#### CURRICULUM VITAE

## ALBERT S. WOO, M.D.

Lifespan Physician Group – Plastic Surgery 2 Dudley Street – MOC 180 Providence, RI 02905 Tel: (401) 444-2299 Fax: (401) 444-2924 Albert.Woo@lifespan.org

## **EDUCATION**

Undergraduate	Brown University, Providence, Rhode Island Bachelor of Arts in Human Biology, Concentration in Brain and Behavior 1991-1995, Magna Cum Laude
Medical School	Brown Medical School, Providence, Rhode Island Doctor of Medicine 1995-1999

#### POSTGRADUATE TRAINING

Internship	Brown Medical School, Rhode Island Hospital, Providence, Rhode Island General Surgery, PGY 1 1999-2000
Residency	Brown Medical School, Rhode Island Hospital, Providence, Rhode Island General Surgery, PGY 2-3 2000-2002
	Brown Medical School, Rhode Island Hospital, Providence, Rhode Island Plastic Surgery, PGY 4-6 2002-2005
Fellowship	University of Washington School of Medicine, Seattle, Washington Craniofacial Surgery (Drs. Joseph Gruss and Richard Hopper) 2005-2006

## POSTGRADUATE HONORS AND AWARDS

2019	Best Presentation Award in Hand Surgery Session I (A Novel 3D-Printed Hand Model to Simulate Bony Fixation with Kirschner Wires without Fluoroscopy) Plastic Surgery The Meeting 2019
2019	Best Presentation Award in Hand Surgery Session III (3D-Printed Flexor Tendon Repair Simulator Promotes Early Medical Student Surgical Interest) Plastic Surgery The Meeting 2019
2016-2107	<i>Top Doctors</i> Castle Connolly Medical Ltd.
2011-2017	Best Doctors in America Best Doctors, Inc.
2014	Top Poster Presentation 43 <sup>rd</sup> Meeting of the AANS/CNS Section on Pediatric Neurological Surgery 2014 (Endoscopic Repair of Sagittal Craniosynostosis—Our First 100)
2013	Paul M. Weeks, M.D., Resident Teaching Award Washington University School of Medicine, Division of Plastic Surgery
2009	Award for Highest Patient Satisfaction Washington University School of Medicine, Saint Louis, Missouri
2008	Award for Highest Patient Satisfaction Washington University School of Medicine, Saint Louis, Missouri
2008	Trailblazers in Craniofacial Surgery Stryker ACMF Educational Foundation
1996	Award of Excellence in Leadership Korean Youth & Community Center, Los Angeles, California

# PROFESSIONAL LICENSES AND BOARD CERTIFICATION

Board Certification	American Board of Plastic Surgery
	Certificate No. 7376
	Initial certification: November 10, 2007
	Recertification exam: April 2015
	Expires December 31, 2027

Licensed Physician and Surgeon

State of Rhode Island License: MD15214 Controlled substance: CMD15214 11/12/2015 – 6/30/2020

State of Missouri License: 2006020250 7/10/2006 – 1/31/2017

State of Washington License: MD00044843 4/12/2005 – 1/22/2008

<b>USMLE</b> Examination	Step 1: Passed June 1997
	Step 2: Passed March 1999
	Step 3: Passed January 2005

#### ACADEMIC APPOINTMENTS

Current Position	The Warren Alpert Medical School of Brown University, Providence, Rhode Island Division of Plastic Surgery, Department of Surgery Associate Professor: July 1, 2016 – June 30, 2021
	Lifespan Physician Group Department of Plastic Surgery Chief, Division of Pediatric Plastic Surgery Director, Craniofacial Program Director, Lifespan 3D Printing Laboratory April 18, 2016 – Current
Previous Positions	Washington University School of Medicine, St. Louis, Missouri Division of Plastic Surgery Associate Professor: January 1, 2015 – March 11, 2016 Assistant Professor: July 1, 2006 – December 31, 2014 Chief, Pediatric Plastic Surgery Director, Craniofacial Surgery Fellowship
	St. Louis Children's Hospital, St. Louis, Missouri Chief, Plastic Surgery Director, Cleft Palate-Craniofacial Institute
	Saint Louis University, St. Louis, Missouri Graduate Orthodontics

#### HOSPITAL APPOINTMENTS

- Rhode Island Hospital March 8, 2016 – February 27, 2018
- The Miriam Hospital March 8, 2016 – February 27, 2018
- Women & Infants Hospital of Rhode Island June 15, 2016 – June 1, 2018
- Barnes-Jewish Hospital, St. Louis, Missouri August 10, 2006 – March 11, 2016
- St. Louis Children's Hospital, St. Louis, Missouri July 1, 2006 – March 11, 2016
- Barnes West County Hospital, St. Louis, Missouri October 22, 2007 – March 11, 2016
- Shriner's Hospital for Children, St. Louis, Missouri December 10, 2014 – February 29, 2016

#### HOSPITAL COMMITTEES

2016-Current	Surgical Clinical Practice and Safety Committee Rhode Island Hospital
2016-Current	Quality Monitoring and Improvement Committee Rhode Island Hospital
2016-Current	Pediatric Surgical Services Committee Hasbro Children's Hospital
2015-2016	Communication Working Group St. Louis Children's Hospital
2014-2016	BJC Robotic Surgery Clinical Expert Council BJC Network
2010-2016	Perioperative Services Subcommittee Saint Louis Children's Hospital

2010	Task Force on Difficult Airway Management Quality and Safety Coordinating Committee Saint Louis Children's Hospital
2009	Operating Room UBJPT Subcommittee on Surgical Consent and Marking Saint Louis Children's Hospital

## UNIVERSITY COMMITTEES

2019-2022	Medical Faculty Executive Committee Brown University
2016-Present	Editorial Board Member, Brown Medicine Magazine The Warren Alpert Medical School of Brown University
2011-2016	Mentoring for Career Development Workgroup Department of Surgery, Washington University in St. Louis
2010-2013	Surgery Quality and Effectiveness Group Department of Surgery, Washington University in St. Louis
2008-2013	Peer Review Committee Department of Surgery, Washington University in St. Louis
2008-2014	Faculty Lifestyle Improvement Committee Department of Surgery, Washington University in St. Louis
2007	Promoting Leadership, Behavioral & Communications Excellence Work Group Department of Surgery, Washington University in St. Louis

## NATIONAL COMMITTEES

2016-Present	Program Committee American Association of Plastic Surgeons
2015-2019	Annual Meeting Program & Instructional Course Committee American Society of Plastic Surgeons
2011-2019	Membership Recruitment, Compliance, & Development Committee American Society of Plastic Surgeons
2015-2018	ASMS Program Committee

	American Society of Maxillofacial Surgeons
2015-2018	ASMS Educational Grants Committee American Society of Maxillofacial Surgeons
2015-2018	ASMS Ethics Committee American Society of Maxillofacial Surgeons
2016-2018	Technology Committee American Association of Plastic Surgeons
2015-2017	ASMS ad hoc Young Maxillofacial Surgeons Committee American Society of Maxillofacial Surgeons
2012-2016	Data Standards Committee American Cleft Palate-Craniofacial Association
2011-2012	PSF Volunteers in Plastic Surgery Steering Committee American Society of Plastic Surgeons

#### MEMBERSHIP IN SOCIETIES

Faculty (Member 753611), AOCMF North America (Since October 21, 2015) Associate Fellow, American College of Surgeons (ID 03251081) American Association of Plastic Surgeons (Since April 2014) American Society of Plastic Surgeons American Cleft Palate-Craniofacial Association (ID 23478) American Society of Maxillofacial Surgeons American Council of Academic Plastic Surgeons Plastic Surgery Research Council

## PUBLICATIONS LIST

#### ORIGINAL PUBLICATIONS IN PEER-REVIEWED JOURNALS

- Sullivan PK, Salomon JA, Woo AS, Freeman MB. The importance of the retaining ligamentous attachments of the forehead for selective eyebrow reshaping and forehead rejuvenation. *Plastic and Reconstructive Surgery*. January 2006. Volume 117(1): 95-104. PMID: 16404255.
- Zienowicz RJ, Karacaoglu E, Woo A. Massive diffuse congenital lipomatosis of the lower extremity. *Plastic and Reconstructive Surgery*. September 2006. Volume 118(3): 63e-66e. PMID: 16932159.

- 3. Shah MM, Smyth M, **Woo AS.** Adverse facial edema associated with off-label use of rh-BMP2 in cranial reconstruction for craniosynostosis: A case report. *Journal of Neurosurgery: Pediatrics.* March 2008. Volume 1(3): 255-257. PMID: 18352773.
- 4. Perlyn C, Nichols C, **Woo AS**, Becker D, Kane A. Le premier siècle: One hundred years of progress in the treatment of Apert syndrome. *Journal of Craniofacial Surgery*. May 2009. Volume 20(3): 801-806. PMID: 19387362.
- Lee A, Van Pelt AE, Smyth M, Pilgram TK, Govier DS, Woo AS, Kane AA. Comparison of perceptions and treatment practices between neurosurgeons and plastic surgeons for infants with deformational plagiocephaly. *Journal of Neurosurgery: Pediatrics*. April 2010. Volume 5(4): 368-374 (cover article). PMID: 20367342.
- 6. **Woo AS,** Jang JL, Liberman RF, Weinzweig J. Creation of a vascularized composite graft with acellular dermal matrix and hydroxyapatite. *Plastic and Reconstructive Surgery*. June 2010. Volume 125(6): 1661-1669. PMID: 20517089.
- 7. Lipira AB, Grames LM, Molter D, Govier DP, Kane AA, **Woo AS**. Videofluoroscopic and nasendoscopic correlates of speech in velopharyngeal dysfunction. *The Cleft Palate-Craniofacial Journal*. September 2011. Volume 48(5): 550-560. PMID: 20815707.
- 8. Hopper RA, Sandercoe G, **Woo A**, Watts R, Kelley P, Ettinger R, Saltzman B. Computed tomographic analysis of temporal maxillary stability and pterygomaxillary generate formation following pediatric Le Fort III distraction advancement. *Plastic and Reconstructive Surgery*. November 2010. Volume 126(5): 1665-1674. PMID: 21042122.
- 9. Jung JJ, **Woo AS**, Borschel GH. The use of Integra® bilaminar dermal regeneration template in Apert syndactyly reconstruction: A novel alternative to simplify care and improve outcomes. *Journal of Plastic Reconstructive and Aesthetic Surgery*. January 2012. Volume 65(1): 118-121. PMID: 21775231.
- Shah MN, Kane AA, Petersen JD, Woo AS, Naidoo SN, Smyth M. Endoscopicallyassisted vs. open repair of sagittal craniosynostosis: The St. Louis Children's Hospital experience. *Journal of Neurosurgery: Pediatrics*. August 2011. Volume 8(2): 165-170. PMID: 21806358.
- 11. Borschel GH, Kawamura DH, Kasukurthi R, Hunter DA, Zuker RM, **Woo AS**. The motor nerve to the masseter muscle: An anatomic and histomorphometric study to facilitate its use in facial reanimation. *Journal of Plastic Reconstructive and Aesthetic Surgery*. March 2012. Volume 65(3): 363-366. PMID: 21992936.
- 12. Gangopadhyay N, Mendonca DA, **Woo AS**. Pierre Robin Sequence. *Seminars in Plastic Surgery*. May 2012. Volume 26(2): 76-82. PMID: 23633934.
- 13. **Woo AS.** Velopharyngeal Dysfunction. *Seminars in Plastic Surgery*. November 2012. Volume 26(4): 170-177. PMID: 24179450.

