

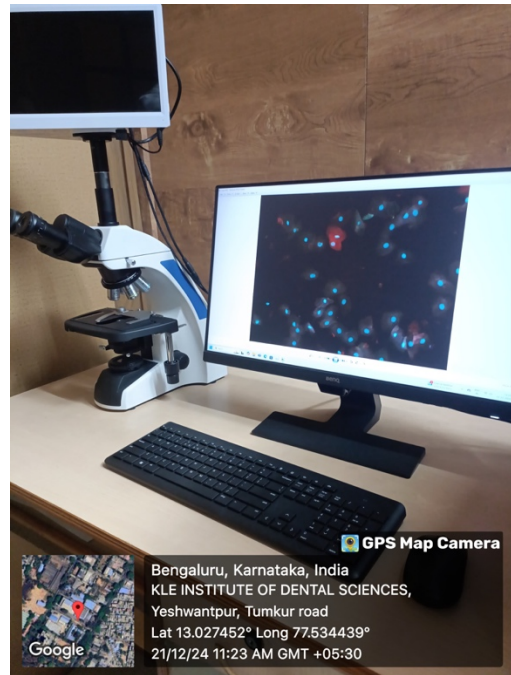
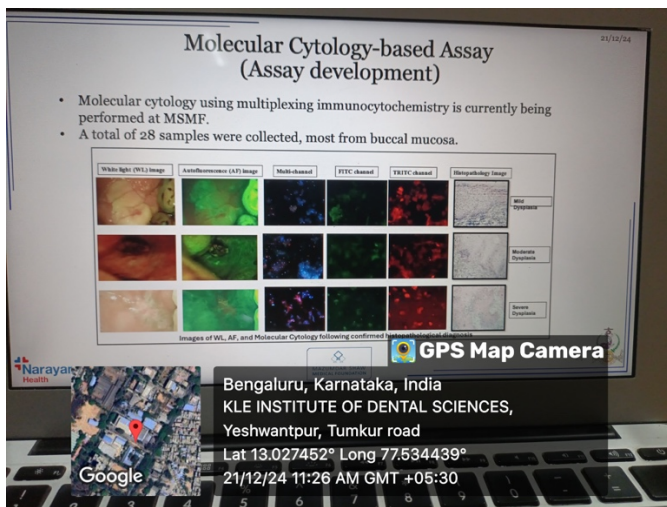
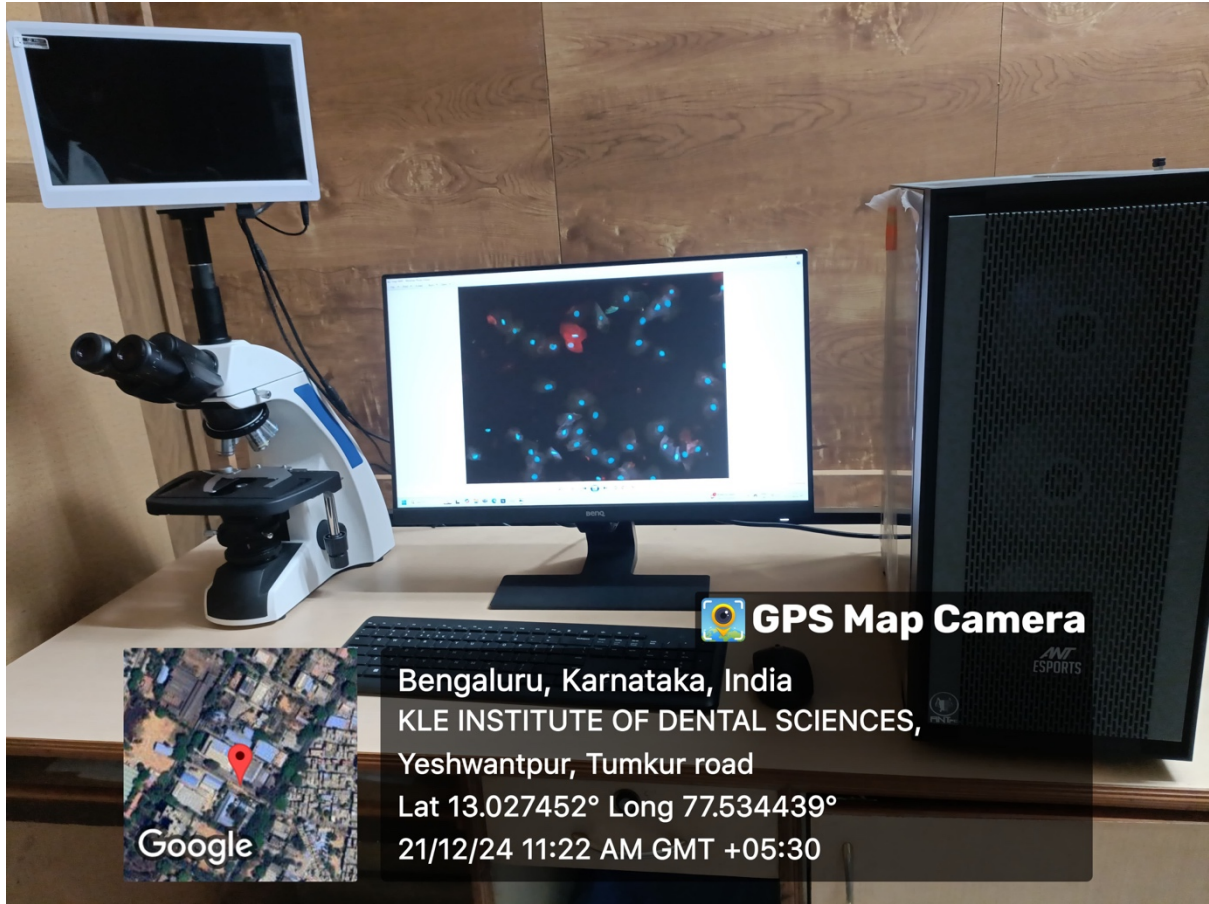
### 3.2.1 Innovations and other initiatives for creation and transfer of knowledge



Cytospin



# Multiplex cytology



## **Incubation centre and evidence of its functioning**

The central research lab has been established in the department of Oral Medicine and Radiology. The funds used for the set up was awarded to the department by National Institutes of Health (NIH), and Indian Council of Medical Research (ICMR), government organizations. The amenities in-house laboratory is equipped with Cytospin (Cytocentrifuge – with the following specification, Hettich Rotofix 32A with 12 place Cytology rotor with a max capacity of 2000 rpm) has been procured for the research project with a goal to establish Point-of-care AI-based tools.

The instrument is procured for Multiplex Cytology as a part of the project and installed in our Central Research Lab. This device is used to concentrate and deposit a monolayer of cells on a microscope slide from a dilute cell suspension. This helps in keeping the cells intact for the study of their morphology and identification of atypical and typical cells in oral cancer screening. Specialized stains and dyes can also be used to visualize nucleic acids or other cellular structures. this device can be utilized for studies related to cytopathology, microbiology, and haematology.

This central lab has facilitated for the prototype development in association with Aindra as point-of-care, minimally invasive as an alternative for the invasive biopsy with near accurate outcomes. The innovation centre has also contributed to develop AI tools for oral visual examination in association with IISc, Bengaluru. These prototypes are in due process of certification and then to scale up with the NCD.