



Improving the Accuracy of Measuring Microscopic Organisms Using Information Technology

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Research Question

How can information technology be used to enhance the ability to measure microscopic organisms in clinical hospital laboratories?

Merits

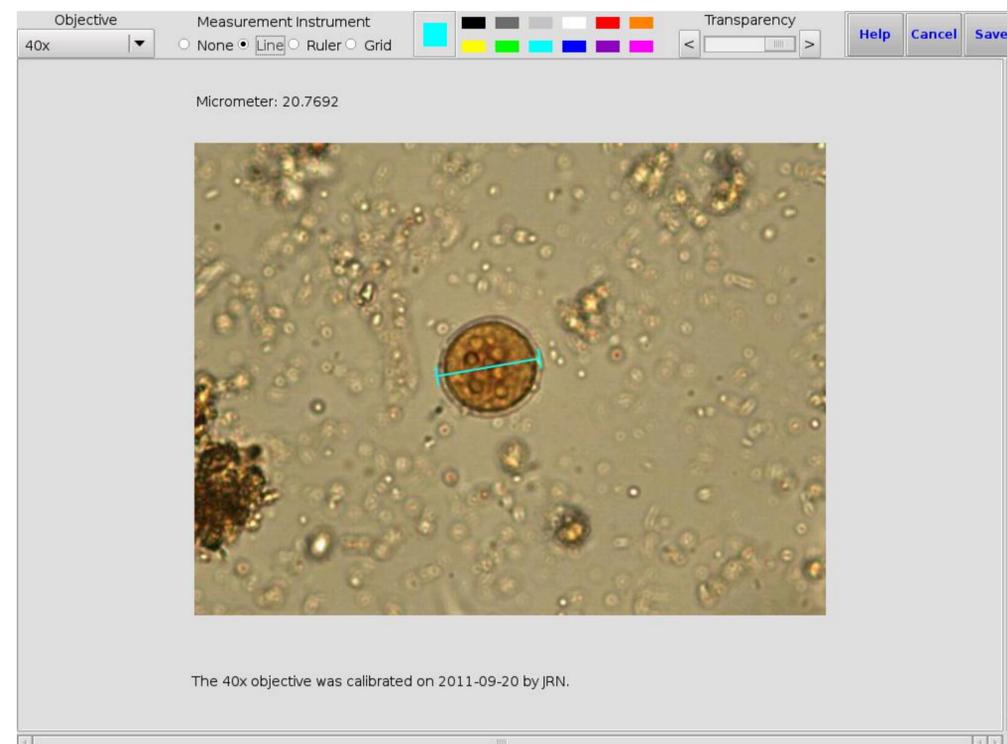
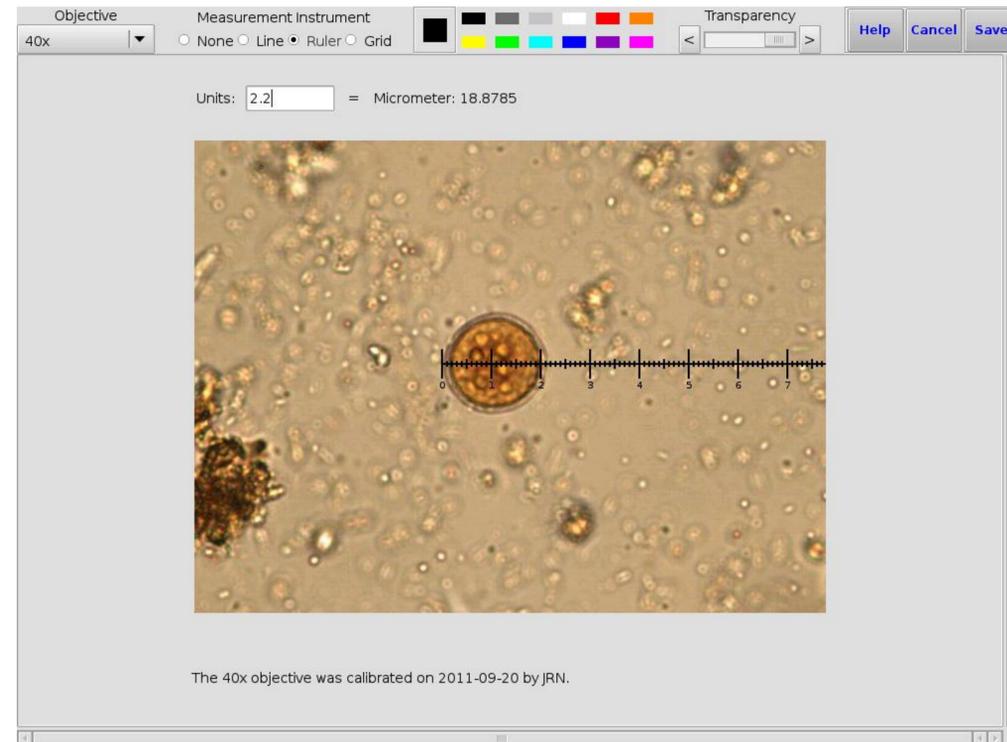
- More accurate measurements
- Easier to calibrate
- Faster to retrieve results
- More reliable diagnosis

Features

- Automated Calculations
- Reduced Complexity
- Calibration Date for Quality Control
- Multiple Objectives
- Multiple Colors

Why Needed

- Many complicated steps
- Time consuming
- Manual math calculations
- Color of ocular micrometer is hard to see



STATPack™ Background

STATPack™ is an emergency response system that addresses critical health information and biosecurity needs. The STATPack system application is a secure, dedicated, HIPAA compliant, web-based network system that supports telecommunication connectivity of clinical health laboratories. The system architecture uses client/server technology and operates in a distributed environment. This connectivity allows for immediate communication and data transfer of urgent health information by transmitting images and text.

Micrometer Description

A micrometer is a tool used in microbiology, it measures the size of a sample, assisting in the process of identifying the sample. Previously the micrometer processes consisted of a calibration slide and a reference measuring tool (ocular micrometer). We have added the functionality of a micrometer into the STATPack™ application. Having the micrometer built in to the STATPack™ application the calculations can be automated rather than done by hand. This saves the laboratory technicians time while identifying the sample.