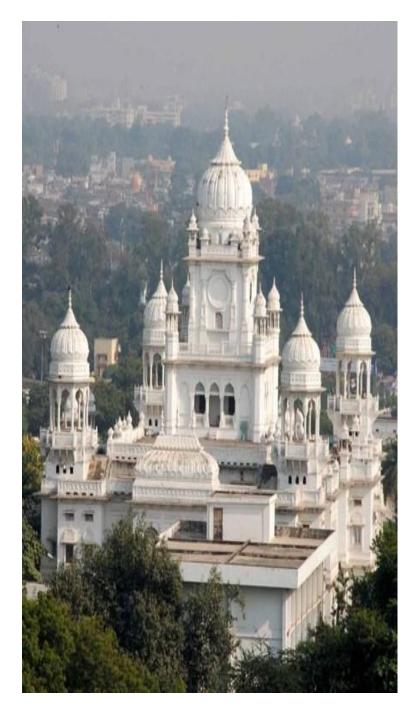


#### Dr. Shalini Gupta

BDS. (Gold Medallist), MDS, MNAMS, FICD, FPFA, FIAFO, P.G. Diploma in Forensic Odontology, P.G. Diploma in Forensic Psychology , Associate Professor Department of Oral Pathology & Microbiology Faculty of Dental Sciences King George's Medical University Lucknow, Uttar Pradesh, India



# **Education Background**

Educational	Year	Institution	Grade / Hons.
BDS	2000	R. Ahmed Dental College and Hospital, Kolkata (Calcutta University)	Gold Medalist
MDS	2005	R. Ahmed Dental College and Hospital, Kolkata (Calcutta University)	Passed

#### Additional Courses:

•Certificate course in Bio Medical Waste Management from IGNOU in 2012.

- •Universal Certificate course in Forensic Odontology from IFS, Pune in 2013.
- •Certification Course on Forensic Odontology from IFS, Pune in 2012.

•P.G. Diploma in Forensic Odontology in 2013-2014 from SIFS, India.

•Certification Course on Forensic Biology and Toxicology in 2013-2014 from SIFS, India.

•Certification course in Cyber forensic & digital crime investigation in 2013-2014 from SIFS, India.

•Certification course on Forensic Psychology in 2013-2014 from SIFS, India. Certificate course on Forensic DNA fingerprinting in 2013-2014 from SIFS, India

#### Position

S.No	Institution	Position	From (Date)	To (date)
1.	King Georg's Medical University UP, Lucknow	Lecturer	8 <sup>th</sup> August 2005	12 <sup>th</sup> July 2008
2.	King Georg's Medical University UP, Lucknow	Assistant Professor & Head	12 <sup>th</sup> July 2008	12 July 2012
3.	King Georg's Medical University UP, Lucknow	Associate Professor	12 July 2012	Till Date

□Stood First in 1st , 2nd , 3rd and Final Yr. B.D.S. with 75% (Honours) marks in Anatomy, Pharmacology, Pathology, Oral Pathology, General Medicine, Periodontics, Orthodontics, Pedodontics.

Gold medals for coming 1st in all four Professional B.D.S and for over all good performances.

□ Highest marks and Gold Medals for Dental Anatomy , Oral Pathology, Conservative Dentistry, Oral Surgery, Orthodontics – Pedodontics.

The high powered selection committee recognized the inputs and unanimously appreciated the professional achievements and academic contribution and given two additional increments by the university.

#### **Fellowship Awarded**

S.N.	Name of Fellowship	Awarding Organization	Date of Receiving	Work
1	Fellowship awarded	Pierre Fauchard Academy, India Section by Senate of the Pierre Fauchard Academy	2013-2014	Nanotechnology, Molecular genetics, oral cancer genomics and proteomics
2	Fellowship awarded	International College for Dentist	2013-2014	Oral Cancer detection, Stem cell, Forensic Odontology
3	Fellowship awarded	Indian Association of Forensic Odontology	To be awarded on 20, sep, 2014	Forensic Odontology

