

# University of Kansas

## School of Medicine

### CGEA Technology Session

CHANGING LEARNING ENVIRONMENT THROUGH TECHNOLOGY:

# Electronic Curriculum

Michael Karr, Senior Coordinator of Technology  
Anthony Paolo, Director of Assessment and Evaluation  
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# Goals of the Electronic Curriculum

- Facilitate self-directed learning
- Increased student collaboration
- Improved personal and institutional organization
- Instant, wireless access to:
  - Course materials
  - Electronic textbooks and journals



# Preparation (3 years of effort)

- Considered every tablet on the market
  - Recommended tablets to prior class
  - Extensive tablet testing by faculty and students
- 120 seat, high security computer testing center
- Digital scanning of microscope slide sets
- Wireless infrastructure
- E-textbook testing and acquisition

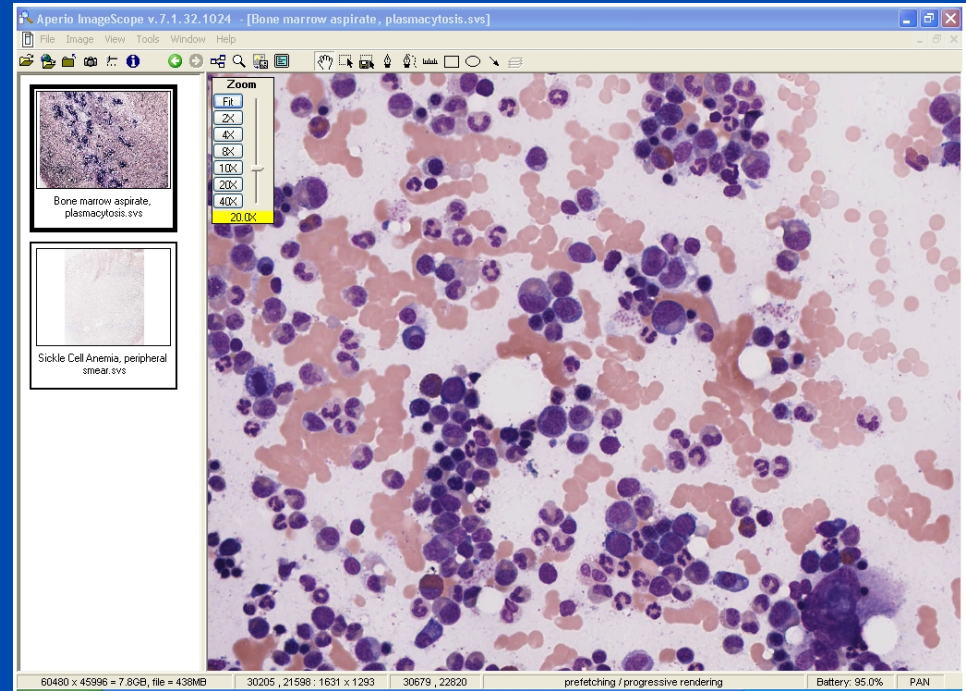
# Tablet Hardware

- Hewlett Packard Compaq TC4200
  - 2GHZ, 1Gb RAM
- LaCie 60Gb external hard drive
- LaCie Dual Layer DVD±RW with Lightscribe
- Targus case
- External travel battery
- USB flash drive



# Software

- Angel Learning content delivery system
- LXR testing software
- Microsoft Office and OneNote
- Agilix GoBinder
- VitalSource Reader
- Microsoft SyncToy
- Camtasia
- Aperio ImageScope
- Microsoft Experience and Education Pack
  - Snipping Tool



