

DR. SHANKARGOUDA PATIL

College of Dental Medicine,
Roseman University of Health Sciences,
South Jordan, Utah-84095, USA

spatil@roseman.edu
+1 (309) 703-6919

CURRENT POSITION

Professor

College of Dental Medicine,
Roseman University of Health Sciences, South Jordan,
Utah-84095, USA

April 2023 –
PRESENT

EDUCATION

DEGREE	DISCIPLINE/FIELD/TOPIC	INSTITUTION
Ph.D.	Effect of Chronic exposure to Shisha in Oral Keratinocytes (Medical Biotechnology)	University of Siena, Italy
MASTER OF DENTAL SURGERY	Oral Pathology, Microbiology and Forensic Odontology	Sree Balaji Dental College, Chennai
BACHELOR OF DENTAL SURGERY	Dental Surgery	PMNM Dental College & Hospital, Bagalkot

ACADEMIC EXPERIENCE

April 2023 - present	Professor, College of Dental Medicine, Roseman University of Health Sciences, South Jordan, Utah-84095, USA
Sep 2022- March 2023	Adjunct Faculty, College of Dental Medicine, Roseman University of Health Sciences, South Jordan, Utah-84095, USA
Jan 2016- Aug 2022	Associate Professor- Department of Maxillofacial Surgery and Diagnostic Sciences, Division of Oral Pathology, College of Dentistry, Jazan University , Jazan, Saudi Arabia
2022- present	Distinguished Adjunct Professor- Centre of Molecular Medicine and Diagnostics (COMMAND), Saveetha Dental College & Hospitals, Saveetha Institute of Medical and Technical Sciences, Saveetha University , Chennai- 600 077
2021- present	Adjunct Professor- Oral Pathology, College of Dental Medicine, University of Sienna
2016- present	Jazan University , Department of Maxillofacial Surgery and Diagnostic Sciences, Division of Oral Pathology, College of Dentistry, Jazan, Saudi Arabia. <i>Associate Professor.</i> -Course Director for Undergraduate program (2019-present) -Didactic lectures practical sessions undergraduates -Training undergraduates and residents in research practices and publication -Clinical supervision of Comprehensive Clinic -Part of Community Health Outreach Program -Member of CODJU Dental Caravan Campaign -Member of Research Mentorship Program (2018-present) -Member BDS Program Accreditation and Assessment -Involved in curriculum development -Under my guidance, Under Graduate Students received awards for poster presentations in Oral Cancer conference organized by the Ministry of Health, Jazan, Saudi Arabia in 2019
2014-16	M.S. Ramaiah University of Applied Sciences , Department of Oral & Maxillofacial Pathology, Faculty of Dental Sciences, Bangalore, Karnataka, India <i>Associate Professor</i> -Academic Advisor for Postgraduate students -Supervising and teaching Undergraduate modules -Supervising Residents in Clinical rotations -Under my guidance, Post Graduate Students received awards for the best paper presentation in the 13 th national triple O symposium in March 2015 at Faculty of Dental Sciences, M.S.Ramaiah University of Health Sciences, Bangalore, India.
2013-14	University of Hong Kong , Faculty of Dentistry, Hong Kong, China. <i>Research Assistant</i>

	-Research Assistant Prof Lakshman Samaranayake on a project assessing Oral Candida prevalence in different diets (2013-14)
2012-14	M.S. Ramaiah University of Applied Sciences Department of Oral & Maxillofacial Pathology, Faculty of Dental Sciences, Bangalore, Karnataka, India. <i>Assistant Professor</i> - Teaching undergraduate and post graduate modules -Advised on curriculum development
2009-12	KLE Institute of Dental Sciences , Bangalore, India. <i>Senior Lecturer</i> -Teaching undergraduate modules -Supervisor Histopathological Laboratory -Member of Scientific Research Committee

RESEARCH AFFILIATION

Visiting Professor of Oral Pathology, School of Dental Medicine, University of Siena, Siena, Italy.

