

## **Dr. Nisha Manila**

### **EDUCATION**

University of Alcala - 2024

- MS-Artificial Intelligence in Healthcare

Harvard T.H. Chan School of Public Health- 2023

- Certification in Artificial Intelligence

Texas A&M University School of Dentistry-2021

- Postgraduate residency –Dept of Diagnostic Sciences, Division of Oral and Maxillofacial Radiology

Tokyo Medical and Dental University, Division of Medical and Dental Sciences-2019

- Ph.D. in Dental Science, Oral Radiation Oncology
- Oral and Maxillofacial Radiology Externship
- GIRS- Graduate Research Diploma Certification

Rajiv Gandhi University of Health Sciences-2009

- Bachelor of Dental Surgery (B.D.S)
- Internship

### **LICENSES**

- California State Dental license –2023-Present
- Louisiana State Dental license – 2021- 2023
- Indian Dental License -2009-Present

## CERTIFICATIONS

- Evaluations of AI Applications in Healthcare-Stanford University-2024
- Certification in Artificial Intelligence- Harvard T.H. Chan School of Public Health- 2023
- Oral and Maxillofacial Radiology- Texas A&M University School of Dentistry 2021

## PRINCIPAL POSITIONS HELD

2023-Present	California North State University College of Dental Medicine, Sacramento, CA	Founding Radiologist, Associate Professor, and Director of Radiology	Dentistry
2024-Present	Saveetha Institute of Medical and Technological Sciences, Chennai, India	Adjunct Professor	Dentistry
2024-Present	Manipal Academy of Higher Education, Manipal College of Dental Sciences, Karnataka, India	Adjunct Professor	Dentistry
2021-2023	Louisiana State University Health Science Center, School of Dentistry, LA	Assistant Professor	Dentistry
2019-2021	Texas A&M University, School of Dentistry, TX	Chief Resident	Dentistry
2015-2019	Tokyo Medical and Dental University, Tokyo, Japan	Graduate Researcher	Dentistry
2014-2015	Tokyo Medical and Dental University, Tokyo, Japan	Graduate Research Diploma student	Dentistry

## HONORS AND AWARDS

2025	Honorary Certification-Manipal College of Dental Sciences, India
2024	Honorary Certification-Lyceum-Northwestern University, Philippines
2023	American College of Dentists Fellowship (FACD)
2022	Honorary Certification - Ajman University College of Dentistry
2019	William H. Rollins Award- In recognition of outstanding research in Oral and Maxillofacial Radiology
2016 -2019	Kobayashi Research Foundation yearly scholarship- Awarded for exceptional candidates, selection is through a peer review process.
2015-2016	Otsuka Toshimi Research Foundation scholarship award

## PROFESSIONAL ACTIVITIES

### MEMBERSHIPS

2024-Present	European Academy of Dentomaxillofacial Radiology
2024-Present	Tripartite Membership CDA, ADA and SDDS
2024-Present	El Dorado Dental Academy
2023-Present	American College of Dentists
2023-Present	American Association for Women Dentists
2023-Present	American Dental Education Association-AAOMR Pre-doc committee
2022-Present	ITU/WHO Focus Group on AI for Health: International Telecommunication Union (ITU) and the World Health Organization (WHO) established a group of experts to develop a benchmarking framework for health solutions based on Artificial Intelligence
2021-Present	International Atomic Energy Agency
2021-2023	Louisiana Dental Association
2021-Present	Radiological Society of North America
2019-Present	American Society of Neuroradiology
2019-Present	International Association of DentoMaxillofacial Radiology
2019-Present	American Academy of Oral and Maxillofacial Radiology
2019-Present	Asian Academy of Oral and Maxillofacial Radiology
2019-Present	International Association of Dental Research
2019-Present	American Dental Education Association
2019-Present	Texas Dental Association
2019-2021	Stomatological Society of Japan
2014-2019	European Society of Medical Oncology
2009-Present	Indian Dental Association