### **Research Projects**

S.No	Title of the project	Grant Organization	Date
1.	Ongoing research project sponsored by <b>ICMR</b> , <b>New Delhi</b> , <b>India</b> , topic entitled "Development of Nanoparticles as Nanogel drug delivery system for oral cancer tumor targeted" <b>as Principal Investigator</b> .	ICMR, New Delhi, India	2014-2017
2.	Collection, Isolation and Characterization of Human Dental Pulp–Derived Mesenchymal Stem Cells for Banking and Clinical Use: a pilot study" as <b>Co-Investigator</b>	ICMR, New Delhi, India,	2014-2017
3.	Ethically approved "Dental health evaluation & sodium fluoride application in deciduous & mixed dentition age groups: a prospective case control study" <b>as Principal Investigator</b> (self funded)	Self funded	2014
4.	Understanding genetic pre-disposition to oral pre cancer and cancer in tobacco chewers from North Indian populations as Principal Investigator as Principal Investigator.	Uttar Pradesh Council of Science & Technology (UPCST)	
5.	<sup>1</sup> H NMR-based metabolic profiling of human serum and saliva associated with pre-oral and oral cancer <b>as Principal Investigator.</b>	self funded in collaboration with CBMR	2013
6.	Reliability of odontometric, anthropometric and facial measurement in stature and gender estimation of an individual: an institutional experience <b>as Principal</b> <b>Investigator.</b>	Under the Intramural Seed Grant Program for Faculty, funded by Research Cell, KGMU, Lucknow.	2013
7.	A study on the reliability of cheiloscopy and palatal rugoscopy in human identification" as Principal Investigator.	Under the Intramural Seed Grant Program for Faculty, funded by Research Cell, KGMU, Lucknow.	2012
8.	The role of cytokine gene Polymorphisms in Oral Precancer & Cancer <b>as Principal</b> Investigator.	Self funded	2011
9.	Detection of Polymorphism in xenobiotic metabolizing enzymes and susceptibility to Oral Submucous fibrosis	Funded by CSIR & completed at IITR, Lucknow	2012
10	Glycemic control and oral health in complete denture wearer	Under the Intramural Seed Grant Program for Faculty, funded by	2013

#### Scientific Workshop & Conference Organized

Name of Conference	Name of Organizing Secretary	Venue	Date	Local/National/Intern ational
National Forensic Odontology Continuing Dental Education Programme and Forensic Workshop on Reconstructive dental identification and molecular DNA	Organizing Chairman	KGMU Lucknow	26-27 April 2013	National
ISHWMCON	Organizing Member	KGMU, Lucknow	2013	International
First UP State Conference of IAOMP	Secretary Scientific	KGMU, Lucknow	28 & 29 April, 2014	National
National forensic odontology continuing dental education program & forensic workshop	Organizing Secretary	KGMU, Lucknow	2 <sup>nd</sup> & 3 <sup>rd</sup> September, 2014	National
12 <sup>th</sup> IAFO National Conference	Co- Conference Convener	Dehradun	20-21 Septem ber, 2014	National
International Conference on Forensic Sciences	Organizing Committee	Lucknow	13 Sep, 2014	International

#### **Scientific Awards**

- Elected member of the academy (NAMS) India in 2012.
- Received best paper (1<sup>st</sup>) in the faculty category for scientific paper presentation. Scientific paper presentation at X National conference of IAFO at I.T.S centres for dental studies & research, Ghaziabad, 8<sup>th</sup> Sept 2012.
- Dental public health award given in NAMS in 2009 to the research paper "Retrospective Comparison of Surgical Modalities in 100 Patients of OSMFS. OOOOE 2009' 107 (3) e-1-10. (Impact Factor: 1.417)" as co-author.
- Excellence Award as Nodal Officer for contribution in establishing the Bio medical waste management system in KGMU under the GEF/UNDP & MoEF-GOI Global Healthcare waste management project.

## **Publications**

- Numbers:- 51
- Research Papers & Reports : 27,
- General Articles & Review: 24
- Books: 02

#### Membership

- Honorary Executive Committee member of IOAMP from 2013.
- Member of International association of dental research. (Member ID: 768915)
- Life member of International Epidemiology Association since 1<sup>st</sup> Jan, 2011.
- Life member of Indian Association of Oral & Maxillofacial Pathologist. (Reg No.- M-477/OLM)
- Life Member of Indian Dental Association. (ID No-168361)
- Life Member of Indian Public Health association.
- Life member Indian association of Forensic Odontology. (Reg No. LM 146).
- Life Member of Indian Society of Dental Research. (Reg. No. LM 718)
- Life Member of INDIA CLEN. (Applied)
- Member of Pierre Fauchard Academy. (Membership No. 203)
- Member International College of Dentist.
- Member Indian Association of Medico Legal Expert
- Life member Indian Academy of Biomedical Sciences.