Distinguished Adjunct Professor, Centre of Molecular Medicine and Diagnostics (COMManD), Saveetha Dental College and Hospitals, Saveetha Institute of Medical and Technical Sciences Saveetha University, Chennai, India.

RESEARCH AND TEACHING INTERESTS

Immunobiology

Oral Pathology

Oral Microbiology

Oral Oncology

Translational Oncology

Dental Pulp Stem Cells

Molecular biology

Molecular Oncology

Periodontal Medicine

FELLOWSHIPS

Fellowship of the Royal College of Pathologists (UK)

Fellowship of the Faculty of Dental Surgery, Royal College of Physicians and Surgeons (Glasgow, UK)

Fellow of International College of Dentists

Fellow of the Pierre Fauchard Academy

Fellow of the Academy of General Education (Manipal, India)

ASSOCIATE PROFESSIONAL APPOINTMENTS

Editor-in-Chief: The Journal of Contemporary Dental Practice (JCDP)

<https://www.thejcdp.com/journalDetails/JCDP>

Editor-in-Chief: World Journal of Dentistry (WJD)

<https://www.wjoud.com/journalDetails/WJOD>

Editor for the special issue ‘Advance Research on Molecular Oral Microorganism’ in the journal Current Issues in Molecular Biology

Editorial board member: Clinical Oral Investigations

Editorial board member: Translational Cancer Research

Editorial board member: BMC Research Notes

Topic editor: Diagnostics, Life, Materials, Current Issues in Molecular Biology

AWARDS & HONORS

Recipient of **Top Peer Reviewer Award 2019** powered by Publons/Web of Science/Clarivate Analytics honoring the elite contributions to Scholarly Peer Review and Editorial pursuits Internationally.

Awarded the title of ‘**the best researcher in Jazan University**’ for the academic year of 2021

Recognized as one of the **top 2% of scientists** in the world for the year 2021 and 2022, based on data compiled and Published by Stanford University.

ACKNOWLEDGEMENT IN SCIENTIFIC RESEARCH PUBLICATION

Acknowledged as the '**number 1 Researcher in Middle East**' according to the **bibliometric analysis** published by Ikram Ul haq et al in May 2019 in the journal 'Library Philosophy and Practice' an official publication of University of Nebraska-Lincoln

PATENT

A fixative solution for tissues. Government of India- Patent number- 355494. Patent granted and registered on 07-01-2021

GRANT REVIEW

Serving as Grant Reviewer for Sapienza Università di Roma, Sapienza, Italy and Sharjah University, UAE.

BOOKS AUTHORED

Patil S. IHC Profiling of Cytokeratin 8 and Cytokeratin 18 in Oral Cancer. Germany: LAP Lambert Academic Publishing; 2010. ISBN-10 3843352178.

Rao R, **Patil S**, Jude J. Giant Cell Lesions of Oral Cavity. Germany: LAP Lambert Academic Publishing; 2013. ISBN-10 365942885X

Patil S, Rao R, Indhu M. Tumor Markers in Oral Pathology: An Insight. Germany: Lambert Academic Publishing; 2013. ISBN-10 3659411450

Torres CRG, **Patil S**, Batista GR. Amalgam Restorations. In Springer, Cham; 2020. p. 373–409. ISBN: 978-3-030-31772-0

Bhutia SK. Autophagy in tumor and tumor microenvironment. Haragannavar VC, Rao RS, Mahapatra KK, Patra S, Behera BP,**Patil S**. Autophagy: An Agonist and Antagonist with

an Interlink of Apoptosis in Cancer In Springer, Singapore.2020. p. 35-60. http://doi-org-443.webvpn.fjmu.edu.cn/10.1007/978-981-15-6930-2_2

CONTRIBUTION IN BOOKS

Ulrich Meyer. Fundamentals of Craniofacial Malformations. Springer. **Shankargouda Patil**, G. S. Vidya, Khaled M. Alqahtani. The Biological Basis of Chromosomal and Single Gene Disorders Pages 87-98. ISBN: 978-3-030-46024-2

Seneviratne CJ, Rosa EAR. Antifungal drug discovery: New theories and new therapies. Frontiers Media SA; 2016. ISBN-13: 9782889199501

Terry DA. What's in your mouth? Your guide to a lifelong smile. USA: Quintessence Publishing Co Inc; 2014. ISBN 978-0-86715-666-9.

