

## CURRICULUM VITAE

### Parag Butala, MD, FACS

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#### EDUCATION

Undergraduate                    Brown University  
   Providence, RI 02912  
   BS, Neuroscience with Honors thesis, Magna cum Laude, 2002

Medical School                    Brown University School of Medicine  
   Providence, RI 02912  
   MD, 2006

Certifications                    Board Certified in General Surgery by the American Board of Surgery (2013)  
   Board Certified in Plastic and Reconstructive Surgery by the American Board of  
   Plastic Surgery (2016)  
   Fellow of the American College of Surgeons (2019)

#### POSTGRADUATE TRAINING

Residency                         Duke University Medical Center  
   Duke University School of Medicine, Durham, NC  
   Plastic and Reconstructive Surgery, 2012-2015

Residency                         Mount Sinai Medical Center  
   Mount Sinai School of Medicine, NY, NY 10029  
   General Surgery, 2006-2012

Postdoctoral Research            New York University Langone Medical Center  
Fellowship                         New York University School of Medicine  
   Institute of Reconstructive Plastic Surgery, NY, NY 10016  
   2009-2010

#### WORK EXPERIENCE

Plastic & Reconstructive        Piedmont Plastic Surgery and Dermatology  
Surgery                             Gastonia, NC 28054  
   Associate, 2015-2017  
   Partner, 2017-present day

#### HONORS AND AWARDS

- 2011                                Resident Research Award – Best Scientific Paper. Northeastern Society of Plastic Surgeons.
- 2010                                Co-Author, AO Foundation Craniomaxillofacial Grant. \$75,000.  
   Warren SM, Davidson EH, Knobel D, **Butala P**, Sultan SM, Crawford JL. Optimizing Neovascularization of Biomimetic Implants for Repair of Large Cranial Defects.
- 2010                                2010 Wound Healing Society Biotechnology Foundation Travel Award  
   **Butala P**, Knobel D, Davidson EH, Crawford JL, Valenzuela C, Canizares O, Szpalski C, Wetterau M, Sultan SM, Epstein S, Saadeh PB, Warren SM. Zmpste24 knockout mice as a novel model of post-operative senescent wound healing
- 2010                                Co-Author, 2010 Wound Healing Society Young Investigator Award

	Crawford JL, Knobel D, <b>Butala P</b> , Kuperman A, Bharrat S, Imberman SB, Davidson EH, Roman BR, Wetterau MT, Sultan S, Warren SM, Saadeh PB. Breaking the cycle of injury: Topical PUMA silencing decreases reactive oxygen species generation and improves diabetic wound healing
2010	Co-Author, 2010 Wound Healing Society Biotechnology Foundation Travel Award Knobel D, Crawford JL, <b>Butala P</b> , Cohen OD, Eydlin O, Lirov R, Klein J, Davidson EH, Roman BR, Wetterau MT, Sultan SM, Warren SM, Saadeh PB. Local reactive oxygen species scavenging improves diabetic wound healing
2009 – 2010	Clinical and Translational Science Grant (NIH/NCRR 1 U54 RR024386-01A1). \$2,000. Novel Progenitor Cell Therapy Augments Wound Healing. Principal Investigator
2007	Mount Sinai School of Medicine Department of Surgery Junior Resident Teaching Award
2005	American Association for the Surgery of Trauma Travel Scholarship
2004	David Mahoney Medical Student Fellowship in Thoracic Surgery Massachusetts General Hospital, Boston, MA
2002	Sigma Xi National Honor Society
2002	Milton Hamolsky Award for Excellence in Science, Brown University
2001	Brown University Class of 1952 Premium for Academic Excellence

