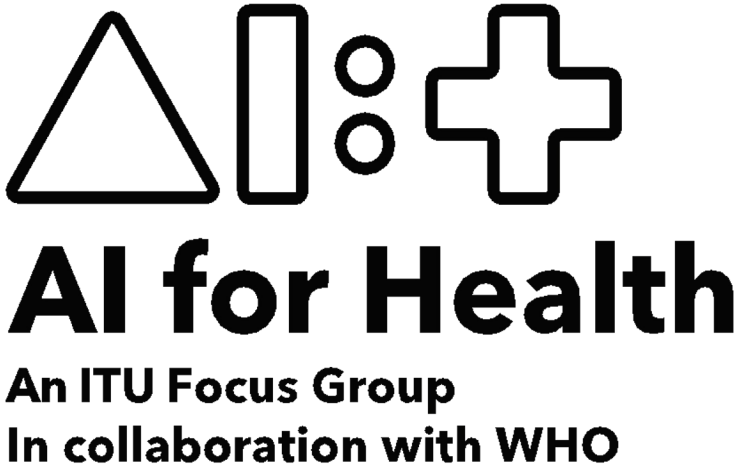
FGAI4H-P-046-A08

Helsinki, 20-22 September 2022

Source:	Sharda University, Noida, UP, India
Title:	Att.8 – Presentation - Artificial Intelligence in Oral & Maxillofacial Oncology
Purpose:	Discussion

Contact:	Parul Khare	E-mail: parulsinha02@gmail.com

Abstract:	This PPT contains a presentation on Artificial Intelligence in Oral & Maxillofacial Oncology.



Principal Investigator

Dr Parul Khare Sinha

MDS Oral & Maxillofacial Pathology, Masters Forensic Odontology,
Assistant Professor, Department of Oral Pathology & Microbiology,
School of Dental Sciences, Sharda University, Noida, UP, India
Adjunct Assistant Professor, Department of Forensic Odontology, Saveetha Dental College, Chennai, India

Adjunct Assistant Professor, Department of Oral Pathology & Forensic Odontology, Saraswati Dental College, Lucknow, India

Ex Visiting Foreign Faculty Assistant Professor, Department of Oral Pathology,
Jiao Tong University, Shanghai China

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Artificial Intelligence in Oral & Maxillofacial Oncology

1st June 2022, Berlin

Artificial Intelligence in Oral & Maxillofacial Oncology

HÖRSAAL
Welcome to the
ITU/WHO Focus Group AI for Health
Meeting

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Machine Learning for Classification of Oral Epithelial Dysplasia and Diagnosis of Squamous Cell Carcinoma

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Co-Principal Investigator

Dr Brandon Veremis
Assistant Professor
Icahn School of Medicine
Mount Sinai, United States

Dr Kenneth Aschheim
Adjunct Clinical Professor
New York College of Dentistry, United

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Collaborators from AI Subtopic Focus Group

Dr. Falk Schwendicke, MDPH

Chair &
Head, Department of Oral Diagnostics, Digital Health and Health Services Research

Charité

Dr Lisa,
Data Scientist,
Department of Oral Diagnostics, Digital Health and Health Services Research
Charité
Universitätsmedizin

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Collaborator Artificial Intelligence

United States of America

Associate Professor, Department of Pathology & Anatomical Sciences, Department of Biomedical Engineering
University at Buffalo SUNY, Buffalo, NY

INTRODUCTION

Head and neck carcinoma are the sixth most common cancer in the world

According to World Cancer research Fund International lip and oral cavity cancers are most common, with more than 377700 cases word wide in 2020.