GUEST LECTURES DELIVERED

13) Cancer stem cells Kansas City University, Joplin, Missouri September 2022

12) Cancer stem cells University of Illinois, Chicago July 2022

11) Navigating the Publishing Landscape. Guest lecture delivered on March 9-10th 2023, 5th Annual Conference of TRIPLE 'O' at Pushpagiri College of Dental Sciences, Kerala, India.

10) Careers in Oral Pathology: Navigating the Path to Success. Guest lecture delivered on February 25th 2023 for Sharad Pawar Dental College, Datta Meghe Institution of Higher Education and Research, Maharashtra, India.

9) Introduction to Dental Research. Guest lecture delivered on April 20th 2022 for University of Illinois, Chicago, USA.

8) Why do Scientific Research? Guest lecture delivered on June 14th 2021 for Sri Venkateswara Dental College and Hospital, Chennai, India.

7) Oral potentially malignant disorders and Oral cancer at Lebanese University International Conference. Beirut, Lebanon, May 4th, 2019

6) Development of cellular model using normal oral keratinocytes to study the molecular alterations on chronic exposure to shisha. Roseman University of Health Sciences, March 2018.

5) Water Pipe smoking and White Lesions at Lebanese University International Conference. Beirut, Lebanon, May 11-13, 2017

4) Waterpipe Smoking:1st Jazan International Dental Conference on Oral Cancer November 21st-24th 2017 at Jazan, Saudi Arabia.

3) Incipient Non Invasive Cancer Diagnosis, 24th Saudi Dental Society International Dental Conference, January 28-30, 2013

2) Incipient Non Invasive Cancer Diagnosis, FDI/CDA/SLDA Joint International Conference, Sri Lanka, June 27 – July 01, 2013

1) Incipient Non-Invasive Cancer Diagnosis, Beirut International Dental Meeting, September, 2012

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- Member of International Association of Dental Research (IADR) / American Association of Dental Research (AADR)
- Member of International Association of Oral Pathology (IAOP)
- Member of American Academy of Oral and Maxillofacial Pathology
- Member of American Dental Education Association (ADEA)

SCIENTIFIC SESSIONS CHAIRED AT CONFERENCES/CONVENTIONS

- 1 Scientific Session - First State Level Undergraduate Convention, Bapuji Educational Association and IDA, Davangere Branch, April 12 – 13, 2010
- 2 Poster Session - 89th general session and exhibition, International Association of Dental Research, San Diego, California, USA, March 2011.
- 3 Scientific Paper Session - 89th general session and exhibition of the International Association of Dental Research, San Diego, California, USA, March 2011.

- 4 Evaluator for Scientific Poster Presentation - 24th Saudi Dental Society International Dental Conference, January 28-30, 2013.
- 5 Poster session chaired at the 93rd IADR General Session and exhibition, Boston, USA, March 2015.
- 6 Session chairman in Oral and Maxillofacial Cancer Conference held at Radisson Blue, Jazan, Saudi Arabia, December 2019
- 7 Judge for Paper session, AIMST International Dental e- conference AIDEC, June 24-27, 2021
- 8 2021 IADR General Session and exhibition, Chairperson of a Session
- 9 2022. IADR General Session and exhibition. Virtual Interactive Talk. Detrimental effects of oral lichen planus on oral stem cells.
- 10 Interactive Talk session chaired on Oral microbiome and Periodontitis in oral dysplasia. AADOCR, held at Portland, Oregon, USA 18th March 2023.