#### RESEARCH PUBLICATIONS

##### *Manuscripts*

1. Szpalski C, **Butala P**, Vandegrift M, Knobel D, Allen RJ Jr, Saadeh PB, Warren SM. Improving senescent wound healing with local and systemic therapies. *Annals of Plastic Surgery*. 2018 May.
2. Pien I, Caccavale S, Cheung MC, **Butala P**, Hughes DB, Ligh C, Zenn MR, Hollenbeck ST. Evolving trends in autologous breast reconstruction: Is the deep inferior epigastric artery perforator flap taking over? *Annals of Plastic Surgery*. 2016 May; 76(5): 489-493.
3. **Butala P**, Fisher MD, Blueschke G, Ruch DS, Richard MJ, Hollenbeck ST, Levinson H, Leversedge FJ, Erdmann D. Factors associated with transfer of hand injuries to a level I trauma center: a descriptive analysis of 1147 cases. *Plastic and Reconstructive Surgery*. 2014 Apr; 133(4):842-848.
4. Muniappan A, Tapias LF, **Butala P**, Wain JC, Wright CD, Donahue DM, Gaisser HA, Lanuti M, Mathisen DJ. Surgical therapy for pulmonary aspergillomas: A 30-year North American experience. *Ann Thorac Surg* 2014; 97: 432-438.
5. Davidson EH, Sultan SM, **Butala P**, Knobel D, Warren SM. Lacunocanalicular fluid flow transduces mechanical tension stress during distraction osteogenesis. *Journal of Craniofacial Surgery*. 2013 Sept; 24(5): 1558-1564.

6. **Butala P**, Szpalski C, Soares M, Davidson EH, Knobel D, Warren SM. Zmpste24-/- mouse model for senescent wound healing research. *Plastic and Reconstructive Surgery*. 2012 Dec; 130(6): 788e-798e.
7. **Butala P**, Hazen A, Szpalski C, Sultan SM, Coleman SR, Warren SM. Endogenous stem cell therapy enhances fat graft survival. *Plastic and Reconstructive Surgery*. 2012 Aug; 130(2): 293-306.
8. Sultan SM, Barr JS, **Butala P**, Davidson EH, Weinstein AL, Knobel D, Saadeh PB, Warren SM, Coleman SR, Hazen A. Fat grafting accelerates neovascularization and decreases fibrosis following thermal injury. *Journal of Plastic, Reconstructive, and Aesthetic Surgery*. 2012; 65(2): 219-227.
9. Mehta N, **Butala P**, Bernstein MP. The imaging of maxillofacial trauma and its pertinence to surgical intervention. *Radiologic Clinics of North America*. 2012; 50(1):43-57.
10. Davidson EH, Sultan SM, **Butala P**, Tutela JP, Canizares O, Wagner IJ, Knobel D, Saadeh PB, Warren SM. Augmenting neovascularization accelerates distraction osteogenesis. *Plastic and Reconstructive Surgery*. 2011 Aug; 128(2): 406-414.
11. Sultan SM, Davidson EH, **Butala P**, Schacher JS, Witek L, Szpalski C, Ricci JL, Saadeh PB, Warren SM. Interval cranioplasty: Comparison of current standards. *Plastic and Reconstructive Surgery*. 2011 May; 127(5): 1855-1864.
12. **Butala P**, Greenstein AJ, Sur MD, Mehta N, Sadot E, Divino CM. Surgical management of acute right lower quadrant pain in pregnancy: A prospective cohort study. *Journal of the American College of Surgeons*. 2010; 211:490-494.
13. **Butala P**, Divino CM. Surgical aspects of *Clostridium difficile*: A review. *American Journal of Surgery*. 2010 July; 200(1):131-5.
14. Sadot E, Telem DA, Arora M, **Butala P**, Nguyen S, Divino CM. Laparoscopy: A safe approach to appendicitis. *Surgical Endoscopy and Other Interventional Techniques*. 2010; 24(2): 383-389.
15. Stopa EG\*, **Butala P\***, Salloway S, Johanson CE, Gonzalez L, Tavares R, Hovanesian V, Hulette CM, Vitek M, Cohen R. Cerebral cortical arteriolar angiopathy, vascular beta-amyloid, smooth muscle actin, Braak stage, and *APOE* genotype. *Stroke*. 2008; 39:814-821. (asterisk denotes equal author contribution).
16. Maslow AD, Stearns G, **Butala P**, Schwartz CS, Gough J, Singh AK. The hemodynamic effects of methylene blue when administered at the onset of cardiopulmonary bypass. *Anesthesia and Analgesia*. 2006; 103: 2-8.

