

SS1 ADVANCING DIGITAL PATHOLOGY & AI: CURRENT STATE AND FUTURE DIRECTIONS

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= Abstract =

Digital pathology is now recognized as an essential technology, providing additional tools for a faster, higher-quality and more accurate diagnosis for patients and physicians. The Digital Pathology Association's focus is on expanding applications, education, and best practices, collaborating with the FDA on equipment approvals, and addressing technology regulations. The practice of diagnostic pathology has gone through a disruptive transformation in which multiple tools such as digital imaging, advanced artificial intelligence algorithms, and computer-aided diagnostic techniques are resulting in the availability of these new tools to assist, augment and empower the diagnostic pathology.

Automated whole slide imaging (WSI) scanners are now rendering diagnostic quality, high-resolution images of entire glass slides and combining these images with innovative digital pathology tools that are making it possible to integrate imaging into all aspects of pathology reporting including anatomical, clinical, and molecular pathology. The recent approvals of WSI scanners for primary diagnosis by the FDA, as well as the approval of at least one prostate AI algorithm so far, has paved the way for incorporating this exciting technology for use in primary diagnosis. Once slides are digitized, artificial intelligence tools can be leveraged to provide a unique platform for innovation and discovery in anatomical and clinical pathology workflows. This DPA session will not only introduce the mission and vision of the DPA, but the speakers will describe where we are in the journey towards fully utilizing digital pathology workflows and employing AI tools for routine pathology practice.