Scientific presentations in international conferences

Name	Location	Date
Does periodontitis increase malignant risk through epithelial mesenchymal interactions?	AADOCR Portland, Oregon, USA.	18th March 2023
Proteomic and phosphoproteomic profiling of shammah-induced signaling in oral keratinocytes	IADR 2021	July 2021
Effect of dental pulp mesenchymal stem cell secretome on cancer	IADR 2021	July 2021
Effect of dietary beverages on enamel and dentin of extracted human teeth: A macroscopic and microscopid analysis.	IADR Asia pacific region,	December 2019
Decoding the Molecular Biology of Shisha Induced Oral Carcinogenesis- Paper presentation, IADR conference	Vancouver, Canada	June 2019
Machine learning (ML) - an Innovative Technology to Study Head and Neck Oncology-Poster presentation, IADR conference	Vancouver, Canada	June 2019
Prevalence and Malignant Potential of Oral Lichenoid Dysplasia - Systematic Review keratinocytes – Poster presentation, AADR Conference	Florida, United States of America	March 21-24, 2018

Identification of shisha-induced molecular alterations in oral keratinocytes – Poster presentation, AADR Conference	Florida, United States of America,	March 21-24, 2018
“Oral verrucous hyperplasia – A new entity.”-poster presentation- IADR General Session	Boston, United States of America	March 2015
“Does Lichenoid dysplasia exist?” - 92nd General Session & Exhibition of IADR	Cape Town, South Africa,	June 2014.
“Syndecan-1 expression in predicting oral malignancy” - 89th General Session and Exhibition of the International Association of Dental Research	San Diego, California, United States of America,	March 2011
“Palatal Rugoscopy in the Indian population” - 32nd Asia Pacific Dental Congress	Colombo, Sri Lanka	May 2010.
“Expression of Cytokeratin 8 & 18: Prognostic marker in Oral Carcinoma?” - 87th General Session & Exhibition of IADR,	Miami Florida, United States of America	April 2009.
“Expression of Simple Epithelial Cytokeratin 8 & 18: Prognostic marker in Oral Squamous cell Carcinomas?” - 31thAsia Pacific Dental Congress	Hong Kong	May 2009
Morsus Humanus: Dentistry based evidence” - 30th Asia Pacific Dental Congress.	Bangkok, Thailand	May 2008

CURRENT RESEARCH AREAS AND RESEARCH INTERESTS

1 **Cancer stem cell biology in premalignant and malignant oral conditions:** Cancer stem cells have shown to be an independent risk factor for cancer metastasis, recurrence, and treatment resistance. Research focusing on the identification and characterization of these cancer stem cells in oral cancer could aid in formulating therapeutic regimens exclusively targeting the stemness of the cancer cells and their potential of induction of epithelial-mesenchymal transition and metastasis. Currently doing experimentation on identification of cancer stem cell like cells in premalignant oral lesions to identify molecular and cellular mechanisms of malignant inductions.

2 **Tumor immunology focusing on T cell behavior in oral cancer:** Current research interest is on understanding the functional behavior of T cells and level of their exhaustion in oral cancer microenvironment which will help to understand the levels of specific T cell response against oral cancer cells and mechanism responsible for their failure.

3 **Inflammation biology in oral diseases:** Most oral diseases have an inflammatory component as part of their pathogenesis due to the presence of high immune response of the oral mucosa. Currently interested in understanding the roles of various cell types of immune system in creation of inflammatory environment in oral cavity during the progression of various diseases.

4 **Dynamics of dental pulp mesenchymal stem cells (DPSCs) differentiation:** DPSCs have become an integral part of regenerative medicine given their wide range of regenerative and differentiative potential but the molecular mechanisms underlying the transcriptional control of DPSC differentiation are not well established. Currently my group is experimenting the dynamics of transcription factors during the differentiation of DPSCs in different target cell types which is much needed question to be solved to enhance the potential of DPSCs.

5 **Genomics and proteomics of oral diseases caused by tobacco products like Shammah, shisha, etc:** Advent of molecular biology has allowed us to decode the molecular biology behind the initiation and progression of disease entities including cancer. A complete molecular picture of etiopathogenesis of a tobacco product induced carcinogenesis through proteomic, genomic profiling could provide novel diagnostic and therapeutic targets. Having collaborative research work going on currently to identify sequence based and protein-based biomarkers to establish correlation between habitual uses of tobacco and progression of premalignant lesions and oral cancer.