- Mendonca D, Naidoo SD, Skolnick G, Skladman R, Woo AS. Comparative study of cranial anthropometric measurement by traditional calipers to computed tomography and 3D photogrammetry. *Journal of Craniofacial Surgery*. July 2013. Volume 24(4): 1106-1110. PMID: 23851749.
- 15. Patel KB, Mendonca AD, Skolnick G, Woo AS. Anatomical study of the medial crura and the effect on nasal tip projection in open rhinoplasty. *Plastic and Reconstructive Surgery*. October 2013. Volume 132(4): 787-793. PMID: 24076670.
- 16. Pet MA, Marty-Grames L, Blount-Stahl M, Molter D, Woo AS. The Furlow palatoplasty for velopharyngeal dysfunction: Velopharyngeal changes, speech improvements, and where they intersect. *The Cleft Palate-Craniofacial Journal*. January 2015. Volume 52(1): 12-22. PMID: 24164331.
- Yarbrough CK, Smyth MD, Holekamp TF, Ranalli NJ, Huang AH, Patel KB, Kane AA, Woo AS. Delayed synostoses of uninvolved sutures after surgical treatment of nonsyndromic craniosynostosis. *Journal of Craniofacial Surgery*. January 2014. Volume 25(1): 119-123. PMID: 24406563.
- Vogel TW, Woo AS, Kane AA, Patel KB, Naidoo S, Smyth MD. A comparison of costs associated with endoscope-assisted craniectomy versus open cranial vault repair for infants with sagittal synostosis. *Journal of Neurosurgery: Pediatrics*. March 2014. Volume 13(3): 324-331. PMID: 24410127.
- Le MB, Patel K, Skolnick G, Naidoo S, Smyth M, Kane A, Woo AS. Assessing longterm outcomes of open and endoscopic sagittal synostosis reconstruction using threedimensional photography. *Journal of Craniofacial Surgery*. March 2014. Volume 25(2): 573-576. PMID: 24577302.
- Russell AJ, Patel KB, Skolnick G, Woo AS, Smyth MD. The path of the superior sagittal sinus in unicoronal synostosis. *Child's Nervous System*. October 2014. Volume 30(10): 1701-1709. PMID: 24578138.
- 21. Mendonca AD, Patel K, **Woo AS.** Anatomical study of the effects of five surgical maneuvers on palate movement. *Journal of Plastic, Reconstructive, and Aesthetic Surgery*. June 2014. Volume 67(6): 764-769. PMID: 24721126.
- 22. Ghosh TD, Skolnick G, Nguyen DC, Sun H, Patel K, Smyth MD, **Woo AS**. Calvarial thickness and diploic space development in children with sagittal synostosis as assessed by computed tomography. *Journal of Craniofacial Surgery*. May 2014. Volume 25(3): 1050-1055. PMID: 24820717.
- 23. Hawasli AH, Beaumont TL, Vogel TW, **Woo AS**, Leonard JR. Acalvaria. *Journal of Neurosurgery: Pediatrics*. August 2014. Volume 14(2): 200-202. PMID: 24926969.

- 24. **Woo AS,** Skolnick GB, Sachanandani NS, Grames LM. Evaluation of two palatal repair techniques for the surgical management of velopharyngeal insufficiency. *Plastic and Reconstructive Surgery*. October 2014. Volume 134(4): 588e-596e. PMID: 24945946.
- 25. Skolnick G, Naidoo SD, Patel KB, **Woo AS**. Analysis of digital measures of cranial vault asymmetry for assessment of plagiocephaly. *Journal of Craniofacial Surgery*. July 2014. Volume 25(4): 1178-1182. PMID: 25006892.
- 26. Gangopadhyay N, Shah M, Skolnick GB, Patel KB, Naidoo SD, Woo AS. Point of maximum width: A new measure for anthropometric outcomes in patients with sagittal synostosis. *Journal of Craniofacial Surgery*. July 2014. Volume 25(4): 1226-1229. PMID: 25006901.
- Huang AH, Patel KB, Maschhoff CW, Huebener DV, Skolnick GB, Naidoo SD, Woo AS. Occlusal classification in relation to original cleft width in patients with unilateral cleft lip and palate. *The Cleft Palate-Craniofacial Journal*. September 2015. Volume 52(5): 574-578. PMID: 25058122.
- Nguyen DC, Patel KB, Woo AS, Kane AA, Smyth MD. Endoscopic-assisted treatment of sagittal craniosynostosis and calcified cephalohematoma. *Journal of Craniofacial Surgery*. November 2014. Volume 25(6): 2127-2129. PMID: 25329845.
- 29. Nguyen DC, Huang AH, Patel KB, Skolnick GB, Naidoo SD, Smyth MD, **Woo AS**. Are endoscopic and open treatments of metopic synostosis equivalent in treating trigonocephaly and hypotelorism? *Journal of Craniofacial Surgery*. January 2015. Volume 26(1): 129-134. PMID: 25534056.
- Huang AH, Sun HH, Skolnick GB, Woo AS. Thickness of calvarium and diploic space in children ages 0 to 17 as assessed by computed tomography. *European Journal of Plastic Surgery*. June 2015. Volume 38(3): 193-198. DOI: 10.1007/s00238-014-1060-3.
- 31. Ghenbot RG, Patel KB, Skolnick GB, Naidoo SD, Smyth MD, Woo AS. Effects of open and endoscopic surgery on skull growth and calvarial vault volumes in sagittal synostosis. *Journal of Craniofacial Surgery*. January 2015. Volume 26(1): 161-164. PMID: 25569396.
- Anastasaki C, Woo AS, Messiaen LM, Gutmann DH. Elucidating the impact of neurofibromatosis-1 germline mutations on neurofibromin function and dopamine-based learning. *Human Molecular Genetics*. June 15, 2015. Volume 24(12): 3518-3528. PMID: 25788518.
- 33. Dvoracek LA, Skolnick GB, Nguyen DC, Naidoo SD, Smyth MD, Woo AS, Patel KB. Comparison of traditional versus normative cephalic index in patients with sagittal synostosis: Measure of scaphocephaly and postoperative outcome. *Plastic and Reconstructive Surgery*. September 2015. Volume 136(3): 541-548. PMID: 25989301.
- 34. Naidoo SD, Skolnick GB, Patel KB, Woo AS, Cheng AL. Long-term outcomes in

treatment of deformational plagiocephaly and brachycephaly using helmet therapy and repositioning: a longitudinal cohort study. *Child's Nervous System*. September 2015. Volume 31(9): 1547-1552. PMID: 26033379.

- 35. Nguyen DC, Patel KB, Skolnick GB, Skladman R, Grames LM, Stahl MB, Marsh JL, Woo AS. Progressive tightening of the levator veli palatini muscle improves velopharyngeal dysfunction in early outcomes of primary palatoplasty. *Plastic and Reconstructive Surgery*. July 2015. Volume 136(1): 131-141. PMID: 26111318.
- Zubovic E, Woo AS, Skolnick GB, Naidoo SD, Smyth MD, Patel KB. Cranial base and posterior cranial vault asymmetry after open and endoscopic repair of isolated lambdoid craniosynostosis. *Journal of Craniofacial Surgery*. July 2015. Volume 26(5): 1568-1573. PMID: 26114505.
- Farber SJ, Snyder-Warwick AK, Skolnick GB, Woo AS, Patel KB. Maxillomandibular fixation by plastic surgeons: Cost analysis and utilization of resources. *Annals of Plastic Surgery*. September 2016. Volume 77(3): 305-307. PMID: 26207551.
- Skolnick GB, Naidoo SD, Nguyen DC, Patel KB, Woo AS. Comparison of direct and digital measures of cranial vault asymmetry for assessment of plagiocephaly. *Journal of Craniofacial Surgery*. September 2015. Volume 26(6): 1900-1903. PMID: 26267578.
- Russell AJ, Patel KB, Skolnick GB, Woo AS. The use of an inferior pennant flap during unilateral cleft lip repair improves lip height symmetry. *Plastic and Reconstructive Surgery*. November 2015. Volume 136(5): 1046-1053. PMID: 26505705.
- 40. Han RH, Nguyen DC, Bruck BS, Skolnick GB, Yarbrough CK, Naidoo SD, Patel KB, Kane AA, **Woo AS**, Smyth MB. Characterization of complications associated with open and endoscopic craniosynostosis surgery at a single institution. Journal of Neurosurgery: Pediatrics. March 2016. Volume 17(3): 361-370. PMID: 26588461.
- 41. Nguyen DC, Shahzad F, Snyder-Warwick A, Patel KB, **Woo AS.** Transcaruncular approach for treatment of medial wall and large orbital blowout fractures. *Craniomaxillofacial Trauma and Reconstruction*. March 2016. Volume 9(1): 46-54. PMID: 26889348.
- Nguyen DC, Patel KB, Parikh RP, Skolnick GB, Woo AS. Five surgical maneuvers on nasal mucosa movement in cleft palate repair: A cadaver study. *Journal of Plastic, Reconstructive, and Aesthetic Surgery*. June 2016. Volume 69(6): 789-795. PMID: 27105546.
- Salehi A, Ott K, Skolnick GB, Nguyen DC, Naidoo SD, Kane AA, Woo AS, Patel KB, Smyth MD. Neosuture formation after endoscope-assisted craniosynostosis repair. *Journal of Neurosurgery: Pediatrics*. August 2016. Volume 18(2): 196-200. PMID: 27128960.
- 44. Odom E, Woo AS, Mendonca DA, Huebener DV, Nissen RJ, Skolnick GB, Patel KB.

Long-term incisal relationships after palatoplasty in patients with isolated cleft palate. *Journal of Craniofacial Surgery*. June 2016. Volume 27(4): 867-870. PMID: 27171942.

- 45. Nguyen DC, Farber SJ, Um GT, Skolnick GB, **Woo AS**, Patel KB. Anatomical study of the intraosseous pathway of the infraorbital nerve. *Journal of Craniofacial Surgery*. June 2016. Volume 27(4): 1094-1097. PMID: 27285894.
- 46. Skolnick GB, Naidoo SD, Nguyen DC, Patel KB, Woo AS. Evidence for use of frontozygomaticus and contralateral eurion as hand-caliper landmarks for assessment of deformational plagiocephaly. *Journal of Craniofacial Surgery*. September 2016. Volume 27(6): 1498-1500. PMID: 27428906.
- Farber SJ, Nguyen DC, Skolnick GB, Woo AS, Patel KB. Current management of zygomaticomaxillary complex fractures: A multidisciplinary survey and literature review. *Craniomaxillofacial Trauma and Reconstruction*. November 2016. Volume 9(4): 313-322. PMID: 27833710.
- 48. Dlouhy BJ, Nguyen DC, Patel KB, Hoben GM, Skolnick GB, Naidoo SN, Woo AS, Smyth MD. Endoscope-assisted management of sagittal synostosis: Wide vertex suturectomy and barrel stave osteotomies versus narrow vertex suturectomy. *Journal of Neurosurgery: Pediatrics*. December 2016. Volume 25(6): 674-678. PMID: 27611899.
- 49. Yen DW, Nguyen DC, Skolnick GB, Naidoo SD, Patel KB, Grames L, **Woo AS**. A comparison of the need for speech therapy after 2 palatal repair techniques. *Annals of Plastic Surgery*. March 2017. Volume 78(3): 284-288. PMID: 27759593.
- Nguyen DC, Woo AS, Farber SJ, Skolnick GB, Yu J, Naidoo SD, Patel KB. Comparison of resorbable plating systems: Complications during degradation. *Journal of Craniofacial Surgery*. January 2017. Volume 28(1): 88-92. PMID: 27906843.
- Farber SJ, Woo AS. Fenestration of Solid Orbital Implants: Reducing retrobulbar hematoma rate. *Journal of Craniofacial Surgery*. January 2017. Volume 28(1): 248-249. PMID: 27906852.
- Yu JL, Nguyen DC, Chaiyasate K, Gangopadhyay N, Sachanandani N, Woo AS. Single Z-plasty versus double-opposing Z-plasty: A cadaveric study of palatal lengthening. *Journal of Craniofacial Surgery*. March 2017. Volume 28(2): 343-346. PMID: 27997446.
- Farber SJ, Nguyen DC, Parikh RP, Jang JL, Woo AS. Improving results in closed nasal reduction: A protocol for reducing secondary deformity. *Plastic and Reconstructive Surgery*. January 2017. Volume 139(1): 51-59. PMID: 28027227.
- 54. Woo AS. Evidence-based medicine: Cleft palate. *Plastic and Reconstructive Surgery*. January 2017. Volume 139(1): 191e-203e. PMID: 28027255.

