

**BIOGRAPHICAL SKETCH**

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NAME: Meister, Kara

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Clinical Assistant Professor

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	END DATE MM/YYYY	FIELD OF STUDY
Clemson University, Clemson, SC	BS	08/2006	Psychology
Medical University of South Carolina, Charleston, SC	MD	05/2011	
University of Pittsburgh School of Medicine, Pittsburgh, PA	NIH training grant	07/2015	T32 Research in Otolaryngology
University of Pittsburgh School of Medicine, Pittsburgh, PA	Resident	06/2017	Otolaryngology-Head & Neck Surgery
Stanford University School of Medicine, Stanford, CA	Fellow	07/2018	Pediatric Otolaryngology-Head & Neck Surgery

**A. Personal Statement**

Dr. Meister is a pediatric otolaryngologist and head & neck surgeon. She received her medical degree from Medical University of South Carolina and completed her otolaryngology residency at the University of Pittsburgh. She completed an NIH funded fellowship in head and neck research at the University of Pittsburgh where she developed a further interest in translational research and bridging the gap between industry and academia. Dr. Meister then went on to complete a pediatric otolaryngology fellowship at Lucile Packard Children's Hospital Stanford. She has served on the Ethics Committee for the American Academy of Otolaryngology—Head & Neck Surgery, and is a member of the Child Health Research Institute. Dr. Meister's research interests involve understanding the utility of technology to diagnose pediatric patients, specifically the use of point-of-care diagnostics. She is a lead of the Pediatric Thyroid Program at Lucile Packard Children's Hospital Stanford and is a participating surgeon in the Aerodigestive Center at Stanford Children's Health.

Several publications are referenced by maiden name: Kara S Davis (Davis KS)

1. Meister KD, Vila PM, Bonilla-Velez J, Sebelik M, Orloff LA. Current Experience of Ultrasound Training in Otolaryngology Residency Programs. J Ultrasound Med. 2018 Aug 12;PubMed PMID: [30099758](#).
2. Davis KS, McCormick AA, Jabbour N. What might parents read: Sorting webs of online information on vascular anomalies. Int J Pediatr Otorhinolaryngol. 2017 Feb;93:63-67. PubMed PMID: [28109499](#).
3. Ishii LE, Tollefson TT, Basura GJ, Rosenfeld RM, Abramson PJ, Chaiet SR, Davis KS, Doghramji K, Farrior EH, Finestone SA, Ishman SL, Murphy RX Jr, Park JG, Setzen M, Strike DJ, Walsh SA, Warner JP, Nnacheta LC. Clinical Practice Guideline: Improving Nasal Form and Function after Rhinoplasty Executive Summary. Otolaryngol Head Neck Surg. 2017 Feb;156(2):205-219. PubMed PMID: [28145848](#).
4. Davis KS, Vosler PS, Yu J, Wang EW. Intraoperative Image Guidance Improves Outcomes in Complex Orbital Reconstruction by Novice Surgeons. J Oral Maxillofac Surg. 2016 Jul;74(7):1410-5. PubMed PMID: [27019413](#).



## B. Positions and Honors

### Positions and Employment

2018 - Clinical Assistant Professor, Stanford University, Department of Otolaryngology - Head & Neck Surgery, Palo Alto, CA

### Other Experience and Professional Memberships

2008 - Member, Committee Member, American Academy of Otolaryngology-Head & Neck Surgery

### Honors

2011 Alpha Omega Alpha , Alpha Omega Alpha  
2011 Arnold P. Gold Foundation Gold Humanism Honor Society, Arnold P. Gold Foundation Gold Humanism Honor Society  
2014 Resident Research Award, Second Prize, Pennsylvania Academy of Otolaryngology—Head & Neck Surgery  
2015 Schein Research Award, First Prize, Three Rivers Otolaryngology Update  
2016 Women in Otolaryngology Section Exemplary Senior Trainee Award, American Academy of Otolaryngology—Head & Neck Surgery  
2017 Adam T. Ross, MD, Leadership Excellence Grant, American Academy of Otolaryngology—Head & Neck Surgery