6 **Artificial intelligence:** Machine learning, convolutional neural network based diagnostic and therapeutic strategy formulation (supervised and unsupervised learning) is a major research interest given its surging application on day today clinical practice. My research team has shown immense interest in AI integrated digital pathology to aid in the diagnosis and prognosis of oral diseases especially oral cancer.

LANGUAGES

English. Hindi. Kannada. Conversational Arabic, Tamil.

SELECTED LIST OF FULL-LENGTH PUBLICATIONS IN IMPACT FACTOR JOURNALS



Shankargouda Patil BDS MDS PhD FRCPATH FDS RCPS(Glas) FICD FPFA
Professor, College of Dental Medicine, [Roseman University of Health Sciences](#), South Jordan, Utah
Verified email at [roseman.edu](#) - [Homepage](#)
Oral Oncology Oral Pathology Oral Medicine Artificial Intelligence Digital Dentistry

Cited by		
	All	Since 2018
Citations	9222	7906
h-index	36	33
i10-index	247	207



Bar chart showing citation trends from 2016 to 2023. The y-axis represents the number of citations, ranging from 0 to 2700. The x-axis represents the years from 2016 to 2023. The chart shows a steady increase in citations over the period, with a significant spike in 2022.

https://scholar.google.co.in/citations?user=lzp_N_0AAAAJ&hl=en

<https://www.researchgate.net/profile/Shankargouda-Patil>

- 268) **Patil S**, Bhandi S, Bakri MMH, Albar DH, Alzahrani KJ, Al-Ghamdi MS, Alnfiai MM, Tovani-Palone MR. Evaluation of efficacy of non-resorbable membranes compared to resorbable membranes in patients undergoing guided bone regeneration. *Heliyon*. 2023 Feb 4;9(3):e13488. doi: 10.1016/j.heliyon.2023.e13488
- 267) Janakiraman V, Sudhan M, Alzahrani KJ, Alshammeri S, Ahmed SSSJ, **Patil S**. Dynamics of TUBB protein with five majorly occurring natural variants: a risk of cortical dysplasia. *J Mol Model*. 2023 Mar 16;29(4):100. doi: 10.1007/s00894-023-05506-7
- 266) **Patil S**. sHPV-mediated oropharyngeal carcinogenesis: An overview. *Indian J Med Res*. 2022 Oct-Nov;156(4&5):687-688. doi: 10.4103/ijmr.IJMR_2507_20
- 265) Janakiraman V, Sudhan M, **Patil S**, Alzahrani KJ, Alzahrani FM, Halawani IF, Ahmed SSSJ. Rheumatoid arthritis treatment with zoledronic acid, a potential inhibitor of GWAS-derived pharmacogenetics STAT3 and IL2 targets. *Gene*. 2023 Mar 6;866:147338. doi: 10.1016/j.gene.2023.147338
- 264) Veerabadran Loganathan A, Subramanian S, Prakash PSG, Appukuttan D, Crena J, Alzahrani KJ, Alsharif K, Halawani IFF, Alzahrani FM, Alshammeri S, Bahammam MA, Balaji TM, Baeshen HA, **Patil S**. Treatment of Gingival Recession Defects with Pouch and Tunnel Technique Using Connective Tissue Graft and Lyophilized Chorion Membrane in Smokers. *Med Sci Monit*. 2023 Mar 8;29:e938865. doi: 10.12659/MSM.938865
- 263) Tovani-Palone MR, **Patil S**. More on Myocarditis after BNT162b2 Vaccination in Israeli Adolescents. *N Engl J Med*. 2023 Feb 9;388(6):576. doi: 10.1056/NEJMc2214450.
- 262) Praharaj PP, Patra S, Mishra SR, Mukhopadhyay S, Klionsky DJ, **Patil S**, Bhutia SK. CLU (clusterin) promotes mitophagic degradation of MSX2 through an AKT-DNM1L/Drp1 axis to maintain SOX2-mediated stemness in oral cancer stem cells. *Autophagy*. 2023 Mar 6:1-21. doi: 10.1080/15548627.2023.2178876