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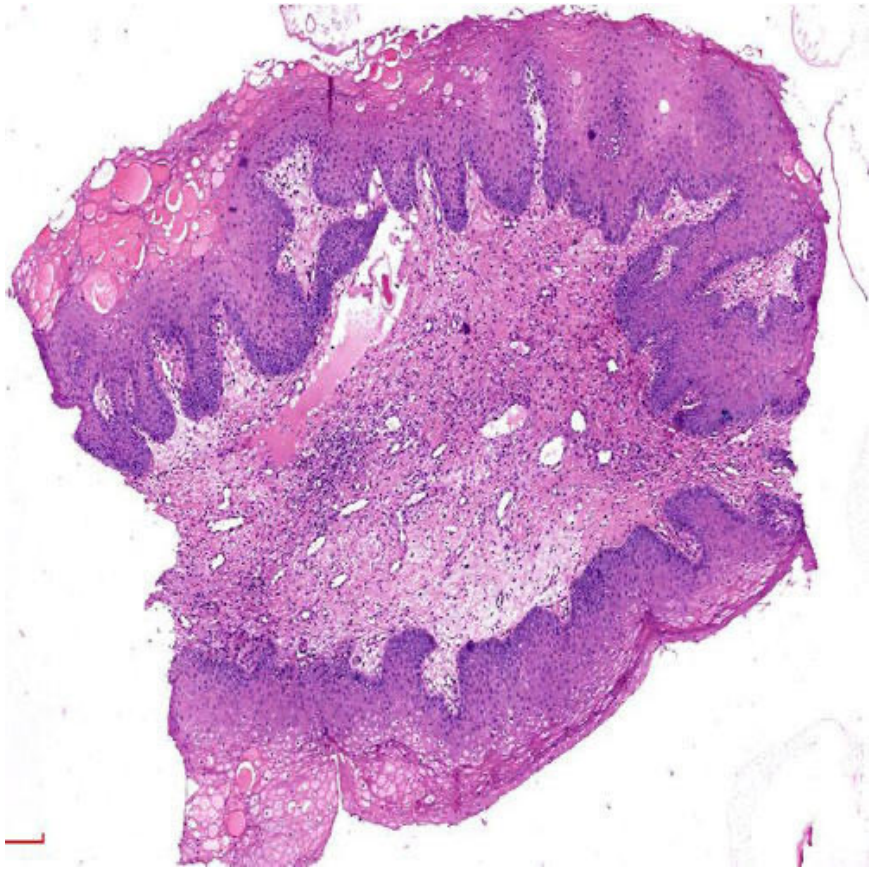
There is not only subjectivity among oral pathologists but also need to have involvement of AI to have standardization



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Aim - is to use a machine learning approach to address the lack of reproducibility in epithelial dysplasia.

Objectives:

- The first approach we will use is to use outcomes data to predict the risk of malignant transformation.

- If not, enough outcomes data is available, we will develop a classifier for epithelial lesions of the oral cavity.

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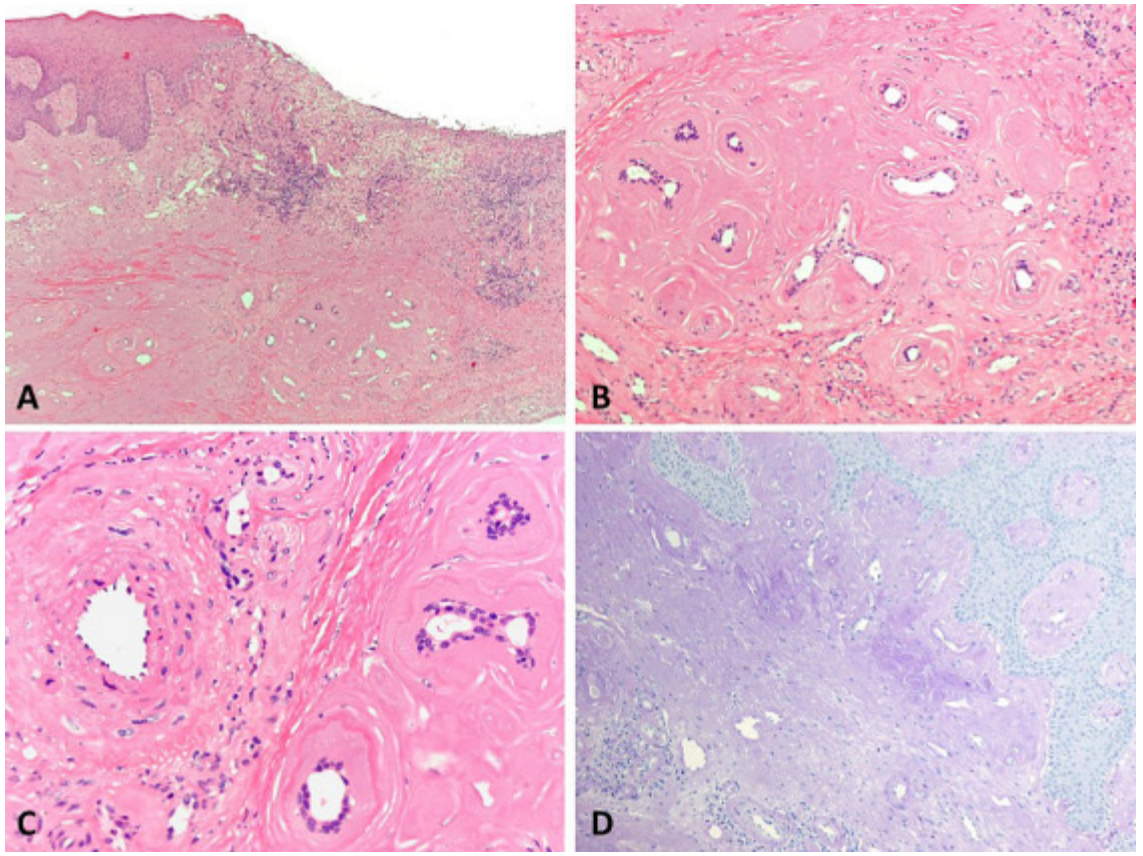
Study samples-

