

Special Interest Group

On

ORAL PRECANCER AND CANCER

An Initiative
of

Research Division

JSS AHER, Mysuru-15.



Team Lead

Dr Sreeshyla H S

Professor

Dept. of Oral Pathology &
Microbiology

JSS Dental College & Hospital

JSS AHER, Mysuru

Started on 2023-24



JSS Academy of Higher Education & Research

(Deemed to be University)

Accredited By NAAC with 'A+' Grade.

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JSS AHER/REG/RES/SIG/OPC/579/2023-24

Date: 31.07.2023.

NOTIFICATION

Sub: Constitution of Special Interest Group in "Oral Precancer Dysbiosis & Cancer"

Ref: Your request letter No. DCH/ACG/54/2022-23/370 Dated 06.06.2023

Special Interest Group (SIG) – "Oral Precancer Dysbiosis & Cancer"

In exercise of powers conferred under Section 50 (xxii) and 12 [xi (a)] of the MoA/Rules of JSS Academy of Higher Education & Research as per UGC Regulations 2016, the Special Interest Group (SIG) in the area of "Oral Precancer Dysbiosis & Cancer" has been constituted for focusing on basic and applied research in the mentioned area with the following members:

Sl. No.	Name of the proposed members	Remarks
01	Dr. Sreeshyla H S Lecturer, Dept. of Oral Pathology & Microbiology, JSS Dental College & Hospital, Mysuru	Group Leader
02	Dr. Usha Hegde Prof & Head, Dept. of Oral Pathology & Microbiology, JSS Dental College & Hospital, Mysuru	Member
03	Dr. Meenakshi S Lecturer, Dept. of Prosthodontics, Crown & Bridge, JSS Dental College & Hospital, Mysuru	Member
04	Dr. Sushma R Lecturer, Dept. of Public Health Dentistry JSS Dental College & Hospital, Mysuru.	Member
05	Dr. Prasanna Deshpande Lecturer, Dept. of Oral Medicine & Radiology, JSS Dental College & Hospital, Mysuru.	Member
06	Dr. Bharathi M B Prof & Head, Dept. of ENT JSS Medical College & Hospital, Mysuru.	Member
07	Dr. Kiran P K Associate Professor, Medical Oncologist JSS Medical College & Hospital, Mysuru.	Member
08	Dr. Vinay Kumar Rao Assistant Professor, Dept. of Medical Genetics, JSS Medical College & Hospital, Mysuru.	Member
09	Dr. Vinay Kumar Muttagi Radiation oncologist Bharath Institute of Oncology, Mysuru	Member

The SIG "Oral Precancer Dysbiosis & Cancer" shall function for a period of three years from the date of Notification.

The SIG shall submit their report once in six months to the JSS AHER. The budget for the functioning shall be submitted by the Group leader of the SIG and approval shall be obtained from JSS AHER for carrying out their various activities.


REGISTRAR

To,

All the above members,

Copy to,

1. The Vice Chancellor, JSS AHER-for kind information
2. The Finance Officer, JSS AHER
3. The Dean (Research), JSS AHER.
4. The Dean (Academics), JSS AHER
5. The Dy. Deans (Research), JSS AHER.
6. The Principal, JSS Dental College & Hospital, Mysuru
7. The Head, Dept. of Oral Pathology & Microbiology, JSS Dental College & Hospital, Mysuru
8. Office Copy

Name of the SIG: ORAL PRECANCER & CANCER

Approval Reference: JSS

**AHER/REG/RES/SIG/OPC/579/2023-24 Dated
31.07.2023.**

Name of the Team Leader: Dr Sreeshyla H S

Members

Sl. No.	Name of the members	Role
1.	Dr. Sreeshyla HS Lecturer, Dept. of Oral Pathology & Microbiology JSSDC&H, Mysuru	Team Leader
2.	Dr. Usha Hegde Prof & Head, Dept. of Oral Pathology & Microbiology JSSDC&H, Mysuru	Member
3.	Dr. Meenakshi S Lecturer, Dept. of Prosthodontics, Crown & Bridge JSSDC&H, Mysuru	Member
4.	Dr. Sushma R Lecturer, Dept. of Public Health Dentistry JSSDC&H, Mysuru	Member