#### **Editorial Member & Reviewer**

- Editorial Advisory Board:
- National Journal of Maxillofacial Surgery.
- Editorial Panel:
- Indian Journal of Restorative dentistry.
- Indian Journal of Contemporary Dentistry.
- •
- Journal Scientific committee:
- Indian Journal of Forensic Medicine & Toxicology
- Reviewer in Journals
- Journal of oral & maxillofacial pathology
- International Journal of Medicine and Medical Sciences
- National Journal of Oral and Maxillofacial Surgery
- Indian journal of dental research
- Journal Of Academy Of Advanced Dental Research (JAADR)
- Peoples Journal of Scientific Research.(PJSR)
- Journal of Dento facial sciences.
- British Medical Journal
- Journal of Clinical & Experimental Pathology
- International Journal of Oral and Maxillofacial Pathology.
- The international journal of medical & dental sciences (ijmds)
- Comprehensive research journal of medicine and medical science
- Indian Journal of Dental Research

### **Oral Presentation in Conferences**

- Role on CYP1A1 and CYP2E1 polymorphism in development of oral leukoplakia among Indian tobacco users' presented in XI National conferences of IAOMP held at College of Dental Surgery Manipal on 20th -22nd December, 2002.
- Ewing's sarcoma of the Maxilla: A rare Presentation' presented on 28 may 2007 in Chennai.
- Role of GSTM1, GSTT1 polymorphism in oral submucous fibrosis" XVII IOAMP 2008 in Kolkata.
- Role of CYP2E and CYP1A1 polymorphism in oral sub mucous fibrosis. XVIII IOAMP, 2009 in Indian Habitat Centre, Delhi.
- Paper presented on "CHEILOSCOPY" in 8<sup>th</sup> National Conference of Indian Association of Forensic Odontology, 2010 in Lucknow 30<sup>th</sup> & 31<sup>st</sup> October 2010.
- Poster presented on "Prevalence of oral cancer and pre-cancerous lesions in North-East India and Its association with the habit of chewing tobacco/pan-masala in hospital based study." at International conference of XIX IOAMP 2010 in Chennai.
- Poster titled 'Ameloblastic Fibroma- 3 case reports' presented at the XIth National PG convention of IAOMP, Manipal, 2011.
- Poster titled "Advances in Salivary Gland Pathology" presented in National Triple 'O' Symposium, 23<sup>rd</sup>-24<sup>th</sup> July, 2011, Raipur.
- Poster titled "Case report of a rare case of Malignant Melanoma in the oral cavity" presented in 25<sup>th</sup> NATCON-2011 Indian association of surgical oncology, 16<sup>th</sup>-18<sup>th</sup> Sept, 2011, Lucknow.
- Scientific Presentation at XX<sup>th</sup> National conference of IAOMP, 18<sup>th</sup> 20<sup>th</sup> November 2011, Ramuji Film City, Hyderabad, A.P.
- Scientific paper presentation at National Triple "O" conference 2012. Held at Sardar Patel Institute Of Dental Sciences, Lucknow.
- Scientific paper presentation at 21<sup>st</sup> National IAOMP , 26-28<sup>th</sup> oct '2012, Goa
- Scientific paper presentation at X National conference of IAFO at I.T.S centres for dental studies & research, Ghaziabad, 8<sup>th</sup> Sept 2012.
- Oral Presentation of original research work entitled "Role of *CYP2E1* Genetic Polymorphism in Development of Oral Leukoplakia among Tobacco Users in North Indian population" in India CLEN conference held at KGMU, Lucknow.
- Oral Presentation of original research work entitled "Odontometric Study of Permanent Maxillary Canine to Establish Sexual Dimorphism in North Indian Population" XXII National Conference Indian Association of Oral and Maxillofacial Pathologists, Mumbai, 8<sup>th</sup> – 10<sup>th</sup> November, 2013.
- Oral Presentation-Oral Precancer and Cancer-ICOPC 3<sup>rd</sup>-4<sup>th</sup> Feb 2014.

