CURRICULUM VITAE

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Aykut A. Unsal, DO, MS

CONTACT INFORMATION

Professional

Thomas Jefferson University
Department of Otolaryngology – Head & Neck Surgery
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EDUCATION

2009 – 2013 Doctorate of Osteopathic Medicine

University of Medicine & Dentistry of New Jersey

Stratford, New Jersey

2006 – 2008 Masters in Science: Biomedical Sciences

University of Medicine & Dentistry of New Jersey

Newark, New Jersey

2002 – 2006 *Major: Biology*

Minor: Computer Science & Music

Boston College

Chestnut Hill, Massachusetts

1998 – 2002 Mahwah High School

Mahwah, New Jersey

SUPPLEMENTAL COURSES

June – August BioMEMS Design and Applications

2007, 2008 Electrical Fundamentals of Biomedical Engineering

Mechanical Fundamentals of Biomedical Engineering

Biological and Chemical Foundations of Biomedical Engineering BioMEMS Bioengineering Institute – Microfabrication Laboratory

New Jersey Institute of Technology

July 2014 Otolaryngology Emergencies Boot Camp

Georgetown University

January 2015 International Endoscopic Sinonasal and Skull Base Anatomy and Surgical

Techniques Course University of Miami

March 2016 Temporal Bone Surgical Dissection Course

Michigan Ear Institute

May 2016	SimFest - Penn Medicine Surgical Simulation Course University of Pennsylvania			
April 2017	Advances in Facial Reconstruction & Cosmetic Surgery Icahn School of Medicine at Mount Sinai			
May 2017	Head and Neck Cancer and Reconstructive Surgery Course University of Iowa			
June 2017	Endoscopic Sinonasal and Skull Base Anatomy and Facial Reconstruction Course Rutgers New Jersey Medical School			
August 2017	Principles of Operative Treatment of Craniomaxillofacial Trauma & Reconstruction AOCMF, Boston, Massachusetts			
May 2018	Advanced Sinus and Skull Base Course American Rhinologic Society, Evanston, Chicago			
April 2019	Rhinologic Lectures and Laboratory Dissection Southern States Rhinology Symposium			
POSTGRADUATE TRAINING				
2013 – 2014	Surgical Internship Rowan University SOM/Thomas Jefferson Health System Stratford, New Jersey			
2014 – 2017	Resident, Otolaryngology & Facial Plastic Surgery Rowan University SOM/Thomas Jefferson Health System Stratford, New Jersey			
2016 – 2018	Rotating Resident, Head and Neck Oncologic Surgery Memorial Sloan Kettering Cancer Center			

2017 – 2018 Visiting Resident University of Pennsylvania – Department of Otorhinolaryngology Philadelphia, Pennsylvania 2017 – 2018 Chief Resident, Department of Otolaryngology & Facial Plastic Surgery Rowan University SOM/Thomas Jefferson Health System Stratford, New Jersey

2018 – 2019 Fellow, Rhinology & Skull Base Surgery
Medical College of Georgia – Augusta University
Augusta, Georgia

New York, New York

ACADEMIC APPOINTMENTS

2019 - Present Assistant Professor, Department of Otolaryngology - Head & Neck Surgery

Drexel University College of Medicine

Philadelphia, Pennsylvania

EMPLOYMENT HISTORY

2020 - Present Otolaryngologist

Department of Otolaryngology - Head & Neck Surgery

Thomas Jefferson University

2019 – 2020 Otolaryngologist

Philadelphia, Ear, Nose & Throat Associates

SOFTWARE DEVELOPMENT

2020 - Present Software Developer

COVID Smell Tracker, mobile app

A research-based app developed to study the relationship between

COVID-19 infection and anosmia www.covidsmelltracker.org

2018 – Present Software Developer

Scrubbed, mobile app

Crowdsourced clinical question bank

www.scrubbedapp.com

2008 – 2010 Co-Founder

Kazoo Interactive, LLC

Educational Facebook application for students (currently discontinued)

2003 – 2008 Software Developer, Consultant

Stryker Corporation, Orthopedic Division

Mahwah, New Jersey

BOARD CERTIFICATION

2019 Certification in Otolaryngology & Facial Plastic Surgery

American Osteopathic Board of Otolaryngology - Head & Neck Surgery

LICENSURE

<u>State</u>	<u>License Number</u>	<u>Issued</u>	<u>Expiration</u>
Delaware	C7-0006136	2/11/2016	3/31/2018
Georgia	080410	5/2/2018	6/30/2019
Pennylvania	OS019971	4/10/2019	10/31/2020

