Faculty at Thomas Jefferson University Medical College wanted to provide virtual microscopy for first year medical students studying Histology. According to faculty, virtual microscopy retains the learning features of microscopes with students studying whole slides rather than isolated images thus promoting the learning of relationships. The system utilizes magnifications ranging from 1X to 1000X with real time pan and zoom comparable to the way a microscope is utilized. However, the virtual approach allows for better control of slide quality, content and resolution. The virtual laboratory setting promotes learning through small group interactions and the materials are available for independent study. A traditional wet lab was equipped with enough computer stations to accommodate half of the 255-member class, seating 2 students per station. Multi-station computers have been installed and are equipped with new hardware technology that allows up to 5 monitors and keyboards to run from a single CPU. The new hardware technology provides a cost and space effective way to bring virtual microscope images to a large number of students. Only 13 computers, rather than 64, are needed because up to 10 students can be assigned per CPU rather than only 2.

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Faculty working individually with microscopes are less engaged with the assignments. Images have fine detail and can be annotated by professors and learners. Interactive lab manuals provide links to images so students can seamlessly refer back and forth. Interaction between students and professors become more engaging. Faculty spends far more time teaching and far less time troubleshooting equipment failure.

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### Project Goals
1. Convert a traditional wet lab for use with virtual microscopy technology in a cost and space efficient way.
2. Provide lab access to half of the 255-member medical school class at a time.
3. Provide an interactive lab manual for students to use seamlessly with the images.

### Contact Information
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### Abstract
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