## INVITED PRESENTATIONS – INTERNATIONAL

2025	Exploring Avenues in Maxillofacial Radiology- CE course, Department of Oral Medicine and Radiology, Manipal College of Dental Sciences, India	Guest Speaker
2024	Artificial Intelligence in Dentistry-Trends, Opportunities and Challenges- 3 <sup>rd</sup> International Research Conference and Medical Symposium (IRCAMS) on Healthcare and Education in the Era of Artificial Intelligence at Lyceum-Northwestern University, Dagupan City, Pangasinan, Philippines.	Plenary Speaker
2023	Artificial Intelligence in Dentistry-A friend or foe? M.S. Ramaiah Dental College Bengaluru, India.	Guest Speaker
2022	Radiographic manifestations of systemic diseases- Ajman University College of Dentistry, UAE in collaboration with Asian Academy of Oral and Maxillofacial Radiology UAE	Guest Speaker
2021	Imaging findings of extra-nodal Rosai-Dorfman Disease of the orbit in elderly patient: A case report- at 23rd International Congress of Dentomaxillofacial Radiology Conference, South Korea	Presenter
2021	Imaging features of rare but not extinct Lemierre syndrome - A case report"- Abstract presentation at 23rd International Congress of Dentomaxillofacial Radiology Conference, South Korea	Presenter
2017	Insulin-like growth factor I receptor (IGF-IR) regulates radiation-induced G2/M checkpoint by controlling Chk1 localization in HeLa cells" Young Researchers Symposium Tokyo, Japan	Presenter
2016	IGF-IR, but not EGFR, regulates DNA damage response in HeLa cells following irradiation" (European Society of Medical Oncology) ESMO Asia, Singapore	Presenter
2016	Roles of IGF-I receptor (IGF-IR) in HeLa cells following irradiation-Selected Best Basic science topic - Stomatological Society Annual Conference, Tokyo	Presenter
2015	Effect of IGF-IR-inhibition on the radiation-induced cell kinetics and DNA repair- Stomatological Society Annual Conference, Tokyo, Japan	Presenter
2015	Inhibition of IGF-IR retards release from radiation-induced G2 arrest"- 6th Indian Scientists Association, Japan Symposium, Tokyo	Presenter
2015	Inhibition of IGF-IR retards release from radiation-induced G2 arrest"- 7th-ISP Student Symposium, Tokyo	Presenter

2014	Inhibition of IGF-IR, but not EGFR, retards release from radiation-induced G2 arrest” Stomatological Society Annual Conference -Tokyo Japan	Presenter
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# **INVITED PRESENTATIONS – NATIONAL**

2025	Artificial Intelligence in Dentistry’ Sacramento District Dental Society 26 CE Course- Pearls in Our Backyard	Plenary Speaker
2025	AI reshaping the Dental Landscape: Integrating the future in Curriculum-CE course at the CDA Presents, Anaheim, LA 2025	Plenary Speaker
2024	Pediatric Pituitary Microadenoma: A Case Report, at the 58th Annual Meeting of American Society of Head and Neck Radiology, San Diego, 2024	Presenter
2021	“Cherubism Affecting the Maxilla-A case report and literature review” at the 72nd Annual Session of AAOMR	Presenter
2021	“Imaging of temporomandibular joint” University of Texas Dallas (UTD)	Presenter
2020	CBCT imaging of “Silent sinus syndrome” - case reports and literature review at 71st Annual Session of AAOMR	Presenter
2020	“Incidental findings of asymptomatic fungal infection in paranasal sinuses: A case report and literature review to increase awareness among dental professionals” - at 71st Annual Session of AAOMR	Presenter
2020	“Basilar invagination: Importance of craniometric measurement” at 71st Annual Session of AAOMR	Presenter
2019	William H. Rollins award for research in Oral and Maxillofacial Radiology-Awardee presentation- International Congress of Dentomaxillofacial Radiology and 70th Annual Session of AAOMR	Presenter
2019	Odontogenic Myxoma: A case report and literature review- Abstract presentation at 22nd International Congress of Dentomaxillofacial Radiology and 70th Annual Session of AAOMR	Presenter

## INVITED PRESENTATIONS - REGIONAL AND OTHER INVITED PRESENTATIONS

2024	Cone Beam Computed Tomography (CBCT)-CNSU CDM Interdisciplinary Interprofessional Seminar- Guest Speaker	Presenter
2023	Graduate General Practice residency symposium- LSU School of Dentistry	Presenter
2022	“Cone Beam Computed Tomography (CBCT) - An advanced imaging modality here to stay”- Louisiana Dental Association ADDA chapter, Lafayette.	Presenter

## Research Grants

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| 1. Ph.D. thesis Project<br>Insulin-like growth factor I receptor regulates the radiation-induced G2/M checkpoint in HeLa cells | PI-Dr. Miura<br>Duration-2014-2019<br>Amount- \$130,000 total |
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## PUBLICATIONS AND CONFERENCE ABSTRACTS