HONORS AND AWARDS

2017 Travel Award Recipient

Triological Society Combined Sections Meeting

New Orleans, Louisiana

2017 Second Place, Top Research Award

"Translatlantic Differences in Survival for Major Salivary Gland Cancer"

Combined Otolaryngology Spring Meeting - Triological Society

San Diego, California

2019 Travel Award Recipient

Triological Society Combined Sections Meeting

Coronado, California

MEMBERSHIP IN PROFESSIONAL SOCIETIES

2013 – Present American Academy of Otolaryngology – Head and Neck Surgery

2013 – Present American Osteopathic Association

2014 - Present Triological Society

2014 - Present American Rhinologic Society

2014 – 2018 New Jersey Association of Osteopathic Physicians and Surgeons

PROFESSIONAL COMMITTEES

2015 – 2016 *Member*

Medical Devices and Drugs Committee

American Academy of Otolaryngology - Head and Neck Surgery

2015 – 2016 *Member*

Medical Informatics Committee

American Academy of Otolaryngology – Head and Neck Surgery

EDUCATIONAL ACTIVITIES

2011 – 2013 Anatomy Lab Tutor

University of Medicine and Dentistry

Stratford, New Jersey

2018 Author – Learning Module: Paranasal and Nasal Malignancies

https://www.otosource.org/content/paranasal-and-nasal-malignancies

Otosource - Head and Neck Surgery

American Academy of Otolaryngology - Head and Neck Surgery Foundation

October - 2019 Lecture: Vascular Anomalies of the Head and Neck

Department of Otolaryngology & Facial Plastic Surgery

Philadelphia College of Osteopathic Medicine

Philadelphia, Pennsylvania

October - 2019 Lecture: Cleft Lip and Palate

Department of Otolaryngology & Facial Plastic Surgery

Philadelphia College of Osteopathic Medicine

Philadelphia, Pennsylvania

November - 2019 Lecture: Clinical Esophagology

Department of Otolaryngology & Facial Plastic Surgery

Philadelphia College of Osteopathic Medicine

Philadelphia, Pennsylvania

BIBLIOGRAPHY

* indicates peer reviewed journal

- *Bhojwani A, Unsal A, Dubal PM, Baredes S, Liu K, Eloy JA. Frontal Sinus Malignancies: A Population-Based Analysis of Incidence and Survival. *Otolaryngology – Head and Neck Surgery* 2016; 154:735-741.
- 2. *Dubal PM, **Unsal AA**, Chung SY, Patel AV, Park RCW, Baredes S, Eloy JA. Population-based trends in outcomes in adenoid cystic carcinoma of the oral cavity. *American Journal of Otolaryngology* 2016; 37:398-406.
- 3. *Dubal PM, **Unsal AA**, Echanique KA, Vazquez A, Reder LS, Baredes S, Eloy JA Laryngeal adenosquamous carcinoma: A population-based perspective. *Laryngoscope* 2016; 126:858-863.
- 4. *Unsal AA, Dubal PM, Patel TD, Vazquez A, Baredes S, Liu JK, Eloy JA. Squamous cell carcinoma of the nasal cavity: A population-based analysis. *Laryngoscope* 2016; 126:560-565.
- 5. **Unsal AA**. New rules for a new era: U.S. FDA imposes new tobacco product regulations. *American Academy of Otolaryngology Head and Neck Surgery: Bulletin*; 2016; 25:8.
- 6. *Chin OY, Dubal PM, Sheikh A, **Unsal AA**, Park RCW, Baredes S, Eloy JA. Laryngeal chondrosarcoma: A systematic review of 592 cases. *Laryngoscope* 2017; 127:430-439.
- 7. *Chung SY, **Unsal AA**, Kilic S, Baredes S, Liu JK, Eloy JA. Pediatric sinonasal malignancies: A population-based analysis. *International Journal of Pediatric Otorhinolaryngology* 2017; 98:97-102.
- 8. *Kilic S, **Unsal AA**, Chung SY, Samarrai R, Kilic SS, Baredes S, Eloy JA. Geographic region: Does it matter in cutaneous melanoma of the head and neck? *Laryngoscope* 2017; 127:2763-2769.