- 55. Shankar VA, Snyder-Warwick A, Skolnick GB, Woo AS, Patel KB. Incidence of palatal fistula at time of secondary alveolar cleft reconstruction. *The Cleft Palate-Craniofacial Journal*. January 2018. PMID: 28140667.
- 56. Jin L, Liu Y, Sun F, Collins MT, Blackwell K, Woo AS, Reichenberger EJ, Hu Y. Three novel ANO5 missense mutations in Caucasian and Chinese families and sporadic cases with gnathodiaphyseal dysplasia. Scientific Reports. February 8, 2017. Volume 7: 40935. doi:10.1038/srep40935. PMID: 28176803.
- 57. Skladman R, Grames L, Skolnick G, Nguyen DC, Naidoo SD, Patel KB, Marsh JL, Woo AS. Adult quality of life post cleft palate repair: A comparison of two techniques. *Journal of Craniofacial Surgery*. June 2017. Volume 28(4): 909-914. PMID: 28277486.
- 58. Yu JL, **Woo AS**. Alar pinning in rigid external distraction for midfacial hypoplasia. *Annals of Plastic Surgery*. September 2017. Volume 79(3): 275-279. PMID: 28570459.
- Nguyen DC, Farber SJ, Skolnick GB, Naidoo SD, Smyth MD, Kane AA, Patel KB, Woo AS. One hundred consecutive endoscopic repairs of sagittal craniosynostosis – An evolution in care. *Journal of Neurosurgery: Pediatrics*. November 2017. Volume 20(5): 410-418. PMID: 28841109.
- 60. Otaify GA, Whyte MP, Gottesman GS, McAlister WH, Gordon JE, Hollander A, Andrews MV, El-Mofty SK, Chen WS, Veis DV, Stolina M, Woo AS, Katsonis P, Lichtarge O, Zhang F, Shinawi M. Gnathodiaphyseal dysplasia: Severe atypical presentation with novel heterozygous mutation of the anoctamin gene (ANO5). *Bone*. February 2018. Volume 107: 161-171. PMID: 29175271.
- 61. Masserano B, Woo AS, Skolnick GB, Naidoo SD, Proctor MR, Smyth MD, Patel KB. The temporal region in unilateral coronal craniosynostosis: Fronto-orbital advancement versus endoscopic-assisted strip craniectomy. *Cleft Palate-Craniofacial Journal*. March 2018. Volume 55(3): 423-429. PMID: 29437517.
- 62. Basta MN, Fiadjoe JE, **Woo AS**, Peeples KN, Jackson OA. Predicting adverse perioperative events in patients undergoing primary cleft palate repair. *The Cleft Palate-Craniofacial Journal*. April 2018. Volume 55(4): 574-581. PMID: 29554444.
- Domeshek LF, Woo A, Skolnick GB, Naidoo S, Segar D, Smyth M, Proctor M, Patel KB. Postoperative changes in orbital dysmorphology in patients with unicoronal synostosis. *Journal of Craniofacial Surgery*. March/April 2019. Volume 30(2): 483-488. PMID: 20688816.
- 64. Hsieh ST, **Woo AS**. Pierre Robin Sequence. *Clinics in Plastic Surgery*. April 2019. Volume 46(2): 249-259. PMID: 30851756.
- 65. Skolnick GB, Murthy S, Patel KB, Huang Z, Naidoo SD, Ju T, Smyth MD, **Woo, AS**. Long-term characterization of cranial defects after surgical correction for single-suture

craniosynostosis. Annals of Plastic Surgery. Volume 82(6): 679-685. PMID: 31082848.

- 66. Nissen NJ, Okhah ZI, Basta MN, Hsieh S, Crozier JW, **Woo AS**. Underdiagnosis of nasoorbitoethmoid fractures in patients with zygoma injury. *Plastic and Reconstructive Surgery*. [Accepted April 11, 2019].
- 67. Nguyen DC, Yen DY, Skolnick GB, Smyth MD, Patel KB, **Woo AS**. Evaluation of direct surgical remodeling of frontal bossing in patients with sagittal synostosis. *Journal of Craniofacial Surgery*. [Accepted May 24, 2019].
- Boyajian MK, Crozier JW, Woo AS. Introduction of medical three-dimensional printing in Rhode Island. *Rhode Island Medical Journal*. August 2019. Volume 102(6): 15-18. PMID: 31398962.
- 69. Boyajian M, Naidoo SD, Al-Samkari HT, Nguyen DC, **Woo AS**. Partial suture fusion in non-syndromic single suture craniosynostosis. *The Cleft Palate-Craniofacial Journal*. [Accepted August 30, 2019].
- Boyajian MK, Bhatt R, Crozier JW, Kalliainen LK, Woo AS. Three-dimensional printed flexor tendon repair simulator promotes medical student surgical interest. *Journal of Contemporary Medical Education*. [Accepted September 18, 2019].

## OTHER PEER-REVIEWED PUBLICATIONS

- 71. **Woo AS**, Patel KB, Snyder-Warwick A. Management and repair of the cleft palate. *Pediatric UPDATE*. August 1, 2014. Volume 35(2).
- 72. Derderian CA, Heppner C, Craddock MM, Woo AS, Patel KB, Smyth MD, Weprin BE, Seaward J, Smartt JM, Kane AA. The effects of whole-vault cranioplasty versus strip craniectomy on long-term neuropsychological outcomes in sagittal craniosynostosis. *Plastic and Reconstructive Surgery*. July 2015. Volume 136(1): 114e-115e. PMID: 25811700.
- 73. Nguyen DC, Patel KB, Woo AS. Reply: Progressive tightening of the levator veli palatini muscle improves velopharyngeal dysfunction in early outcomes in primary palatoplasty. *Plastic and Reconstructive Surgery*. March 2016. Volume 137(3): 644e. PMID: 26910716.
- 74. Nguyen DC, Patel KB, Woo AS. Reply: Progressive tightening of the levator veli palatini muscle improves velopharyngeal dysfunction in early outcomes in primary palatoplasty. *Plastic and Reconstructive Surgery*. June 2016. Volume 137(6): 1059e-60e. PMID: 26890516.

#### BOOKS AND BOOK CHAPTERS

#### Books:

1. **Woo, AS** (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.

#### Book Chapters:

- 1. **Woo AS,** Gruss JS: Fractures of the Zygoma. In: Weinzweig (Ed): Plastic Surgery Secrets Plus (2<sup>nd</sup> Edition). Elsevier: Philadelphia, 2010. ISBN: 0323034705.
- Barbour JR, Woo AS, Fox IK. Dupuytren's Contracture. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Belz JM, Woo AS, Tung THH. Breast Cancer Reconstruction. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Domeshek L, Woo AS. Mandible Fractures. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Franco MJ, Woo AS. Le Fort Fractures. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Gangopadhyay N, Woo AS. Lower Lid Ectropion (Senile/Paralytic). In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Gangopadhyay N, Woo AS. Pediatric Mandible Fractures. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Hoben G, Woo AS. Neck Burn Contracture. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Hoben G, Woo AS. Scalp Burn Reconstruction. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.

- Kale S, Woo AS, Myckatyn TM. Cheek Reconstruction. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Moore AM, Woo AS. Rhinoplasty. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Sachanandani NS, Woo AS. Frontal Sinus Fractures. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Shahzad F, Woo AS. Bilateral Cleft Lip Deformity. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Shahzad F, Woo AS. Cleft Palate Deformity. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Shahzad F, Woo AS. Microtia. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Shahzad F, Woo, AS. Zygoma Fractures. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Woo AS. Unilateral Cleft Lip and Palate Deformity. In: Woo AS (Ed), Shahzad F, Snyder-Warwick A (Co-Eds). *Plastic Surgery Case Review*. New York: Thieme, October 2014. ISBN: 9781604068207.
- Stoker G, Buchowski J, Woo AS. Chapter 54: Wound Complications. In: Shen F, Samartzis D, Fessler RG [Eds]. *Textbook of the Cervical Spine*. Saunders: Maryland Heights, Missouri, January 2015, pp. 471-477. ISBN: 9781455711437.
- 19. Woo AS. Cleft and Orthognathic Surgery: Questions. In: Buck II DW. *Review of Plastic Surgery*. Elsevier: December 2015, pp. ISBN: 978-0-323-35491-2.

#### OTHER NON-PEER REVIEWED PUBLICATIONS

75. Domeshek L, Patel K, Skolnick G, Smyth M, **Woo AS**. Long-term frontal asymmetry following fronto-orbital reconstruction for unilateral coronal craniosynostosis. *Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies*. May 2013.

- 76. Gangopadhyay N, Woo AS. Point of maximum width: A new measure for anthropometric outcomes in patients with sagittal synostosis. Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies. May 2013.
- 77. Ghenbot R, Skolnick G, Patel K, **Woo AS**. Cranial vault volume in unoperated sagittal synostosis A case study and comparison. *Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies*. May 2013.
- 78. Ghenbot R, Skolnick G, Patel K, **Woo AS.** Skull growth and cranial vault volumes in sagittal synostosis. *Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies.* May 2013.
- 79. Grames LM, Stahl MB, Skolnick G, Wombacher N, **Woo AS.** Participant perspectives on a unique speech therapy collaborative care program for children with clefts. *Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies*. May 2013.
- 80. Huang AH, Patel K, Naidoo S, Skolnick G, Woo AS. Are endoscopic and open treatments of metopic synostosis equivalent in treating trigonocephaly? *Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies*. May 2013.
- 81. Le M, Naidoo AH, Skolnick G, Patel K, Smyth M, Kane AA, Woo AS. Assessing longterm outcomes of sagittal synostosis reconstruction using three-dimensional photography. *Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies*. May 2013.
- 82. Maschoff C, Naidoo S, Woo AS. Long term outcome of maxillary growth in relation to original cleft width in patients with unilateral cleft lip and palate. *Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies*. May 2013.
- 83. Mendonca AD, Patel K, **Woo AS.** Anatomical study of the effects of five surgical maneuvers on palate movement. *Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies*. May 2013.
- 84. Woo AS, Sachanandani N, Skolnick G. Evaluation of two palatal repair techniques for the surgical management of velopharyngeal insufficiency. *Proceedings of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies*. May 2013.
- 85. Yarbrough C, Huang AH, Smyth M, Patel K, **Woo AS.** Delayed synostosis of an unrelated suture after surgical treatment of non-syndromic craniosynostosis. *Proceedings* of the 12th International Congress on Cleft Lip/Palate and Related Craniofacial

Anomalies. May 2013.

#### PUBLICATIONS SUBMITTED OR IN PREPARATION

- 1. Akiki R, Jehle C, Crozier J, Woo AS. Cleft lip & palate surgery crowdfunding and access to care. *The Cleft Palate-Craniofacial Journal*. [Submitted November 3, 2019].
- 2. Brower J, Crozier J, McIntire D, Boyajian M, **Woo AS**. Reconstruction of a hemirhinectomy defect using a 3D printed custom soft tissue cutting guide. *Annals of Plastic Surgery*. [Submitted August 30, 2019].
- 3. Mehrzad R, Crozier J, **Woo AS**. Letter to the Editor: Googling aesthetic plastic surgery for patient insights into the latest trends. *Plastic and Reconstructive Surgery*. [Submitted August 19, 2019].
- 4. Denour E, Crozier J, Van Dongen C, **Woo AS**. Case study: The use of three-dimensional photography and printing in the fabrication of a nasal prosthesis. *Journal of Prosthodontic Research*. [Submitted June 17, 2019].
- Boyajian M, Lubner R, Roussel L, Crozier J, Ryder B, Woo AS. Innovating the Medical Student Suturing Curriculum with a 3D Printed Training Tool. *The Clinical Teacher*. [Submitted September 7, 2019].
- 6. Hsiao V, Kiwanuka E, Kwan D, Woo AS. The landscape of transgender surgery in the United States. *Annals of Plastic Surgery*. [Submitted July 23, 2018].
- Yu J, Patel KB, Skolnick GB, Naidoo SN, Parikh R, David L, Couture D, Smyth MB, Woo AS. Comparison of two endoscopic sagittal craniosynostosis repair techniques: Spring-assisted surgery versus craniectomy with helmet molding therapy. *The Cleft Palate-Craniofacial Journal*. [Submitted].
- 8. McIntire DR, Jehle CC, Basta MN, Crozier JW, **Woo AS**. Closed reduction of nasal fractures in the emergency department: Success or failure? *Plastic and Reconstructive Surgery*. [Submitted September 4, 2019].

#### ABSTRACTS

- Shahzad F, Woo AS, Snyder-Warwick A. The transcaruncular approach for treatment of medial wall and giant orbital blowout fractures. *Plastic and Reconstructive Surgery*. October 2011, Volume 128(4S): 31.
- 2. Nguyen DC, Patel K, Skolnick G, Grames L, Stahl M, **Woo AS**. Progressive tightening of the levator veli palatini muscle improves velopharyngeal function in primary palatoplasty. *Plastic and Reconstructive Surgery*. April 2014, Volume 133(4S): 1003.

PMID 24675332.