# Shared File Space

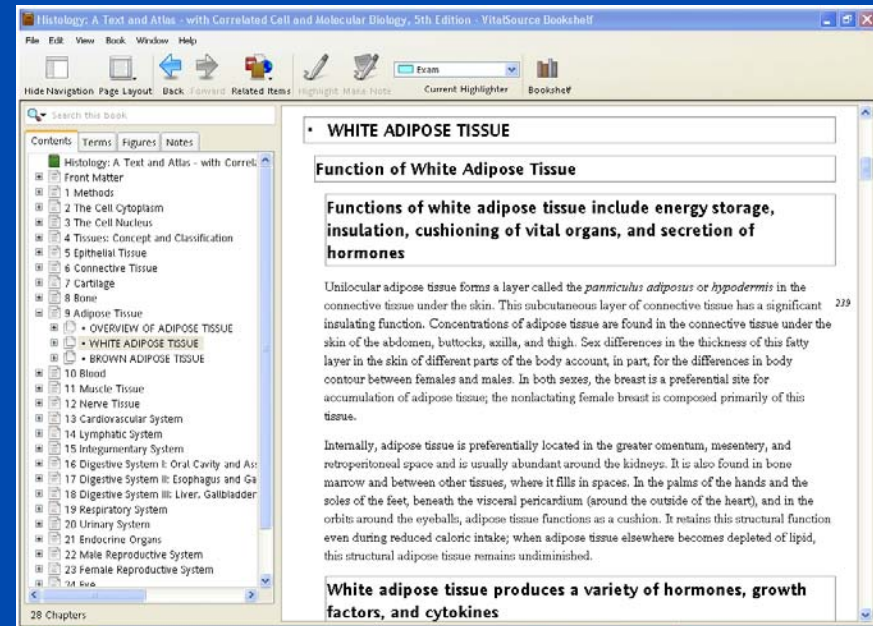
- Created to address Angel speed issues
- Copies content on Angel in folder structure
- Storage for lecture recordings
- Built on Novell MyFiles, WebDav variant
- Read only for students

# Digital Lecture Recording

- Extremely popular (88% usage)
- Small impact on attendance
- No Budget, replaces student note service
- Student Ambassadors
- Recorded in PowerPoint
- Switched to Camtasia
- Compressed in iSquint on Macintosh
  - Approximately 16MB per hour
- Not true Podcast... yet

# Costs

- Hardware \$2,000 per unit
- Software \$222 per unit
- Electronic texts
  - ~ \$100,000 per year
  - McGraw Hill, Access Medicine (online)
  - Lippincott Williams & Wilkins, Elsevier – VitalSource (on tablet hard drive)
- Student cost \$2,500



# Student Use

- Taking notes
- Sharing notes
- Lecture recordings
- Virtual microscopy
- (iTunes, mySpace, Facebook, IM)



# Virtual microscopy lab

- Eliminated costly slide sets and microscopes
- Students create their own atlas of images
- Images become part of their notes, tied to classroom content



# Technical difficulties

- Tablets (4 hardware replacements)
  - Loss or breakage of pens (dog ate 1 pen)
  - Bad screens (1)
  - Bad wireless cards (2)
- Wireless connectivity
  - Saturation of access points
- Software
  - Too many software choices (but we wouldn't change a thing)

# Student Support

- Online community group
- University help desk
- Technology Coordinator
- Peer support
- Faculty support



# Planned Changes

- Small group, student-led Tablet PC orientation session
- Increased software orientation (OneNote, GoBinder, Aperio Imagescope, Angel Learning)
- Improved student interface on our content delivery system (Angel Learning)
- Constant hardware evaluation

# PDA Logging for Clerkships

- Created initially to improve mid-clerkship feedback and to satisfy ED-2
- Current System Based on Satellite forms
  - Palm Only, Tungsten X
- Student Access to PatientKeeper
- Switching to E\*Value from Advanced Informatics
  - Multi-Platform as well as web interface
  - Easily customizable reports
- Future Plans: Switch to PDA Phone

# Questions and Comments?

- Mike Karr, [mkarr@kumc.edu](mailto:mkarr@kumc.edu)
- Anthony Paolo, [apaolo@kumc.edu](mailto:apaolo@kumc.edu)
  - Email us anytime!