Thursday, May 14, 2015

7:00 am – 5:00 pm  Registration  
Cascade Ballroom Foyer

7:00 am – 5:00 pm  Speaker Ready Room  
Cascade Ballroom Foyer

7:00 am – 6:00 pm  Poster Set-Up  
Puget Sound Room

7:00 – 8:00 am  Continental Breakfast  
Cascade Ballroom Foyer

8:00 am – 12:00 pm  Local Programming  
University of Washington, Harborview Medical Center

12:00 – 12:15 pm  Members Photograph  
University of Washington, Harborview Medical Center

12:30 – 2:00 pm  Lunch; Non-Members  
Pine

12:30 – 2:00 pm  Lunch & Business Meeting; Members only  
Pike

1:45 – 7:00 pm  Exhibits  
Cascade Ballroom Foyer

2:00 – 2:30 pm  Coffee with Exhibitors  
Cascade Ballroom Foyer

2:30 – 4:00 pm  Session 1 Best Papers  
Cascade Ballroom

2:30 pm  
1. N-Acetylcysteine Improves Autologous Fat Graft Survival in a Mouse Model  
Joshua A. Gillis, MD; Simon Gebremeskel, BSc; Kyle D. Phipps, PhD;  
Lori A. MacNeil, PhD; Christopher J. Sinal, PhD; Brent Johnston, PhD;  
Paul Hong, MD; Michael Bezuhly, MD  
Dalhousie University, Halifax, NS, Canada

2:39 pm  
2. Clinical Outcomes after a Modified End-to-Side Nerve Transfer Using the Phrenic Nerve as a Donor for Treatment of Brachial Plexus Injury  
Jacques A. Machol, IV, MD1; Ji-Geng Yan, MD, PhD1; Robert Robert Fang, MD2; Lin-Ling Zhang, MD1; James Sanger, MD1; Hani Matloub, MD1  
1Medical College of Wisconsin, Milwaukee, WI, 2Emory University, Atlanta, GA
3. Regenerative Peripheral Nerve Interfaces: Impact of Decellularized Small Intestinal Submucosa on Regeneration, Reinnervation, and Revascularization
Frances M. Walocko, MSE; Elizabeth A. Mays, BSE; Zachary P. French, HS; Cheryl A. Hassett, BS; Jana D. Moon, BS; Nicholas B. Langhals, PhD; Paul S. Cederna, MD; Melanie G. Urbanchek, PhD
University of Michigan, Ann Arbor, MI

4. Mammary Adipose Derived Stem Cells in BRCA-Related Breast Cancers
Irene J. Pien, BS\textsuperscript{1}; Jared A. Blau, BS, MEd\textsuperscript{1}; Michelle L. Bowie, MS\textsuperscript{2}; Siya Lem, BS\textsuperscript{2}; Victoria L. Seewaldt, MD\textsuperscript{2}; Scott T. Hollenbeck, MD\textsuperscript{3}
\textsuperscript{1}Duke University School of Medicine, Durham, NC, \textsuperscript{2}Duke University Department of Medicine, Division of Medical Oncology, Durham, NC, \textsuperscript{3}Duke University Department of Surgery, Division of Plastic, Maxillofacial, and Oral Surgery, Durham, NC

5. The Suture Provides a Niche for Mesenchymal Stem Cells of Craniofacial Bones
Hu Zhao, DDS, PhD; Jifan Feng, DDS, PhD; Mark Urata, DDS, MD; Yang Chai, DDS, PhD
University of Southern California, Los Angeles, CA

6. Missense Variant in MAPK Inactivator PTPN5 is Associated with Decreased Severity of Post-Burn Hypertrophic Scarring
Ravi F. Sood, MD; Anne M. Hocking, PhD; Lara A. Muffley, BS; Maricar Ga, BS; Shari Honari, RN, BSN; Reiner P. Alexander, MD, MSc; Nicole S. Gibran, MD
UW Medicine Regional Burn Center, Seattle, WA

7. Predicting Venous Congestion Before DIEP Breast Reconstruction
Christopher R. Davis, BSc, MB ChB, MRCS\textsuperscript{1}; Lyn Jones, FRCS, FRCR\textsuperscript{2}; Rachel Tillett, MSc, FRCS (Plast)\textsuperscript{3}; Helen Richards, MRCS\textsuperscript{2}; Sherif Wilson, FRCS (Plast)\textsuperscript{2}
\textsuperscript{1}Stanford University, Stanford University, CA, \textsuperscript{2}Southmead Hospital, Bristol, United Kingdom, \textsuperscript{3}Royal Devon and Exeter NHS Trust, Exeter, United Kingdom

8. Understanding the Recovery Phase of Breast Reconstruction: Patient Reported Outcomes Correlated to Type and Timing of Reconstruction
Katie Weichman, MD\textsuperscript{1}; Jennifer B. Hamill, MPH\textsuperscript{2}; Hyunjin Myra Kim, ScD\textsuperscript{2}; Xiaoxue Chen, BS\textsuperscript{2}; Edwin G. Wilkins, MD, MS\textsuperscript{2}; Andrea L. Pusic, MD, MHS\textsuperscript{3}
\textsuperscript{1}Montefiore Medical Center/Albert Einstein School of Medicine, Bronx, NY, \textsuperscript{2}University of Michigan, Ann Arbor, MI, \textsuperscript{3}Memorial Sloan Kettering Cancer Center, New York, NY

9. Pullulan-Collagen Hydrogels Seeded with Adipose-Derived Mesenchymal Stem Cells Enhance Progenitor Cell Recruitment and Functionality
Revanth Kosaraju, BS Candidate; Robert C. Rennert, MD; Zeshaan N. Maan, MBBS, MRCS; Dominik Duscher, MD; Janos Barrera, BS; Alexander J. Whittam, BA; Melanie Rodrigues, PhD; Michael Januszky,
3:51 pm 10. The Role of Skin-Specific Immunobiology and Major Histocompatibility Complex Sharing in Vascularized Composite Allograft Tolerance
David A. Leonard, MBChB, Kumaran Shanmugarajah, MBBS, Harrison Powell, BS, Alexander Albritton, BS, Christopher Mallard, BS, David H. Sachs, MD, Curtis L. Cetrulo, Jr., MD, Josef M. Kurtz, PhD
Massachusetts General Hospital, Boston, MA

4:00 – 5:30 pm Session 2 Best Papers
Cascade Ballroom

4:00 pm 11. Cell-based Muscle Regeneration by utilizing Epigenetic Drug and Hydrogel
ShihJye Tan, MS, Zhi Yang, MD; Josephine Fang, MS; Yichen Wu, MS; Marcel Nimni, PhD; Mark Urata, MD, DDS; Bo Han, PhD
USC, Los Angeles, CA

4:09 pm 12. Ex Vivo Free Flap Transfection with Minicircle DNA for Targeted Localized Gene Therapy
Peter A. Than, MD; Robert R. Rennert, MD; Christopher R. Davis, BSc MB, ChB, MRCS; Shane Morrison, MD; Tai Le, Michael W. Findlay, MBBS, PhD, FRACS, FACS; Geoffrey C. Gurtner, MD, FACS
Stanford University School of Medicine, Stanford, CA

4:18 pm 13. Is there a Safe Lipoaspirate Volume? A Risk Assessment Model of Liposuction Volume as a Function of Body Mass Index Based on TOPS Data
Ian Chow, BA1; Mohammed S. Alghoul, MD1; Nima Khavanin, BS1; Philip J. Hanwright, BA1; Kristen E. Mayer, BS1; Keith M. Hume, MA3; Robert X Murphy Jr., MD, MA4; Karol A. Gutowski, MD2; John YS Kim, MD1
1Northwestern University, Chicago, IL, 2University of Illinois, Chicago, IL, 3American Society of Plastic Surgery, Chicago, IL, 4Lehigh Valley Health Network, Allentown, PA

Grzegorz Kwiecien, MD; Bahar Bassiri Gharb, MD, PhD; Kashyap Tadisina, BA; Maria Madajka, PhD; James E. Zins, MD; Graham S. Schwarz, MD
Cleveland Clinic, Cleveland, OH

4:36 pm 15. Dermal-Based Peripheral Nerve Interface for Transduction of Sensory Feedback from Upper Extremity Prostheses
Ian C. Sando, MD1; Gregory J. Gerling, PhD2; Daniel C. Ursu, MS1; Kristoffer B. Sugg, MD1; Yaxi Hu, BS1; Steven C. Haase, MD1; Nicholas B. Langhals, PhD1; Paul S. Cederna, MD1; Melanie G. Urbanchek, PhD1
1University of Michigan, Ann Arbor, MI, 2University of Virginia, Charlottesville, VA
16. Adjacent Antagonistic RPNs Produce Independent Signaling for Prosthesis Control
Andrei Nedic, MSE; Daniel Ursu, MS; Ian Sando, MD; Jana Moon, BS; Cheryl Hassett, BS; R Brent Gillespie, PhD; Nick Langhals, PhD; Paul Cederna, MD; Melanie Urbanchek, PhD
University of Michigan, Ann Arbor, MI

17. In utero Transplantation of Gene Modified Human Adipose Stem Cells for Sustained Factor VIII Transgene Expression
Maricel G. Miguelino, MD; Christopher D. Pivetti, MS; David E. Sahar, MD; Jerry S. Powell, MD
University of California, Davis, Sacramento, CA

18. Post Transplantation Cyclophosphamide Promotes Robust Immune Tolerance after Reconstructive Transplantation
Georg J. Furtmüller, MD; Madeline L. Fryer, BA; Byoungchol Oh, DVM; PhD; Sudipto Ganguly, PD; Jessica Izzi, DVM; Jeffrey Dodd-o, MD, PhD; Giorgio Raimondi, PhD; Damon S. Cooney, MD, PhD; WP Andrew Lee, MD, Leo Luznik, MD; Gerald Brandacher, MD
Johns Hopkins University, Baltimore, MD

19. SDF-1 Mediates Pre-adipocyte Neovascular Potential and Slows Progression of Type 2 Diabetes
Janos Barrera, BS; Zeshaan Maan, MBBS, MSc, MRCS; Alexander J. Whittam, BA; Robert Rennert, MD; Dominik Duscher, MD; Kevin Paik, BA; Michael Hu, MD, MS, MPH; Graham Walmsley, BA; Michael T. Longaker, MD, MBA; Geoffrey C. Gurtner, MD, FACS
Stanford School of Medicine, Palo Alto, CA

20. Defining the Role of the Vasculogenic Niche in Trauma-induced Heterotopic Ossification using Novel Imaging and Lineage-tracing Mice
Shailesh Agarwal, MD1; Shawn Loder, BS1; Cameron Brownley, BS1; Jonathan Peterson, BS1; Eboda Oluwatobi, BS1; Ronald Tompkins, MD2; David Herndon, MD3; Hsiao Sung, DDS, MD1; Wenzhao Zeng, PhD4; Dolrudee Jumloungras, PhD5; Bjorn Olsen, PhD5; Paul S. Cederna, MD1; Steven R. Buchman, MD1; Benjamin Levi, MD1
1University of Michigan, Ann Arbor, MI, 2Massachusetts General Hospital, Boston, MA, 3University of Texas Medical Branch, Galveston, TX, 4Stanford University, Stanford, CA, 5Harvard Dental School, Boston, MA.