- 9. *Unsal AA, Chung SY, Unsal AB, Baredes S, Eloy JA. A Population-Based Analysis of Survival for Sinonasal Rhabdomyosarcoma. *Otolaryngology Head and Neck Surgery* 2017; 157:142-149.
- 10. *Unsal AA, Chung SY, Zhou AH, Baredes S, Eloy JA. Sinonasal adenoid cystic carcinoma: a population-based analysis of 694 cases. *International Forum of Allergy & Rhinology* 2017; 7:312-320.
- 11. *Unsal AA, Patel VR, Chung SY, Zhou AH, Baredes S, Eloy JA. Head and neck sweat gland adenocarcinoma: A population-based perspective of a rare entity. *Laryngoscope* 2017; 127:2757-2762.
- 12. *Zhou AH, Chung SY, Patel VR, **Unsal AA**, Hsueh WD, Baredes S, Eloy JA. et al. Do geographic differences or socioeconomic disparities affect survival in sinonasal squamous cell carcinoma? *International Forum of Allergy & Rhinology* 2017; 7:1195-1200.
- 13. *Traylor K, laia A, **Unsal AA**, Teixido M, Agnello F, Sparacia G. Unusual Imaging Manifestations of Severe Bilateral Cochlear Otosclerosis. *Delaware Medical Journal* 2018; 90: 20-22
- 14. *Unsal AA, Gregory N, Rosenstein K. Current opinions in office-based rhinology. Current Opinions in Otolaryngology – Head and Neck Surgery 2018; 26:8-12.
- 15. *Unsal AA, Kilic S, Dubal PM, Baredes S, Eloy JA, Group E-W. A population-based comparison of European and North American sinonasal cancer survival. *Auris Nasus Larynx* 2018; 45:815-824.
- 16. *Unsal AA, Unsal AB, Henn TE, Baredes S, Eloy JA. Cutaneous squamous cell carcinoma of the lip: A population-based analysis. *Laryngoscope* 2018; 128:84-90.
- 17. *Unsal AA, Booth JR, Rossi NA, Byrd JK, Kountakis SE. Basaloid nasopharyngeal carcinoma: A population-based analysis of a rare tumor. *Laryngoscope* 2019 Dec;129(12):2727-2732
- 18. *Unsal AA, Dubal PM, Pfaff JA, Friedel ME, Eloy JA, Kountakis SE. Doctor Google: Correlating Internet search trends for epistaxis in metropolitan climates. *American Journal of Otolaryngology* 2019 May Jun;40(3):358-363.
- 19. *Booth JR, **Unsal AA**, Tadros S, Byrd JK, Kountakis SE. Salivary Gland Cancers of the Nasopharynx: A Population-Based Analysis of 383 Cases. *Otolaryngology Head and Neck Surgery* 2019. 2019 Sep; 161(3);442-449.
- *Sharbel D, Unsal AA, Groves M, Albergotti G, Byrd JK. Salivary Clear Cell Carcinoma Clinicopathologic Characteristics and Outcomes: A Population-Based Analysis. *Annals of Otology, Rhinology, & Laryngology* 2019 Nov; 128(11):989-996.

- 21. **Unsal AA**. Demographics and Outcomes in Chronic Rhinosinusitis. *Audio-Digest Otolaryngology*. November 21, 2019. Volume 52, Issue 23.
- 22. *Sharbel D, Li M, **Unsal AA**, Tadros S, Lee J, Biddinger P, Holmes T, Kountakis SE. Use of Mucosal Eosinophil Count as a Guide in the Management of Chronic Rhinosinusitis. *International Forum of Allergy & Rhinology*. 2020 Jan 12.
- 23. *Makary CA, Gill B, Parman B, **Unsal AA**, Holmes T, Reyes-Gelves C, Kountakis SE. Subjective and Objective Measurements of Sinonasal Manifestations in Patients With Autoimmune Disorders. *Laryngoscope*. 2020 Apr 23. In press
- 24. *Holmes T, Makary C, Unsal AA, Biddinger P, Reyes-Gelves C, Kountakis SE. How Does Age Impact Presentation and Outcomes in Chronic Rhinosinusitis? Annals of Otology, Rhinology, & Laryngology. 2020 May 9:3489420919124
- 25. *Unsal AA, Reyes-Gelves C, Biddinger P, Kountakis SE. Eosinophilic Mucin: A Predictor for Disease Severity in Chronic Rhinosinusitis. *American Journal of Rhinology & Allergy*. 2020. In Press

BOOK CHAPTERS

 Unsal AA, Kilic S, Svider P, Eloy JA. Management of Frontal Sinus Malignancies. In: Lal D, Hwang PH (eds), Frontal Sinus Surgery: A Systematic Approach. New York, NY: Springer; 2019

ABSTRACTS

1. *Alapati S, **Unsal AA**, Cracchiolo K, Roman B, Lee N, Cohen M. Incidence and Distribution of Nodal Metastasis in Sinonasal Malignancy. International Journal of Radiation Oncology 2018; 100-5; 1384.