- Nguyen DC, Patel KB, Skolnick GB, Woo AS. Anatomical study of the effects of five surgical maneuvers on nasal mucosa movement. *Plastic and Reconstructive Surgery*. October 2014, Volume 134(4): 4-5. PMID: 25254676.
- Parikh RP, Farber SJ, Nguyen D, Skolnick GB, Patel K, Woo AS. Risk factors for postoperative complications after surgical correction of craniosynostosis: A nationwide analysis of 1357 intracranial procedures. *Plastic and Reconstructive Surgery*. October 2015, Volume 136(4 Supplement): 40. PMID: 26397535.
- Parikh RP, Nguyen DC, Skolnick GB, Patel KB, Woo AS. Surgical site infections in pediatric plastic surgery: Risk factors and implications for quality improvement from a nationwide assessment of 11,656 operations. *Plastic and Reconstructive Surgery*. October 2015, Volume 136(4 Supplement): 120. PMID: 26397639.
- 6. Boyajian MK, Snapp WK, Crozier JW, Schmidt S, **Woo AS**, Prsic A. A Novel 3D Printed Hand Model for Simulate Bony Fixation with Kirschner Wires without Fluoroscopy. *Plastic and Reconstructive Surgery Global Open*. [In Press].
- 7. Boyajian MK, Lubner R, Roussel L, Crozier JW, Ryder B, **Woo AS**. A Novel Suture Training Device to Innovate the Surgical Curriculum in Medical School. *Plastic and Reconstructive Surgery Global Open*. [In Press].

## SCHOLARLY WORK PUBLISHED IN OTHER MEDIA

#### PEER-REVIEWED

 Woo AS. Naso-orbito-ethmoid fractures. Plastic Surgery Hyperguide (<u>http://www.plasticsurgery.hyperguides.com/featurePresentation.asp?xyz=2&operation=pause</u>), May 15, 2007.

#### INVITED PRESENTATIONS

#### NATIONAL AND INTERNATIONAL

- 1. **Woo AS.** Techniques in Craniofacial Surgery. Invited presentation at Plastic Surgery Grand Rounds, Rhode Island Hospital in Providence, Rhode Island, on February 15, 2006.
- 2. **Woo AS.** Pediatric Craniofacial Reconstruction. Invited presentation at Surgery Grand Rounds, Michigan State University in Lansing, Michigan, on February 16, 2006.
- 3. **Woo AS.** Orbital Reconstruction. Invited presentation at Interdisciplinary Problem Solving in Craniomaxillofacial Surgery at Ohio State University in Columbus, Ohio, on

June 6, 2009.

- 4. **Woo AS.** Complex Periorbital Reconstruction. Invited presentation at the Snowbird Symposium in Park City, Utah, on February 5, 2010.
- 5. **Woo AS.** Reshaping the Face of Tomorrow. Invited presentation at webinar sponsored by Osteomed on June 4, 2015.
- 6. Harshbarger R (moderator), Miller D, Birgfeld C, **Woo AS.** Facial Fractures: When Things Go Wrong. Panel Presentation at Plastic Surgery The Meeting 2015 in Boston, Massachusetts, on October 18, 2015.
- 7. **Woo AS**. 3D Printing in Medicine. Invited presentation at the 28<sup>th</sup> Annual Additive Manufacturing Users Group (AMUG) in St. Louis, Missouri, on April 5, 2016
- Hopper RA (moderator), Khechoyan D, Steinbacher D, Taylor J, Woo AS. Beyond the cephalic index: How should we really be measuring our synostosis outcomes? ASCFS/ACPA Panel Presentation at 73<sup>rd</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association in Atlanta, Georgia, on April 9, 2016.
- Woo AS. Distraction of the Craniofacial Skeleton. Invited presentation at the ASMS Basic Maxillofacial Principles & Technics Course in Chicago, Illinois, on August 21, 2016.
- Woo AS. Minimally Invasive Cranioplasty: Endoscopy/Helmet or Spring-Assisted. Invited presentation at the ASMS Pediatric Symposia in Pittsburgh, Pennsylvania, on August 27, 2016.
- 11. Mount D (moderator), Rogers G, Persing J, **Woo AS**. Craniosynostosis: Minimal vs Total Remodeling. Panel Presentation at ASMS Pre-Conference Symposium: Why Do You Do It That Way? In Los Angeles, California, on September 22, 2016.
- 12. Doumit G (moderator), Patel P, **Woo AS**, Forrest C. Skullcraft: 3D Printing for Planning in Craniofacial Surgery. Panel Presentation at Plastic Surgery The Meeting 2016 in Los Angeles, California, on September 25, 2016.
- 13. **Woo AS.** Letting Go Under Control: Resident as Primary Surgeon for a Consecutive, Non-Selective Series of Furlow Palatoplasties. Discussant at the 96<sup>th</sup> Annual Meeting of the American Association of Plastic Surgeons in Austin, Texas, on March 28, 2017.
- 14. **Woo AS**. Surgical Approaches to the Mandible. Invited presentation at the AO North America Management of Facial Trauma Conference in Columbus, Ohio, on May 7, 2017.
- 15. **Woo AS**. Surgical Management of Pierre Robin Sequence. Multidisciplinary Panel Invited presentation at the 2<sup>nd</sup> International Robin Sequence Consensus Meeting in Toronto, Canada, on May 8, 2017.

- 16. Woo AS. Complex Orbital Reconstruction and Secondary Repair. Invited presentation at AO CMF Pre-Course Symposium: Concepts in Reconstruction of Facial Trauma Following Initial Management in Arlington, Virginia, on October 20, 2017.
- 17. **Woo AS**. Condylar Fractures. Invited presentation at AO CMF Management of Facial Trauma Conference in Arlington, Virginia, on October 22, 2017.
- 18. **Woo AS**. Scaphocephaly Correction with Suturectomy with Helmet. Invited presentation at PRS Korea 2017 in Seoul, South Korea, on November 10, 2017.
- 19. Woo AS. Update in Cleft Palate Repair. Invited presentation at PRS Korea 2017 in Seoul, South Korea, on November 10, 2017.
- 20. **Woo AS**. 3D Printing in Plastic Surgery. Invited presentation at the 3D Heals Boston: Healthcare 3D Printing Groundup at General Electric Headquarters in Boston, Massachusetts, on June 26, 2018.
- 21. Kirschner R, Friel M, Mehendale F, Rogers-Vizena C, **Woo AS**. Fundamentals of Cleft Palate Repair and Review of Outcomes. Invited presentation at Plastic Surgery The Meeting 2018 in Chicago, Illinois, on September 29, 2018.
- Woo AS. A New Technique for Cleft Palate Repair. Invited presentation at the 1<sup>st</sup> Annual Joseph S. Gruss Symposium in Facial Reconstruction in Seattle, Washington, on January 26, 2019
- 23. **Woo AS**. Craniofacial Disorders and Syndromes. Invited presentation at the 4<sup>th</sup> Annual CSF Disorder Symposium: From Canvas to Clinic Artistic(al) Management of Cerebrospinal Fluid Disorders in Providence, Rhode Island, on June 15, 2019.
- 24. Mann R, Losee J, **Woo AS**. ABC's of Cleft Palate Repair. Panel Presentation at Plastic Surgery The Meeting 2019 in San Diego, California, on September 20, 2019.
- 25. **Woo AS.** Cleft Palate Repair. International invited speaker to the 19<sup>th</sup> Shanghai International Plastic and Aesthetic Surgery Conference in Shanghai, China, on March 20-22, 2020.

#### LOCAL AND REGIONAL

- 1. **Woo AS.** Facial Trauma in the Pediatric Population. Presentation at C-S-I (Continuing Education for Supervisors and Staff including Investigative & Forensic Medicine) in Cape Girardeau, Missouri, on October 26, 2006.
- 2. **Woo AS.** Post-traumatic Facial Reconstruction. Lecture to first-year medical student class at Washington University in St. Louis in St. Louis, Missouri, on December 4, 2006.

- 3. **Woo AS.** Pediatric Craniofacial Surgery. Presentation at Early Bird Rounds Conference at St. Louis Children's Hospital in St. Louis, Missouri, on March 2, 2007.
- 4. **Woo AS.** Cleft Lip and Palate (An Overview). Presentation to the Pediatric Medical Society of Southwest Missouri in Springfield, Missouri, on April 2, 2007.
- 5. **Woo AS.** Pediatric Craniofacial Injuries (An Overview). Presentation at the 26<sup>th</sup> Annual Trends in Trauma Conference in St. Louis, Missouri, on April 26, 2007.
- 6. **Woo AS.** Traumatic Facial, Skull, and Ear Injuries. Presentation at Trauma Grand Rounds for St. John's Mercy Hospital in St. Louis, Missouri, on August 8, 2007.
- 7. **Woo AS.** Overview of Pediatric Plastic Surgery. Presentation at Clinical Pediatric Update in Springfield, Illinois, on September 28, 2007.
- 8. **Woo AS.** Facial Trauma. Presentation at Traumapalooza at BJC Critical Care System in St. Louis, Missouri, on October 1, 2007.
- 9. **Woo AS.** Cleft lip and palate (An Overview). Presentation at Saint Louis Children's Hospital Staff Nurse Education Day in St. Louis, Missouri, on October 3, 2007.
- 10. Borschel GH, **Woo AS**, Kane AA. Update in Pediatric Plastic Surgery. Overview of pediatric plastic surgery. Local presentation at Anderson Hospital Department of Family Practice in Maryville, Illinois, on October 24, 2007.
- 11. **Woo AS.** Craniofacial reconstruction. Medical student lecture at Washington University in St. Louis in St. Louis, Missouri, on December 6, 2007.
- 12. **Woo AS.** Cleft lip and palate (An Overview). Presentation at Saint Louis Children's Hospital Staff Nurse Education Day in St. Louis, Missouri, on December 10, 2007.
- 13. **Woo AS.** Outpatient Pediatric Plastic Surgery. Presentation at Early Bird Rounds Conference at St. Louis Children's Hospital in St. Louis, Missouri, on May 15, 2009.
- 14. **Woo AS.** Techniques in Pediatric Craniofacial Surgery. Presentation at Craniofacial Grand Rounds, St. Louis Children's Hospital in St. Louis, Missouri, on March 30, 2011.
- 15. **Woo AS.** Post-Traumatic Reconstruction of the Skull and Upper Face. Presentation at Neurosurgery Grand Rounds, Washington University in St. Louis in St. Louis, Missouri, on July 28, 2010.
- 16. **Woo AS.** Pediatric Facial Trauma: A Whirlwind Tour. Presentation at Surgical Nursing Grand Rounds, St. Louis Children's Hospital in St. Louis, Missouri, on May 11, 2011.
- 17. Woo AS. Craniofacial Surgery. Presentation to the St. Louis Chapter of the Association

of Operating Room Nurses in St. Louis, Missouri, on January 10, 2012.

- Woo AS. Craniofacial Development & the Surgical Management of Craniosynostosis. Presentation at Washington University Therapy Services Grand Rounds in St. Louis, Missouri, on March 21, 2012.
- 19. **Woo AS.** Craniosynostosis. Presentation at Washington University Facial Plastic Surgery Grand Rounds in St. Louis, Missouri, on April 4, 2012.
- 20. **Woo AS.** Facial Trauma. Presentation at Washington University General Surgery Teaching Rounds in St. Louis, Missouri, on April 11, 2012.
- 21. **Woo AS**, Leonard J. Acalvaria. Presentation at the St. Louis Children's Hospital Pediatric Grand Rounds in St. Louis, Missouri, on May 14, 2013.
- 22. **Woo AS**. An Overview of Care for Cleft Lip and Palate. Presentation at Blessing Hospital Pediatric Grand Rounds in Quincy, Illinois, on July 31, 2013.
- 23. **Woo AS.** The Plastic Surgeon and the Speech Pathologist. Presentation at Cleft Palate and Velopharyngeal Dysfunction for the Speech Pathologist in St. Louis, Missouri, on October 5, 2013.
- 24. **Woo AS**. Severe Craniofacial Trauma and Reconstruction. Presentation at St. Louis Children's Hospital Trauma Grand Rounds in St. Louis, Missouri, on May 15, 2014.
- 25. Woo AS. An Overview of Care for Cleft Lip and Palate. Presentation at St. Louis University Speech and Language Pathology Course in St. Louis, Missouri, on June 17, 2014.
- 26. **Woo AS.** Pediatric Facial Trauma. Presentation at Blessing Hospital Pediatric Grand Rounds in Quincy, Illinois, on September 24, 2014.
- 27. **Woo AS**. An Overview of Cleft Lip and Palate. Presentation at Washington University Fetal Care Educational Conference in St. Louis, Missouri, on November 20, 2014.
- Woo AS. An Overview of Care for Cleft Lip and Palate. Presentation at St. Louis University Speech and Language Pathology Course in St. Louis, Missouri, on June 18, 2015.
- 29. **Woo AS.** What Every Pediatrician Should Know About Pediatric Plastic Surgery. Presentation at Early Bird Rounds Conference at St. Louis Children's Hospital in St. Louis, Missouri, on December 11, 2015.
- 30. **Woo AS**. Facial Fracture Plating. Presentation at Plastic Surgery Grand Rounds in St. Louis, Missouri, on January 13, 2016.