#### *Abstracts*

1. **Butala P**, Cheung MC, Wilk A, Anolik RA, Hollenbeck ST. Comparison of early outcomes between plastic surgeons and otolaryngologists performing head and neck free flap reconstruction: Based on the American College of Surgeons National Surgical Quality Improvement Program. *American Association of Plastic Surgeons*. April 2014 (Miami, FL). *Plastic and Reconstructive Surgery*, April 2014, 133(4S): 989-990.
2. Caccavale S, Pien I, Cheung M, **Butala P**, Hughes D, Ligh C, Zenn MR, Hollenbeck ST. The economic implications of changing trends in breast flap reconstruction in the United States. *Plastic Surgery Research Council*. *Plastic and Reconstructive Surgery*. 2014; 133(3S): 39-40. March 2014 (New York, NY).

3. **Butala P**, Fisher MD, Bluschke G, Ruch DS, Richard MJ, Hollenbeck ST, Levinson H, Leversedge FJ, Erdmann D. Factors associated with transfer of hand injuries to a level I trauma center: An analysis of 1,147 cases. American Association of Hand Surgery. January 2014 (Kauai, HI).
4. **Butala P**, Knobel D, Crawford JL, Szpalski C, Marchac A, Sultan SM, Wetterau M, Davidson EH, Saadeh PB, Warren SM. Topical siRNA and progenitor cell mobilization accelerate senescent wound healing and decrease reactive oxygen species. Northeastern Society of Plastic Surgeons. October 2011 (Amelia Island, FL). Winner of resident research award for best scientific paper.
5. **Butala P**, Szpalski C, Wetterau M, Saadeh PB, Warren SM. Augmentation of fat graft survival with progenitor cell mobilization in a murine model. European Association of Plastic Surgery. June 2011 (Mykonos, Greece).
6. **Butala P**, Knobel D, Crawford JL, Szpalski C, Marchac A, Sultan SM, Wetterau M, Davidson EH, Saadeh PB, Warren SM. Topical siRNA and progenitor cell mobilization reduce age-related reactive oxygen species and accelerate healing in a senescent wound. Plastic Surgery Research Council. April 2011 (Louisville, KY).
7. Layliev J, Marchac A, **Butala P**, Henderson R, Sagevin F, Weinstein AL, Saadeh PB, Warren SM. Stem cell therapy enhances bony healing. Plastic Surgery Research Council. April 2011 (Louisville, KY).
8. Knobel D, Cohen O, Crawford JL, **Butala P**, Wetterau M, Warren SM, Saadeh PB. Local control of reactive oxygen species improves diabetic wound healing. Plastic Surgery Research Council. April 2011 (Louisville, KY).
9. Sultan SM, **Butala P**, Barr JS, Weinstein AL, Knobel D, Saadeh PB, Warren SM, Coleman SR, Hazen A. Fat grafting accelerates neovascularization and decreases fibrosis in following thermal injury. Plastic Surgery Research Council. April 2011 (Louisville, KY).
10. **Butala P**, Knobel D, Crawford JL, Szpalski C, Marchac A, Sultan SM, Wetterau M, Davidson EH, Saadeh PB, Warren SM. Topical siRNA and stem cell therapy reduce reactive oxygen species and accelerate healing in a senescent wound. Wound Healing Society. Wound Repair and Regeneration. 2011; 19(2): A8-A62. April 2011 (Dallas, TX).
11. **Butala P**, Szpalski C, Wetterau M, Sultan SM, Davidson EH, Crawford JL, Knobel D, Allen RJ Jr., Saadeh PB, Warren SM, Coleman S, Hazen A. Augmentation of fat graft survival with progenitor cell mobilization in a murine model. International Federation of Adipose Therapeutics and Science Society. October 2010 (Dallas, TX).
12. Canizares O, Allen RJ Jr., Wetterau M, Szpalski C, Davidson EH, Knobel D, **Butala P**, Wagner IJ, Tutela JP, Saadeh PB, Warren SM, Hazen A. Comparison of fat graft survival following centrifugation and Telfa®-rolling. International Federation of Adipose Therapeutics and Science Society. October 2010 (Dallas, TX).
13. Barr JS, Sultan SM, **Butala P**, Szpalski C, Knobel D, Crawford JL, Layliev J, Davidson EH, Saadeh PB, Warren SM, Coleman SR, Hazen A. Fat grafting in thermal injury: Improving wound healing through angiogenesis and decreased fibrosis. International Federation of Adipose Therapeutics and Science Society. October 2010 (Dallas, TX).
14. Knobel D, Crawford JL, **Butala P**, Eydlin O, Davidson EH, Wetterau MT, Warren SM, Saadeh PB. Elucidating the link between reactive oxygen species and p53: The pathway behind impaired diabetic wound healing. Northeastern Society of Plastic Surgeons. October 2010 (Washington, DC).