261) Mahapatra KK, Patra S, Mishra SR, Behera BP, **Patil S**, Bhutia SK. Autophagy for secretory protein: Therapeutic targets in cancer. *Adv Protein Chem Struct Biol.* 2023;133:159-180. doi: 10.1016/bs.apcsb.2022.10.009

260) Ghosh S, Sapkota BS, Rao RS, **Patil S**, Rajkumar C, Lakshminarayan S. Expansion microscopy: A revolution in diagnostic pathology. *J Microsc.* 2023 Apr;290(1):3-9. doi: 10.1111/jmi.13170.

259) Chakraborty P, Ravishankar PL, Saravanan AV, Alzahrani KJ, Halawan IF, Alshammeri S, Alnfai MM, Baeshen HA, Qattan SYM, Almarghlani A, Karkala SR, Neelakandan A, **Patil S**. Effect of Amnioguard and Biomesh GTR Membranes with Novabone Putty in the Treatment of Periodontal Osseous Defects-A Communication. *Int J Environ Res Public Health.* 2023 Jan 1;20(1):816. doi: 10.3390/ijerph20010816.

258) Gadbail AR, Sarode SC, Chaudhary MS, Gondivkar SM, Tekade SA, Yuwanati M, Sarode GS, Hande A, **Patil S**. Ki-67, CD105, and α -smooth muscle actin expression in oral squamous cell carcinoma corresponds with different forms of tobacco consumption habits. *J Cancer Res Ther.* 2022 Dec;18(Supplement):S197-S204. doi: 10.4103/jcrt.JCRT_1307_20.

257) Fageeh HN, Mansour MA, Fageeh HI, Hummadi A, Khurayzi T, Marran K, Alqunfuthi N, **Patil S**. Dental Plaque Removal with Two Special Needs Toothbrushes in Patients with Down Syndrome: A Parallel-Group Randomised Clinical Trial of Efficacy. *Oral Health Prev Dent.* 2022 Nov 30;20(1):501-508.

256) Mahapatra KK, Patra S, Mishra SR, Behera BP, **Patil S**, Bhutia SK. Autophagy for secretory protein: Therapeutic targets in cancer. *Adv Protein Chem Struct Biol.* <https://doi.org/10.1016/bs.apcsb.2022.10.009>

255) Arumuganainar D, Yadalam PK, Alzahrani KJ, Alsharif KF, Alzahrani FM, Alshammeri S, Ahmed SSSJ, Vinothkumar TS, Baeshen HA, **Patil S**. Inhibitory effect of lupeol, quercetin, and solasodine on *Rhizopus oryzae*: A molecular docking and dynamic simulation study. *J Infect Public Health.* 2023 Jan;16(1):117-124. doi: 10.1016/j.jiph.2022.12.006

254) Patra S, **Patil S**, Klionsky DJ, Bhutia SK. Lysosome signaling in cell survival and programmed cell death for cellular homeostasis. *J Cell Physiol.* 2022 Dec 11. doi: 10.1002/jcp.30928

253) Fageeh HN, Mansour MA, Fageeh HI, Hummadi A, Khurayzi T, Marran K, Alqunfuthi N, **Patil S**. Dental Plaque Removal with Two Special Needs Toothbrushes in Patients with Down Syndrome: A Parallel-Group Randomised Clinical Trial of Efficacy. *Oral Health Prev Dent.* 2022 Nov 30;20(1):501-508. doi: 10.3290/j.ohpd.b3630331

252) Gopalakrishnan U, Thiagarajan K, Felicita AS, Gosh P, Alshehri A, Awadh W, Alzahrani KJ, Alzahrani FM, Alsharif KF, Halawani IF, Alshammeri S, Alamoudi A, Albar DH, Baeshen HA, **Patil S**. In-Vitro Assessment of the Corrosion Potential of an Oral Strain of Sulfate-Reducing

