

IIT Kanpur transfers non-invasive oral cancer detection technology to Scangenie Scientific

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Device offers quick and painless screening with 90% accuracy in clinical settings



To facilitate widespread adoption and commercial success, Indian Institute of Technology Kanpur (IIT-K) has transferred its unique technology, 'Munh Parikshak,' a portable device for detecting oral cancer, invented by Prof. Jayant Kumar Singh and his team from the Department of Chemical Engineering, to Scangenie Scientific, a Kanpur-based startup.

The device uses special lights and a camera to examine the mouth, providing instant results by analysing mouth images and categorising them as normal, pre-cancerous, or cancerous. The results are displayed on a smartphone app and stored on cloud servers for continuous updates, making it ideal for self-testing.

The technology licensing agreement was formally signed between IIT Kanpur and Scangenie Scientific in the presence of Prof. Tarun Gupta, Dean of R&D, IIT-K; Prof. Ankush Sharma, Professor-in-Charge of SIIC, IIT-K; Prof. Amitabha Bandyopadhyay, Head of BSBE Dept, IIT-K; Dr Prerana Singh, Head of Oral Pathology at MPDC and co-inventor; Prof. Jayant Kumar Singh, ChE Dept. & Inventor, IIT-K; and Dharendra Singh, Licensee & Director of Scangenie Scientific.

Munh-Parikshak is a user-friendly device having white and fluorescence light source that connects wirelessly to smartphones, tablets, iPads, etc. With a built-in power backup, it stores health history for tracking and provides instant oral health reports. The device offers quick and painless screening with 90% accuracy in clinical settings. It is safe, radiation-free, and does not require any additional chemicals or processes.

According to market research findings, the oral cancer diagnosis market is expected to reach \$2.98 billion by 2032 with a 5% CAGR, while the rapid test kit market, currently at \$736 million, is growing at a 7% CAGR until 2027.