5:30 – 7:00 pm Welcome Reception
The Space Needle

Friday, May 15, 2015

7:00 am – 5:30 pm Registration
Cascade Ballroom Foyer

7:00 am – 5:30 pm Speaker Ready Room
Cascade Ballroom Foyer

7:00 am – 5:30 pm Exhibits
Cascade Ballroom Foyer
7:00 – 8:00 am  Continental Breakfast with Exhibitors  
Cascade Ballroom Foyer

8:00 – 9:30 am  Session 3 Best Papers  
Cascade Ballroom

8:00 am  
21. Therapeutic Modulation of an Embryonic Fibroblast Lineage
Graham G. Walmsley, BA; Michael S. Hu, MD; Zeshaan N. Maan, MD; Yuval Rinkevich, PhD; Michael Januszyk, MD; Dominic Duscher, MD; Alexander Whittam, BA; David Atashroo, MD; Ruth Tevlin, MD; Elizabeth Zielins, MD; Peter H. Lorenz, MD; Irving L. Weissman, MD; Geoffrey C. Gurtner, MD; Michael T. Longaker, MD  
Stanford University, Stanford, CA

8:09 am  
22. Cd4+ Cells Home to and Initiate Pathological Changes of Lymphedema after Lymphatic Injury
Gabriela D. Garcia Nores, MD; Daniel A. Cuzzzone, MD; Jason C. Gardenier, MD; Ira L. Savetsky, MD; Jeremy S. Torrisi, BA; Matthew D. Nitti, BA; Geoffrey E. Hespe, BS; Raghu P. Katari, PhD; Babak J. Mehrara, MD  
1Memorial Sloan Kettering Cancer Center, New York, NY, 2New York University Hospital Center, New York, NY

8:18 am  
24. Effects of Obesity and Diabetes Mellitus on Adipose Tissue Derived Stromal Cells- Implications for Health, Massive Weight Loss and Therapeutics
Michael W. Findlay, MBBS, PhD, FRACS, FACS; Robert C. Rennert, MD; Michael Sorkin, MD; Michael Januszyk, MD; Peter A. Than, MD; Christopher Davis, MBBCh, MRCS; H. Peter Lorenz, MD, FACS; Homero Rivas, MD, MBA, FACS; John M. Morton, MD, FACS; Geoffrey C. Gurtner, MD, FACS  
Stanford University, Stanford, CA

8:27 am  
25. Enhancement of Nerve Regeneration after Delayed Repair with Controlled Release of Neurotrophic Factors
Kasra Tajdaran, MAsc; M. Cecilia Alvarez-Veronesi, MAsc; Matthew D. Wood, PhD; Molly S. Shoichet, PhD; Tessa Gordon, PhD; Gregory H. Borschel, MD, FACS, FAPP  
1University of Toronto, Toronto, ON, Canada, 2Washington University, St. Louis, MO

8:36 am  
Mohamad Sebai, MBBS; Carisa Cooney, MPH; Buchi Ogbuagu, MD; MPH; Pablo Baltodano, MD; Chris Devulapalli, MD; Michele Manahan, MD; Gedge Rosson, MD  
Johns Hopkins Hospital, Baltimore, MD

8:45 am  
27. Tissue-Engineered, Vascularized Skin Flaps Containing Dermal Appendages
Rachel C. Hooper, MD; Adam M. Jacoby, BA; Ope A. Asanbe, MD; Wilmina N. Landford, BA; Peipei Zhang, PhD; Hector L. Osoria, BS; Alice
8:54 am
28. Propranolol Alters IH Development Via Beta2-adrenergic Receptor Blockade
Ryan W. England, BS; Naikhoba C.O. Munabi, BA; Jan K. Kitajewski, PhD; Carrie J. Shawber, PhD; June K. Wu, MD
Columbia University, New York, NY

9:03 am
29. Endothelial CXCL12 Recruits a Novel Circulating Progenitor Cell in Response to Tissue Injury
Zeshaan N. Maan, MBBS, MSc, MRCS; Dominik Duscher, MD; Alexander J. Whittam, BA; I N. Vial, MD; Michael Januszyk, MD, PhD; Lauren Fischer, MD; Robert C. Rennert, MD; Melanie Rodrigues, PhD; Michael S. Hu, MD, MS, MPH; Graham G. Walmsley, BA; Michael T. Longaker, MD, MBA; Geoffrey C. Gurtner, MD, FACS
Stanford University School of Medicine, Stanford, CA

9:12 am
30. A Nonsurgical, Lifelong Animal Model Lymphedema through Toxin-mediated Lymphatic Ablation
Jason C. Gardenier, MD; Gina T. Farias-Eisner, MD; Raghu P. Kataru, PhD; Ira L. Savetsky, MD; Jeremy S. Torrisi, BA; Gabriela D. Garcia Nores, MD; Matthew D. Nitti, BA; Geoffrey E. Hespe, BS; Babak J. Mehrara, MD
Memorial Sloan Kettering Cancer Center, New York, NY

9:30 – 10:30 am
Panel Session
Cascade Ballroom

10:30 – 11:00 am
Coffee with Exhibitors
Cascade Ballroom Foyer

11:00 – 11:40 am
Session 4 Best EPSRC Papers
Cascade Ballroom

11:00 am
31. Malignant Melanoma Thickness and Risk of Future Malignancies
Katie Young1, 2; Alexander Ives3; Tim Jones3; J. Verne3; Alex Varey2; Yoav Ben-Shlomo1
1University of Bristol, School of Social and Community Medicine, Bristol, United Kingdom, 2North Bristol NHS Trust, Department of Plastic Surgery, Bristol, United Kingdom, 3Public Health England South West, Bristol, United Kingdom

11:10 am
32. Impaired Regenerative Ability of Aged and Diabetic Adipose Derived Stem Cells is Caused by Depletion of Cell Subpopulations
Dominik Duscher1; Robert. C. Rennert1; Michael Januszyk1; Zeshaan N. Maan1; Alexander J. Whittam1; Graham G. Walmsley1,2; Michael S. Hu1; Geoffrey C. Gurtner1
1Stanford University, Division of Plastic Surgery, Stanford, CA, 2Stanford University, Institute for Stem Cell Biology and Regenerative Medicine, Stanford, CA

11:20 am
33. Reliability and Validity of RPNI Signaling of Gait Phases during Voluntary Walking
Andrej Nedic1; Daniel Ursu2; Jana Moon1; Cheryl Hassett1; R. Brent Gillespie2; Nicholas B. Langhals1; Paul Cederna1; Melanie Urbanchek1
11:30 am

34. In-Vivo Changes in Nipple-Areolar Complex Perfusion after Breast Augmentation with Implants
Niclas P. Broer; E. Teng; Katie Weichman; S. Voigt; A. Forte; S. Kwei
Klinikum Bogenhausen, Plastische Chirurgie, München, Germany

11:40 am – 1:00 pm

Lunch
Cascade Ballroom Foyer

1:00 – 2:00 pm

Guest Speaker
Cascade Ballroom

2:00 – 3:30 pm

Session 5 Group A
Cascade Ballroom I

2:00 pm

35. The Use of Co² Fractional Photothermolysis for the Treatment of Burn Scars
Benjamin Levi, MD; Amir Ibrahim, MD; Katie Mathews, BA; Brandon Wojcik, MD; Jason Gomez, BS; Shawn Fagan, MD, FACS; William Gerald Austen, Jr., MD, FACS; Jeremy Goverman, MD, FACS
Massachusetts General Hospital, Boston, MA

2:07 pm

Abhishek Chatterjee, MD, MBA¹; Tomasz Kosowski, MD, MBA²; Bryan Pyfer, BS³; Julia Tchou, MD, PhD¹; Carla Fisher, MD¹; Sirish Maddali, MD⁴
¹University of Pennsylvania, Philadelphia, PA, ²Miami Breast Center, Miami, FL, ³Dartmouth Medical School, Lebanon, NH, ⁴Plastic and Hand, Portland, ME

2:14 pm

37. A Qualitative Study of Breast Reconstruction Decision-making Among Asians
Michelle M. Chang, BS; Rose Fu, MD; Margaret Chen, MD; Christine Rohde, MD, MPH
New York Presbyterian Hospital/Cornell-Columbia, New York City, NY

2:21:00 pm

38. Short-term Adverse Outcome Comparison in Autologous Breast Reconstruction: Latissimus, Free, and TRam Flaps
Benjamin B. Massenburg, BA; Paymon Sanati-Mehrizy, BA; Michael J. Ingargiola, MD; Jonatan Hernandez Rosa, MD; Peter Taub, MD
Icahn School of Medicine at Mount Sinai, New York, NY

2:28 pm

39. A Qualitative Study of Breast Reconstruction Decision-Making Among Asians
Michelle M. Chang, BS; Rose Fu, MD; Margaret Chen, MD; Christine Rohde, MD, MPH
Columbia University Medical Center, New York, NY

2:35 pm

40. Comparison of Complication Rates between Freeze-Dried and Ready-to-Use Human Acellular Dermal Matrices in Women Undergoing Implant-Based Breast Reconstruction: A Meta-Analysis
2:42 pm

41. Perioperative Anticoagulation Increases the Risk of Complications after Cranioplasty
Eric W. Sankey, BS¹; Joseph Lopez, MD, MBA²; Shuting Zhong, BS³; Ignacio Jusue-Torres, MD⁴; Jason Liauw, MD⁵; Judy Huang, MD²; Henry Brem, MD²; Chad Gordon, DO²
¹Johns Hopkins University School of Medicine, Baltimore, MD, ²Johns Hopkins Hospital, Baltimore, MD, ³University of Illinois College of Medicine, Rockford, IL

2:49 pm

42. Volumetric Changes of the Pedicled Tram Flap and the Contralateral Native Breast in the Long Term Follow Up
Eun Key Kim, MD, PhD; Jin Sup Eom, MD, PhD; Taik Jong Lee, MD; PhD, Hee Jong Lee, MD; Young Chul Seo, MD; Ji Young Yun, MD; Sang Shin Lee, MD
Asan Medical Center, Seoul, Korea, Republic of

2:56 pm

43. Risk Analysis for Post-Operative Complications after Immediate Tissue Expander Breast Reconstruction (TE-IBR)
Gabriel Klein, MD¹; Bret T Phillips, MD, MBA²; Wilmena Landford, BS¹; A. Laurie Shroyer, PhD¹; Duc Bui, MD¹; Alex Dagum, MD¹; Sami Khan, MD¹
¹Stony Brook University Hospital, Stony Brook, NY, ²Duke University, Division of Plastic, Maxillofacial and Oral Surgery, Durham, NC

3:03 pm

44. Outcomes and Safety of Combined Abdominoplasty-Hysterectomy versus the Individual Procedures
Benjamin B. Massenburg, BA; Paymon Sanati-Mehrizy, BA; Michael J. Ingargiola, MD; Jonatan Hernandez Rosa, MD; Peter J. Taub, MD; FACS, FAAP
Icahn School of Medicine at Mount Sinai, New York, NY

