

# Digital Pathology Virtual Microscope Slides for Hematology with Online Database

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## Technology description

The Virtual Microscope The Digital Pathology Virtual Microscope Slides allow medical students and allied health professionals to access hematology microscope slides through an online database for distance learning and enhanced curriculum delivery. The Digital Pathology Virtual Microscope Slide database is the only database that offers a high quality resolution of 83X oil immersion, which is necessary for the proper examination of blood cells. The use of virtual microscopes can transform traditional teaching methods by removing the reliance on physical space, equipment, and specimens to a model that is solely dependent upon computer-internet access. This rich database is enhanced with patient clinical presentations, laboratory data, comprehensive slide interpretations, and diagnoses. Transforming Glass Hematology Slide Sets into a Digital Online Database The University of Minnesota's hematology slide sets are used to develop an understanding of blood cell morphology and identification for clinical hematology training. The slide sets represent a variety of rare and unique disease samples. Glass microscope slides are extremely difficult to duplicate because they have been created from actual patient samples. Glass microscope slides are very fragile and fade over time, by digitizing the slide sets, this resource is preserved and can be accessed via the web by more students. The University of Minnesota has developed the first high resolution (83X oil immersion) slide database. Digitized Hematology Microscope Slide Database Available for Distance Learning and Enhanced Curriculum Before the development of virtual microscope databases, clinical laboratory instruction relied on the availability of slide sets and microscopes for student use. The Digital Pathology Virtual Microscope Slides for Hematology allow medical students to access the entire University slide set database online through distance learning education. This increases the convenience of accessing the slide sets and making the slides available to a broader audience. The slide sets are a tremendous resource in the instruction of new clinical laboratory scientists for their roles as qualified medical professionals in the health care industry. The online database can extend past traditional laboratory science programs, serving as a resource for lab professionals continuing their medical education.

Access- increases availability of hematology slide sets to students, while also extending the reach of traditional laboratory science programs. Fulfillment Details After execution of the Digital Pathology

Virtual Microscope - Slides for Hematology with Online Database and verification of payment, you will receive your userid and password by email from the University of Minnesota Office for Technology Commercialization. System Requirements The database can be used with either a PC or Mac. The database can be accessed using any browser connection, but Firefox is preferred. The operating system requirements are Windows XP SP3, Windows Vista, Windows 7, Mac OS X 10 or above with Parallels Desktop installed. Recommended connection type is cable or LAN; DSL can be used but provides minimum functionality. The online database can be viewed via browser/website but local installation of Aperio, Inc's ImageScope yields much higher performance.

### Advantages

Less expensive - the cost is less than that of replicating, creating, and storing glass slide sets. High quality - the digitized slides have a high resolution of 83X oil immersion. - - - Glass slides are fragile, can be easily broken or damaged, and can fade. Convenient - slide sets can be accessed through an online database, anywhere, anytime. No longer dependent on availability of space, equipment, or specimens.

#### Institution

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