2000 whole slide images from 10 international institutions (200 each)

10 different oral pathologists will review the annotations

Category- Benign, PMLs & SQCC



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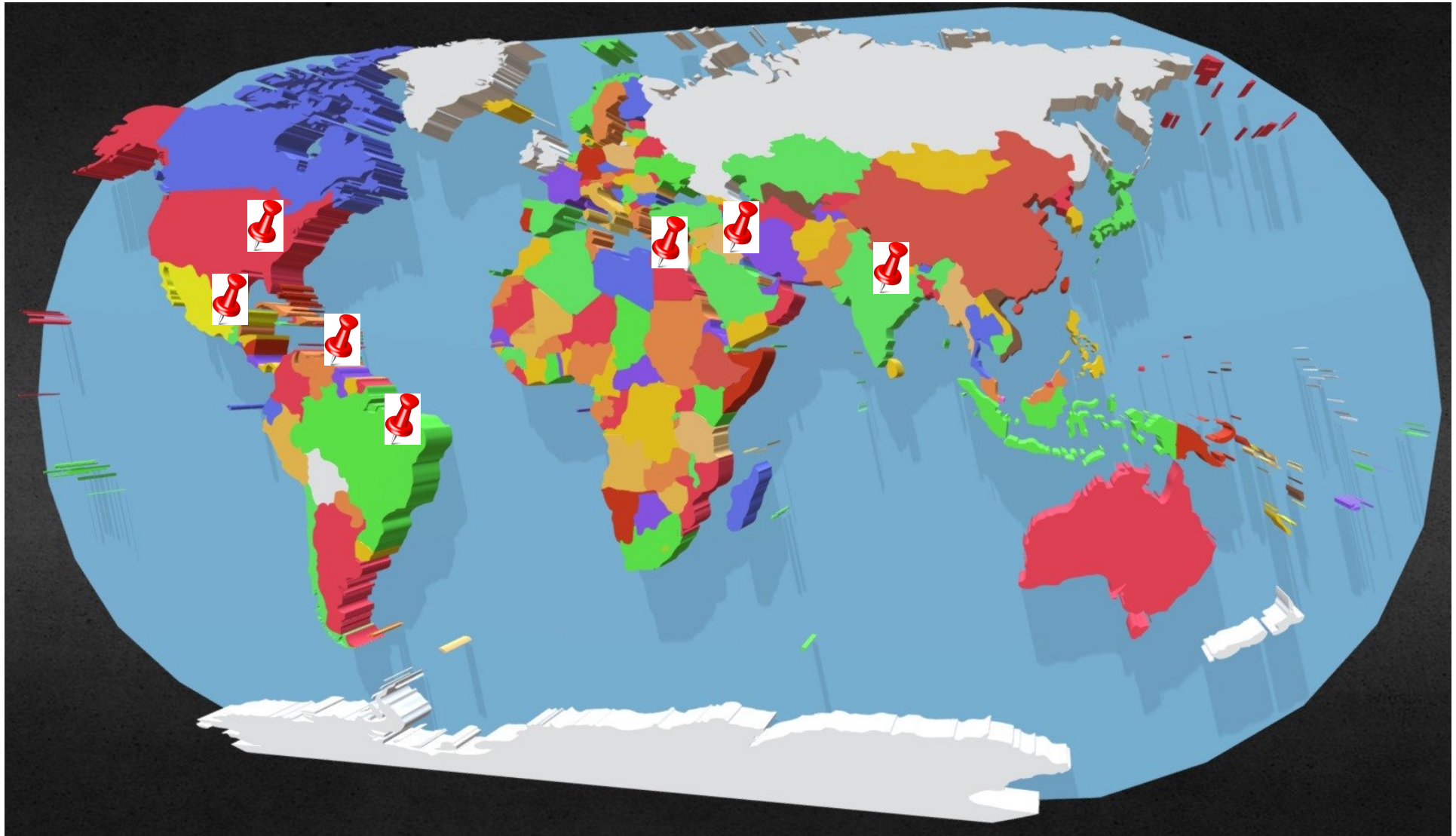