3:10 pm

45. Maintenance of Certification: Do Current Practice Patterns in Craniomaxillofacial Surgery Follow Evidence-Based Medicine?
Michael S. Gart, MD¹; Arun K. Gosain, MD²
¹Northwestern University, Chicago, IL, ²Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL

3:17 pm

46. Body Image and Quality of Life: Changes with Gastric Bypass Surgery and Body Contouring
Nirav B. Patel, MD, MS, JD¹; Sven Gunther, AS, BS²; Ping Song, BA³; Chin-Shang Li, PhD⁴; Nathan A. Kludt, MD⁵; Carolyn Y.G. Lee, RN, MSN, ANP-C, PSN¹; Shannon M. Hearney, BS Candidate⁶; Kamlesh B. Patel, MD⁷; Mohamed R. Ali, MD⁸; Michael S. Wong, MD¹
¹UC Davis Medical Center, Division of Plastic Surgery, Sacramento, CA, ²UC Davis School of Medicine, Sacramento, CA, ³Virginia Commonwealth University School of Medicine, Richmond, VA, ⁴UC Davis School of Medicine, Division of Biostatistics, Sacramento, CA, ⁵Joseph R. Burlin, MD, Inc., Stockton, CA, ⁶University of California, Davis, Davis, CA, ⁷Washington University School of Medicine, St. Louis,
2:00 pm

47. Outcomes of a Hand Surgery Mission to Honduras
Carolyn Chuang, BS1; Jacob Azurdia, MD2; David Asuzu, PhD1; Kyle Ragins, BA1; Grant Thomson, MD1
1Yale School of Medicine, New Haven, CT, 2University of Toledo College of Medicine and Life Sciences, Toledo, OH

2:00 – 3:30 pm
Session 5 Group B
Cascade Ballroom II

2:07 pm

48. Characterization of Factors Leading to Heterotopic Ossification in Adult Burn Injury Using a Large Multi-Institutional Burn Database
Aviram M. Giladi, MD, MS1; Prakash Jayakumar, MBBS2; Lewis Kazis, SD3; Katie Mathews, BA4; Karen Kowalske, MD5; Dagmar Amtmann, PhD6; Jeffrey C. Schneider, MD7; Paul S. Cederna, MD1; Colleen M. Ryan, MD, FACS8; Benjamin Levi, MD1
1University of Michigan, Ann Arbor, MI, 2Massachusetts General Hospital, Boston, MA, 3Boston University, Boston, MA, 4Harvard University Medical School, Boston, MA, 5University of Texas Southwestern, Dallas, TX, 6University of Washington, Seattle, WA, 7Harvard University Medical School/Spaulding Rehabilitation Hospital, Boston, MA, 8Massachusetts General Hospital/Shriners Hospital for Children-Boston, Boston, MA

2:14 pm

49. PEMF Modulates Cytokines in the Wound Milieu to Reduce Post-Operative Inflammation: Application to Autologous Breast Reconstruction
Naikhoba C. O. Munabi, BA, June K. Wu, MD, Erin M. Taylor, MD, Jeffrey A. Ascherman, MD, Arthur A. Pilla, PhD, Christine H. Rohde, MD, MPH
Columbia University, New York, NY

2:21 pm

50. Optimizing Satisfaction with Care in Breast Reconstruction
Wess A. Cohen, MD1; Tiffany N.S. Ballard, MD2; Jennifer B. Hamill, MPH2; Hyunggin M. Kim, ScD3; Xiaoxue Chen, BS3; Stefan J. Cano, PhD2; Edwin G. Wilkins, MD, MS3; Andrea L. Pusic, MD, MHS1
1Memorial Sloan Kettering Cancer Center, New York, NY, 2University of Michigan Health System, Ann Arbor, MI, 3University of Michigan, Ann Arbor, MI, 4Plymouth University Peninsular Schools of Medicine and Dentistry, Plymouth, United Kingdom

2:28 pm

51. Immediate versus Delayed Reconstruction after Mastectomy -- An Analysis of 30 Day Post-Operative Outcomes
Paymon Sanati-Mehrity, BA; Benjamin B. Massenburg, BA; John M. Rozehnal, BA; Michael J. Ingargiola, MD; Jonatan Hernandez-Rosa, MD; Peter J. Taub, MD
Icahn School of Medicine at Mount Sinai, New York, NY

2:35 pm

52. Outcomes of Craniofacial Microsomia Treatment: Microtia Reconstruction
Rachel S. Mandelbaum, BA1; Deborah B. Martins, BS1; Sarah Park, BS1; Emily Dubina, MD1; Akira Ishiyama, MD2; James P. Bradley, MD1; Justine C. Lee, MD, PhD1
2:42 pm 53. Are Patients with Low Body Mass Index Candidates for Deep Inferior Epigastric Perforator Flaps for Unilateral Breast Reconstruction?
Pieter G. Koolen, MD; Neel A. Kantak, MD; Colette Martin, BS; Adam M. Tobias, MD; Bernard T. Lee, MD, MBA; Samuel J. Lin, MD
Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA

2:49 pm 54. Polysomnogram Parameters of Children with and without Robin Sequence Undergoing Cleft Surgery are Not Significantly Different
Justine M. McGauley, BA; Jeremy Goss, BA; Eric Adjei Boakye, MA; Margie S. Hunter, BS; Paula Buchanan, MPH, PhD; Shalini Paruthi, MD; Alexander Y. Lin, MD
Saint Louis University, St. Louis, MO

2:56 pm 55. Patients with Clefts who Undergo Sleep Studies after Surgery do not Show Significantly Improved Sleep Parameters after Adenotonsillectomy
Justine M. McGauley, BA; Jeremy Goss, BA; Eric Adjei Boakye, MA; Margie S. Hunter, BS; Paula Buchanan, MPH, PhD; Shalini Paruthi, MD; Alexander Y. Lin, MD
Saint Louis University, St. Louis, MO

3:03 pm 56. Long Term Outcomes of Total Knee Arthroplasty Following Soft Tissue Defect Reconstruction with Flaps
Grzegorz Kwiecien, MD; Grigorios Lamaris, MD, PhD; Bahar Bassiri Gharb, MD, PhD; Trevor Murray, MD; Mark F. Hendrickson, MD; James E. Zins, MD; Raymond Isakov, MD
Cleveland Clinic, Cleveland, OH

3:10 pm 57. Does Time affect Patient Satisfaction?
Wess A. Cohen, MD, Nima P. Patel, MD
Maimonides Medical Center, Brooklyn, NY

3:17 pm 58. Patient Perceived Benefit in Facial Aesthetic Procedures: The FACE-Q as a Tool to Study Botulinum Toxin Injection Outcomes
Anthony J. Taglienti, MD; Anthony Wilson, MD; Brian Chang, BA; Nancy Folsom, RN; Catherine Chang, MD; Bianca Chin, MD; Ivona Percec, MD, PhD
1Hospital of the University of Pennsylvania, Philadelphia, PA, 2Perelman School of Medicine at the University of Pennsylvania, Philadelphia, PA

2:00 – 3:30 pm Session 5 Group C
Elliott Bay

2:00 pm 59. Quantification of Operative Time and the Factors that Prolong Microsurgical Breast Free Flap Procedures
Nelson Rodriguez-Unda, MD; Jose M. Flores, MPH; Carisa M. Cooney, MPH; Gedge D. Rosson, MD
Johns Hopkins School of Medicine, Baltimore, MD
60. The Impact of Hormonal Therapy on Outcomes of Total Skin-Sparing Mastectomy and Immediate Tissue Expander-Based Breast Reconstruction
Frederick Wang, MD; Anne Warren Peled, MD; Barbara Fowble, MD; Michael Alvarado, MD; Cheryl Ewing, MD; Laura Esserman, MD, MBA; Robert Foster, MD; Hani Sbitany, MD
University of California, San Francisco, San Francisco, CA

61. Effect Modifiers of Radiation Risks in Total Skin-Sparing Mastectomy with Immediate Tissue Expander-Implant Reconstruction
Frederick Wang, MD; Anne Warren Peled, MD; Barbara Fowble, MD; Michael Alvarado, MD; Cheryl Ewing, MD; Laura Esserman, MD, MBA; Robert Foster, MD; Hani Sbitany, MD
University of California, San Francisco, San Francisco, CA

62. The Bipedicle-Conjoined Deep Inferior Epigastric Perforator Flap for Unilateral and Bilateral Breast Reconstruction: A Concept in Evolution
Pieter G. Koolen, MD1; Bernard T. Lee, MD, MBA1; Samuel J. Lin, MD1; Heather Erhard, MD2; David T. Greenspun, MD, MSc3
1Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, 2Albert Einstein College of Medicine, Bronx, NY, 3Greenwich Hospital, Greenwich, CT

63. A Quantitative Analysis of Different Botulinum Toxin Formulations: A Randomized Double Blind Prospective Clinical Trial of Comparative Dynamic Strain Reduction
Anthony J. Wilson, MD; Brian Chang, BS; Bianca C. Chin, MD; Anthony J. Taglinenti, MD; Nancy Folsom, RN; Ivona Percec, MD, PhD
University of Pennsylvania, Philadelphia, PA

64. Assessing Recurrence Rates Following Wide Local Excision of Head and Neck Malignant Melanoma: Immediate versus Delayed Reconstruction
Tiago R. Matos, MD MSc2; Pieter G. Koolen, MD1; Ahmed M. S. Ibrahim, MD1; Jie Sun, BA3; Bernard T. Lee, MD, MBA1; Robert A. Frankenthaler, MD1; Samuel J. Lin, MD1
1Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, MA, 2Brigham and Women’s Hospital, Harvard Medical School, Boston, MA, 3Harvard School of Dental Medicine, Boston, MA

65. Free Flap Take-backs Following Microvascular Thrombosis: Evidence-based Strategies to Improve Outcomes and Expedite Salvage
Michael N. Mirzabeigi, MD; David L. Colen, MD; Jonas A. Nelson, MD; Suhail Kanchwala, MD; Stephen J. Kovach, MD; Joseph M. Serletti, MD; Liza C. Wu, MD
University of Pennsylvania, Philadelphia, PA

66. Is Vicryl Mesh Really a Safe Alternative to Acellular Dermis in Tissue Expander-based Breast Reconstruction?
Stacy Henderson, MD; Brett Michelotti, MD; Susie Sun, MD; Cathy Henry, MD; Dino Ravnic, MD; T. Shane Johnson, MD; Donald Mackay, MD; John Potochny, MD
Penn State Milton S. Hershey Medical Center, Hershey, PA
2:56 pm

67. The Clinical Efficacy and Financial Impact of Laser-assisted Indocyanine Green Angiography on Implant-based Breast Reconstruction at a Large Academic Medical Center
Christin A. Harless, MD; Sue Visscher, PHD; Steven R. Jacobson, MD
Mayo Clinic, Rochester, Rochester, MN