5.	Dr. Prasanna Deshpande Lecturer, Dept. of Oral Medicine & Radiology JSSDC&H, Mysuru	Member
6.	Dr. Bharathi MB Prof & Head, Dept of ENT JSS Medical College & Hospital, Mysuru	Member
7.	Dr. Kiran PK Assistant Professor, Medical Oncologist JSS Medical College & Hospital, Mysuru	Member
8.	Dr. Vinay Radiooncologist Bharath Institute of Oncology, Mysuru	Member

Objectives

Primary Objectives

To build a multidisciplinary research team of clinicians and basic scientists to address preventive, educative, diagnostic and management aspects of tobacco, oral precancer and cancer

Secondary Objectives:

To educate the community on the risk factors, screening and early diagnosis of oral precancer and cancer

Activities Conducted

Inauguration of special interest group (SIG)

Inauguration of SIG on “Oral Precancer & Cancer” was held on 22nd August at Gowrishankara auditorium, JSS Dental College & Hospital. The program was presided by Dr.Mahima VG, Deputy COE, JSS AHER as Guest of Honour, Dr.Dhakshaini MR, Principal as Chief Guest, Vice Principal Dr. Jaishankar HP and Dr.Shashidara R, Prof & Head, Department of Oral Pathology & Microbiology, CIDS.





Guest Lecture

On 22/08/23 by Dr. Shashidara R

Topic

The Oral Microbiome – Implications in Systemic Diseases and Oral Cancer



Health Education Camp

Health education provided on oral precancer and cancer to the general public/Patient at institution, Community Camps and at Suttur Jathra





Research Projects

Project proposal submitted for external funding

- Therapeutic potential of Simarouba glauca leaf extract for the treatment of Oral Squamous Cell Carcinoma (OSCC) – Submitted to GRE – VGST 2023 for amount of Rs. 4000000 (Not Approved)
- Isolation And Characterization of Bioactive Compounds from Plants' Extracts for Prevention and Treatment of Oral Diseases. Submitted to ICMR on March 2024 for amount of Rs. 4587400. (Results Awaited)
- Cytobrush, toothbrush and wooden spatula in the assessment of cytological features in oral cancer patients- A comparative analysis between three sampling devices – Student ICMR STS project submitted in July 2024 for amount of Rs.50000. (Results Awaited)
- Assessment of micronuclei among tobacco users using liquid based cytology – A comparative analysis with the conventional cytology – Student ICMR STS project submitted in July 2024 for amount of Rs.50000. (Results Awaited)
- Detection and comparison of Helicobacter Pylori in Oral Squamous Cell Carcinoma & Oral Potentially Malignant Disorders using modified Giemsa stain – Student ICMR STS project submitted in July 2024 for amount of Rs.50000. (Results Awaited)

- Comparative Evaluation of Salivary pH, Buffer Capacity, Calcium, Phosphorus, and Alkaline Phosphatase among smokers and nonsmokers- A Biochemical study – Student ICMR STS project submitted in July 2024 for amount of Rs.50000. (Results Awaited)
- Rural Populations’ Perception on Risk Factors, Early Symptoms, Screening and Treatment of Oral Cancer: A Community Based Questionnaire Study – Student ICMR STS project submitted in July 2024 for amount of Rs.50000. (Results Awaited)

Collaborations: Nil

Projects and Patents

Ongoing Project

1. In vitro and In vivo assessment of the therapeutic potential of Simarouba glauca leaf extract for the treatment of Oral Squamous Cell Carcinoma (OSCC) (ICMR granted project - IIRP-2023-6590)

- **Investigators** - PI – Dr Sushma R
CO-PI – Dr Subbarao MVSTT, Dr Sreeshyla HS, Dr. Nagabhushan D

Objectives of the study

- a. SG leaf extracts characterization by LC-MS/ MS.
- b. In vitro Anti-cancer activity of leaf extracts of SG on established OSCC by MTT Assay, Cell Migration, Cell Cycle Analysis, Morphological examination, Estimation of Total Protein, Western Blotting Analysis and Apoptosis Assay.
- c. In vivo assessment of SG extract for anticancer therapeutic efficiency using xenografted tumor models

Progress

Data collection is in process

2. A comparative evaluation of hematological parameters and cell block technique in oral precancer and cancer (SIG funded project)

- **Investigators** - PI – Dr Sreeshyla HS
CO-PI – Dr Usha Hegde, Dr Prasanna
Deshpande
Dr Sushma R Dr Karthikeya Patil
Dr Sujeeth Shetty