PRESS ARTICLES

 Brunk D "Asthma patients with sinusitis, polyps, fare poorer after sinus surgery" CHEST Physician. January 26, 2019. https://www.mdedge.com/chestphysician/article/193324/asthma/asthma-patients-sinusitis-polyps-fare-poorly-after-sinus

ANTICIPATED PUBLICATIONS

- 1. Holmes T, **Unsal AA**, Gupta S, Biddinger P, Kountakis SE. Effects of Eosinophilia And Nasal Polyposis on Quality of Life in Chronic Rhinosinusitis Patients with Concurrent Asthma
- 2. Blumenthal D, **Unsal AA**, Holmes T, Biddinger P, Kountakis SE. Gender and Chronic Rhinosinusitis A Long-term Outcomes-based Analysis

PRESENTATIONS/POSTERS

- 1. **Unsal AA**. A Geometric Basis for the Analysis of Multiple Sequence Alignments. *Boston College Undergraduate Research Day*. May 2006.
- 2. **Unsal AA**, Ivanov D. BioMEMS: A Novel Approach to Blood Typing. *National Institute of Health-National Science Foundation Annual BBSI Meeting*. Washington, DC. July 2008.
- 3. **Unsal AA**, Dubal PM, Patel TD, Vazquez A, Baredes S, Liu JK, Eloy JA. Metastatic Squamous Cell Carcinoma of the Nasal Cavity: A Population-Based Analysis. *American Rhinologic Society Annual Fall Meeting*; Dallas, Texas, Sept 26, 2015.
- 4. **Unsal AA**, Chung SY, Zhou AH, Baredes S, Eloy JA. Sinonasal Adenoid Cystic Carcinoma: A Population Analysis of 694 Cases. *American Rhinologic Society Annual Fall Meeting*; San Diego, California, Sept. 17, 2016
- 5. Wong A, **Unsal AA**, Chung SY, Desai SV Sylvester MJ, Baredes S, Eloy JA. A Population-Based Analysis of Survival of Sinonasal Rhabdomyosarcoma. *American Rhinologic Society Annual Fall Meeting*; San Diego, California, Sept 17, 2016.
- 6. Chung SY, **Unsal AA**, Wong A, Desai SV, Filimonov A, Aboud M, Eloy JA. Pediatric Sinonasal Malignancies: A Population-Based Analysis. *American Rhinologic Society Annual Fall Meeting*; San Diego, California, Sept 17, 2016.
- Chung SY, Patel VR, Unsal AA, Zhou AH. Geographic Differences in Disease-Specific Survival of Head and Neck Mucosal Melanoma: A Population Based Analysis. Triological Society Combined Sections Meeting; New Orleans, Louisiana, Jan 19-21, 2017
- 8. **Unsal AA**, Patel VR, Chung SY, Zhou AH. Disease-Specific Survival in Head and Neck Sweat Gland Adenocarcinoma: A Population Based Analysis of 627 Cases. *Triological Society Combined Sections Meeting*; New Orleans, Louisiana, Jan 19-21, 2017
- 9. Chung SY, Zhou AH, **Unsal AA**, Patel VR, Baredes S, Eloy JA. Regional Differences in Sinonasal Adenoid Cystic Carcinoma. *Triological Society Combined Sections Meeting*; New Orleans, Louisiana, Jan 19-21, 2017
- Chung SY, Zhou AH, Unsal AA, Patel VR, Baredes S, Eloy JA. Do Geographic Differences or Socioeconomic Disparities Affect Survival in Sinonasal Squamous Cell Carcinoma? *Triological Society Combined Sections Meeting*; New Orleans, Louisiana, Jan 19-21, 2017
- 11. Kilic S, **Unsal AA**, Chung SY, Baredes S, Eloy JA. Geographical Region: Does it Matter in Cutaneous Melanoma of the Head and Neck? *Triological Society Combined Sections Meeting*; New Orleans, Louisiana, Jan 19-21, 2017