We are in phase two of the research project, wherein our collaborators have applied for ethical permissions & IRBs and we are waiting for permissions to start data

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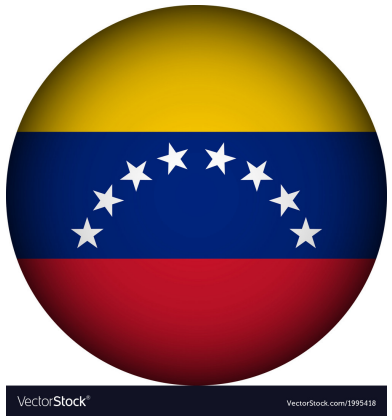
BRAZIL

Dr Felipe Fonseca

DDS, PhD

Lecturer/Researcher Oral Pathology and Oral Medicine

Universidade Federal de Minas Gerais (Belo Horizonte)



VENEZUELA

Dr Mariana Villarroel
Professor, Director Oral Med programme. Head Oral Pathology Lab.
Central University of Venezuela

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ISRAEL

Dr. Marilena Vered
Dept. Oral Pathology, Oral Medicine and Maxillofacial Imaging, School of Dental Medicine, Tel Aviv University, Tel Aviv; Institute of Pathology, Sheba Medical Center, Tel Hashomer, Ramat Gan

JORDAN

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Dr Rima
-Vice Dean of Faculty of Dentistry
-Professor of Oral and Maxillofacial Pathology, Department of Oral Surgery and Medicine, Faculty of Dentistry, Jordan University of Science and Technology, Irbid, Jordan
-Consultant Oral and Maxillofacial Pathologist, King Abdullah University Hospital, Irbid, Jordan

MEXICO

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Dr Beatriz Aldape
Professor
Private Practice

INDIA

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Dr Supriya Kheur
Professor & Chair,
Department of Oral Pathology Microbiology

Dr. D.Y.Patil Dental College &

Dr Malathi Narasimhan
Professor
Department of Oral Pathology Microbiology

Sri Ramachandra

INDIA

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Dr Deepak Bhargava
HOD, Department of
Oral Pathology
Microbiology

School of Dental

Dr Alka Kale
Principal,
Professor
Oral Pathology
Microbiology
KLE VK Institute
of Dental Sciences,
KLE Belagavi

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UNITED STATES OF AMERICA

Dr Margaret Brandwein, MD
Professor of Pathology and
Site chair
Department of Pathology
Mount Sinai West
United States

SUCCESS
Next Exit
Road To Success

THANK
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