### **Scientific Sessions Chaired**

- 8<sup>th</sup> National Conference of IAFO, 2010 in Lucknow 30<sup>th</sup> & 31<sup>st</sup> October 2010
- IOAMP International conference of XIX IOAMP 2010 in Chennai.
- XI National PG Convention of IAOMP, 9<sup>th</sup> and 10<sup>th</sup> July, 2011, Manipal.
- National Triple 'O' Symposium, 23<sup>rd</sup>-24<sup>th</sup> July, Raipur.
- 20<sup>th</sup> National conference of IAOMP, 18<sup>th</sup> 20<sup>th</sup> November 2011, Hyderabad, A.P.
- Chaired and moderator at National Triple "O" conference 2012. Held at Sardar Patel Institute Of Dental Sciences Lucknow.
- 21<sup>st</sup> National IAOMP, 26-28<sup>th</sup> oct '2012, Goa.
- Chaired Session at X National conference of IAFO at I.T.S centre for dental studies & research, Ghaziabad, 8<sup>th</sup> Sept 2012.
- Invited for chair session on 11<sup>th</sup> National conference of Indian Association of Forensic Odontology. Vijayawada to be held on 21-22 Sep, 2013.
- Invited for Chair Session on 5<sup>th</sup> International Conference on Legal Medicine, Medical Negligence and Litigation in Medical Practice & 5<sup>th</sup> International Conference on Current Trends in Forensic Sciences, Forensic Medicine & Toxicology (IAMLE- 2014) to be held on 25-27 Feb, 2014 at The International Centre Goa, Dona Paula, Goa, India.
- Chaired Scientific Session at the International Oral Pre Cancer and Cancer,KGMU,3<sup>rd</sup>-4<sup>th</sup> feb 2014.
- Chaired Scientific Session XII National triple "o" symposium 2014 Udaipur (Rajasthan), 7-9 March 2014.

#### Statement Highlighting the current research and long term vision Area of Interest- Molecular genetics and cytogenetics, oral cancer genomics and

- Area of Interest- Molecular genetics and cytogenetics, oral cancer genomics and proteomics & metabolomics, Nanotechnology, cancer stem cell, bioinformatics and forensic odontology.
- My research has included mainly on oral cancer their diagnosis and early detection.
- The on going and communicated research project deals with that the Understanding the genetic predisposition and it an explain the variation in susceptibility to oral cancer and pre cancerous condition with or without even after exposure to tobacco products.
- We are also working on evidence to indicate the importance of mi-RNA dysregulation in the acquisition of cancer cell sensitivity to chemotherapeutic drugs and provide a strong basis for the development of mi-RNA-based therapeutic strategies aiming to reverse cancer cell drug resistance.
- We hope that it can contribute to early diagnosis and treatment of oral cancer. We also work on nanotechnology and its role oral cancer in our ongoing study, Nanotechnology holds innovative path to treat the oral cancer by early detection and targeted & novel drug delivery system.

# Statement Highlighting the current research and long term vision Cont...

- An understanding of the genes involved in processes such as DNA double-strand break repair, DNA damage response, cell-cycle control, apoptosis, cellular antioxidant defences, and cytokine production, has evolved toward examination of how genetic variants, most often, SNPs, may influence carcinogenesis.
- Repair of damaged DNA is an important biological phenomenon for the integrity of cellular DNA and polymorphisms in DNA repair genes may alter the activity of the enzymes and, thus, modulate cancer susceptibility.
- We also focus on dental stem cell which briefly includes, Mesenchymal Stem Cells (MSCs) biology which has become an important field for the understanding of tissue regeneration and implementation of regenerative medicine. Dental stem cells (MSCs) possess different levels of capacities to become specific tissue forming cells.
- Associate infection like Oral candidiasis, It is a common local infection seen in infants, elder adults, and persons with cellular immune deficiency states, such as acquired immunodeficiency syndrome. The most common form of oral candidiasis is the pseudo membranous type seen on buccal mucosa, palate, tongue, or oropharynx, which has the appearance of white plaques that can be rubbed off. The nodular type is a rare form of oral candidiasis, and constitutes one clinical presentation of chronic hyperplastic candidiasis (CHC). Although CHC appears to be a malignant tumor in humans.

# Statement Highlighting the current research and long term vision Cont...

- These are generally defined as clonogenic cells capable of both self renewal and multiline age differentiation possessing immuno-regulatory capacities that have been permissive to allergenic transplantation.
- HPV-associated head and neck squamous cell cancers are caused by one virus type, HPV 16.
- The transforming potential/tumor maintenance capacity of this high risk HPV is mediated by two viral oncoproteins, E6 and E7, making them attractive targets for therapeutic vaccines. But, prophylactic or preventive vaccines are derived by providing interference in viral docking/binding with its receptor on host cell.
- Peptide vaccines are hypothetically the best prophylactic measures against any infectious disease. HPV causing oropharyngeal cancer is still open challenge. Therefore, in-depth characterization of capsid of HPV for oropharyngeal tropism and immunogenic peptide determination becomes obligatory for vaccine development as guard against HPV infections.
- Also working on Genetic basis of different tooth anomalies in Human- Hypodontia, oligodontia, taurodontia, denttinogeneis imperfecta & genetic of human tooth development.