3:03 pm

68. Comparative Study of Liposomal Bupivacaine versus Paravertebral Block for Pain Control Following Mastectomy with Immediate Tissue Expander Reconstruction
Jad M. Abdelsattar, MBBS; Judy C. Boughey, MD; Anita T. Mohan, MBBS; Prakriti Gaba, BS; Bill Tran, MD; Scott Harmsen, MD; Christopher J. Jankowski, MD; James W. Jakub, MD; Tina J. Hieken, MD; Amy C. Degnim, MD; David R. Farley, MD; Karim Bakri, MBBS; Steven R. Jacobson, MD; Valerie Lemaine, MD; Renata L. Maricevich, MD; Michel Saint-Cyr, MD
Mayo Clinic, Rochester, MN

3:10 pm

69. Intrathoracic Muscle Flaps: Comparison of Outcomes for Infection versus Prophylactic Airway Coverage
Ziyad S. Hammoudeh, MD; Amelia C. Van Handel, BS; Akhavan A. Arya, BS; Francis C. Nichols, III, MD; Brian T. Carlsen, MD; Steven L. Moran, MD
Mayo Clinic, Rochester, MN

3:17 pm

70. Immediate Implant Exchange During Acute Infection in the Setting of Breast Reconstruction
Russell E. Ettinger, MD; Shailesh Agarwal, MD; Theodore A. Kung, MD; David L. Brown, MD University of Michigan, Ann Arbor, MI

3:24 pm

71. T-regulatory Cell Proliferation after Lymphatic Injury Regulates Immune Function in Lymphedema
Ira L. Savetsky, MD; Swapna Ghanta, MD; Nicholas J. Albano, BS; Jason C. Gardenier, MD; Jeremy S. Torrisi, BA; Gabriela D. Garcia Nores, MD; Matthew D. Nitti, BA; Geoffrey E. Hespe, BS; Raghu P. Kataru, PhD; Babak J. Mehrara, MD, FACS
Memorial Sloan Kettering Cancer Center, New York, NY

3:30 – 4:00 pm
Coffee with Exhibitors and Poster Presentations
Cascade Ballroom Foyer & Puget Sound Room

4:00 – 5:30 pm
Session 6 Group A
Cascade Ballroom I

4:00 pm

72. Endothelial Cells from Capillary Malformations are Enriched for Somatic GNAQ Mutations and Aberrantly Express PDGFRβ
Javier A. Couto, BS; Lan Huang, PhD; Matthew P. Vivero, BA; Nolan Kamitaki, BA; Reid A. Maclellan, MD, MMSc; John B. Mulliken, MD; Joyce Bischoff, PhD; Matthew L. Warman, MD; Arin K. Greene, MDc; MMSc
Boston Children's Hospital, Harvard Medical School, Boston, MA

4:07 pm

73. A Somatic MAP3K3 Mutation is Associated with Verrucous Venous Malformation
Javier A. Couto, BS; Matthew P. Vivero, BA; Harry P.W. Kozakewich, MD; Amir H. Taghinia, MD; John B. Mulliken, MD; Matthew L. Warman,
4:14 pm  
**74. Palate and Mandibular Form are Regulated by Actin Capping Protein CAPZB Function**
Kusumika Mukherjee, PhD¹; Kanaa Ishii, MD¹; Michael J. Grimaldi, B.A.¹; Christina Nguyen, BS²; Michael Talkowski, PhD¹; James Gusella, PhD¹; Richard Maas, MD, PhD²; Cynthia C. Morton, PhD²; Eric C. Liao, MD, PhD¹  
¹Massachusetts General Hospital, Boston, MA, ²Brigham and Women's Hospital, Boston, MA

4:21 pm  
**75. Identification of Mandibular Growth Center via Clonal Cell Analysis**
Irving TC Ling, MBBS, MRCSEd; Lucie Rochard, PhD; Eric C. Liao, MD, PhD  
Massachusetts General Hospital, Harvard Medical School, Boston, MA

4:28 pm  
**76. Hair Follicle Specific ALK2/ACVR1 Critically Regulates Stem Cell Maintenance and Skin Development**
Michael Sorkin, MD; Shailesh Agarwal, MD; Shawn Loder, BS; Cameron Brownley, BS; Kavitha Ranganathan, MD; Jon Li, MD; Shuli Li, PhD; Paul Cederna, MD; Benjamin Levi, MD  
University of Michigan, Ann Arbor, MI

4:35 pm  
**77. Modeling Pfeiffer Syndrome in Zebrafish by CRISPR-targeted Homologous Recombination**
Joanna P. Tomaszewski, MS; Arun K. Gosain, MD; Jolanta M. Topczewska, PhD  
Ann & Robert H. Lurie Children’s Hospital of Chicago, Chicago, IL

4:42 pm  
**78. Generating an irf6 Mutant Model for Rapid Analysis of Human Genetic Variants, Elucidate Gene Regulatory Network, and Drug Discovery to Mitigate Cleft Lip and Palate**
Christina A. Nguyen, BS; Edward B. Li, BA; Kusumika Mukherjee, PhD; Lisa Gfrerer, MD; Eric C. Liao, MD, PhD  
Massachusetts General Hospital, Boston, MA

4:49 pm  
**79. Whole-Proteome Analysis of Craniosynostotic Tissue Suggests a Link Between Inflammatory Signaling and Premature Suture Fusion**
Sarah Lyon, BS¹; Michael Januszyk, MD²; Anoop Mayampurath, PhD¹; Darrel J. Waggoner, MD¹; David M. Frim, MD¹; Tong-Chuan He, MD, PhD¹; Russell R. Reid, MD PhD¹  
¹University of Chicago, Chicago, IL, ²Stanford University, Stanford, CA

4:56 pm  
**80. TWIST1 Silencing Enhances in vitro and in vivo Osteogenic Differentiation of Human Adipose Derived Stem Cells by Triggering Activation of BMP-ERK/FGF Signaling and TAZ Upregulation**
Kshemendra Senarath-Yapa, MA, MBBChir, MRCS¹; Natalina Quarto, PhD¹; Andrea Renda, PhD²; Michael Longaker, MD MBA¹  
¹The Hagey Laboratory for Pediatric Regenerative Medicine, Stanford University, Stanford, CA, ²Dipartimento di Scienze Biomediche Avanzate, Universita’ degli Studi di Napoli, Napoli, Italy
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<tr>
<th>Time</th>
<th>Presentation</th>
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<td>5:03 pm</td>
<td><strong>81. Impact of koliber Mutation on Patency of Cranial Suture in Zebrafish</strong></td>
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<td>Jolanta M. Topczewska, PhD; Rupa Mirmira, BS; Joanna P. Tomaszewski, MS; Rebecca Anderson, PhD candidate;</td>
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<td>Jacek Topczewski, PhD; Arun Gosain, MD</td>
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<td>Northwestern Feinberg School of Medicine, Chicago, IL</td>
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<td>5:10 pm</td>
<td>**82. BMP-2 Use in Alveolar Cleft Repair is Associated with an Increased Incidence of Postoperative Nasal</td>
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<td>Jeremy A. Goss, BA; Margie S. Hunter, BS; Alexander Y. Lin, MD</td>
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<td>Saint Louis University School of Medicine, St. Louis, MO</td>
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<td>5:17 pm</td>
<td><strong>83. Connective Tissue Growth Factor (CTGF/CCN2) is Essential for Secondary Palatogenesis</strong></td>
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<td>Alex G. Lambi, BA; Joseph T. Tarr, BA; David I. Hindin, MD; Christina Mundy, PhD; Honey Hendesi, PhD;</td>
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<td>Steven N. Popoff, PhD; James P. Bradley, MD</td>
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<td>¹Temple University School of Medicine, Philadelphia, PA, ²Temple University Hospital, Philadelphia, PA</td>
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<td>4:00 – 5:30 pm</td>
<td><strong>Session 6 Group B</strong> Cascade Ballroom II</td>
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<td>4:00 pm</td>
<td>**84. Surgical Correction for Metopic Craniosynostosis: A 3D Photogrammetric Analysis of Cranial Vault</td>
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<td>Outcomes</td>
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<td>Olivia E. Linden, BA; Vanessa M. Baratta, BA; Margaret M. Byrne, RN; Petra M. Klinge, MD, PhD;</td>
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<td>Stephen R. Sullivan, MD, MPH; Helena OB Taylor, MD</td>
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<td>Warren Alpert Medical School of Brown University, Rhode Island</td>
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<td>Hospital, Hasbro Children’s Hospital, Providence, RI</td>
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<td>4:07 pm</td>
<td><strong>85. Brain Electrophysiology in Craniosynostosis and Deformational Plagiocephaly</strong></td>
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<td>Jenny F. Yang, BS; Eric D. Brooks, BS; Peter W. Hashim, MD; Roberto Travieso, MD; Jordan Terner, MD;</td>
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<td>Hannah Reuman, BA; Karen Law, BA; Emily Levy, BA; Linda C. Mayes, PhD; James C. McPartland, PhD;</td>
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<td>John A. Persing, MD</td>
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<td>Yale University School of Medicine, New Haven, CT</td>
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<td>4:14 pm</td>
<td><strong>86. Biomechanical Comparison of Lag Versus Bicortical Screw Fixation in Metacarpal Fractures</strong></td>
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<td>Priya Lewis, BA; Benjamin Gerke, BS; Zachary Filip, MD; Serkan Inceoglu, PhD; Jane Dhillon, MD; Mark</td>
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<td>Martin, MD, DMD</td>
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<td>Loma Linda University, Loma Linda, CA</td>
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<td>4:21 pm</td>
<td><strong>87. An Automated Cleft Speech Evaluator Using Speech Recognition Software</strong></td>
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<td>James R. Seaward, FRCS(Plast.)¹; Julie Cook, MS, CCC-SLP²; Cortney Van’T Slot, MS, CCC-SLP²; Rami Hallac,</td>
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<td>PhD; Megan Vucovich, MD¹; Alex A. Kane, MD¹</td>
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<td>¹University of Texas Southwestern Medical Center, Dallas, TX,</td>
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<td>²Children’s Medical Center, Dallas, TX</td>
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<td>4:28 pm</td>
<td><strong>88. Spontaneous Forehead Remodeling after Posterior Vault Reconstruction in Sagittal Synostosis</strong></td>
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4:35 pm

89. Optimization of Pathologic Fracture Healing after Radiotherapy Utilizing Amifostine in Combination with Deferoxamine
Hannah C. Ratliff, BS candidate; Alexis Donneys, MD, MS; Yekaterina Polyatskaya, MD; Noah S. Nelson, BS; Cheyenne A. Vasseli, BS; Sagar S. Deshpande, BS; Jose J. Rodriguez, MD; Joshua P. Spiegel, BS; Erin E. Page, BS; Tulsi Patel, BS; Steven R. Buchman, MD
University of Michigan, Ann Arbor, MI

4:42 pm

90. Craniofacial Anomalies Result from Morphogenetic Defects in Cellular Positional Cues as Revealed by Genetic Analysis of Wnt Signaling
Lucie J. Rochard, PhD; Stefanie Monica, BS; Yawei Kong, PhD; Michael Grimaldi, BS; Eric C. Liao, MD, PhD
Massachusetts General Hospital, Boston, MA