1. Best Practices and Guidelines for Dental Image Annotation in AI; The Role of Annotation in AI-Driven Dentistry: Challenges and Solutions, **White Paper**: Nielsen S Pereira, Ruben Pauwels, Marwa Baraka, Antonin Tichy, **Nisha Manila**, Shahid Islam, Falk Schwendicke, Published by ITU/WHO Focus Group on AI for Health, 2025.
2. Cone Beam Computed Tomography: Basics and Incidental Findings: **Nisha Manila**, solicited article-SDDS Nuggets, 2025 September.
3. Synthetic Imaging in Dentistry using Deep Learning: A Narrative Review of Techniques and Applications, Basel Khalil, Marwa Baraka, Sara Haghighat, Sanyam Jain, **Nisha Manila**, Rishi, Ramani, Antonin Tichy, Ekaterina Tolstaya, Falk Schwendicke, Ruben Pauwels-In press
4. Incidence of postoperative pain after single-visit and multiple-visit root canal therapy: A Systematic Review- Mohmed Isaqail Karobari, Gunjan Kumar, Samikshya Jena, **Nisha Manila**, Mohammad Fareed-BMC Oral health, 2025-01-08, DOI: 10.1186/s12903-024-05412-1
5. A Literature Review on Automatic Segmentation of Anatomic landmarks in Dentistry-Master's thesis. **Nisha Manila**, Ignacio Olmeda, 2024.
6. A study on the association between skeletal malocclusion, upper airway cross-sectional area and upper airway volume using CBCT scans. Yazan Mohamad Mahmoud, AB Rani Samsudin, Saad Al-Bayatti, Snigdha Pattanaik, Khamis Gaballah, Serene Badran, **Nisha Manila**, Vinayak Kamath, Shishir Shetty - European Journal of General Dentistry, 2025-03-19, DOI: 10.1055/s-0045-1804927
7. Clinical Presentations and Management of MRONJ in Elderly Patients: A Case Series. Aamanda Williams, Jerry Nguyen, Donald Liberty, **Nisha Manila**, Article in Press Journal of the California Dental Association, 2024.
8. AI Reshaping the Dental Landscape: Integrating the Future into Curriculum- **Nisha Manila**, Aaron Glick, Pinelopi Xenoudi, 2024, *Journal of the California Dental Association*, 52(1). <https://doi.org/10.1080/19424396.2024.2365953>

9. Why Trustworthy Artificial Intelligence (AI)? The Imperative for Responsible Development: **Nisha Manila**, solicited article-SDDS Nuggets, 2024 December.
10. Aaron Glick, Nicholas Tipton, Nisha Manila, Jennifer Chang, AI in Orthodontics: Clinical Implementation and Considerations for Use. Journal of Implant practice.US. 2CE Credits, 2024
11. Aaron Glick, Nicholas Tipton, Nisha Manila, Jennifer Chang, AI in Endodontics: Clinical Implementation and Considerations for Use. Journal of Implant practice US. 2CE Credits, 2024
12. Aaron Glick, Nicholas Tipton, **Nisha Manila**, Jennifer Chang, AI in Implant Dentistry: Clinical Implementation and Considerations for Use. Journal of Implant practice US, Volume 17, Number1 2024. <https://implantpracticeus.com/ce-articles/ai-in-implant-dentistry-clinical-implementation-and-considerations-for-use/>.2CE Credits, 2024
13. Rata Rokhshad, Seyyede Niloufar Salehi, Amirmohammad Yavari, Parnian Shobeiri, Mahdiah Esmaeili, **Nisha Manila**, Saeed Reza Motamedian & Hossein Mohammad-Rahimi Deep learning for diagnosis of head and neck cancers through radiographic data: a systematic review and meta-analysis. Oral Radiol (2023). <https://doi.org/10.1007/s11282-023-00715-5>
14. Shetty SR, Murray C, Kawas SA, Jaser S, Talaat W, Madi M, Kamath V, **Manila N**, Shetty R, Ajila V. Acceptability of fully guided virtual implant planning software among dental undergraduate students. BMC Oral Health. 2023 May 29;23(1):336. doi: 10.1186/s12903-023-03064-1. PMID: 37248483; PMCID: PMC10226220.
15. **Manila N**, Nair M, Liang H. Incidental Findings of Asymptomatic Fungal Infection. Case Rep Dent. 2022 Sep 5; 2022:3694968. doi: 10.1155/2022/3694968. PMID: 36105627; PMCID: PMC9467816.
16. **Manila N**. Artificial intelligence: The new odds in dentistry. LDA J. 2022 Fall;81(3): 28-9.
17. **Manila NG**, Tahmasbi Arashlow M, Ehlers S, Liang H, Nair MK. Cone-beam computed tomographic imaging of silent sinus syndrome: A case series and a literature review. Imaging Sci Dent. 2020 Dec;50(4):365-371. doi: 10.5624/isd.2020.50.4.365. Epub 2020 Dec 15. PMID: 33409147; PMCID: PMC7758263.
18. Nomura Y, Watanabe H, **Manila NG**, Asai S, Kurabayashi T. Evaluation of streak metal artifacts in cone beam computed tomography by using the Gumbel distribution: a phantom study. Oral Surg Oral Med Oral Pathol Oral Radiol. 2021 Apr;131(4):494-502. doi:10.1016/j.oooo.2020.08.031. Epub 2020 Aug 29. PMID: 33020029.
19. **N.G. Manila**, J. Sakamoto, T. Kurabayashi, H. Harada, M.A. Tahmasebi, H. Liang, M.K. Nair, Odontogenic Myxoma: A Case Report and Literature Review, Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology, Volume 130, Issue 2, 2020, Pages e64-e65, ISSN 2212-4403, <https://doi.org/10.1016/j.oooo.2020.03.023>.
20. **Nisha Gowri Manila**, Atsushi Kaida, Ken-ichi Nakahama, Masahiko Miura, Insulin-like growth factor I receptor regulates the radiation-induced G2/M checkpoint in HeLa cells, Biochemical and Biophysical Research Communications, Volume 503, Issue 4, 2018, Pages 2977-2983, ISSN 0006-291X, <https://doi.org/10.1016/j.bbrc.2018.08.080>
21. **Nisha Gowri Manila**, Atsushi Kaida, Masahiko Miura. IGF-IR, but not EGFR, regulates DNA damage response (DDR) in HeLa cells following irradiation. Oncology//Pro ESMO Asia 2016 Congress 2016.12.17 Singapore