Bacteria on Metallic Orthodontic Materials. *Int J Environ Res Public Health*. 2022 Nov 19;19(22):15312. doi: 10.3390/ijerph192215312

251) Birur PN, Patrick S, Warnakulasuriya S, Gurushanth K, Raghavan SA, Rath GK, Chaturvedi P, Chandru V, Mathew B, Prabhash K, Gurudath S, Mukhia N, Sunny SP, Mehrotra R, Vivek V, **Patil S**, Kumar GS, Fasalkar S, Pratima R, Kuriakose MA. Consensus guidelines on management of oral potentially malignant disorders. *Indian J Cancer*. 2022 Jul-Sep;59(3):442-453. doi: 10.4103/ijc.IJC_128_21

250) Mahendra J, Mahendra L, Sharma V, Alamoudi A, Bahammam HA, Mugri MH, Bahammam SA, Bahammam MA, Zidane B, Abirami Nayaki RP, Muralidharan J, Dave PH, Balaji TM, Bhandi S, **Patil S**. Red-Complex Bacterial Levels in Pregnant Women With Preeclampsia and Chronic Periodontitis. *Int Dent J*. 2022 Nov 18:S0020-6539(22)00229-5. doi: 10.1016/j.identj.2022.10.003

249) Navya PD, Kaarthikeyan G, Raj J S, Alamoudi A, Bahammam MA, Zidane B, Bahammam HA, Bahammam SA, Hassan AAA, Kamil MA, Bhandi S, Raj AT, **Patil S**. Suppression of Tumorigenicity 2 Pro-Inflammatory Biomarker Linking Diabetes Mellitus and Periodontitis: A Pilot Study. *Med Sci Monit*. 2022 Nov 15;28:e938218. doi: 10.12659/MSM.938218

248) Venkatesiah SS, Augustine D, Mishra D, Gujjar N, Haragannavar VC, Awan KH, Patil S. Immunology of Oral Squamous Cell Carcinoma-A Comprehensive Insight with Recent Concepts. *Life (Basel)*. 2022 Nov 7;12(11):1807. doi: 10.3390/life12111807

247) Dharmarajan L, Prakash PSG, Appukuttan D, Crena J, Subramanian S, Alzahrani KJ, Alsharif KF, Halawani IF, Alnfiai MM, Alamoudi A, Kamil MA, Balaji TM, **Patil S**. The Effect of Laser Micro Grooved Platform Switched Implants and Abutments on Early Crestal Bone Levels and Peri-Implant Soft Tissues Post 1 Year Loading among Diabetic Patients-A Controlled Clinical Trial. *Medicina (Kaunas)*. 2022 Oct 15;58(10):1456. doi: 10.3390/medicina58101456

246) Gadi S, Subramanian S, Prakash PSG, Appukuttan D, Thanigaimalai A, Bahammam MA, Alzahrani KJ, Alsharif KF, Halawani IF, Alnfiai MM, Balaji TM, **Patil S**. Interdental Papillary Reconstruction by Microtunnelling Technique Using Autologous Biomatrices-A Randomised Controlled Clinical Trial. *Medicina (Kaunas)*. 2022 Sep 22;58(10):1326. doi: 10.3390/medicina58101326

245) **Patil S**, Alamoudi A, Zidane B, Alzahrani KJ, Alzahrani FM, Banjer HJ, Reda R, Balaji TM, Bhandi S, Raj AT, Testarelli L. Dose-Dependent Effects of Melatonin on the Viability, Proliferation, and Differentiation of Dental Pulp Stem Cells (DPSCs). *J Pers Med*. 2022 Oct 1;12(10):1620. doi: 10.3390/jpm12101620