- 31. **Woo AS**. Development of a New Cleft Palate Repair. Presentation at Craniofacial Grand Rounds in St. Louis, Missouri, on February 11, 2016.
- 32. **Woo AS**. Parting Thoughts to the Residents. Presentation at Plastic Surgery Grand Rounds in St. Louis, Missouri, on March 1, 2016.
- 33. **Woo AS**. Surgical Techniques in Facial Trauma Reconstruction. Presentation at Surgical Grand Rounds on Rhode Island Hospital in Providence, Rhode Island, on April 26, 2016.
- 34. Woo AS. Craniofacial Surgery: A Multidisciplinary Team Approach. Presentation at the 1<sup>st</sup> Annual Cerebrospinal Fluid Disorders Symposium at The Warren Alpert Medical School in Providence, Rhode Island, on June 25, 2016.
- 35. **Woo AS**. Craniofacial Surgery: An Overview for Programmatic Development. Presentation to the Rhode Island Hospital Foundation Board in Providence, Rhode Island, on July 28, 2016.
- 36. **Woo AS**. Technology in Plastic Surgery (3D Printing, Imaging, and Robotic Applications). Presentation at Pediatric Grand Rounds at Rhode Island Hospital in Providence, Rhode Island, on November 11, 2016.
- 37. **Woo AS**. Craniofacial Surgery: In Pursuit of Excellence. Presentation at the President's Pursuit of Excellence Meeting at Rhode Island Hospital in Providence, Rhode Island, on November 18, 2016.
- 38. **Woo AS**. Facial Trauma Reconstruction. Lecture to the Brown University Pre-Clinical Trauma Elective at The Warren Alpert Medical School in Providence, Rhode Island, on November 28, 2016.
- 39. **Woo AS.** What Every Pediatrician Should Know About Plastic Surgery. Presentation at Pediatric Grand Rounds at Saint Anne's Hospital in Fall River, Massachusetts, on December 16, 2016.
- 40. **Woo AS.** Craniofacial Surgery. Presentation to the Biomedical Club at The Wheeler School in Providence, Rhode Island, on January 6, 2017.
- 41. **Woo AS.** An Overview of Craniofacial Surgery. Presentation to the Post-Anesthesia Nursing Group at Rhode Island Hospital in Providence, Rhode Island, on January 18, 2017.
- 42. **Woo AS**. Craniofacial Surgery: The Management of Craniosynostosis. Lecture to the Brown University Pre-Clinical Trauma Elective at The Warren Alpert Medical School in Providence, Rhode Island, on February 21, 2017.
- 43. **Woo AS**. Craniofacial Reconstruction. Presentation at Brown University Neurosurgery Grand Rounds in Providence, Rhode Island, on May 1, 2017.

- Woo AS. Medical 3D Printing. Keynote speaker at Medical Innovations in 3D Printing New England 3DP Healthcare Solutions Series in Boston, Massachusetts, on June 7, 2017.
- 45. **Woo AS**. 3D Printing in Medical Education. Presentation at Brown University Fourth Annual MedEd Talks! in Providence, Rhode Island, on October 30, 2017.
- 46. **Woo AS.** Hair Transplantation. Presentation at the Lifespan Physician Group Lunch and Learn Event in Providence, Rhode Island, on January 3, 2018.
- Woo AS. 3D Printing in Medicine and Education. Presentation to the Department of Biomedical Engineering at Brown University in Providence, Rhode Island, on March 8, 2018.
- 48. McIntire D, Jehle CC, Basta M, Woo AS, Liu PY. Closed Reduction of Nasal Fractures in the Emergency Department: Success or Failure? Presented at the 59<sup>th</sup> Annual Meeting of the New England Society of Plastic Surgeons in Manchester Village, Vermont on June 9, 2018.
- 49. Jehle CC, Basta M, McIntire D, Woo AS, Liu PY. Responsible Antibiosis in Patients Presenting Acutely with Midface Fractures. Presented at the 59<sup>th</sup> Annual Meeting of the New England Society of Plastic Surgeons in Manchester Village, Vermont on June 9, 2018.
- 50. Jehle CC, Hsieh S, Basta M, Rao V, Nissen NJ, McIntire D, Woo AS, Liu PY. Mandible Fractures Undergoing Transfer Rarely Require Acute Intervention. Presented at the 59<sup>th</sup> Annual Meeting of the New England Society of Plastic Surgeons in Manchester Village, Vermont on June 9, 2018.
- 51. Hsieh S, Jehle CC, Rao V, Nissen NJ, McIntire D, Woo AS, Liu PY. Prophylactic Antibiotic Bias in the Setting of Mandible Trauma. Presented at the 59<sup>th</sup> Annual Meeting of the New England Society of Plastic Surgeons in Manchester Village, Vermont on June 9, 2018.
- 52. Nissen NJ, Hsieh S, Rao V, Woo AS, Liu PY. The Underdiagnosis and Incomplete Reconstruction of Nasoorbitoethmoid Fractures. Presented at the 59<sup>th</sup> Annual Meeting of the New England Society of Plastic Surgeons in Manchester Village, Vermont on June 10, 2018.
- 53. Hsiao V, Kiwanuka E, Woo AS, Liu PY. Epidemiology and Demographic Characteristics of the Transgender Population in the US. Presented at the 59<sup>th</sup> Annual Meeting of the New England Society of Plastic Surgeons in Manchester Village, Vermont on June 10, 2018.
- 54. Woo AS. 3D Printing in Medicine and Education. Presentation to the Department of

Neurosurgery Grand Rounds at Rhode Island Hospital in Providence, Rhode Island, on June 11, 2018.

- 55. **Woo AS.** 3D Printing in Medicine. Presentation to the Multidisciplinary Antenatal Diagnosis and Management Conference at Women & Infants Hospital in Providence, Rhode Island, on July 20, 2018.
- 56. Woo AS. Why Plastic Surgery is Cool. Presentation to the Lifespan Office of Development Staff Retreat at Brown University in Providence, Rhode Island, on August 7, 2018.
- 57. **Woo AS.** Why Craniofacial Surgery is Cool. Presentation to PeriOperative Services at Rhode Island Hospital in Providence, Rhode Island, on September 5, 2018.
- 58. Woo AS. Cleft Care and the Development of a New Cleft Palate Repair. Presentation to Rhode Island Dental Assistants Association in Providence, Rhode Island, on September 18, 2018.
- 59. **Woo AS.** 3D Printing in Medicine. Presentation to the Diagnostic Imaging Quarterly Research Meeting at Rhode Island Hospital in Providence, Rhode Island, on December 11, 2018.
- 60. **Woo AS,** Piotrowski J. Plastic Surgery Issues in the Neonate. Presentation at the Perinatal Management Conference at Women & Infants Hospital in Providence, Rhode Island, on December 19, 2018.
- Woo AS. Reconstructive Management of Facial Burns. Presentation at the 10<sup>th</sup> Annual Burn Symposium at Rhode Island Hospital in Providence, Rhode Island, on March 7, 2019.
- 62. **Woo AS.** Craniofacial Disorders and Syndromes. Presentation at the 4<sup>th</sup> Annual CSF Disorder Symposium "From Canvas to Clinic Artistic(al) Management of Cerebrospinal Fluid Disorders at The Warren Alpert Medical School in Providence, Rhode Island, on June 15, 2019.
- 63. Woo AS. Prospectus of Arts and Medicine from a Physician Perspective 3D Printing of Pathology. Presentation at the 4<sup>th</sup> Annual CSF Disorder Symposium "From Canvas to Clinic – Artistic(al) Management of Cerebrospinal Fluid Disorders at The Warren Alpert Medical School in Providence, Rhode Island, on June 15, 2019.
- 64. Hattab A, Taubin G, Woo AS. Computer Assisted Carving Synchronizing Digital and Physical Models. Presentation at the 4<sup>th</sup> Annual CSF Disorder Symposium "From Canvas to Clinic – Artistic(al) Management of Cerebrospinal Fluid Disorders at The Warren Alpert Medical School in Providence, Rhode Island, on June 15, 2019.
- 65. Woo AS. 3D Printing at Rhode Island Hospital. Presentation to the Department of Plastic

Surgery at Rhode Island Hospital in Providence, Rhode Island, on May 22, 2019.

- 66. **Woo AS.** Plastic Surgery and Research. Presentation to The Warren Alpert Medical School in Providence, Rhode Island, on August 2, 2019.
- 67. **Woo AS.** 3D Printing at Rhode Island Hospital. Presentation to the Brown University Division of Ophthalmology at Rhode Island Hospital in Providence, Rhode Island, on September 9, 2019.

## ORAL RESEARCH PRESENTATIONS

- 1. Sullivan PK, Kim RY, Singer DS, **Woo AS.** The anatomic basis for the tear trough and crescent deformity at the lower eyelid-cheek junction. Regional presentation at the 2003 New England Society of Plastic and Reconstructive Surgeons in Plymouth, Massachusetts, on June 1, 2003.
- Sullivan PK, Kim RY, Singer DS, Woo AS. The anatomic basis for the tear trough and crescent deformity at the lower eyelid-cheek junction. National presentation at the 2003 American Society of Plastic Surgeons National Meeting in San Diego, California, on October 12, 2003.
- 3. **Woo AS,** Jang JL, Weinzweig J. Creation of a vascularized composite graft with acellular dermal matrix and hydroxyapatite. Local presentation at the 11<sup>th</sup> Annual Research Celebration at Rhode Island Hospital on October 21, 2003.
- 4. **Woo AS,** Zienowicz RJ. Massive diffuse congenital lipomatosis of the lower extremity: A case report. Regional presentation at the 2004 New England Society of Plastic and Reconstructive Surgeons in Lenox, Massachusetts, on June 4, 2004.
- 5. **Woo AS,** Lee JS, Panter K, Seki J, Spangenberger A, Weinzweig J. Bony palatal fusion following in utero repair of the congenital cleft palate model. Regional presentation at the 2004 New England Society of Plastic and Reconstructive Surgeons in Lenox, Massachusetts, on June 4, 2004.
- 6. **Woo AS,** Jang JL, Weinzweig J. Creation of a vascularized composite graft with acellular dermal matrix and hydroxyapatite. National presentation at the 2004 Plastic Surgery Research Council in Ann Arbor, Michigan, on June 11, 2004.
- 7. **Woo AS,** Lee JS, Panter K, Seki J, Spangenberger A, Weinzweig J. Bony palatal fusion following in utero repair of the congenital cleft palate model. National presentation at the 2004 American Society of Plastic Surgeons National Meeting in Philadelphia, Pennsylvania, on October 11, 2004.

- 8. **Woo AS,** Jang JL, Weinzweig J. Creation of a vascularized composite graft with acellular dermal matrix and hydroxyapatite. National presentation at the 2005 Plastic Surgery Senior Residents Conference in Houston, Texas, on March 18, 2005.
- Woo AS, Omnell L, Williams B, Hopper RA. Three dimensional midface stability following Le Fort III distraction in syndromic pediatric patients. National presentation at the 63<sup>rd</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association Conference in Vancouver, Canada, on April 7, 2006.
- Van Pelt A, Govier D, Kane AA, Woo AS. Comparison of mandibular morphology in surgically corrected and uncorrected patients with unilateral coronal synostosis. National presentation at the 64<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association Conference in Broomfield, Colorado, on April 27, 2007.
- 11. Lee A, Van Pelt A, Kane AP, Woo A, Smyth MD. Comparison of perceptions and treatment practices between neurosurgeons and plastic surgeons for infants with deformational plagiocephaly. National presentation at 41<sup>st</sup> Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery in Miami, Florida, on November 28, 2007.
- 12. Shah M, Govier D, Woo AS. Evaluation of outcomes following calvarial vault remodeling in children with isolated sagittal synostosis. National presentation at the 65<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association Conference in Philadelphia, Pennsylvania, on April 18, 2008.
- Scheve S, Woo AS. Ear molding A non-surgical approach to correct ear deformity. National presentation at the Preconference for the 66<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association Conference in Scottsdale, Arizona, on April 21, 2009.
- 14. Lipira A, Grames LM, Molter D, Kane AA, Woo AS. Correlation of videofluoroscopy and nasendoscopy findings and their relationship to speech. National presentation at the 66<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association Conference in Scottsdale, Arizona, on April 23, 2009.
- 15. Harless C, Govier D, Woo AS. Evaluation of forehead and orbital growth following isolated metopic synostosis reconstruction. National presentation at the 66<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association Conference in Scottsdale, Arizona, on April 24, 2009.
- 16. Al-Samkari H, Govier D, Kane AA, Woo AS. Partial suture fusion in multiple suture craniosynostosis. National presentation at the 66<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association Conference in Scottsdale, Arizona, on April 24, 2009.
- 17. Sun HH, Lipira AB, Govier DP, **Woo AS.** Development of the calvarial diploe in children as assessed by computed tomography. National presentation at the 67<sup>th</sup> Annual

Meeting of the American Cleft Palate-Craniofacial Association Conference in Fort Worth, Texas, on March 19, 2010.