22. **Nisha Gowri Manila**, Atsushi Kaida, Masahiko Miura. Kinetic analysis of radiation-induced cell-cycle alterations in HeLa cells expressing fluorescent ubiquitination-based cell cycle indicator (Fucci). *Radiat Environ Med.* 2016.08; 5(2); 16-21
23. **Nisha Gowri Manila**, Atsushi Kaida, Masahiko Miura, Effect of IGF-IR-inhibition on the radiation-induced cell kinetics and DNA repair. *Stomatological Society Journal*, March 2016.
24. **Nisha Gowri Manila**, Atsushi Kaida, Masahiko Miura Inhibition of IGF-IR retards release from radiation-induced G2 arrest 6th ISAJ Symposium Journal, 2016.
25. **Nisha Gowri Manila**, Atsushi Kaida, Masahiko Miura, Inhibition of IGF-IR, but not EGFR, retards release from radiation-induced G2 arrest, *Stomatological Society Journal* March 2015.
26. **Nisha Manila et.al**, Integrating Artificial Intelligence in Dental Education-A Framework for Curriculum Development. *CNSU Annual Research Day 2025*.
27. **Nisha Manila**, Marketa Leisure: Pediatric Pituitary Microadenoma: A Case Report. *CNSU Annual Research Day 2025*.
28. **Nisha Manila et.al**, Efficacy of Automatic Segmentation Techniques for Anatomic Landmarks in Dental Imaging: A Systematic Review and Meta Analysis, *CNSU Annual Research Day 2025*.
29. **Nisha Manila**, Marketa Leisure: Pediatric Pituitary Microadenoma: A Case Report, American Society of Head and Neck Radiology (ASHNR) 58<sup>th</sup> Annual Meeting 2024, San Diego, CA.
30. **N. Manila**, P. Mirfendereski, U. Ahmed, G. Essex. Algorithmic Odontology: Navigating Ethical Horizons in AI-driven Dentistry for Patient Welfare, *CNSU Annual Research Day 2024*.
31. **N. Manila**, J. Medina, M. Le, K. Keating, Imaging Insights: Guiding Dentists through the Labyrinth of Osteoradionecrosis and Medication-related osteonecrosis of the Jaws - Case Report, *CNSU Annual Research Day 2024*.
32. M. Sharp, M. Qureshi, S. Kaur, S. Chitre, **N. Manila**, Optimizing the Pediatric X-Ray Experience: A Literature Review on the Effectiveness of Dental Anxiety Reduction Techniques, Patient-Centered Sensors, and Imaging Protocols- Project that achieved highest recognition at *CNSU Annual Research Day 2024*.
33. **N. Manila**, H. Liang, M.K. Nair, M.A. Tahmasbi, Basilar Invagination: Importance of Craniometric Measurement, *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, Volume 132, Issue 3, 2021, Pages e116-e117, ISSN 2212-4403, <https://doi.org/10.1016/j.oooo.2021.04.031>.
34. **N. Manila**, E.A. Scott, S. Bender, M.A. Tahmasebi, M.K. Nair, H. Liang, Incidental Findings of Asymptomatic Fungal Infection in Paranasal Sinuses: A Case Report And Literature Review To Increase Awareness Among Dental Professionals, *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, Volume 132, Issue 3, 2021, Page e116, ISSN 2212-4403, <https://doi.org/10.1016/j.oooo.2021.04.030>.
35. **N. Manila**, M.A. Tahmasebi, H. Liang, M.K. Nair, CBCT Imaging of “Silent Sinus Syndrome” - Case Reports and Literature Review, *Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology*, Volume 132, Issue 3, 2021, Page e115-116, ISSN 2212-4403, <https://doi.org/10.1016/j.oooo.2021.04.029>.