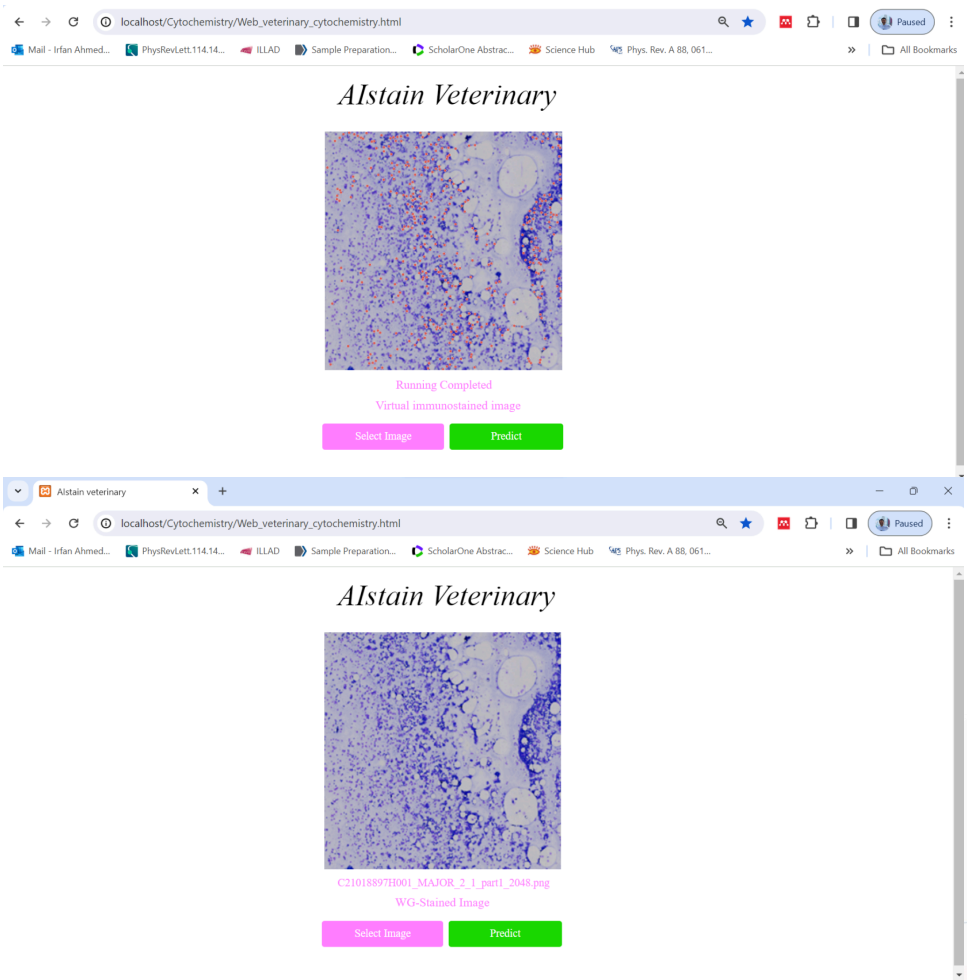
Knowledge Transfer Office
香港城市大學
City University of Hong Kong

AI-Powered Virtual Immunocytochemistry for Rapid and Robust Fine Needle Aspiration Biopsy Diagnosis

Health & Wellness

Biomedical and Genetic Engineering

Computer/AI/Data Processing and Information Technology



IP Status
Patent filed

Technology Readiness Level (TRL) ? 5

Inventor(s)

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Opportunity

AI-powered virtual immunocytochemistry (ICC) is a cloud-based diagnostic tool for pathologists. Presently, pathologists need to stain biopsy samples with standard and antibody-based ICC reagents prior to making the final diagnosis. Antibody reagents take hours to days to perform staining, along with requiring specialized equipment and technical skills.

Technology

Our AI platform enables ICC to be done in minutes over the internet, saving considerable time, cost, and complexity in diagnosis. This new invention complements our AI-powered virtual immunohistochemistry (IHC) invention, which received Gold Medal with Congratulations of the Jury at the

2023 International Exhibition of Inventions Geneva. Together, pathologists can perform immunostaining on a wide range of biopsy samples over the internet.

Advantages

- Reduced processing time
- Simplified procedures
- Reduced cost

Applications

- Diagnostic pathology
- Education