- 18. Shah MN, Lee A, Petersen JD, Naidoo S, Woo AS, Kane AA, Smyth MD. The St. Louis Children's Hospital experience with endoscopically-assisted sagittal synostosis repair. National presentation at the 39<sup>th</sup> Annual Meeting of the AANS/CNS Section on Pediatric Neurological Surgery in Cleveland, Ohio, on December 2, 2010.
- 19. Scheve SV, **Woo AS.** Non-surgical ear correction. National presentation at the 68<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association Conference in San Juan, Puerto Rico, on April 6, 2011.
- Shahzad F, Woo AS, Snyder-Warwick A. The transcaruncular approach for treatment of medial wall and giant orbital blowout fractures. National presentation at Plastic Surgery 2011 in Denver, Colorado, on September 24, 2011.
- 21. Mendonca D, Naidoo S, Smyth MD, Patel K, Woo A. Endoscopic correction of 101 craniosynostosis cases: The St. Louis Children's Hospital experience. International presentation at the Indian Society of Cleft Lip, Palate and Craniofacial Anomalies International Meeting in Bangalore, India, on January 27, 2012.
- 22. **Woo AS.** A new technique for cleft palate repair. National presentation at the 69th Annual Meeting of the American Cleft Palate-Craniofacial Association in San Jose, California, on April 18, 2012.
- 23. Pet MA, Grames LM, Stahl MB, **Woo AS.** The Furlow palatoplasty for secondary velopharyngeal dysfunction: Quantifying changes in velopharyngeal anatomy and speech quality. National presentation at the 69th Annual Meeting of the American Cleft Palate-Craniofacial Association in San Jose, California, on April 19, 2012.
- 24. Mendonca AD, Skolnick G, Naidoo S, **Woo AS.** Comparative study of cranial anthropometric measurement by calipers versus computed tomography and threedimensional photographic images. National presentation at the 69th Annual Meeting of the American Cleft Palate-Craniofacial Association in San Jose, California, on April 20, 2012.
- 25. Shahzad F, Grames LM, **Woo AS.** Pharyngeal flap and sphincter pharyngoplasty for velopharyngeal dysfunction: Speech outcomes and complications. National presentation at the 69th Annual Meeting of the American Cleft Palate-Craniofacial Association in San Jose, California, on April 20, 2012.
- 26. Patel K, Mendonca AD, **Woo AS.** Anatomical study of the medial crura and its effect on nasal tip projection. National presentation at Plastic Surgery The Meeting 2012 in New Orleans, Louisiana, on October 28, 2012.
- 27. Ghosh T, Skolnick G, Sun H, Patel K, Smyth M, Woo AS. Calvarial thickness and

diploic space development in children with sagittal synostosis as assessed by computed tomography. National presentation at the 41<sup>st</sup> Meeting of the AANS/CNS Section on Pediatric Neurological Surgery in St. Louis, Missouri, on November 28, 2012.

- 28. Ghenbot R, Skolnick G, Patel K, Naidoo S, Smyth M, Woo AS. Skull growth and cranial vault volumes in sagittal synostosis. National presentation at the 41<sup>st</sup> Meeting of the AANS/CNS Section on Pediatric Neurological Surgery in St. Louis, Missouri, on November 28, 2012.
- 29. Vogel T, **Woo A**, Kane A, Patel K, Naidoo S, Smyth MD. A comparison of costs associated with endoscope-assisted strip craniectomy and open cranial repair for infants with sagittal synostosis. National presentation at the 41<sup>st</sup> Meeting of the AANS/CNS Section on Pediatric Neurological Surgery in St. Louis, Missouri, on November 28, 2012.
- 30. Mendonca DA, Patel K, Woo AS. Anatomical study of the effects of five surgical maneuvers on palate movement. International presentation at the 12<sup>th</sup> Annual Conference of the Indian Society of Cleft Lip, Palate and Craniofacial Anomalies (Indocleft 2013) in Nagpur, Maharashtra, India, on January 18, 2013.
- 31. Ghenbot R, Skolnick G, Patel K, Naidoo S, Smyth M, Woo AS. Skull growth and cranial vault volumes in sagittal synostosis. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 6, 2013.
- 32. Ghosh T, Skolnick G, Sun H, Patel K, Smyth M, Woo AS. Calvarial thickness and diploic space development in children with sagittal synostosis as assessed by computed tomography. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 6, 2013.
- 33. Grames LM, Wombacher N, Stahl MB, Skolnick G, **Woo AS.** Participant perspectives on a unique speech therapy collaborative care program for children with clefts. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 6, 2013.
- 34. Huang AH, Skolnick G, Naidoo S, Patel K, Smyth M, Woo AS. Are endoscopic and open treatments of metopic synostosis equivalent in treating trigonocephaly? International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 6, 2013.
- 35. Le M, Skolnick G, Patel K, Naidoo S, Kane AA, Smyth M, **Woo AS.** Assessing longterm outcomes of sagittal synostosis reconstruction using three-dimensional photography. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 6, 2013.
- 36. Naidoo S, Patel K, Galli T, Skolnick G, Woo AS. Head shape outcomes six months after

cranial molding helmet therapy for deformational plagiocephaly. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 6, 2013.

- 37. Skolnick G, Naidoo S, Patel K, **Woo AS**. Analysis of digital measures of cranial vault asymmetry for assessment of plagiocephaly. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 6, 2013.
- 38. Ghenbot R, Skolnick G, Patel K, Naidoo S, Smyth M, Woo AS. Cranial vault volume in unoperated sagittal synostosis – A case study and comparison. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 7, 2013.
- 39. Maschoff C, Woo AS, Naidoo S, Skolnick G, Huebener D, Patel K. Long term outcome of maxillary growth in relation to original cleft width in patients with unilateral cleft lip and palate. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 7, 2013.
- 40. Mendonca AD, Patel K, **Woo AS**. Anatomical study of the effects of five surgical maneuvers on palate movement. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 7, 2013.
- 41. Naidoo S, Patel K, Skolnick G, Smyth M, **Woo AS.** Effect of helmet center on the outcome of endoscopic repair of sagittal synostosis. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 7, 2013.
- 42. Domeshek L, Patel K, Skolnick G, Naidoo S, Smyth M, **Woo AS.** Long-term frontal asymmetry following fronto-orbital reconstruction for unilateral coronal craniosynostosis. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 8, 2013.
- 43. Gangopadhyay N, Shah M, Skolnick G, Naidoo S, Patel K, Smyth M, Woo AS. Point of maximum width: A new measure for anthropometric outcomes in patients with sagittal synostosis. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 8, 2013.
- 44. Huang AH, Yarbrough C, Ranalli N, Patel K, Smyth M, Woo AS. Delayed synostosis of an unrelated suture after surgical treatment of non-syndromic craniosynostosis. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 8, 2013.

- 45. Odom E, **Woo AS**, Mendonca D, Skolnick G, Patel KB. Long-term outcomes of maxillary growth after palatoplasty in patients with isolated cleft palate. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 9, 2013.
- 46. **Woo AS,** Sachanandani N, Skolnick G, Grames LM. Evaluation of two palatal repair techniques for the surgical management of velopharyngeal insufficiency. International presentation at the 12th International Congress on Cleft Lip/Palate and Related Craniofacial Anomalies in Lake Buena Vista, Florida, on May 9, 2013.
- 47. Patel K, Skolnick G, Smyth M, **Woo AS.** Endoscopic-assisted management of sagittal synostosis: Wide vertex suturectomy and barrel stave osteotomies versus narrow vertex suturectomy. National presentation at Plastic Surgery The Meeting 2013 in San Diego, California, on October 14, 2013.
- 48. Grames L, Marsh J, Skolnick G, Nguyen D, Skladman R, **Woo AS.** Velopharyngeal outcomes at age six for three types of palatoplasty. National presentation at the 71st Annual Meeting of the American Cleft Palate-Craniofacial Association in Indianapolis, Indiana, on March 26, 2014.
- 49. Dvoracek LA, Skolnick GB, Naidoo SD, Smyth MD, **Woo AS**, Patel KB. Traditional vs normative cephalic index in patients with sagittal synostosis: Measures of scaphocephaly and postoperative outcome. National presentation at the 71st Annual Meeting of the American Cleft Palate-Craniofacial Association in Indianapolis, Indiana, on March 28, 2014.
- 50. Nguyen D, Huang A, Patel KB, Skolnick G, Naidoo S, Smyth M, **Woo AS**. Are endoscopic and open treatments of metopic synostosis equivalent in treating trigonocephaly and hypotelorism? National presentation at the 71st Annual Meeting of the American Cleft Palate-Craniofacial Association in Indianapolis, Indiana, on March 28, 2014.
- 51. Russell A, Patel K, Skolnick G, Woo AS. Use of an inferior pennant flap during unilateral cleft lip repair improves lip symmetry. National presentation at the 71st Annual Meeting of the American Cleft Palate-Craniofacial Association in Indianapolis, Indiana, on March 28, 2014.
- 52. Skladman R, Grames L, Skolnick G, **Woo AS.** Adult quality of life post cleft palate repair: A comparison of two techniques. National presentation at the 71st Annual Meeting of the American Cleft Palate-Craniofacial Association in Indianapolis, Indiana, on March 28, 2014.
- 53. Skolnick G, Naidoo S, Patel K, Woo AS. A comparison of direct and digital measures of cranial vault asymmetry for assessment of plagiocephaly. National presentation at the 71st Annual Meeting of the American Cleft Palate-Craniofacial Association in Indianapolis, Indiana, on March 28, 2014.

- 54. Zubovic E, **Woo AS**, Skolnick G, Naidoo S, Smyth M, Patel K. Cranial base asymmetry after open and endoscopic repair of isolated lambdoid craniosynostosis. National presentation at the 71st Annual Meeting of the American Cleft Palate-Craniofacial Association in Indianapolis, Indiana, on March 28, 2014.
- 55. Nguyen DC, Patel K, Skolnick G, Grames L, Stahl M, **Woo AS**. Progressive tightening of the levator veli palatini muscle improves velopharyngeal function in primary palatoplasty. National presentation at the 93rd Annual Meeting of the American Association of Plastic Surgeons in Miami Beach, Florida, on April 7, 2014.
- 56. Nguyen D, Patel KB, Skolnick GB, **Woo AS**. Anatomical study of the effects of five surgical maneuvers on nasal mucosa movement. National presentation at Plastic Surgery The Meeting 2014 in Chicago, Illinois, on October 11, 2014.
- 57. Patel KB, Nguyen D, **Woo AS.** Neosuture formation after endoscopic-assisted craniosynostosis repair. National presentation at Plastic Surgery The Meeting 2014 in Chicago, Illinois, on October 11, 2014.
- 58. Dlouhy B, Patel K, Woo AS, Naidoo S, Smyth MD. Endoscopic-assisted management of sagittal synostosis: Wide vertex suturectomy and barrel stave osteotomies versus narrow vertex suturectomy. National presentation at the 43<sup>rd</sup> Meeting of the AANS/CNS Section on Pediatric Neurological Surgery in Amelia Island, Florida, on December 4, 2014.
- 59. Han R, Patel K, Woo AS, Naidoo S, Smyth MD. Characterization of complications associated with open and endoscopic craniosynostosis surgery at a single institution. National presentation at the 43<sup>rd</sup> Meeting of the AANS/CNS Section on Pediatric Neurological Surgery in Amelia Island, Florida, on December 4, 2014.
- 60. Nguyen D, Patel KB, Skolnick GB, Naidoo S, Dlouhy B, Smyth MD, **Woo AS**. Endoscopic repair of sagittal craniosynostosis: An evolution in care. National presentation at the American Association of Plastic Surgeons (AAPS) Annual Meeting in Scottsdale, Arizona, on April 12, 2015.
- 61. Nguyen D, Patel KB, Skolnick GB, **Woo AS**. Anatomical study of the effects of five surgical maneuvers on nasal mucosa movement. National presentation at the 72nd Annual Meeting of the American Cleft Palate-Craniofacial Association in Palm Springs, California, on April 24, 2015.
- 62. Nguyen DC, Skolnick GB, Patel KB, Grames LM, Stahl M, **Woo AS**. The effect of secondary palatoplasty on velopharyngeal lateral wall motion. National presentation at the 72nd Annual Meeting of the American Cleft Palate-Craniofacial Association in Palm Springs, California, on April 24, 2015.
- 63. Nguyen DC, Patel K, Skolnick G, Grames L, Stahl M, **Woo AS**. Progressive tightening of the levator veli palatini muscle improves velopharyngeal function in primary palatoplasty. National presentation at the 72nd Annual Meeting of the American Cleft

Palate-Craniofacial Association in Palm Springs, California, on April 24, 2015.

