BIOGRAPHICAL SKETCH

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NAME: GOHEL, ANITA

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

POSITION TITLE: Clinical Professor Program Director, Oral & Maxillofacial Radiology, Department of Oral & Maxillofacial Diagnostic Sciences.

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)	Completion Date MM/YYYY	FIELD OF STUDY
Calcutta University, Kolkata, India	BDS	09/1991	Dentistry
University of Connecticut, Farmington CT		09/1996	Oral & Maxillofacial Radiology
University of Connecticut, Farmington CT	PhD	09/1998	Biomedical Science

A. Personal Statement

I am a clinical professor, division, and program director of Oral and Maxillofacial Radiology, at the College of Dentistry, University of Florida, and Board Certified Oral and Maxillofacial Radiologist. My training in Oral & Maxillofacial radiology helped me acquire skills to analyze the radiographic features in advanced imaging. In addition, I have training in bone biology, which was crucial for analyzing the micro-architecture of the bone. My clinical and translational research focuses on advanced 3D imaging, jaw lesions, and pathology. I have been actively investigating the role of image modifications to examine TMJ region morphology, MRONJ-induced osteonecrosis, advanced imaging diagnosis of glandular odontogenic cysts, and using AI to create a training dataset essential for creating an ideal detection and diagnosis model for 2D and 3D imaging diagnosis of jaw lesions.

I have been actively investigating the role of image modification in examining radiographic features of medication-related osteonecrosis, TMJ region morphology, and advanced imaging diagnosis of glandular odontogenic cysts, using AI to create a training dataset essential for creating an ideal detection and diagnosis model for 3D imaging diagnosis of jaw lesions.

I will serve as Co-I on the current proposal entitled *"Artificial Intelligence for prediction of location and severity of impacted maxillary teeth."*.

As a trained Oral & Maxillofacial radiologist, I have provided radiographic expertise in both 2D and advanced 3D imaging in orthodontic research with Dr. Deguchi. This study assessed the reliability and accuracy of inter radicular TAD placement using CBCT images. (See below)

1. Srinivasan, S.; Tee, B.C.; Wang, A.; **Gohel, A.**; Kim, D.G.; Deguchi, T.; Sun, Z. Reliability and accuracy of assessing temporary anchorage device-tooth root contact with cone-beam computed tomography. Am J Orthod Dentofacial Orthop. 159(3):271-80. 2021. PMID: 33485718.

B. Positions and Honors

Positions and Employment

01/2020- present	Clinical Professor & Program Director, University of Florida, College of Dentistry, Oral & Maxillofacial Diagnostic Sciences
01/2016- 12/2019	Clinical Professor & Program Director, The Ohio State University, College of Dentistry, OMF Pathology and Radiology
03/2015-12/2015	Clinical Professor, Boston University Henry M. Goldman School of Dental Medicine, General Dentistry
07/2007-02/2015	Associate Professor, Boston University Henry M. Goldman School of Dental Medicine, General Dentistry
09/1999- 06/2007	Assistant Professor, Boston University Henry M. Goldman School of Dental Medicine, Department of Diagnostic Sciences and Patient Services

Other Experience and Professional Memberships

Professional Certifications and Licenses

- Board-certified Oral & Maxillofacial Radiologist: Certified by ABOMR, 2000.

National and Regional Committee Appointments

- 9/2022 - present   Immediate past-president, AAOMR
- 11/2021 - 9/2022   President, American Academy of Oral & Maxillofacial Radiology
- 10/2020- 10/2021   President-elect, American Academy of Oral & Maxillofacial Radiology
- 01/ 2017 – 10/2020   Commissioner, ADA National Commission on Recognition of Dental Specialties and Certifying Board
- 01/ 2017- 10/2020   Review Committee member, OMF Radiology, Commission on Dental Accreditation
- 01/ 2017- 12/2018   Chair, Continuing Education Committee, AAOMR
- 01/2017-12/2017   President, American Board of Oral & Maxillofacial Radiology
- 01/2015-12/2016   Vice-President, American Board of Oral & Maxillofacial Radiology
- 01/2012- 12/2017   Director, American Board of Oral and Maxillofacial Radiology, 2012 present
- 01/2010-12/2013   Chair, Allied Health Committee, American Academy of Oral & Maxillofacial Radiology

Honors & Awards

- 2023: Inducted into the Xi Omicron Chapter of Omicron Kappa Upsilon Honorary Dental Society (OKU) at the University of Florida College of Dentistry
- 2019 Postle Teaching award, Ohio State College of Dentistry
- 2019 Best teacher award Clinical, Ohio State College of Dentistry
- 2019 Best teacher award Didactic, Ohio State College of Dentistry
- 2015 Fellowship in the International College of Dentists
- 2015 Certificate of Merit: Yankee Dental Congress
- 2014 Faculty Recognition Award for Educational Innovation
- 2014 Certificate of Merit: Yankee Dental Congress
- 2013 Certificate of Merit: Merrimack Dental Society
- 2013 Nominated to the Emerging Leaders Forum, ADEA

C. Contributions to Science

1. Radiogarphic imaging and diagnosis: Radiographs provide and visualization of dental osseous structures and has multipl eappilications in oral maxillofacial imaging including diagnosis and treatment planning. I have used my expertise in 2D and 3D imaging to provide guidance and assistance in the radiographic analysis of anatomical landmarks, osseous lesions and radiographic diarnosis.

