pm-1:00 pm**      **AWARDS ANNOUNCEMENTS**
- 1:00 pm**      **ADJOURN**