15. Wetterau MT, Marchac A, Szpalski C, Knobel D, Crawford JL, **Butala P**, Sultan SM, Hwang L, Warren SM, Saadeh PB, Levine JP. Topical CXCR3 silencing mitigates angiostasis associated with radiation injury. Northeastern Society of Plastic Surgeons. October 2010 (Washington, DC).
16. Sultan SM, Barr JS, Szpalski C, **Butala P**, Crawford JL, Knobel D, Davidson EH, Saadeh PB, Warren SM, Coleman SR, Hazen A. Fat grafting promotes neovascularization and alleviates fibrosis in a murine burn model. Northeastern Society of Plastic Surgeons. October 2010 (Washington, DC).
17. **Butala P**, Knobel D, Crawford JL, Szpalski C, Marchac A, Sultan SM, Wetterau MT, Saadeh PB, Warren SM. Development of a transgenic mouse model of age-related wound healing. Northeastern Society of Plastic Surgeons. October 2010 (Washington, DC).
18. **Butala P**, Sultan SM, Davidson EH, Crawford JL, Szpalski C, Knobel D, Marchac A, Saadeh PB, Warren SM, Coleman SR, Hazen A. Progenitor cell mobilization augments fat graft survival. American Society of Plastic Surgeons. Plastic and Reconstructive Surgery. 2010; 126(4S): 56-57. October 2010 (Toronto, Canada).
19. Wetterau M, Knobel D, Crawford JL, Marchac A, Szpalski C, **Butala P**, Warren SM, Levine JP, Saadeh PB. Alloderm as a topical gene therapy matrix to improve graft vascularity. American Society of Plastic Surgeons. Plastic and Reconstructive Surgery. 2010; 126(4S): 59. October 2010 (Toronto, Canada).
20. Marchac A, **Butala P**, Knobel D, Allen RJ Jr, Szpalski C, Wetterau M, Crawford JL, Davidson EH, Saadeh PB, Warren SM. Chemical delay of flaps through endogenous stem cell therapy. American Society of Plastic Surgeons. Plastic and Reconstructive Surgery. 2010; 126(4S): 59-60. October 2010 (Toronto, Canada).
21. Davidson EH, Sultan SM, **Butala P**, Knobel D, Tutela JP, Canizares O, Wagner IJ, Crawford JL, Witek L, Hu B, Saadeh PB, Warren SM. Lacunocanalicular flow in osseous repair and regeneration. American Society of Plastic Surgeons. Plastic and Reconstructive Surgery. 2010; 126(4S): 98. October 2010 (Toronto, Canada).
22. **Butala P**, Szpalski C, Knobel D, Crawford JL, Marchac A, Davidson EH, Sultan SM, Wetterau M, Saadeh PB, Warren SM. Modeling senescent wound healing with the Zmpste24 transgenic mouse. American College of Surgeons. Journal of the American College of Surgeons. 2010; 211(3S): S78. October 2010 (Washington, DC).
23. **Butala P**, Sultan SM, Davidson EH, Crawford JL, Szpalski C, Knobel D, Saadeh PB, Warren SM, Coleman SR, Hazen A. Improved fat graft survival with mobilization of progenitor cells. American College of Surgeons. Journal of the American College of Surgeons. 2010; 211(3S): S94. October 2010 (Washington, DC).
24. Knobel D, Crawford JL, **Butala P**, Davidson EH, Wetterau M, Sultan SM, Szpalski C, Warren SM, Saadeh PB. Local reactive species scavenging improves diabetic wound healing. American College of Surgeons. Journal of the American College of Surgeons. 2010; 211(3S): S80. October 2010 (Washington, DC).
25. Davidson EH, Sultan SM, **Butala P**, Knobel D, Tutela JP, Canizares O, Wagner IJ, Witek L, Hu B, Warren SM. Is lacunocanalicular flow the transducer of mechanical tension stress to osteogenesis in distraction? American College of Surgeons. Journal of the American College of Surgeons. 2010; 211(3S): S84. October 2010 (Washington, DC).
26. Sultan SM, Davidson EH, **Butala P**, Schacher JS, Witek L, Saadeh PB, Warren SM. Interval cranioplasty: Evaluating viability and osteointegration of the bone graft following storage and

