Techcyte and Pramana Unveil Smart, Inline, Volumetric Digital Microbiology Scanning

OREM, UT, UNITED STATES, June 20, 2025 /EINPresswire.com/ -- Techcyte and Pramana today announced the upcoming launch of smart, inline, volumetric scanning. This innovation aims to set the standard for how microbiology slides are digitized. Techcyte algorithms can now be run on Pramana scanners during scanning, delivering the highest quality imaging of parasitology, gram, and AFB slides.

Digitizing microbiology slides is a significant challenge for most whole slide scanners. Wet preps, sparse slides, and varying sample thickness can result in whole slide images that are not acceptable, which negatively impacts operational costs and manual labor. Many scanners can scan multiple z-stacks, which increases scan time, file size, and processing and storage costs.

In contrast, Pramana's Spectral series scanners use sophisticated software and a powerful GPU to enable real-time volumetric scanning, capturing Z-stacks and fusing the best pixels to produce high quality images. The original Z-stacks can be retained for further review in areas where AI identifies significant objects. The software also features onboard quality control to detect and correct focus, artifacts, and stitching issues, without user intervention.

Building on this foundation, Techcyte's AI algorithms (for research use only) can now be deployed directly on Pramana's scanners, the first and only to offer edge AI compute capabilities. During scanning, the AI analyzes each field of view in real time and can flag relevant objects, mimicking the fine focus function in a microscope with AI automation. Z-stacks are saved only in those areas around the objects of interest.

"This capability allows us to advance the practice of digital microbiology," said Ben Cahoon, CEO at Techcyte. "Smart inline volumetric scanning brings intelligence into the digital scanning process, helping provide labs with in-focus and z-stacked images that bring the benefits of going digital to microbiology."

“Smart inline volumetric scanning brings to reality the vision that we had for our platform from day one,” said Mike Koenig, Chief Business Officer at Pramana. “Pramana’s scanner architecture allows us to support complex sample types from partners like Techcyte with speed and precision—now enhanced even further by inline AI.”

This joint innovation sets the stage for expanded digital adoption in areas like bacteriology, parasitology, and cytology, where object-level resolution in three dimensions can be helpful for reads. It will be showcased at ASM Microbe in Los Angeles, June 20–22, at Booth 1811 and will be available to customers in Q4 of 2025.

###

About Techcyte
Techcyte is aiming to transform the practice of pathology through a unified, AI-powered digital platform that streamlines complex workflows, integrates with core lab systems, and enhances communication across the lab.

By partnering with leading laboratories, scanner manufacturers, diagnostic hardware providers, and AI developers, we deliver a unified digital pathology platform to labs and clinics around the world, furthering our mission to positively impact the health of humans, animals, and the environment.

Visit techcyte.com for more information.

Techcyte’s anatomic and clinical pathology platform is for Research Use Only in the United States.

About Pramana
Pramana is a health tech company transforming digital pathology with AI-powered imaging solutions that support seamless adoption across labs, health systems, and medical centers. Pramana's Spectral scanners deliver industry-leading image quality. Built-in AI algorithms and automated quality control streamline workflows and capture previously undetectable tissue features. The company is headquartered in Cambridge, Mass.

For more information, visit www.pramana.ai.

Troy Bankhead
Techcyte
4352295966 ext.
email us here
Visit us on social media:

LinkedIn
Facebook

This press release can be viewed online at: https://www.einpresswire.com/article/824077217

EIN Presswire's priority is source transparency. We do not allow opaque clients, and our editors try to be careful about weeding out false and misleading content. As a user, if you see something we have missed, please do bring it to our attention. Your help is welcome. EIN Presswire, Everyone's Internet News Presswire™, tries to define some of the boundaries that are reasonable in today's world. Please see our Editorial Guidelines for more information.
© 1995-2025 Newsmatics Inc. All Right Reserved.