4:49 pm

91. Autophagy Mediates Environment-Gene Interactions in Orofacial Cleft Pathogenesis
Lucie J. Rochard, PhD¹; Edward Li, BS¹; Christina Nguyen, BS¹; James F. Gusella, PhD¹; Richard Maas, MD, PhD²; Cynthia Morton, PhD²; Michael Talkowski, PhD¹; Eric C. Liao, MD, PhD¹
¹Massachusetts General Hospital, Boston, MA, ²Brigham and Women's Hospital, Boston, MA

4:56 pm

92. Using a Novel Transgenic Mouse to Identify Endochondral Ossification Precursor Cells and to Induce Bone Growth
Shawn Loder, BS; Shailesh Agarwal, MD; Cameron Brownley, BS; John Li, MD; Michael Sorkin, MD; Shuli Li, PhD; Jonathan Peterson, BA; Yuji Mishina, PhD; Benjamin Levi, MD
University of Michigan, Ann Arbor, MI

5:03 pm

93. A Novel Analogue of Oxysterol Promotes in vitro and in vivo Bone Regeneration
Kameron S. Rezzadeh, BA; Andres Segovia, MD; Akishige Hokugo, DDS, PhD; Reza Jarrahy, MD
UCLA Ronald Reagan Medical center, Los Angeles, CA

5:10 pm

94. Patient-Specific Tissue Engineered Constructs for Ear Reconstruction: Long Term (6 month) Results
Benjamin P. Cohen, BS¹; Rachel C. Hooper, MD²; Jennifer Puetzer, PhD¹; Rachel Nordberg, MEng¹; Ope A. Asanbe, MD²; Peipei Zhang, PhD²; Lawrence J. Bonassar, PhD¹; Jason A. Spector, MD, FACS²
¹Cornell University, Ithaca, NY, ²Weill Cornell Medical College, New York, NY

5:17 pm

95. Combined Amifostine and Deferoxamine Therapy Preserves Biomechanics and Improves Union Rate in a Model of Distraction Osteogenesis Following Radiotherapy
Noah S. Nelson, BS; Yekaterina Polyatskaya, MD; Alexander R. Zheutlin, BS; Joseph E. Perosky, MS; Alexis Donneys, MD, MS; Jose J. Rodriguez, MD; Sagar S. Deshpande, BS; Kenneth M. Kozloff, PhD;
5:24 pm  
96. Lymphatic Dysfunction Amplifies the Pathological Effects of Obesity in Skin Inflammation  
Ira L. Savetsky, MD; Nicholas J. Albano, BS; Jason C. Gardenier, MD; Jeremy S. Torrisi, BA; Gabriela D. Garcia Nores, MD; Matthew D. Nitti, BA; Geoffrey E. Hespe, BS; Raghu P. Kataru, PhD; Babak J. Mehrara, MD, FACS  
Memorial Sloan Kettering Cancer Center, New York, NY

4:00 – 5:30 pm  
Session 6 Group C  
Elliott Bay

4:00 pm  
97. Prevention of Vein Intimal Hyperplasia with Photochemical Tissue Passivation in a Porcine Model  
Saiqa I. Khan, MD; Harry M. Salinas, MD; Amanda Meppelink, BS; Michael C. McCormack, MBA; Mark A. Randolph, MAS; Robert W. Redmond, PhD; William G. Austen, Jr., MD  
Massachusetts General Hospital - Harvard Medical School, Boston, MA

4:07 pm  
98. Alternatively Activated M2 Macrophages Improve Autologous Fat Graft Survival via Induction of Angiogenesis in a Preclinical Model.  
Simon Gebremeskel, BScH; Kyle Phipps, PhD; Joshua Gillis, MD; Paul Hong, MD, FRCSC; Brent Johnston, PhD; Michael Bezuhly, MD, FRCSC  
Dalhousie University, Halifax, NS, Canada

4:14 pm  
Stefanie Monica, BS¹, Richard Harland, PhD², Eric Liao, MD,PhD¹  
¹Massachusetts General Hospital, Boston, MA, ²University of California, Berkeley, Berkeley, CA

4:21 pm  
100. Creation and Validation of a Condition-Specific VTE Risk Assessment Tool for Open Ventral Hernia Repair Patients  
Christopher J. Pannucci, MD MS¹, Marten N. Basta, BA², John P. Fischer, MD², Stephen J. Kovach, MD²  
¹University of Utah, Salt Lake City, UT, ²University of Pennsylvania, Philadelphia, PA

4:28 pm  
Yekaterina Polyatskaya, MD; Noah S. Nelson, BS; Jose J. Rodriguez, MD; Alexander R. Zheutlin, BS; Sagar S. Deshpande, BS; Peter A. Felice, MD; Alexis Donneys, MD, MS; Steven R. Buchman, MD  
University of Michigan, Ann Arbor, MI

4:35 pm  
102. Developing a Noninvasive High-efficacy Technique for the Treatment of Infantile Hemangioma using a Nanoparticle-Conjugated Delivery System  
Hakan Orbay, MD, PhD; Lindsey Harrison, BS; Kamaljit Devi, BS; Yuanpei Li, PhD; Wenwu Xiao, PhD; Kit Lam, MD, PhD; David E. Sahar, MD  
UCDavis, Sacramento, CA
103. PUMA Regulates Radiation Induced Fibrosis by Activating Epithelial to Mesenchymal Transition through Snail1 Expression
Nicholas Brownstone, BA; William Hambley, BA; Karan Mehta, BS; Nakul Rao, MD; Chin Park, MD; Rohini Kadle, BS; Anna Zhou, BA; Camille Kim, BS; Abigail Sartor, BA; Piul Rabbani, PhD; Pierre Saadeh, MD; Daniel Ceradini, MD
NYU Langone Medical Center, New York, NY

4:49 pm

104. Co-Implantation of Auricular Chondrocytes and Mesenchymal Stem Cells for the Generation of Auricular Elastic Neocartilage: Strategy Towards the Translation of Tissue Engineered Ears
Ope A. Asanbe, MD; Benjamin P. Cohen, BA; Peipei Zhang, PhD; Wilmina N. Landford, BA; Adam M. Jacoby, BA; Lawrence J. Bonassar, PhD; Jason A. Spector, MD, FACS
1Weill Cornell Medical College, New York, NY, 2Cornell University, Ithaca, NY

4:56 pm

105. Efficacy and Economic Advantage of Exparel Intercostal Nerve Blocks for Pain Management in 1st Stage Implant Based Breast Reconstruction Patients
Suzette G. Miranda, MD; Thomas Gallagher, BA; Hakim K. Said, MD
University of Washington, Seattle, WA

5:03 pm

106. 9-Cis-Retinoic Acid Ameliorates Surgically Induced Lymphedema in The Mouse Hindlimb Model
Athanasios Bramos, MD; Young-Kwon Hong, PhD; Alex K. Wong, MD
Keck School of Medicine of USC, Los Angeles, CA

5:10 pm

107. Efficient Topical Gene Silencing via Self-Assembling Engineered Lipoproteoplex
Anna T. Zhou, BA; William Rifkin, BS; Haresh More, MTechn; Nikita Srivastava, BS; Muhammad H. Junejo, BS; Rohini L. Kadle, BS; Camille Kim, BS; Rita A. Sartor, BA; Nicholas D. Brownstone, BA; Jin K. Montclare, PhD; Pierre B. Saadeh, MD; Piul S. Rabbani, PhD; Daniel J. Ceradini, MD
1New York University, New York, NY, 2Polytechnic Institute of New York University, New York, NY

5:17 pm

108. Vascular Endothelial Growth Factor Signaling is affected by Changes in the ß-Adrenergic Receptor Pathways in Hemangioma Stem Cells
Alex Kitajewski, BA; Justin Kung, BA; Andrew K. Edwards, PhD; Carrie J. Shawber, PhD; Jan K. Kitajewski, PhD; June K. Wu, MD
Columbia University, New York, NY

5:30 – 6:30 pm Poster Viewing Reception
Puget Sound

7:00 – 9:00 pm Members Dinner
The Flight Museum

Saturday, May 16, 2015

7:30 am – 12:30 pm Registration
Cascade Ballroom Foyer
7:30 am – 12:00 pm  Speaker Ready Room
Cascade Ballroom Foyer

7:30 – 10:00 am  Exhibits
Cascade Ballroom Foyer

7:30 – 8:30 am  Continental Breakfast with Exhibitors
Cascade Ballroom Foyer

8:30 – 10:00 am  Session 7 Group A
Cascade Ballroom I

8:30 am  

109. Reconstruction of Abdominal Wall Defects Using Neurotized Vascularized Composite Allografts
Justin M. Broyles, MD; Karim A. Sarane, MD; Sami H. Tuffaha, MD; Damon S. Cooney, MD, PhD; W.P. Andrew Lee, MD; Gerald Brandacher, MD; Justin M. Sacks, MD
The Johns Hopkins University School of Medicine, Baltimore, MD

8:37 am  

110. Cellular Senescence Onset Coincides with Axonal Regenerative Arrest in Long Acellular Nerve Grafts
Louis H. Poppler, MD; Xueping Ee, MD; Lauren Prange, BS; Gwendolyn Hoben, MD; Daniel A. Hunter, RA; Ying Yan, MD, PhD; Sheila Stewart, PhD; Susan E. Mackinnon, MD; Matthew D. Wood, PhD
Washington University in St. Louis School of Medicine, St. Louis, MO

8:44 am  

111. Notch Signaling In Senescent Schwann Cells: A Target For Improving Nerve Regeneration
Gwendolyn M. Hoben, MD, PhD; Xueping Ee, MD; Lauren Prange, BS; Daniel Hunter, RA; Amy M. Moore, MD; Sheila Stewart, PhD; Susan E. Mackinnon, MD; Matthew D. Wood, PhD
Washington University School of Medicine, St. Louis, MO

8:51 am  

112. Evaluation of Viability, Structural Integrity and Functional Outcome after Whole Eye Transplantation
Yang Li, MD, PhD1; Chiaki Komatsu, MD1; Bo Wang, BS1; Maxine R. Miller, MD1; Hongkun Wang, MD1; Yolandi van der Merwe, BEng1; Leon C. Ho, BEng1; Nataliya Kostereva, PhD1; Wensheng Zhang, MD, PhD1; Bo Xiao, MD, PhD1; Edward H. Davidson, MA, MBBS1; Mario G. Solari, MD1; Michael B. Steketee, PhD1; Shuzhong Guo, MD, PhD2; Lawrence Kagemann, MD1; Gadi Wollstein, MD1; Joel S. Schuman, MD1; Kevin C. Chan, PhD1; Vijay S. Gorantla, MD, PhD1; Kia M. Washington, MD1
1University of Pittsburgh, Pittsburgh, PA, 2Fourth Military Medical University, Xi’an, China

8:58 am  

113. Vascularized Bone Marrow Transplantation As A New Approach For Bone Marrow Transplantation
Yingjun Su, MD, PhD; Jianwu Chen, MD; Shuzhong Guo, MD, PhD
Department of Plastic and Reconstructive Surgery, Xijing Hospital, Fourth Military Medical University, Xi’an, China

9:05 am  

114. Defining The Role Of Skin And Mucosal Biopsy In Facial Allotransplantation.
Arif Chaudhry, MD1; Michael Sosin, MD2; Branko Bojovic, MD2; Michael R. Christy, MD2; Cinthia B. Drachenberg, MD3; Eduardo D. Rodriguez,
9:12 am