1. Carlson ED, Stubbs A, Chandrasekaran S, Robles B, Kolanda R, **Gohel A**, Sarkis R. Sex-related differences in the distance of the mental foramen to the cementoenamel junction in adults: a study using cone beam computed tomography. Gen Dent. 2019 Mar-Apr;67(2):34-37. PMID: 30875305.

2. Vyas R, **Gohel A**, Escoffier C, Shan K, Katz J. Idiopathic lingual mandibular sequestration and its relationship to medication-related osteonecrosis of the jaws (MRONJ): mini review. Quintessence Int. 2022 Oct 21;53(10):868-873. doi: 10.3290/j.qi.b3418171. PMID: 36169274.

3. Villa, A.; **Gohel A.** Diagnostic challenge: oral ulceration with mandibular necrosis. *J Am Dent Assoc.* 145(7):752-6. 2014. PMID:24982282

4. **Gohel A**, Oda M, Katkar AS, Sakai O. Multidetector Row Computed Tomography in Maxillofacial Imaging. Dent Clin North Am. 2018 Jul;62(3):453-465. doi: 10.1016/j.cden.2018.03.005. PMID: 29903561

2. **Radiographic diagnosis of jaw lesions diagnsois:** As a trained Oral & Maxillofacial radiologist, I have provided radiographic expertise in several studies with 2D and advanced 3D imaging.

1. Srinivasan, S.; Tee, B.C.; Wang, A.; **Gohel, A.**; Kim, D.G.; Deguchi, T.; Sun, Z. Reliability and accuracy of assessing temporary anchorage device-tooth root contact with cone-beam computed tomography. *Am J Orthod Dentofacial Orthop.* 159(3):271-80. 2021. PMID: 33485718.

2. Knobloch, L.A.; Larsen, P.; McGlumphy, E.; Kim, D.G.; **Gohel, A.**; Messner, R.; Fogarty, K.J.; Fogarty, M.T. Prospective cohort study to evaluate narrow-diameter implants for restoration of a missing lateral incisor in patients with a cleft palate: One-year results. *J Prosthet Dent.* 22:S0022-3913(21)00200-6. 2021. PMID: 34034898.

3. Carlson, E.D.; Stubbs, A.; Chandrasekaran, S.; Robles, B.; Kolanda, R.; **Gohel, A.**; Sarkis, R. Sex-related differences in the distance of the mental foramen to the cementoenamel junction in adults: a study using cone-beam computed tomography. *Gen Dent.* 67(2):34-7. 2019. PMID:30875305.

4. Nunn, M.E.; Fish, M.D.; Garcia, R.I.; Kaye, E.K.; Figueroa, R.; **Gohel, A.**; Ito, M.; Lee, H.J.; Williams, D.E.; Miyamoto, T. Retained asymptomatic third molars and risk for second molar pathology, *J Dent Res.* 92(12):1095-9. 2013 PMID:24132082.

5. Vyas R, **Gohel A**, Escoffier C, Shan K, Katz J. Idiopathic lingual mandibular sequestration and its relationship to medication-related osteonecrosis of the jaws (MRONJ): mini review. Quintessence Int. 2022 Oct 21;53(10):868-873. doi: 10.3290/j.qi.b3418171. PMID: 36169274

6. Kawashima Y, Sakai O, **Gohel A**; Proximity of the mandibular canal to teeth and cortical bone. J Endod. 2016 Feb (42) 221–224.

7. Devenney-Cakir B, Subramaniam RM, Reddy SM, Imsande H, **Gohel A**, Sakai O. Cystic and cystic-appearing lesions of the mandible: review. AJR Am J Roentgenol. 2011 Jun;196(6 Suppl):WS66-77. doi: 10.2214/AJR.09.7216. PMID: 21606244.

8. Dunfee BL, Sakai O, Pistey R, **Gohel A.** Radiologic and pathologic characteristics of benign and malignant lesions of the mandible. Radiographics. 2006 Nov-Dec;26(6):1751-68. doi: 10.1148/rg.266055189. PMID: 17102048.

9. Nunn ME, Fish MD, Garcia RI, Kaye EK, Figueroa R, **Gohel A**, Ito M, Lee HJ, Williams DE, Miyamoto T. Retained asymptomatic third molars and risk for second molar pathology. J Dent Res. 2013 Dec;92(12):1095-9. doi: 10.1177/0022034513509281. Epub 2013 Oct 16. PMID: 24132082; PMCID: PMC3834658.

Complete List of Published Work in My Bibliography:

Peer-Reviewed Papers: 27; Invited articles:7; Book Chapters: 2
https://pubmed.ncbi.nlm.nih.gov/?term=gohel%2C+a&size=50

D. Research Support

Ongoing Research Support

R21DE031449-01A1 - Co-investigator, Osteocyte Death in Osteonecrosis of the Jaw in Rice Rats: Role of Necroptosis and Temporal Relationship with Radiographic, Molecular and Histopathologic Findings (PI: Aguirre, Jose Ignacio)

2023 Orthodontic Faculty Development Fellowship (OFDFA)::Machine Learning Model to Assess the External Apical Root Resorption from the CBCT image (PI, Divakar Karanth)