- reimplantation. European Association for Cranio-Maxillo-Facial Surgery. September 2010 (Bruges, Belgium).
27. Wang X, Marchac A, **Butala P**, Allori A, Szpalski C, Saadeh PB, McCarthy JG, Warren SM. Progenitor cell mobilization enhances cranio-maxillo-facial healing via improved neovascularization and osteogenesis. European Association for Cranio-Maxillo-Facial Surgery. September 2010 (Bruges, Belgium).
  28. **Butala P**, Marchac A, Szpalski C, Knobel D, Crawford JL, Sultan SM, Wetterau M, Saadeh PB, Warren SM. A transgenic mouse model of age-related wound healing: Characterization and Therapeutics. European Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 126(2S): 712-729 (Hamburg, Germany).
  29. Knobel D, Crawford JL, **Butala P**, Wetterau MT, Marchac A, Szpalski C, Warren SM, Saadeh PB. Linking reactive oxygen species and apoptosis: Towards an understanding of diabetic wound healing. European Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 126(2S): 712-729 (Hamburg, Germany).
  30. Marchac A, **Butala P**, Wang S, Allori A, Szpalski C, Saadeh PB, McCarthy JG, Warren SM. Endogenous stem cell therapy improves calvarial bone healing. European Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 126(2S): 712-729 (Hamburg, Germany).
  31. **Butala P**, Szpalski C, Sultan SM, Davidson EH, Knobel D, Crawford JL, Allen RJ Jr., Saadeh PB, Warren SM, Coleman S, Hazen A. Improvement of fat graft survival with novel progenitor cell therapy. International Society for Aesthetic Plastic Surgery. August 2010 (San Francisco, CA).
  32. Roman BR, Thanik VD, Zoumalan RA, Lee JW, Immelman S, Crawford JL, Tutela JP, **Butala P**, Eydlin O, Lirov R, Varjabedian L, Wetterau MT, Warren SM, Saadeh PB. Intra- and transcutaneous delivery of siRNA for localized gene silencing. Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 125(6): S75 (San Francisco, CA).
  33. Canizares O, Allen RJ Jr., Davidson EH, Knobel D, **Butala P**, Wagner IJ, Tutela JP, Levine JP, Saadeh PB, Warren SM, Hazen A. Chewing the fat: The importance of processing techniques on fat graft survival. Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 125(6): S78 (San Francisco, CA).
  34. Wetterau MT, Marchac AC, Knobel D, **Butala P**, Szpalski C, Immelman SB, Crawford JL, Warren SM, Saadeh PB. Mitigating radiation-induced skin injury: Preventing angiostasis via topical CXCR3 silencing. Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 125(6): S59 (San Francisco, CA).
  35. Crawford JL, Knobel D, **Butala P**, Kuperman A, Bharrat S, Immelman SB, Davidson EH, Roman BR, Wetterau MT, Sultan SM, Warren SM, Saadeh PB. Breaking the cycle of injury: Topical pro-oxidant gene silencing decreases downstream targets, upstream mediators, and improves diabetic wound healing. Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 125(6): S59 (San Francisco, CA).
  36. Wetterau MT, Knobel D, **Butala P**, Crawford JL, Marchac AC, Szpalski C, Immelman SB, Warren SM, Saadeh PB. Alloderm-based gene therapy: Improving graft vascularity. Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 125(6): S35 (San Francisco, CA).
  37. **Butala P**, Knobel D, Davidson EH, Crawford JL, Velanzuela C, Canizares O, Szpalski C, Wetterau M, Saadeh PB, Warren SM. Zmpste24 knockout mice as a novel model of senescent wound healing.

- Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 125(6): S58 (San Francisco, CA).
38. **Butala P**, Sultan SM, Davidson EH, Crawford JL, Szpalski C, Knobel D, Allen RJ Jr., Saadeh PB, Warren SM, Coleman S, Hazen A. Augmentation of fat graft survival with progenitor cell mobilization. Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 125(6): S12 (San Francisco, CA).
  39. Davidson EH, Sultan SM, **Butala P**, Knobel D, Tutela JP, Canizares O, Wagner IJ, Hu B, Saadeh PB, Warren SM. Lacunocanalicular flow and distraction osteogenesis: Theory and Therapeutics. Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 125(6): S10 (San Francisco, CA).
  40. Sultan SM, Davidson EH, Schacher JS, **Butala P**, Knobel D, Witek L, Ricci JL, Saadeh PB, Warren SM. Interval cranioplasty: Evaluating current standards, exploring future directions. Plastic Surgery Research Council. Plastic and Reconstructive Surgery. 2010; 125(6): S10 (San Francisco, CA).
  41. Knobel D, Crawford JL, **Butala P**, Cohen OD, Eydlin O, Lirov R, Klein J, Davidson EH, Roman BR, Wetterau MT, Sultan SM, Warren SM, Saadeh PB. Local reactive oxygen species scavenging improves diabetic wound healing. Wound Healing Society (Young Investigator Award Competition and winner of Wound Biotechnology Foundation Travel Award for Trainees). Wound Repair and Regeneration. 2010; 18(2): A8-A52 (Orlando, FL).
  42. Crawford JL, Knobel D, **Butala P**, Kuperman A, Bharrat S, Immerman SB, Davidson EH, Roman BR, Wetterau MT, Sultan S, Warren SM, Saadeh PB. Breaking the cycle of injury: Topical PUMA silencing decreases reactive oxygen species generation and improves diabetic wound healing. Wound Healing Society (2010 Young Investigator Award). Wound Repair and Regeneration. 2010; 18(2): A8-A52 (Orlando, FL).
  43. **Butala P**, Knobel D, Davidson EH, Crawford JL, Valenzuela C ,Canizares O, Szpalski C, Wetterau M, Sultan SM, Epstein S, Saadeh PB, Warren SM. Zmpste24 knockout mice as a novel model of post-operative senescent wound healing. Wound Healing Society (Young Investigator Award Competition and winner of Wound Biotechnology Foundation Travel Award for Trainees). Wound Repair and Regeneration. 2010; 18(2): A8-A52 (Orlando, FL).
  44. Davidson EH, Wang X, **Butala P**, Sultan SM, Allen RJ Jr., Tutela JP, Canizares O, Knobel D, Witek L, Saadeh PB, Warren SM. Novel progenitor cell therapy augments ischemic osseous wound healing. Wound Healing Society. Wound Repair and Regeneration. 2010; 18(2): A8-A52 (Orlando, FL).
  45. Davidson EH, Nguyen PD, Knobel D, Sultan SM, **Butala P**, Crawford JL, Shetye PR, Karpadia H, Grayson B, Cutting CB, Warren SM. Improving the success rate of gingivoperiosteoplasty in cleft lip alveolus and palate: Pre-clinical investigation of novel technologies. American Association of Plastic Surgeons. March 2010 (San Antonio, TX).
  46. Sultan SM, Schachar JS, Davidson EH, **Butala P**, Knobel D, Witek L, Ricci JL, Saadeh PB, Warren SM. Assessing the efficacy of interval cranioplasty flaps *in vivo* and *in vitro*. American Cleft Palate-Craniofacial Association. March 2010 (Fort Worth, TX).
  47. Davidson EH, **Butala P**, Sultan SM, Knobel D, Tutela JP, Canizares O, Wagner IJ, Witek L, Saadeh PB, Warren SM. Novel mechanisms for accelerating distraction osteogenesis by augmenting neovascularization. American Cleft Palate-Craniofacial Association. March 2010 (Fort Worth, TX).
  48. Davidson EH, **Butala P**, Allen RJ, Sultan S, Knobel D, Saadeh PB, Coleman SR, Hazen A, Warren SM. Progenitor cell therapies augment ischemic wound healing: Preclinical studies. Association of