Neil Fairbairn, MD; Wasim Q. Malik, PhD; Neelakantan Sunder, MD; Robert Ajemian, PhD; Ashley Turza, PhD; Victoria Vega, PhD; Jeena Easow, MD; Emilio Bizi, MD, PhD; Emory Brown, MD, PhD; Jonathan M. Winograd, MD

1Massachusetts General Hospital, Boston, MA, 2Massachusetts Institute of Technology, Cambridge, MA

9:19 am

116. The Impact and Mechanisms of Antibody-Mediated Rejection in Vascularized Composite Allotransplantation

Devin T. Miller, BS; Denver Lough, MD, PhD; Barbara Kern, MD; Georg J. Furtmüller, MD; Giorgio Raimondi, PhD; W.P. Andrew Lee, MD; Zhaoli Sun, MD, PhD; Gerald Brandacher, MD

The Johns Hopkins School of Medicine, Baltimore, MD

9:26 am

117. Microenvironmental Cues Enhance Indoleamine 2,3-dioxygenase Expression to Facilitate Mesenchymal Stem Cell-Mediated Immunosuppression

Rohini L. Kadle, BS; Marc A. Soares, MD; Nakul Rao, MD; April Duckworth, MD; Chin Park, MD; Joshua David, BS; Christopher D. Lopez, BA; Anna Zhou, BA; Nicholas Brownstone, BA; Rita Abigail Sartor, BS; Camille Kim, BS; Piul S. Rabbani, PhD; Daniel J. Ceradini, MD

NYU, New York, NY

9:33 am


Mike Hendry, MD, MSc1; Eva Placheta, MD2; Cecilia Alvarez-Veronesi, MAsc1; Tessa Gordon, PhD1; Gregory Borschel, MD1

1University of Toronto, Toronto, ON, Canada, 2Medical University of Vienna, Vienna, Austria, Austria

9:40 am

119. Development of a Non-invasive Diagnostic and Predictive Tool for Acute Rejection in Vca Using Differential Cytokine Profiling

Nakul Rao, MD; Piul Rabbani, PhD; Chin Park, MD; Daniel Ceradini, MD

NYU, New York, NY

9:47 am

120. A Critical Analysis of Peripheral Nerve Regeneration in a Chronic Denervation Rat Model Using a Sustained Biomaterial-Based Delivery of GDNF, Chondroitinase, and GDNF+Chondroitinase Growth Factors

Karim A. Sarhane, MD, MSc; Sami H. Tuffaha, MD; Kellin Krick, PhD candidate; Chris Cashman, MD/PhD candidate; Joshua D. Budilhardo, B.Sc; Justin M. Broyles, MD; Russel Martin, PhD candidate; James Abraham, MA; Zuhaib Ibrahim, MD; Ruifa Mi, MD, PhD; Damon S. Cooney, MD, PhD; Ahmet Hoke, MD, PhD; WP Andrew Lee, MD; Hai-
8:30 – 10:00 am  
**Session 7 Group B**  
*Cascade Ballroom II*

### 8:30 am

**121. Human Adipose-Derived Stem Cells and Wound Healing: Enhanced Cell Delivery and Wound Healing by Gelatin Microcryogels in a Nude Mice Model**

Lin Zhu, MD; Yang Zeng, PhD; Qin Han, PhD; Wei Liu, PhD; Xiaojing Mao, MD; Yaqian Li, MD; Nanze Yu, MD; Siyu Feng, PhD; Qinyouen Fu, PhD; Xiaojun Wang, MD; Yanan Du, PhD; Robert Chunhua Zhao, PhD

1Department of Surgery, Division of Plastic Surgery, Peking Union Medical College Hospital, Beijing, China, 2Department of Biomedical Engineering, School of Medicine, Tsinghua University, Beijing, China, 3Center of Excellence in Tissue Engineering, Institute of Basic Medical Sciences and School of Basic Medicine, Chinese Academy of Medical Sciences & Peking Union Medical College, Beijing, China, 4School of Biological Science and Medical Engineering, Beihang University, Beijing, China

### 8:37 am

**122. RNA Sequencing for Identification of Differentially Expressed Non-Coding Transcripts During Adipogenic Differentiation of Adipose-Derived Stromal Cells**

Anna Luan, MS; Kevin J. Paik, AB; Jiang Li, MS; Elizabeth R. Zielins, MD; David A. Atashroo, MD; Andrew Spenceley, BS; Arash Momeni, MD; Michael T. Longaker, MD, MBA; Kevin C. Wang, MD, PhD; Derrick C. Wan, MD

Stanford University School of Medicine, Stanford, CA

### 8:44 am

**123. Enhancing Outcomes Following Neonatal Nerve Injury with N-acetyl Cysteine**

Daniel Demsey, MD; Joseph Catapano, MD; David Scholl, BSc; Cameron Chiang, BSc; Tessa Gordon, PhD; Gregory Borschel, MD

The Hospital for Sick Children, Toronto, ON, Canada

### 8:51 am

**124. Mitigation Of Hypertrophic Scar Contraction And Stiffening Via An Elastomeric Biodegradable Scaffold**

Mohamed M. Ibrahim, MD; Elizabeth R. Lorden, BS; Kyle J. Miller, BA; Latif Bashirov, MD; Ellen Hammett, BS; Manuel Medina, MD; Youngmee Jung, BS; Ali Rastegarpou, MD; Angelica M. Selim, MD; Kam W. Leong, PhD; Howard Levinson, MD

1The Division of Plastic and Reconstructive Surgery, Department of Surgery, Duke University School of Medicine, Durham, NC, 2Department of Biomedical Engineering, Duke University, Durham, NC, 3Korea Institute of Science and Technology Biomaterials Research Center, Korea, Korea, Republic of, 4Duke University Medical Center, Department of Pathology, Durham, NC, 5Columbia University, Department of Biomedical Engineering, New York, NY

### 8:58 am

**125. Development of a Medical Device for Clinical Translation of a Novel PEG Fusion Method for Immediate Physiological Recovery after Peripheral Nerve Injury**

David C. Riley, BS; Curt A. Deister, PhD; Richard B. Boyer, BS; Charlie L. Rodriguez-Feo, BS; Tu-Anh N. Ha, BS; Bruce R. Shack,
126. An Electrospun Fiber-Hydrogel Composite with Interfacial Bonding for Soft Tissue Regeneration in vivo
Georgia C. Yalanis, MSc1; Sashank Reddy, MD2; Russ Martin, BS2; Jisuk Choi, PhD2; Gerald Brandacher, MD1; Hai-Quan Mao, PhD2; Justin M. Sacks, MD1
1Johns Hopkins University School of Medicine, Baltimore, MD, 2Johns Hopkins University Whiting School of Engineering, Baltimore, MD

9:12 am

Kasra Tajdaran, MASc1; Matthew D. Wood, PhD2; Molly S. Shoichet, PhD1; Tessa Gordon, PhD1; Gregory H. Borschel, MD, FACS, FAPP1
1University of Toronto, Toronto, ON, Canada, 2Washington University, St. Louis, MO

9:19 am

128. Biopatterned Recombinant Human Bone Morphogenetic Protein 2 Does Not Induce Pansynostosis or Growth Restriction in the Immature Craniofacial Skeleton
Sameer Shakir, BS1; Osama Basri, DMD1; James J. Cray, PhD2; Sanjay Naran, MD1; Darren M. Smith, MD2; Zoe M. Maclsaac, MD1; Evan B. Katznel, MD1; Weinberg M. Seth, PhD1; Mark P. Mooney, PhD1; Joseph E. Losee, MD1; Cooper M. Greg, PhD1
1University of Pittsburgh, Pittsburgh, PA, 2Medical University of South Carolina, Charleston, SC, 3Hospital for Sick Children, Toronto, ON, Canada

9:26 am

129. Effects of Growth Hormone Therapy on Axonal Regeneration, Muscle Atrophy, Schwann Cell Proliferation and End-Organ Reinnervation Following Nerve Injury and Repair
Sami Tuffaha, MD; Joshua Budihardjo, BSc; Karim Sarhane, MD; Mohammed Khoshein, MD; Diana Song, MD; Justin Bryoles, MD; Roberto Salvatori, MD; Kenneth Means, MD; James Higgins, MD; Jaimie Shores, MD; Ahmet Hoke, MD; Damon Cooney, MD PhD; W.P. Andrew Lee, MD; Gerald Brandacher, MD
Johns Hopkins Medical Institutions, Baltimore, MD

9:33 am

130. Tissue Engineered, 3D Collagen Microsphere Scaffold (MSS) Expedites Cellular Invasion and Neovascularization
Peipei Zhang, MD, PhD; Ope Asanbe, MD; Wilmina Landford, MD; Adam Jacoby, BA; Rachel Hooper, MD; Abraham Stroock, PhD; Jason Spector, MD, FACS
Weill Cornell Medical College, New York, NY

9:40 am

131. Muscle-Specific ECM Derived Hydrogel for 3D Printing Facilitates Differentiation of Adipose Derived Stem Cells into Muscle Cells
Solmaz N. Leilabadi, MD, MHA; Alexandra L. Rutz, MS; Sumanas W. Jordan, MD, PhD; Ian Chow, BS; Thomas A. Mustoe, MD; Ramille N. Shah, PhD; Seok Jong Hong, PhD; Robert D. Galiano, MD
Northwestern University, Chicago, IL
9:47 am 132. A Multifactorial Histologic Analysis of the Foreign Body Response to Intradermal and Subcutaneous Implants
Eugenia H. Cho, BS¹; Alina Boico, BS¹; Lin Liao¹; Janna K. Register, PhD¹; Natalie A. Wisniewski, PhD²; Kristen Helton, PhD²; Tuan Vo-Dinh, PhD¹; Gregory Palmer, PhD¹; Bruce Klitzman, PhD¹
¹Duke University, Durham, NC, ²PROFUSA Corp, San Francisco, CA

8:30 – 10:00 am Session 7 Group C
Elliott Bay

8:30 am 133. Natural Killer Cells Promote Differentiation of Human Adipose-Derived Stem Cells in vitro
Kameron S. Rezzadeh, BA; Akishige Hokugo, DDS, PhD; Anahid Jewett, PhD, MPH; Anna Koziowska, PhD; Andres Segovia, MD; Patricia Zuk, PhD; Zheyu Zhang, BA; Reza Jarrahy, MD
UCLA Ronald Reagan Medical center, Los Angeles, CA

8:37 am 134. Adipose-derived Stem Cells after Paclitaxel Treatment Demonstrate Decreased Function and Suppression of Breast Cancer Cell Viability
William M. Harris, MD; Michael A. Plastini, MD; Telisha Ortiz, MD; Nikolas Kappy, MD; Jefferson Benites, BS; Shaohua Chang, PhD; A. Lelani Fahey, MD; Martha S. Matthews, MD; Jeffrey P. Carpeneter, MD; Spencer Brown, PhD; Ping Zhang, PhD
Department of Surgery- Cooper University Hospital and Cooper Medical School of Rowan University, Camden, NJ