- 64. Patel KB, Ragan D, Skolnick G, Naidoo S, **Woo AS**, Smyth M, Pineda J. Cerebral blood flow in craniosynostosis: Evaluation by MRI. National presentation at the 72nd Annual Meeting of the American Cleft Palate-Craniofacial Association in Palm Springs, California, on April 24, 2015.
- 65. Yen D, Nguyen D, Skolnick GB, Naidoo S, Patel KB, Grames LM, **Woo AS**. A comparison of the need for speech therapy following two palatal repair techniques. National presentation at the 72nd Annual Meeting of the American Cleft Palate-Craniofacial Association in Palm Springs, California, on April 24, 2015.
- 66. Parikh R, Skolnick GB, Patel KB, Farber SJ, **Woo AS**. Risk factors for postoperative complications after surgical correction of craniosynostosis: A nationwide analysis of 1357 intracranial procedures. National presentation at Plastic Surgery The Meeting 2015 in Boston, Massachusetts, on October 17, 2015.
- 67. Parikh R, Nguyen D, Patel KB, Skolnick GB, **Woo AS**. Surgical site infections in pediatric plastic surgery: Risk factors and implications for quality improvement from a nationwide assessment of 11,656 operations. National presentation at Plastic Surgery The Meeting 2015 in Boston, Massachusetts, on October 18, 2015.
- 68. Masserano B, Woo AS, Skolnick GB, Naidoo SN, Proctor M, Smyth MB, Patel KB. Evaluation of the temporal region in unilateral coronal craniosynostosis after frontoorbital advancement or endoscopic-assisted strip craniectomy and cranial orthotic therapy. National presentation at 73<sup>rd</sup> Annual of the American Cleft Palate-Craniofacial Association in Atlanta, Georgia, on April 7, 2016.
- 69. Yu J, Patel KB, Skolnick GB, Naidoo SN, Parikh R, David L, Couture D, Smyth MB, Woo AS. Comparison of two endoscopic sagittal craniosynostosis repair techniques: Spring-assisted surgery versus craniectomy with helmet molding therapy. National presentation at 73<sup>rd</sup> Annual of the American Cleft Palate-Craniofacial Association in Atlanta, Georgia, on April 7, 2016.
- 70. Domeshek L, Woo AS, Skolnick GB, Naidoo SN, Smyth M, Proctor M, Patel KB. Pre- to postoperative changes in orbital dysmorphology in unicoronal craniosynostosis following endoscopic repair. National presentation at 73<sup>rd</sup> Annual of the American Cleft Palate-Craniofacial Association in Atlanta, Georgia on April 8, 2016.
- 71. Murthy S, Skolnick GB, Huang Z, Naidoo SN, Patel KB, Ju T, Woo AS. Long-term characterization of cranial defects after surgical correction for single-suture craniosynostosis. National presentation at 73<sup>rd</sup> Annual of the American Cleft Palate-Craniofacial Association in Atlanta, Georgia on April 8, 2016.
- 72. Nguyen D, Awad M, Farber S, Parikh R, Skolnick GB, **Woo AS**. Robotic-assisted Cleft Palate Repair: A feasibility study. National presentation at 73<sup>rd</sup> Annual of the American

Cleft Palate-Craniofacial Association in Atlanta, Georgia, on April 8, 2016.

- 73. Yu J, Patel KB, Skolnick GB, Parikh RP, Naidoo SD, **Woo AS**. Long-term lip height asymmetry following primary unilateral cleft lip repair. National presentation at Plastic Surgery The Meeting 2016 in Los Angeles, California, on September 24, 2016.
- 74. Yu J, **Woo AS.** Alar Pinning with Rigid External Distraction for Treatment of Midfacial Hypoplasia. National presentation at Plastic Surgery The Meeting 2016 in Los Angeles, California, on September 26, 2016.
- 75. Nguyen D, Farber S, Skolnick GB, Awad M, **Woo AS**. Robotic-Assisted Cleft Palate Repair: A Feasibility Study. National presentation at Plastic Surgery The Meeting 2016 in Los Angeles, California, on September 26, 2016.
- 76. Basta MN, Fiadjoe JE, Woo AS, Peeples KN, Jackson OA. Predicting Risk For Adverse Perioperative Events In Patients Undergoing Cleft Palate Repair. National presentation at the 96<sup>th</sup> Annual Meeting of the American Association of Plastic Surgeons in Austin, Texas, on March 25-28, 2017.
- 77. Nissen N, Hsieh S, Rao V, **Woo AS**. Underdiagnosis of Nasoorbitoethmoid Fractures in Patients with Midface Trauma. National presentation at the 97<sup>th</sup> Annual Meeting of the American Association of Plastic Surgeons in Seattle, Washington, on April 9, 2018.
- 78. Jehle C, Basta M, McIntire D. Responsible antibiosis in patients presenting acutely with midface fractures. National presentation at the 97<sup>th</sup> Annual Meeting of the American Association of Plastic Surgeons in Seattle, Washington, on April 9, 2018.
- 79. Basta M, Breuing K, Kwan D, Liu P, Jehle CC, Woo AS. Head and neck reconstruction by plastic surgeons results in fewer surgical complications compared to ENT: A propensity-matched analysis of 30-day outcomes. National presentation at the 97<sup>th</sup> Annual Meeting of the American Association of Plastic Surgeons in Seattle, Washington, on April 10, 2018.
- 80. Pickersgill NA, Skolnick GB, Naidoo SD, Smyth MD, Woo AS, Patel KB. Regression of Cephalic Index following Endoscopic Repair of Sagittal Synostosis. National presentation at the 75<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association in Pittsburgh, Pennsylvania, on April 13, 2018.
- 81. Nissen N, Hsieh S, Rao V, Woo AS, Lio PY. The Underdiagnosis and Incomplete Reconstruction of Nasoorbitoethmoid Fractures. Regional presentation at the 59<sup>th</sup> Annual Meeting of the New England Society of Plastic and Reconstructive Surgeons in Manchester Village, Vermont on June 10, 2018.
- 82. Bass J, **Woo AS**, Bhatt R, Schmidt S. Treatment of Open Hand Fractures in the Emergency Department: Bedside Washout Vs Operative Washout and Infection Risk as a Correlate of Time to Definitive Operative Management. National presentation at Resident

Abstract Session of Plastic Surgery The Meeting 2018 in Chicago, Illinois, on September 29, 2018.

- 83. Hsiao V, Kiwanuka E, Kwan D, Woo AS. The Landscape of Transgender Surgery in the United States. National presentation at Plastic Surgery The Meeting 2018 in Chicago, Illinois, on September 28-October 1, 2018.
- 84. Bass J, Woo AS, Bhatt R, Schmidt S. Treatment of Open Hand Fractures in the Emergency Department: Bedside Washout Vs Operative Washout and Infection Risk as a Correlate of Time to Definitive Operative Management. National presentation at Plastic Surgery The Meeting 2018 in Chicago, Illinois, on September 30, 2018.
- 85. Brower J, Boyajian M, McIntire D, Crozier J, Woo AS. Reconstruction of a Hemirhinectomy Defect Using a 3D Printed Custom Soft Tissue Cutting Guide. National presentation at the World Society of Surgical Simulation at Plastic Surgery The Meeting 2018 in Chicago, Illinois, on September 30, 2018.
- 86. Basta MN, Crozier J, Rao V, Nissen N, Liu PY, Woo AS. Refining Operative Indications for Orbital Floor Fractures: A Risk-Stratification Tool Predicting Symptom Development and Need for Surgery. National presentation at the 98<sup>th</sup> Annual Meeting of the American Association of Plastic Surgeons in Baltimore, Maryland, on April 8, 2019.
- 87. Akiki RK, Jehle CC, Basta M, Crozier J, Boyajian MK, Woo AS, Liu PY. Medical Crowdfunding and Access to Care for Patients Undergoing Cleft Lip & Palate Surgery. Regional presentation at the 60<sup>th</sup> Annual Meeting of the New England Society of Association of Plastic Surgeons in Newport, Rhode Island, on June 2, 2019.
- 88. Boyajian MK, Snapp WK, Crozier JW, Schmidt S, Woo AS, Prsic A. A Novel 3D Printed Hand Model for Simulate Bony Fixation with Kirschner Wires without Fluoroscopy. National presentation at Plastic Surgery The Meeting 2019 in San Diego, California on September 20, 2019.
- Roussel LO, Boyajian MK, Akiki RK, Woo AS. What Gets Published? A Comparison of Content and Conversion to Publication for Podium Presentations at National Plastic Surgery Meetings. National presentation at Plastic Surgery The Meeting 2019 in San Diego, California on September 21, 2019.
- 90. Boyajian MK, Lubner R, Roussel L, Crozier JW, Ryder B, **Woo AS**. A Novel Suture Training Device to Innovate the Surgical Curriculum in Medical School. National presentation at Plastic Surgery The Meeting 2019 in San Diego, California on September 22, 2019.
- 91. Boyajian MK, Bhatt R, Crozier JW, Kalliainen L, Woo AS. 3D Printed Flexor Tendon Repair Simulator Promotes Early Medical Student Surgical Interest. National presentation at Plastic Surgery The Meeting 2019 in San Diego, California on September 22, 2019.

92. Rao V, Woo AS. Which Procedure Provides the Greatest Face Lift? A Cadaveric Study Comparing the Skin Only, SMASectomy of Extended SMAS Face Lift Techniques in 10 Hemi-Faces. National presentation at Plastic Surgery The Meeting 2019 in San Diego, California on September 22, 2019.

#### POSTER PRESENTATIONS

- 1. **Woo AS,** Jang JS, Weinzweig J. Increasing viability of bone grafts through vascularization of isogeneic bone in Lewis rats. Local presentation at the 11<sup>th</sup> Annual Research Celebration at Rhode Island Hospital on October 21, 2003.
- 2. **Woo AS,** Jang JS, Weinzweig J. Increasing viability of bone grafts through vascularization of isogeneic bone in Lewis rats. National presentation at the 2004 Plastic Surgery Research Council in Ann Arbor, Michigan, on June 11, 2004.
- Sun HH, Lipira AB, Govier DP, Woo AS. Development of the calvarial diploe in children as assessed by computed tomography. Local presentation at the 4th Annual Research Training Symposium & Poster Session at Washington University in St. Louis, Missouri, on October 28, 2009.
- 4. Harless C, Govier DP, **Woo AS.** Evaluation of forehead and orbital growth following isolated metopic synostosis reconstruction. Local presentation at the 3rd Annual Research Training Symposium & Poster Session at Washington University in St. Louis, Missouri, on October 29, 2008.
- Chaiyasate K, Sachanandani N, Woo AS. Single Z-plasty versus double-opposing Zplasty: A cadaveric study of palatal lengthening. National presentation at the 67<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association Conference in Fort Worth, Texas, on March 20, 2010.
- Olsen MA, Ball KE, Aft RL, Brandt KE, Eberlein TJ, Fox IK, Gillanders WE, Margenthaler JA, Myckatyn TM, Tung THH, Woo AS, Fraser VJ. Noninfectious wound complications after mastectomy with and without immediate breast reconstruction. National presentation at the 33rd Annual San Antonio Breast Cancer Symposium in San Antonio, Texas, on December 11, 2010.
- 7. Borschel G, Kasukurthi R, Kawamoto D, Hunter D, **Woo AS.** The motor nerve to the masseter muscle: An anatomic and histomorphometric study to facilitate its use in facial reanimation. National presentation at the 2011 American Society for Peripheral Nerve Annual Meeting in Cancun, Mexico, on January 14-16, 2011.
- 8. Russell A, Patel K, Skolnick G, Smyth M, **Woo AS**. The path of the superior sagittal sinus in unicoronal synostosis. National presentation at the 71st Annual Meeting of the American Cleft Palate-Craniofacial Association in Indianapolis, Indiana, on March 26,

2014.