- 12. Mendelson ZS, Kilic S, Kilic SS, **Unsal AA**, Baredes S, Eloy JA. Survival for Thyroid Cancer in the 21st Century: Europe vs. United States. *Combined Otolaryngology Spring Meeting Triological Society*; San Diego, California April 26-30, 2017
- Kilic S, Kilic SS, Mendelson ZS, Unsal AA, Baredes S, Eloy JA. Transatlantic Differences in Survival for Lip Cancer: Europe vs. United States. Combined Otolaryngology Spring Meeting – Triological Society; San Diego, California April 26-30, 2017
- 14. Kilic S, Kilic SS, Mendelson ZS, Unsal AA, Baredes S, Eloy JA. Transatlantic Differences in Survival for Major Salivary Gland Cancer: Europe vs. United States. Combined Otolaryngology Spring Meeting – Triological Society; San Diego, California April 26-30, 2017
- 15. Temmermand DA, **Unsal AA**, Dubal PM, Romeo SJ, Eloy JA. Oropharyngeal Non-Keratinizing SCC: A SEER Analysis. *American Academy of Otolaryngology-Head and Neck Surgery Annual Conference*; Chicago, Illinois September 10-13, 2017
- 16. **Unsal AA**, Romeo S, Reddy R, Kılıç S, Eloy JA, EUROCARE-5 Working Group. Esthesioneuroblastoma: A Comparison Study of The EUROCARE And SEER Population Databases. *American Rhinologic Society Meeting*, Chicago, IL, September 9, 2017.
- 17. **Unsal AA**, Temmermand DA, Kılıç S, Baredes S, Eloy JA, EUROCARE-5 Working Group. Sinonasal Mucosal Melanoma: A Population-Based Comparison of the EUROCARE and SEER Registries. *American Rhinologic Society Meeting*, Chicago, IL, September 9, 2017.
- 18. Temmermand DA, **Unsal AA**, Romeo S, Eloy JA. Oropharyngeal Non-Keratinizing SCC: A SEER Analysis. *American Academy of Otolaryngology Head and Neck Surgery Meeting*, Chicago, IL, September 10, 2017.
- 19. Alapati S, **Unsal AA**, Cracchiolo J, Roman B, Lee N, Cohen M. Incidence and Distribution of Nodal Metastasis in Sinonasal Malignancy. *Combined Otolaryngology Spring Meeting Triological Society*; National Harbor, MD April 18-22, 2017
- 20. Joshi R, Unsal AA, Cracchiolo J, Migliacci J, Roman B, Cohen M. An Analysis of Endoscopic and Open Approaches to Sinonasal Malignancies in the National Cancer Database from 2010 to 2014. North American Skull Base Society Annual Meeting; Coronado, CA February 2, 2018
- 21. **Unsal AA**, Dubal PM, Pfaff JA, Friedel ME, Eloy JA. Kountakis SE. Epistaxis and Weather: Correlating Internet Search Activity with Climate Data. *American Rhinologic Society Annual Meeting*; Atlanta, GA October 5, 2018.
- 22. Romeo SJ, **Unsal AA**, Claudine J, Zhang Z, Teixido M. Migraine Symptoms and Weather: An Investigation of Climate Triggers Using Internet Search Activity. *Triological Society Combined Sections Meeting*; Coronado, California, Jan 24-26, 2019

- Unsal AA, Tadros S, Holmes T, Kountakis SE. Gender and Chronic Rhinosinusitis: An Investigation of Subtypes and Quality of Life. Triological Society Combined Sections Meeting; Coronado, California, Jan 24-26, 2019
- 24. Tadros S, **Unsal AA**, Holmes T, Kountakis SE. Effects of Eosinophilia and Nasal Polyposis on Quality of Life in Chronic Rhinosinusitis Patients with Asthma. *Triological Society Combined Sections Meeting*; Coronado, California, Jan 24-26, 2019
- 25. Sharbel D, **Unsal AA**, Groves M, Albergotti G, Byrd JK. Salivary Clear Cell Carcinoma Clinicopathologic Characteristics and Outcomes: A Population-Based Analysis. *Combined Otolaryngology Spring Meeting—American Head and Neck Society*; Austin TX May 1-2, 2019
- 26. Parman B, Makary C, Gill B, Holmes T, **Unsal AA**, Reyes C, Kountakis SE. Sinonasal anatomic variants in allergic fungal rhinosinusitis. *Triological Society Combined Sections Meeting*; Coronado, California, Jan 23-25, 2020.
- 27. Gill B, Makary C, Parman B, Holmes T, **Unsal AA**, Reyes C, Kountakis SE. Sinonasal Manifestations of Autoimmine Disease. *Triological Society Combined Sections Meeting;* Coronado, California, Jan 23-25, 2020.