8:44 am 135. Human Adipose Tissue-Derived Stromal/Stem Cells Promote Migration and Early Metastasis of Head & Neck Cancer Xenografts
Walter J. Joseph, III, BS¹; Eduardo A. Lacayo, MD²; Muralidharan Anbalagan, PhD²; Jeffrey M. Gimble, MD/PhD³; Ryan K. Jones, MA²; Paul L. Friedlander, MD²; Brian G. Rowan, PhD²; Ernest S. Chiu, MD¹
¹NYU Langone Medical Center, New York, NY, ²Tulane University School of Medicine, New Orleans, LA, ³Louisiana State University, Baton Rouge, LA

Rica Tanaka, MD, PhD¹; Kayo Arita, PhD¹; Satoshi Fujimura, PhD¹; Kayoko Okada, PhD¹; Makiko Kado, MD¹; Takayuki Asahara, MD, PhD²; Hiroshi Mizuno, MD, PhD¹
¹Juntendo University School of Medicine, Tokyo, Japan, ²Tokai University School of Medicine, Isehara, Japan

8:58 am 137. Fibromodulin Reprogrammed Cells-based Bone Regeneration
Zhong Zheng, PhD¹; Tara Aghaloo, DDS, MD, PhD¹; Chen-shuang Li, DDS¹; Pu Yang, DDS, MD, PhD¹; Soochul Lee, MD, PhD²; Jin-Hee Kwak, DDS, MS¹; Ali Zarringhalam, BS¹; Maxwell Murphy, MS¹; Kang Ting, DMD, DMedSci¹; Chia Soo, MD¹
¹UCLA, Los Angeles, CA, ²CHA Univeristy, Gyeongghi-do, Korea, Republic of

9:05 am 138. External Volume Expansion and Fat Grafting after Post Mastectomy Radiation Therapy: Increased Skin Angiogenesis and
Proliferation May Improve Fat Graft Based Soft Tissue Reconstruction
Jorge Lujan-Hernandez, MD1, Michael S. Chin, MD1, Dylan J. Perry, B.A.1, Ava G. Chappell, BA1, Oksana O. Babchenko, BS1, Elizabeth Bannon, MS1, Luca Lancerotto, MD2, Yuan Chyuan Lo, PhD1, Thomas J. Fitzgerald, MD1, Janice F. Lalikos, MD1
1University of Massachusetts Medical School, Worcester, MA, 2University of Padova, Padova, Italy

9:12 am

139. Novel Preparation Method for The Therapeutic Micro-spheroids Of Adipose-derived Stromal Cells (ASCs): Three-dimensional Floating Culture In Non-cross-linked Hyaluronic Acid (HA) Gel
Jingwei Feng, MD; Kazuhide Mineda, MD; Kentaro Doi, MD; Shinichiro Kuno, MD; Kahori Kinoshita, MD; Koji Kanayama, MD; Kotaro Yoshimura, MD
University of Tokyo, Tokyo, Japan

9:19 am

140. Ultrasound Assisted Liposuction Does not Compromise The Regenerative Potential of Ascs
Dominik Duscher, MD1,2; Anna Luan, MS2; David Atashroo, MD2; Zhesaan N. Maan, MBBS, MS2; Elizabeth R. Zielins, MD2; Kevin Paik, BA2; Alexander J. Whittam, BS2; Michelle Lin, BS2; Graham G. Walmsley, BA2; Michael S. Hu, MD, MPH, MS2; Manfred Schmidt, MD1; Georg M. Huemer, MD, MBA, MS1; Derrick C. Wan, MD2; Michael T. Longaker, MD, MBA2; Geoffrey C. Gurtner, MD, FACS2
1Johannes Kepler University, Division of Plastic Surgery, Linz, Austria, 2Stanford University, Division of Plastic Surgery, Stanford, CA

9:26 am

141. Malar 3D Lipotopography: Relating Fat Grafting to the Cheek and Topographical Surface Changes
Carrie Stern, MD1, Jillian E. Schreiber, BA1, Matthew E. Doscher, MD1, Jeremy S. Nikfarjam, MD1, Evan S. Garfein, MD1, Elizabeth B. Jelks, MD2, Glenn W. Jelks, MD2, Oren M. Tepper, MD1
1Montefiore Medical Center/Albert Einstein College of Medicine, Bronx, NY, 2NYU Langone Medical Center, New York, NY

9:33 am

142. A Microbiologic Comparison of Acellular Dermal Matrices as an Aseptic Reconstructive Material and a Scaffold for Stem Cell In-growth
Shaun D. Mendenhall, MD1; Tim H.F. Daugherty, MS1; Nicole M. Cosenza, MS1; Katherine E. McKenna, MD1; Ryan W. Schmucker, MD1; Joel D. Reichensperger, BS1; Ashim Gupta, PhD1; Janak Koirala, MD, MPH1; Paul S. Cederna, MD2; Michael W. Neumeister, MD1
1Southern Illinois University School of Medicine, Springfield, IL, 2University of Michigan School of Medicine, Ann Arbor, MI

9:40 am

143. Characterization And Transplantation Of Human Muscle Stem Cells For Reconstructive Applications.
Xiaoti Xu, MD1; Karlrijn Wilschut, PhD1; Gayle Kouklis, BS1; Hua Tian, PhD1; Robert Hesse, BS1; Jason H. Pomerantz, MD2
1Department of Surgery, Division of Plastic and Reconstructive Surgery, University of California San Francisco, San Francisco, CA, 2Departments of Surgery and Orofacial Sciences, Division of Plastic and Reconstructive Surgery, Craniofacial and Mesenchymal Biology Program, Eli and Edythe Broad Center of Regeneration Medicine, University of California San Francisco, San Francisco, CA
144. Differential Oxygen Tension and Environmental Inflammatory Conditions Optimize Mesenchymal Stem Cell Fate and Immunosuppressive Potential
Rohini L. Kadle, BS; Marc A. Soares, MD; Nakul Rao, MD; April Duckworth, MD; Chin Park, MD; Joshua David, BS; Christopher D. Lopez, BA; Anna Zhou, BA; Nicholas Brownstone, BA; Rita Abigail Sartor, BS; Camille Kim, BS; Piul S. Rabbani, PhD; Daniel J. Ceradini, MD
NYU, New York, NY

10:00 – 10:30 am Coffee with Exhibitors
Cascade Ballroom Foyer

10:30 am – 11:40 am Session 8 Group A
Cascade Ballroom I

10:30 am 145. Lymph Node Transfer Restores Immune Responses in a Mouse Model of Lymphedema
Walter J. Joseph, III, BS; Seth Z. Aschen, BS; Daniel A. Cuzzone, MD; Jason C. Gardenier, MD; Swapna Ghanta, MD; Nicholas J. Albano, BS; Ira L. Savetsky, MD; Jeremy S. Torrisi, BA; Babak J. Mehrara, MD
MSKCC, New York, NY

10:37 am 146. Short Hairpin RNA Silencing of PHD-2 Improves Neovascularization and Functional Outcomes in Diabetic Wounds and Ischemic Limbs
Kevin J. Paik, AB; Zeshaan Maan, MD; Shane D. Morrison, MS; Hsin-Han Chen, MD; Robert Rennert, BS; Michael Sorkin, MD; Dominik Duscher, MD; Michael T. Chung, BS; David Atashroo, MD; Michael S. Hu, MD; Shuli Li, MD, PhD; Kshemendra Senarath-Yapa, MD; Adrian McArdle, MD; Elizabeth A. Brett, MS; Anna Luan, MS; Ruth Tevlin, MD; Elizabeth R. Zielins, MD; Wan Xing Hong, MS; Graham Walmsley, BS; Christopher Duldulao, BS; Taylor Wearda, BS; Owen Marecic, BS; Joseph C. Wu, MD PhD2,3; Geoffrey C. Gurtner, MD; Michael T. Longaker, MD, MBA; Derrick C. Wan, MD
1Hagey Laboratory for Pediatric Regenerative Medicine, Department of Surgery, Plastic and Reconstructive Surgery Division, Stanford University School of Medicine, Stanford, CA, 2Department of Medicine, Division of Cardiology, Stanford University School of Medicine, Stanford, CA, 3Department of Radiology, Stanford University School of Medicine, Stanford, CA, 4Institute for Stem Cell Biology and Regenerative Medicine, Stanford University School of Medicine, Stanford, CA

10:44 am 147. A Transdermal Drug Delivery System for Deferoxamine for the Prevention and Treatment of Diabetic Wounds
Dominik Duscher, MD; Alexander J. Whittam, BS; Zeshaan N. Maan, MBBS, MS; Mohammed Inayatullah, PhD; Janos Barrera, BS; Arnetha J. Whitmore, BA; Yixiao Dong, PhD; Jayakumar Rajadas, PhD; Geoffrey C. Gurtner, MD, FACS
1Stanford University, Division of Plastic Surgery, Stanford, CA, 2Johannes Kepler University, Division of Plastic Surgery, Linz, Austria

10:51 am 148. Obesity But Not High Fat Diet Impairs Lymphatic Function
Gabriela D. Garcia Nores, MD; Daniel A. Cuzzone, MD; Jason C. Gardenier, MD; Ira L. Savetsky, MD; Jeremy S. Torrisi, B.A.; Matthew
D. Nitti, BA; Geoffrey E. Hespe, BS; Raghu P. Kataru, PhD; Babak J. Mehrara, MD
1Memorial Sloan Kettering Cancer Center, New York, NY, 2New York University Hospital Center, New York, NY

10:58 am 149. Perilymphatic Inflammation and iNOS Production Play a Key Role in the Regulation of Lymphatic Dysfunction in Obesity
Jeremy S. Torrisi, BA; Daniel A. Cuzzone, MD; Geoffrey E. Hespe, BS; Matthew D. Nitti, BA; Jason C. Gardenier, MD; Ira L. Savetsky, MD; Gabriela Garcia Nores, MD; Raghu Kataru, PhD; Babak J. Mehrara, MD, FACS
Memorial Sloan Kettering Cancer Center, New York, NY

11:05 am 150. Phosphodiesterase 5 Inhibition Mitigates I-r Injury in a Model of Vascularized Composite Allotransplantation
Marc A. Soares, MD; Nakul Rao, MD; Chin Park, MD; Piul S. Rabbani, PhD; Abby Sartor, BA; Pierre B. Saadeh, MD; Daniel J. Ceradini, MD NYU, New York, NY

11:12 am 151. Tlr3 Activation Links Damage Sensing to Epimorphic Regeneration in the Skin
Sashank K. Reddy, MD, PhD; Amanda Nelson, PhD; Emily Chang, BA; Tabetha Ratliff, MA; Adiya Katseff, BA; Sydney Resnik, BA; Lloyd S. Miller, MD, PhD; Luis A. Garza, MD, PhD
1Johns Hopkins University, Baltimore, MD, 2Pennsylvania State University, Hershey, PA

11:19 am 152. Attenuation of Autophagy via local SGK-1 Inhibition in SCC of the Head and Neck May Sensitize to Cisplatin Therapy
Henrik O. Berdel, MD; Jun Liu, BS; Mahmood Mozaffari, PhD; Jack C. Yu, MD; Babak Baban, PhD
1Palmetto Health / University of South Carolina, Columbia, SC, 2Georgia Regents University, Augusta, GA