- 9. Zubovic E, **Woo AS**, Skolnick G, Naidoo S, Smyth M, Patel K. Posterior cranial vault asymmetry in lambdoid craniosynostosis after open and endoscopic repair. National presentation at the 71st Annual Meeting of the American Cleft Palate-Craniofacial Association in Indianapolis, Indiana, on March 26, 2014.
- Salehi A, Ott K, Skolnick G, Naidoo S, Woo AS, Patel KB, Smyth MD. Neosuture formation after endoscopic-assisted craniosynostosis repair. National presentation at the Congress of Neurological Surgeons Annual Meeting in Boston, Massachusetts, on October 18-22, 2014.
- Dlouhy B, Patel K, Woo AS, Naidoo S, Smyth MD. Endoscopic repair of sagittal craniosynostosis — Our first 100. Top poster presentation at the 43<sup>rd</sup> Meeting of the AANS/CNS Section on Pediatric Neurological Surgery in Amelia Island, Florida, on December 4, 2014.
- 12. Domeshek L, Lee J, Skonick G, Naidoo S, Nguyen D, Patel KB, **Woo AS**. Morphologic variation between partial- and complete sagittal suture fusion in nonsyndromic isolated sagittal synostosis. National presentation at the 72nd Annual Meeting of the American Cleft Palate-Craniofacial Association in Palm Springs, California, on April 20-25, 2015.
- Skolnick GB, Naidoo S, Nguyen D, Patel KB, Woo AS. Evidence for use of frontozygomaticus and contralateral eurions as hand-caliper landmarks for assessment of deformational plagiocephaly. National presentation at the 72nd Annual Meeting of the American Cleft Palate-Craniofacial Association in Palm Springs, California, on April 20-25, 2015.
- 14. Yen D, Skolnick G, Nguyen D, Naidoo S, Patel KB, Smyth M, Kane AA, Woo AS. Evaluation of direct surgical remodeling of frontal bossing in patients with sagittal synostosis. National presentation at the 72nd Annual Meeting of the American Cleft Palate-Craniofacial Association in Palm Springs, California, on April 20-25, 2015.
- 15. Rosenberg E, Patel KB, Skolnick GB, Nguyen D, Naidoo SN, **Woo AS**. Lay assessment of facial deformity after cleft lip repair. National presentation at 73<sup>rd</sup> Annual of the American Cleft Palate-Craniofacial Association in Atlanta, Georgia, on April 6, 2016.
- 16. McIntire D, Jehle CC, Basta M, Woo AS. Closed reduction of nasal fractures in the emergency department: Success or failure? National presentation at the 97<sup>th</sup> Annual Meeting of the American Association of Plastic Surgeons in Seattle, Washington, on April 7-10, 2018.
- 17. Jehle CC, Rao V, Basta M, Nissen N, Hsieh S, McIntire D, **Woo AS**. Mandible fractures undergoing transfer rarely require acute intervention. National presentation at the 97<sup>th</sup> Annual Meeting of the America Association of Plastic Surgeons in Seattle, Washington, on April 7-10, 2018.

- Akiki R, Jehle CC, Basta M, Crozier J, Boyajian M, Woo AS. Medical Crowdfunding and Access to Care in Patients Undergoing Cleft Lip & Palate Surgery. National presentation at the 76th Annual Meeting of the American Cleft Palate-Craniofacial Association in Tucson, Arizona, on April 9-13, 2019.
- 19. Akiki R, Jehle CC, Basta M, Crozier J, Boyajian M, **Woo AS**. Medical Crowdfunding and Access to Care in Patients Undergoing Cleft Lip & Palate Surgery. National presentation at the 64th Annual Meeting of the Plastic Surgery Research Council in Baltimore, Maryland, on May 2-5, 2019.
- Lubner RJ, Boyajian M, Woo AS, Groblewski J. Optimized Multidisciplinary Care of Otitis Media in Cleft Palate Patients. National presentation at the AAO-HNSF 2019 Annual Meeting & OTO Experience in New Orleans, Louisiana, on September 15-18, 2019.

## FACULTY: COURSES AND PANELS

- 1. Course Director: Surgical Approaches and Management of Facial Fractures. Conducted at Indiana University in Indianapolis, Indiana, on March 10, 2007.
- 2. Course Faculty: Interdisciplinary Problem Solving in Craniomaxillofacial Surgery. Ohio State University in Columbus, Ohio, on June 6-7, 2009.
- 3. Course Chairman: Surgical Approaches & Techniques in Craniofacial Trauma Reconstruction: A Hands-On Cadaver Lab for Senior Residents in St. Louis, Missouri, on September 11, 2010.
- 4. Panel Moderator: Management and Repair of the Cleft Palate. Conducted for Pediatric UPDATE on July 3, 2014.
- 5. Panel Moderator: Scientific Session 2 Pediatric. At Plastic Surgery The Meeting in Chicago, Illinois, on October 10, 2014.
- 6. Course Faculty: 24<sup>th</sup> Annual Craniofacial Surgery & Transfacial Approaches to the Skull Base: A Hands-On Cadaver Workshop. Practical Anatomy and Surgical Education Laboratory in St. Louis, Missouri, on December 5-7, 2014.
- 7. Course Director: Woo AS, Patel KB, Smyth M, Naidoo S, Reber D. Endoscopic Craniosynostosis Surgery. Presentation at the 72nd Annual Meeting of the American Cleft Palate-Craniofacial Association in Palm Springs, California, on April 23, 2015.
- Course Faculty: 25<sup>th</sup> Annual Craniofacial Surgery & Transfacial Approaches to the Skull Base: A Hands-On Cadaver Workshop. Practical Anatomy and Surgical Education Laboratory in St. Louis, Missouri, on December 4-6, 2015.

- 9. Panelist: Birgfeld C, Harshbarger R, Morris D, Woo AS. Facial Fractures: When Things Go Wrong. Presentation at Plastic Surgery The Meeting 2015 in Boston, Massachusetts on October 18, 2015.
- 10. Course Faculty: ASMS Basic Maxillofacial Principles & Techniques Course in Chicago, Illinois on August 19-21, 2016.
- Course Faculty: 26<sup>th</sup> Annual Craniofacial Surgery & Transfacial Approaches to the Skull Base: A Hands-On Cadaver Workshop. Practical Anatomy and Surgical Education Laboratory in St. Louis, Missouri, on December 2-4, 2016.
- 12. Course Faculty: AO North America Management of Facial Trauma Conference in Columbus, Ohio, on May 6-7, 2017.
- 13. Course Faculty: AO CMF Management of Facial Trauma Conference in Arlington, Virginia, on October 21-22, 2017.
- 14. Session Co-Chair: Concurrent Session 5: ASCFS I at the 75<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association in Pittsburgh, Pennsylvania, on April 13, 2018.
- 15. Instructor: Fundamentals of Cleft Palate Repair and Review of Outcomes at Plastic Surgery The Meeting 2018 in Chicago, Illinois, on September 29, 2018.
- 16. Course Co-Director: 4<sup>th</sup> Annual CSF Disorder Symposium "From Canvas to Clinic Artistic(al) Management of Cerebrospinal Fluid Disorders at The Warren Alpert Medical School in Providence, Rhode Island, on June 15, 2019.
- 17. Course Faculty: AO CMF Management of Facial Trauma Conference in Arlington, Virginia, on August 24-25, 2019.
- 18. Panelist: Mann R, Losee J, **Woo AS**. ABC's of Cleft Palate Repair. Panel Presentation at Plastic Surgery The Meeting 2019 in San Diego, California, on September 20, 2019.
- 19. Session Co-Chair: Concurrent Session 13: Cleft Lip/Palate Surgery II at the 77<sup>th</sup> Annual Meeting of the American Cleft Palate-Craniofacial Association in Portland, Oregon, on April 3, 2020.

#### <u>GRANTS</u>

 New Measure of Cranial Deformation in Patients with Sagittal Synostosis (CI 0040) Institute for Clinical and Translational Services Just In Time Core Usage Funding Grant Principal Investigator: Albert Woo Project Period: 3/21/12 – 3/20/13 Total Funding (CBMI): \$1,500

- Cleft Palate Research Saint Louis Children's Hospital Foundation Principal Investigator: Albert Woo Project Period: 6/1/12 – 12/31/12 Allotment: \$ 2,500
- Craniofacial Summer Research Project Saint Louis Children's Hospital Foundation Principal Investigator: Albert Woo Project Period: 6/4/12 – 8/16/12 Allotment: \$ 3,000
- 4. Craniofacial Summer Research Project Saint Louis Children's Hospital Foundation Principal Investigator: Albert Woo Project Period: 3/1/13 – 9/30/13 Allotment: \$ 2,000
- 5. Craniosynostosis and Brain Metabolism: Evaluation by MRI (12-033) Malinckrodt Institute of Radiology Research Grant Principal Investigator: Kamlesh Patel, MD Co-Investigator: Albert Woo Project Period: 8/1/12 – 9/30/13 Allotment: \$7,350
- Nasoalveolar Workshop Fund Saint Louis Children's Hospital Foundation Principal Investigator: Albert Woo Project Period: 12/1/13 – 11/30/14 Allotment: \$4,500
- 7. Craniofacial Imaging Laboratory at Washington University KLS Martin Research Grant Principal Investigator: Albert Woo Project Period: 7/1/14 – 6/30/16 Allotment: \$20,000/year x 2 years
- Comparison of Resorbable Plating Systems: Problems During the Degradation Process Stryker CMF Research Grant Principal Investigator: Kamlesh Patel Co-Investigator: Albert Woo Project Period: 7/1/14 – 6/30/16 Allotment: \$19,845.00

- 9. 3D Printing as a Means to Optimize Patient Outcomes (7980-88) The Foundation for Barnes-Jewish Hospital Principal Investigator: Albert Woo, MD Project Period: 1/1/15 – 12/31/15 Allotment: \$80,382
- 10. 2015 ACPA Annual Meeting Funding (60100-615745-K5009-10) Saint Louis Children's Hospital Foundation Principal Investigator: Albert Woo, MD Project Period: 1/1/16 – 12/31/16 Allotment: \$4,365
- 11. Vascular Anomalies Database (PR-2015-22) Saint Louis Children's Hospital Foundation Principal Investigator: Albert Woo, MD Project Period: 1/1/16 – 12/31/16 Allotment: \$15,180
- 86. Mimics Software for 3D Printing Saint Louis Children's Hospital Foundation Principal Investigator: Albert Woo, MD Project Period: 4/6/16 – 4/5/17 Allotment: \$49,120

#### PATENTS

U.S. Provisional Patent Application No. 62/841,563 Title: Flexor Tendon Training Device Tech ID: 2602 RIH# 296 Our Ref: 405505-579P01US Filed on May 1, 2019 Inventors: Michael K. Boyajian, Albert S. Woo and Joseph W. Crozier

#### **REVIEW RESPONSIBILITIES**

Reviewer, PLOS ONE Reviewer, FDA Office of Orphan Products Development (OOPD) Reviewer, Plastic and Reconstructive Surgery Reviewer, The Cleft Palate-Craniofacial Journal Reviewer, Journal of Cranio-maxillofacial Trauma Reviewer, Journal of Craniofacial Surgery

#### **OTHER PUBLICATIONS**

- 1. **Woo AS** (Editor). KAMPUS Journal (Korean-American Mobilization Project to Unite Students). 1996
- 2. **Woo AS,** Kim DH, Lee KY. Korean-American Identity: An Intergenerational Dialogue with K.Y. Lee. *Korean Times English Edition, Seoul, Korea.* December 1996.
- 3. Woo AS. The Korean Youth & Community Center. KoreAm Journal. October 1996.
- 4. Woo AS. What's up with Korean-Americans? Korean Times English Edition, Los Angeles. August 1996.
- 5. Woo AS. Cleft deformities require immediate specialized care. *St. Louis Post Dispatch*. May 28, 2007.
- 6. Woo AS. Healthy Kids: Minimizing Scarring. St. Louis Post Dispatch. June 19, 2014.

## TELEVISION APPEARANCES

- 1. "Outside the Box." The Frontline For Hope: Season 2, Episode 1. KSDK: November 22, 2014. <u>http://www.childrensforhope.com/episodes/season-2-episode-1/</u>
- 2. "All In." The Frontline For Hope, Season 2, Episode 4: KSDK: December 13, 2014. http://www.childrensforhope.com/episodes/season-2-episode-4/

#### DISCLOSURES

Osteomed LP, Consulting and royalty agreement for development of the Low Profile Midface System

Thieme, Royalties from publication of *Plastic Surgery Case Review* 

#### CLINICAL INTERESTS

Craniofacial Surgery Cleft Lip/Nose and Palate Deformities Post-traumatic Facial Reconstruction 3D Printing Robotic Plastic Surgery Hair Transplantation Pediatric Plastic Surgery Complex Orbital Reconstruction Ear Reconstruction Facial Plastic Surgery Cosmetic Surgery Facial Reanimation Breast Reconstruction General Plastic Surgery