- Academic Surgeons Academic Surgical Congress. Journal of Surgical Research. 2010; 158(2): 322 (San Antonio, TX).
49. Davidson EH, Allori AC, Sultan SM, **Butala P**, Nguyen P, Reformat DD, Clark E, Ricci J, Warren SM. In vitro biomimicry for vascularized bone engineering. Association of Academic Surgeons Academic Surgical Congress. Journal of Surgical Research. 2010; 158(2): 320 (San Antonio, TX).
  50. Sadot E, Telem DA, Arora M, **Butala P**, Nguyen SQ, Divino CM. Laparoscopy: A safe approach for pregnant women with appendicitis. Digestive Disease Week. Gastroenterology. 2009; 136(5): A-909. (Chicago, IL).
  51. **Butala P**, Jacob BP, Cambronero N, Xipoleas G, Reiner MA. Single incision laparoscopic surgery (SILS): Cholecystectomy. Digestive Disease Week. Gastroenterology. 2009; 136(5): A-883. (Chicago, IL).
  52. Telem DA, Chin C, **Butala P**, Swanson S. Thoracoscopic thymectomy: A good option for anterior mediastinal disease. American College of Chest Physicians Chest. 2008; 134: p80003. (Philadelphia, PA).
  53. **Butala P**, Salloway S, Johanson CE, Gonzalez L, Tavares R, Hovanesian V, Donahue JE, Hulette C, Vitek MP, Stopa EG. Microvascular damage in Alzheimer's disease. Neurobiology of Aging. 2004; 25: S408. International Conference on Alzheimer's Disease and Related Disorders (Philadelphia, PA).
  54. Lee PH, Babu K, **Butala P**, Sateesha P, Pham L, Vezeridis P, Cheng J, and Jay GD. A comparison of Combitube and intubationist laryngeal mask airway (iLMA) for unrestrained emergency airway management in microgravity by novice intubationists. Aviation, Space, and Environmental Medicine. Aerospace Medical Association, 2003 (San Antonio, TX).
  55. **Butala P**, Salloway S, Johanson CE, Gonzalez L, Tavares R, Hovanesian V, Donahue JE, Hulette C, Vitek MP, Stopa EG. Microvascular damage in Alzheimer's disease. Society for Neuroscience Abstract Viewer and Itinerary Planner, 2002. Abstract No. 328.1 (Orlando, FL).
  56. Stopa EG, Fallon JR, Salloway S, **Butala P**, Zipser BD, Morales X, Hovanesian V, Hulette C, Rosenberg C, Tavares R, Johanson CE, Vitek MP. Differential distribution of smooth muscle actin and agrin in the microvasculature of the Tg APP670, 671 mouse and Alzheimer brain. Journal of the Neurological Sciences. 2002; 203-204: 330 (Salzburg, Austria).
  57. Lee PH, Babu K, **Butala P**, Sateesha P, Pham L, Vezeridis P, Cheng J, and Jay GD. Airway management in microgravity: A comparison of traditional endotracheal intubation and the Combitube. Aviation, Space, and Environmental Medicine. 2002; 73(3): 308 (Montreal, Canada).
  58. Stopa EG, Fallon JR, Salloway S, **Butala P**, Zipser BD, Morales X, Hovanesian V, Hulette C, Rosenberg C, Tavares R, Johanson CE, Vitek MP. Differential distribution of smooth muscle actin and agrin in the microvasculature of the APP670, 671 mouse and Alzheimer brain. Society for Neuroscience Abstracts. 2001; 27(1): 1135 (San Diego, CA).