11:26 am 153. The Investigation of Transendothelial Migration and Breast Cancer Metastasis Utilizing A Tissue Engineered, Ex Vivo Three Dimensional Vascularized Platform
Rachel C. Hooper, MD; Ope A. Asanbe, MD; Wilmina N. Landford, BA; Adam M. Jacoby, BA; Peipei Zhang, PhD; Hector L. Osoria, BS; Claudia Fischbach, PhD; Jason A. Spector, MD, FACS
1Weill Cornell Medical College, New York, NY, 2Cornell University, Ithaca, NY

11:33 am 154. Chronic Wounds have Surrounding Regions of Lymphatic Dysfunction
Jeremy S. Torrisi, BA; Ira L. Savetsky, MD; Jason C. Gardenier, MD; Gabriela Garcia Nores, MD; Matthew D. Nitti, BA; Geoffrey E. Hespe, BS; Raghu Kataru, PhD; Babak J. Mehrara, MD, FACS
Memorial Sloan Kettering Cancer Center, New York, NY

10:30 am – 12:00 pm Session 8 Group B
Cascade Ballroom II

10:30 am 155. Hypoxia Preconditioned Plasma (HPP) and its Role in promoting Angiogenesis-supported Wound Regeneration
10:37 am 156. Optimizing Timing and Targeting of Bone Morphogenetic Protein Receptor One to Treat Heterotopic Ossification with Novel Kinase Inhibitors and Ligand Traps
John Li, MD¹; Shailesh Agarwal, MD¹; Shawn Loder, BS¹; Cameron Brownley, BS¹; Jonathan Peterson, BS¹; Kavitha Ranganathan, MD¹; Paul S. Cederna, MD¹; Eboda Oluwatobi, BS¹; Agustin Mohedas, PhD²; Paul Yu, MD²; Benjamin Levi, MD¹
¹University of Michigan, Ann Arbor, MI, ²Brigham and Womens Hospital, Boston, MA

10:44 am 158. Novel Implantable Optical Oxygen Monitor to Detect Flap Viability
Mohamed M. Ibrahim, MD; Bruce Klitzman, PhD
The Division of Plastic and Reconstructive Surgery, Department of Surgery, Duke University School of Medicine, Durham, NC

10:51 am 159. Combining Preoperative CTA Mapping of the Peroneal Artery and Its Perforators with Computer-Generated Patient-Specific Surgical Guides for Free Fibula Flap Reconstruction of Complex Head and Neck Defects
Noopur Gangopadhyay, MD; Mark W. Villa, MD; Edward I. Chang, MD; Jesse C. Selber, MD; Elizabeth S. Craig, MD; Jessie Liu, PhD; Patrick B. Garvey, MD
UT MD Anderson Cancer Center, Houston, TX

10:58 am 160. Muscle-Sparing Latissimus Dorsi Myocutaneous Pedicled Flaps with Extended Transversely Oriented Skin Paddles are a Reliable Alternative to Thoracodorsal Artery Perforator Flaps
Yin Kan Hwee, MD; Pedro Vieira, ME; Christopher Brooks, MD; Yoav Barnavon, MD
Cleveland Clinic Florida, Weston, FL

11:05 am 161. Outcomes and Cost Analysis of CT-Guided Virtual Surgical Modeling for Mandibular Reconstruction with Osteocutaneous Free Fibula Flaps
Eric I. Chang, MD; Neal S. Topham, MD
Fox Chase Cancer Center, Rockledge, PA

11:12 am 162. Changes in Skin Vascularity in a Murine Model for Post-Mastectomy Radiation
Jose J. Rodriguez, MD, Theodore A. Kung, MD, Yekaterina Polyatskaya, MD, Noah S. Nelson, BS, Yao Wang, MD, Sagar S. Deshpande, BS, Alexander R. Zheutlin, BS, Alexis Donneys, MD, Steven R. Buchman, MD, Adeyiza O. Momoh, MD University of Michigan, Ann Arbor, MI.

11:19 am 163. Topical Deferoxamine Penetrates the Dermis and Increases Cutaneous Vascularity: The Development of a Topical Therapy for Radiation Soft Tissue Injury
11:26 am 164. The Impact of the Adaptive Immune System On Ectopic Bone Formation
Kavitha Ranganathan, MD; Shuli Li, PhD; Shawn Loder, BS; Cameron Brownley, BS; Shailesh Agarwal, MD; Casey Kraft, BS; Oluwatobi Eboda, BS; Jonathan Peterson, BS; Paul S. Cederna, MD; Steven R. Buchman, MD; Benjamin Levi, MD
University of Michigan, Ann Arbor, MI

11:33 am 165. Profunda Artery Perforator Flap Perforasome Territories: Implications of Vascular Anatomy for Optimal Flap Design in Reconstructive Microsurgery
Anita T. Mohan, MRCS, MBBS, BSc1; Lin Zhu, MD2; Charalambos Rammos, MD2; Gregory Michalak, PhD2; Nirusha Lachman, PhD2; Steve Moran, MD2; Michel Saint-Cyr, MD2
1Mayo Clinic, Rochester, MN, 2Mayo Clinic, Rochester, MN

11:40 am 166. Appraisal Of Perforasomes And Venosomes Of Perforators In Bilateral Diep Breast Reconstruction Using Updated SpyQ Analysis
Anita T. Mohan, MRCS, MBBS, BSc; Lin Zhu, MD; Samir Mardini, MD; Steven Moran, MD; Michel Saint-Cyr, MD
Mayo Clinic, Rochester, MN

10:30 am – 12:00 pm Session 8 Group C
Elliott Bay

10:30 am 167. Tissue Inhibitor Of Metalloproteinase-2 Suppresses Collagen Synthesis Within Keloids
Teruyuki Dohi, MD; Koichi Miyake, MD, PhD; Masayo Aoki, MD, PhD; Rei Ogawa, MD, PhD; Satoshi Akaishi, MD, PhD; Takashi Okada, MD, PhD; Hiko Hyakusoku, MD, PhD
Nippon Medical School, Tokyo, Japan

10:37 am 168. Thrombospondin-1 And CD47 Signaling Regulate Healing Of Thermal Injury In Mice
Justin B. Maxhimer, MD1; Hubert Shih, MD2; David Soto-Pantoja, PhD2; David Roberts, PhD3
1UCLA Medical Center, Los Angeles, CA, 2Stanford School of Medicine, Palo Alto, CA, 3National Institutes of Health, Bethesda, MD

10:44 am 169. Calcium Entry Via TRPC3 Channels Transduce Mechanical Force And Accerelate Wound Contraction
Kenichiro Kawai, MD, PhD1; Hisako Ishise, MD1; Barrett Larson, MD2; Soh Nishimoto, MD, PhD1; Toshihiro Fujiwara, MD, PhD1; Masao Kakibuchi, MD, PhD1
1Hyogo College of Medicine, Nishinomiya, Japan, 2Stanford University, Stanford, CA

10:51 am 170. The Effect Of Bone Marrow Derived Stem Cell Induced By amD-3100 On Expanded Flap
Hii-Sun Jeong, MD, PhD1; Hye-Kyung Lee, MD, PhD2; Kwan-Chul Tark, MD, PhD2; Dae-Hyun Lew, MD, PhD2; In Suck Suh, MD, PhD1
10:58 am

171. Rational Identification of Novel Surface Markers to Enhance Cell Therapies
Michael Januszyk, MD; Robbert C. Rennert, MD; Michael Sorkin, MD; Melanie Rodrigues, PhD; Dominik Duscher, MD; Michael T. Chung, MD; Kevin Paik, BS; Revanth Kosaraju, BS; Michael Findlay, MD, PhD; Jason P. Glotzbach, MD, PhD; Zeshaan N. Maan, MBBS, MRCS; Atul J. Butte, MD, PhD; Geoffrey C. Gurtner, MD, PhD
Stanford University, Stanford, CA

11:05 am

172. Detection of Novel Cancer Subpopulations Through Integration of Public Microarray Data with Single Cell Gene Expression Profiling
Michael Januszyk, MD; Nadine Jahchan, PhD; Purvesh Khatri, PhD; Robbert C. Rennert, MD; Michael Sorkin, MD; Julien Sage, PhD; Michael T. Longaker, MD; Atul J. Butte, MD, PhD; Geoffrey C. Gurtner, MD
Stanford University, Stanford, CA

11:12 am

173. The Cellular and Molecular Dynamics of Burn Injury Progression Following Partial Thickness Burns: The Effect of Early and Late Debridement
Ian Chow, BA, Wei Xu, PhD; Solmaz N. Leilabadi, MD; Shengxian Jia, MD; Ping Xie, MD, PhD; Sumanas W. Jordan, MD, PhD; Seok J. Hong, PhD; Thomas A. Mustoe, MD; Robert D. Galiano, MD
Northwestern University, Chicago, IL

11:19 am

174. TRPC3 Channels Regulate Expression of Fibronectin Via NFκB Signaling in Response to Cyclic Strain And Contribute to Hypertrophic Scar Formation
Kenichiro Kawai, MD, PhD; Hisako Ishise, MD; Barrett Larson, MD; Soh Nishimoto, MD, PhD; Toshihiro Fujiwara, MD, PhD; Masao Kakibuchi, MD, PhD
1Hyogo College of Medicine, Nishinomiya, Japan, 2Stanford University, Stanford, CA

11:26 am

175. The Role of Fibronectin on Spatial Organization in 3D Culture: a Model for Wound Healing after Breast Reconstruction and Post-Mastectomy Radiation Therapy
Henry C. Hsia, MD; Sibo Tian, BA; Sharad Goyal, MD; Bruce G. Haffty, MD; Ting Chen, PhD; Ramsey A. Foyt, PhD
Rutgers-Robert Wood Johnson Medical School, New Brunswick, NJ

11:33 am

176. Single Cell Transcriptomic Analysis of Human Fetal Bone Marrow-Derived Mesenchymal Stem Cells in Wound Healing
Sacha M.L. Khong, PhD; Dominik Duscher, MD; Michael Januszyk, MD; Peter A. Than, MD; Zeshaan Maan, MD; Geoffrey C. Gurtner, MD
Stanford University, Stanford, CA

11:40 am

177. Angiotensin Receptor Blockade is Associated with Decreased Cutaneous Scar Formation in a Rat Model: A Preclinical Study
11:47 am 178. Activation of Hif by Small Molecule Inhibitors of Phd2 Accelerates Wound Healing In Vivo
Michael Hu, MD, MPH, MS1; Wan Xing Hong, MS1; Min Xie, PhD2; Shibing Tang, PhD2; Robert Rennert, MD1; Graham Walmsley, BS1; Zeshaan Maan, MD1; Andrew Zimmermann, BS1; Geoffrey Gurtner, MD1; Amato Giaccia, PhD1; Peter Lorenz, MD1; Sheng Ding, PhD1; Michael Longaker, MD, MBA1
1Stanford, Stanford, CA, 2UCSF, San Francisco, CA

12:00 – 12:30 pm Awards Announcements & Adjourn
Cascade Ballroom