

*Press Release*

## **Pakistan's largest histopathology AI dataset 'HistoVault v1' launched by the Precision Medicine Lab**

*Peshawar, February 14, 2025*

The Precision Medicine Lab and the Department of Histopathology at Rehman Medical Institute have successfully launched HistoVault v1, Pakistan's largest histopathology image dataset that sets the stage for bring AI into the clinical diagnosis in the local context.

The project was led by Dr. Faisal Khan, Principal Investigator, Precision Medicine Lab, and Brig (R) Prof Iqbal Muhammad, Consultant and HOD, Histopathology at Rehman Medical Institute and was funded by the Higher Education Commission under the National Research Program for Universities (NRPU) grant.

The Precision Medicine Lab in Peshawar is a federally funded consortium which is spearheading the country's first precision medicine pilot since 2018 and is responsible for several breakthroughs at the interface of data, technology and medicine. The Lab is jointly run by CECOS University and Rehman Medical Institute.

HistoVault v1 is a groundbreaking dataset designed to advance AI-powered histopathology research and development and boasts over 17000 images acquired using both WSI and LCLR approaches. The Lab also presented the latest models it had trained using the dataset for four different types of cancer including breast, gastric, oral and colorectal cancers.

The launch event was graced by the DG for Science and Technology, Government of KP, Mr. Sajid Hussain Shah, as well as leading researchers, professors and consultants from GIKI, IMSciences, KTH, LRH and HMC.

'AI in Medicine is here and Pakistan needs to urgently scale up its capabilities and we can't be more proud to be at the forefront of this', said **Dr. Faisal Khan**, who has a masters and a doctorate from the University of Oxford and is the founder and director of the Precision Medicine Lab.

'Today marks a significant moment for the Triple Helix model, where a collaborative effort between academia, industry, and government has led to the launch of Histovault v1' said the chief guest and DGF Science and Technology, **Mr. Sajid Hussain Shah**. 'I congratulate Dr Faisal Khan, the Lab, Rehman Medical Institute and CECOS University, on this successful initiative'.

**Shafique Ur Rehman, CEO, Rehman Medical Institute**, said 'This magic has happened only because we had all the right ingredients concentrated in one cluster right here. Just imagine a future where solutions developed right here in Hayatabad are not only saving lives locally but also making an impact in London, Tokyo, New York, and across the world.'

**Engr. Sohaib Tanveer, VP of CECOS University**, also shared his thoughts saying 'When this project was conceived, it was an idea that needed to be executed. The challenge, however, was bringing together computer scientists, biotechnologists, and engineers. Despite this, an

incredible job has been done. At Precision Medicine Lab, these experts collaborated and successfully delivered an outstanding service and product. We are grateful to HEC for supporting this NRPV project, this is where the magic happens.'

With HistoVault v1, Pakistan takes a significant step toward AI-driven precision medicine. The dataset will be open sourced on the Open Data Portal Pakistan, and made publicly accessible to researchers, fostering collaboration, innovation, and scientific breakthroughs in oncology and pathology.