Objectives of the study

- To study and compare hematological parameters between oral precancer and cancer
- To study and compare Exfoliative cytology between oral precancer and cancer

Progress

Data collection is in process

Completed Projects

Student ICMR STS project 2023-03284; Sagara SN guided by Dr Sreeshyla HS

Topic : Effectiveness of DNA specific stains for micronucleus assay in exfoliated buccal epithelial cells– A comparative study among tobacco users

Report Submitted on May 2024

Patents/Prototypes: Nil

Achievements

Publications

Sreeshyla HS, Aishwarya R, Usha H, Nitin VM, Priyanka N, Patil K, Harshitha N, Shruti G. A Study on Micronuclei in Exfoliated Buccal Epithelial Smears to Detect Epithelial Changes in Patients Undergoing Panoramic Radiography. BBRJ 7(3):p 387-390, Jul-Sep 2023. DOI:10.4103/bbrj.bbrj_127_23.

Awards and Recognitions: Nil

Student/Faculty Involvement:

Faculty involvement

- Dr Sushma was organising committee member of “National workshop on Tobacco free life : Healthcare professionals vital roles and responsibilities” conducted by Department of PHD and Department of OMR JSSDC&H on 31st May 2024
- Dr Sreeshyla participated in DST-SERB sponsored international conference on genetics and epigenetics of cancer, 1st-3rd October 2023 conducted by Department of molecular biology, JSS Medical College and Presented a scientific poster on “Research on Oral Precancer & Cancer – Bridging the Gap”
- Dr Sushma and Dr Sreeshyla participated in “National workshop on Tobacco free life : Healthcare professionals vital roles and responsibilities” conducted by Department of PHD and Department of OMR JSSDC&H on 31st May 2024
- Dr Sushma and Dr Sreeshyla participated in “National workshop on Tobacco free life : Healthcare professionals vital roles and responsibilities” conducted by Department of PHD and Department of OMR JSSDC&H on 31st May 2024
- Dr Usha Hegde and Dr Sushma and Dr Sreeshyla participated in webinar organised by Pravara institute of medical sciences, Loni, on the topic “Current trends in Premalignancy and Malignancy” on 5th Feb 2024
- Dr Sushma and Dr Sreeshyla participated in DST sponsored Workshop on “Anticancer agents : Screening to Signalling Mechanism Nov 30th to 24th organised by JSSAHER
- Dr Sreeshyla participated in 3rd International Conference on Advance Interdisciplinary Research (ICAIR-2024 online) Jointly Organised By Digvijay Nath Post Graduate College, Gorakhpur, UP and Presented a scientific paper on “Colposcopy in the Diagnosis of Oral Precancer and Cancer - The Current Standing”

Students

1. Dr Sara intern student JSSDC&H participated in DST-SERB sponsored international conference on genetics and epigenetics of cancer, 1st-3rd October 2023 conducted by Department of molecular biology, JSS Medical College and Presented a scientific poster on “LDH Biomarker and malignancy”
2. Dr Sara (author) intern student and Dr Sreeshyla (co-author) JSSDC&H participated in 37th Perre Fauchard Academy Annual Conference at Bangalore Presented a scientific poster on “Salivary LDH Biomarker – A comparative analysis among tobacco habitues associated with and without OPMDs” and was adjudged 1st prize for the same zed by Department of Periodontology JSSDC&H
3. Dr Sariya and Dr Priyal intern students JSSDC&H participated in Manpal Dental Conference 2024 th to 9th July and Presented a scientific poster on “Beyond the Mirror: Colposcopy unveiling precancerous and cancerous lesions”

Future Plans

- **Upcoming Events**
 - one webinar/seminar to be organised by December 2024
- **Long-Term Goals:**
 - To conduct interdisciplinary research with societal outcomes
 - Patient and public education

Conclusion

Through the SIG we wish to

- Develop JSSDC&H, as a centre of excellence for Oral Cancer Prevention, Education, Screening and Early Diagnosis.
- Enhanced knowledge & preventive of oral health care practices
- Facilitate and enhance collaborations between dental specialists, clinicians and basic scientist within and outside JSS AHER
- Enhanced proficiency of dental specialists & clinicians in early diagnosis and treatment of oral precancer and cancer
- Research publications
- Promote recognition & better ranking in accreditation bodies