## C. Contribution to Science

1. Postdoctoral Research: With a focus on biostatistics and diagnostics, my study of head and neck cancer trained me to define clinical questions and gain an understanding of bench work in the basic sciences through pre-clinical cancer models. As such, I have utilized techniques to quantitatively assess patterns and changes in disease occurrence in head and neck pathologies. Through my Postdoctoral Scholar position under the T32 training grant, I was mentored in clinical trial design and successful collaborations between industry and academia. By utilizing an outcomes-based framework to prioritize research hypotheses, I seek to develop outcomes-based solutions which target diagnostic dilemmas. Now at Stanford University as faculty, I have been investigating the development of a novel diagnostic tools to better care for pediatric otolaryngology patients.
  - a. Kulkarni S, Bill A, Godse NR, Khan NI, Kass JI, Steehler K, Kemp C, Davis K, Bertrand CA, Vyas AR, Holt DE, Grandis JR, Gaither LA, Duvvuri U. TMEM16A/ANO1 suppression improves response to antibody-mediated targeted therapy of EGFR and HER2/ERBB2. Genes Chromosomes Cancer. 2017 Jun;56(6):460-471. PubMed PMID: [28177558](#); PubMed Central PMCID: [PMC5469289](#).
  - b. Davis KS, Lim CM, Clump DA, Heron DE, Ohr JP, Kim S, Duvvuri U, Johnson JT, Ferris RL. Tumor volume as a predictor of survival in human papillomavirus-positive oropharyngeal cancer. Head Neck. 2016 Apr;38 Suppl 1:E1613-7. PubMed PMID: [26681273](#); PubMed Central PMCID: [PMC4844840](#).
  - c. Vargo JA, Ferris RL, Ohr J, Clump DA, Davis KS, Duvvuri U, Kim S, Johnson JT, Bauman JE, Gibson MK, Branstetter BF, Heron DE. A prospective phase 2 trial of reirradiation with stereotactic body radiation therapy plus cetuximab in patients with previously irradiated recurrent squamous cell carcinoma of the head and neck. Int J Radiat Oncol Biol Phys. 2015 Mar 1;91(3):480-8. PubMed PMID: [25680594](#).
  - d. Davis KS, Byrd JK, Mehta V, Chiosea SI, Kim S, Ferris RL, Johnson JT, Duvvuri U. Occult Primary Head and Neck Squamous Cell Carcinoma: Utility of Discovering Primary Lesions. Otolaryngol Head Neck Surg. 2014 Aug;151(2):272-8. PubMed PMID: [24812081](#); PubMed Central PMCID: [PMC4604041](#).

2. As a medical student, I participated in diverse clinical experiences to gain broad exposure to surgical research and the field of Otolaryngology. My research investigations included topics rhinology, epidemiology, and swallowing. As part of the Pediatric Oncology Education Program and St Jude Children's Hospital, I performed meta-analysis of population-based programs targeted at childhood obesity. This deepened my understanding of external validity and considerations of implementation of research into clinical care. I also studied the role of the complement system in a murine model of smoke-induced epithelial damage. This facilitated my understanding of basic science infrastructure, scientific methodology, and strengthened my skills in reading, writing, and interpreting the scientific literature. These opportunities developed my ability to design IRB-approved protocols; use epidemiologic techniques to quantitatively assess the external validity of research; formulate specific hypotheses, study designs, and analysis algorithms; and communicate and present these findings.
- a. Klesges LM, Williams NA, Davis KS, Buscemi J, Kitzmann KM. External validity reporting in behavioral treatment of childhood obesity: a systematic review. Am J Prev Med. 2012 Feb;42(2):185-92. PubMed PMID: [22261216](#); PubMed Central PMCID: [PMC4573550](#).
  - b. Davis KS, Welsh CT, Hawes RH, Gillespie MB. Pathology quiz case 3. Heterotopic gastric mucosa (inlet patch). Arch Otolaryngol Head Neck Surg. 2011 Aug;137(8):831; author reply 834-5. PubMed PMID: [21844423](#).
  - c. Davis KS, Casey SE, Mulligan JK, Mulligan RM, Schlosser RJ, Atkinson C. Murine complement deficiency ameliorates acute cigarette smoke-induced nasal damage. Otolaryngol Head Neck Surg. 2010 Jul;143(1):152-8. PubMed PMID: [20620635](#).

#### **D. Additional Information: Research Support and/or Scholastic Performance**

##### **Completed Research Support**

Resident Research Award, AAO-HNSF CORE Grant (\$10,000)      Meister, Kara (Davis) (PI)      06/01/15-06/01/16  
"Co-targeting HER3 and PI3K in Squamous Cell Carcinoma"  
Role: PI