244) Murugesan A, Dinesh SPS, Muthuswamy Pandian S, Ashwin Solanki L, Alshehri A, Awadh W, Alzahrani KJ, Alsharif KF, Alnfiai MM, Mathew R, El-Bialy T, Baeshen HA, Bhandi S, Raj AT, **Patil S**. Evaluation of Orthodontic Mini-Implant Placement in the Maxillary Anterior Alveolar Region in 15 Patients by Cone Beam Computed Tomography at a Single Center in South India. *Med Sci Monit*. 2022 Oct 26;28:e937949. doi: 10.12659/MSM.937949

- 243) Tony JB, Parthasarathy H, Tadepalli A, Ponnaiyan D, Alamoudi A, Kamil MA, Alzahrani KJ, Alsharif KF, Halawani IF, Alnfiai MM, Ramachandran L, Balaji TM, **Patil S**. CBCT Evaluation of Sticky Bone in Horizontal Ridge Augmentation with and without Collagen Membrane-A Randomized Parallel Arm Clinical Trial. *J Funct Biomater*. 2022 Oct 19;13(4):194. doi: 10.3390/jfb13040194
- 242) Chhetri D, Vengadassalopathy S, Venkadassalopathy S, Balachandran V, Umapathy VR, Veeraraghavan VP, Jayaraman S, **Patil S**, Iyaswamy A, Palaniyandi K, Gnanasampanthapandian D. Pleiotropic effects of DCLK1 in cancer and cancer stem cells. *Front Mol Biosci*. 2022 Sep 26;9:965730. doi: 10.3389/fmolb.2022.965730
- 241) Gangadharan S, Ambrose JM, Rajajagadeesan A, Kullappan M, **Patil S**, Gandhamaneni SH, Veeraraghavan VP, Nakkella AK, Agarwal A, Jayaraman S, Surapaneni KM. Repurposing of potential antiviral drugs against RNA-dependent RNA polymerase of SARS-CoV-2 by computational approach. *J Infect Public Health*. 2022 Sep 27;15(11):1180-1191. doi: 10.1016/j.jiph.2022.09.007
- 240) Gopalakrishnan U, Murthy RT, Felicita AS, Alshehri A, Awadh W, Almalki A, Vinothkumar TS, Baeshen HA, Bhandi S, Kathir A, Samala A, Raj AT, Heboyan A, **Patil S**. Sulfate-Reducing Bacteria in Patients Undergoing Fixed Orthodontic Treatment. *Int Dent J*. 2022 Sep 27:S0020-6539(22)00181-2. doi: 10.1016/j.identj.2022.07.007
- 239) Addugala H, Venugopal VN, Rengasamy S, Yadalam PK, Albar NH, Alamoudi A, Bahammam SA, Zidane B, Bahammam HA, Bhandi S, Shrivastava D, Srivastava KC, **Patil S**. Marginal and Internal Gap of Metal Copings Fabricated Using Three Types of Resin Patterns with Subtractive and Additive Technology: An In Vitro Comparison. *Materials (Basel)*. 2022 Sep 15;15(18):6397. doi: 10.3390/ma15186397.
- 238) Rajamanickam K, Teja KV, Ramesh S, AbuMelha AS, Alkahtany MF, Almadi KH, Bahammam SA, Janani K, Choudhari S, Jose J, Srivastava KC, Shrivastava D, **Patil S**. Comparative Study Assessing the Canal Cleanliness Using Automated Device and Conventional Syringe Needle for Root Canal Irrigation-An Ex-Vivo Study. *Materials (Basel)*. 2022 Sep 6;15(18):6184. doi: 10.3390/ma15186184.
- 237) Goje SK, Dave B, Hassan AAA, Bahammam SA, Bahammam HA, Zidane B, Alshehri A, Awadh W, Bhandi S, Raj AT, **Patil S**. Evaluation of Mesiodistal Root Angulation of Permanent Incisors, Canines, and First Pre-Molars by Orthopantomogram Dental Imaging Findings in 296 Children Aged 6-14 Years. *Med Sci Monit*. 2022 Sep 8;28:e937833. doi: 10.12659/MSM.937833
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