#### RESEARCH PRESENTATIONS

1. **Butala P**, Cheung MC, Wilk A, Anolik RA, Hollenbeck ST. Comparison of early outcomes between plastic surgeons and otolaryngologists performing head and neck free flap reconstruction: Based on the American College of Surgeons National Surgical Quality Improvement Program. American Association of Plastic Surgeons. April 2014, Miami, FL Plastic and Reconstructive Surgery, April 2014, 133(4S): 989-990. [Oral Presentation]

2. **Butala P**, Knobel D, Crawford JL, Szpalski C, Marchac A, Sultan SM, Wetterau M, Davidson EH, Saadeh PB, Warren SM. Topical siRNA and progenitor cell mobilization accelerate senescent wound healing and decrease reactive oxygen species. Northeastern Society of Plastic Surgeons. October 2011, Amelia Island, FL. [Oral Presentation, Winner of resident research award for best scientific paper]
3. **Butala P**, Szpalski C, Wetterau M, Saadeh PB, Warren SM. Augmentation of fat graft survival with progenitor cell mobilization in a murine model. European Association of Plastic Surgery. June 2011, Mykonos, Greece. [Oral Presentation]
4. **Butala P**, Knobel D, Crawford JL, Szpalski C, Marchac A, Sultan SM, Wetterau M, Davidson EH, Saadeh PB, Warren SM. Topical siRNA and progenitor cell mobilization reduce age-related reactive oxygen species and accelerate healing in a senescent wound. Plastic Surgery Research Council. April 2011, Louisville, KY. [Oral Presentation]
5. **Butala P**, Knobel D, Crawford JL, Szpalski C, Marchac A, Sultan SM, Wetterau M, Davidson EH, Saadeh PB, Warren SM. Topical siRNA and stem cell therapy reduce reactive oxygen species and accelerate healing in a senescent wound. Wound Healing Society. April 2011, Dallas, TX. [Oral Presentation]
6. **Butala P**, Szpalski C, Wetterau M, Sultan SM, Davidson EH, Crawford JL, Knobel D, Allen RJ Jr., Saadeh PB, Warren SM, Coleman S, Hazen A. Augmentation of fat graft survival with progenitor cell mobilization in a murine model. International Federation of Adipose Therapeutics and Science Society. October 2010, Dallas, TX. [Oral Presentation]
7. **Butala P**, Knobel D, Crawford JL, Szpalski C, Marchac A, Sultan SM, Wetterau MT, Saadeh PB, Warren SM. Development of a transgenic mouse model of age-related wound healing. Northeastern Society of Plastic Surgeons. October 2010, Washington, DC. [Oral Presentation].
8. **Butala P**, Marchac A, Szpalski C, Knobel D, Crawford JL, Sultan SM, Wetterau M, Saadeh PB, Warren SM. A transgenic mouse model of age-related wound healing: Characterization and Therapeutics. European Plastic Surgery Research Council, August 2010, Hamburg, Germany. [Oral Presentation]
9. **Butala P**, Sultan SM, Davidson EH, Crawford JL, Szpalski C, Knobel D, Marchac A, Saadeh PB, Warren SM, Coleman SR, Hazen A. Progenitor cell mobilization augments fat graft survival. American Society of Plastic Surgeons, October 2010, Toronto, Canada. [Oral Presentation]
10. **Butala P**, Szpalski C, Knobel D, Crawford JL, Marchac A, Davidson EH, Sultan SM, Wetterau M, Saadeh PB, Warren SM. Modeling senescent wound healing with the Zmpste24 transgenic mouse. American College of Surgeons, October 2010, Washington, DC. [Oral Presentation]
11. **Butala P**, Sultan SM, Davidson EH, Crawford JL, Szpalski C, Knobel D, Saadeh PB, Warren SM, Coleman SR, Hazen A. Improved fat graft survival with mobilization of progenitor cells. American College of Surgeons, October 2010, Washington, DC. [Oral Presentation]
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