Media Technology & Production
MEDIA TECHNOLOGY & PRODUCTION

STAFFING

Charles Bears
Director

Ray Rollins
Manager of Classroom Technology

Eric Capozzoli, CTS
Project Manager

Kevin Flanigan
Supervisor of Video Production
MEDIA TECHNOLOGY & PRODUCTION

STAFFING

Beth Albasi
Administrative Assistant

Marc Beck
A/V Technician

Sean Cox
A/V Technician

Frank Kane
A/V Technician

Joe Lavin
A/V Technician

Terrance Morrison
A/V Technician
MEDIA TECHNOLOGY & PRODUCTION

STAFFING

Dave Randle
A/V Technician

Syd Redmond
A/V Technician

Steve Surgalski
A/V Technician

Marvin Whitest
A/V Technician
Services Provided at Penn Medicine

• Classroom Technology and Support Management
• Video Production Services
• Oversee and Manage MTP Installations
• AV Rental Services
• AV Consulting
• Digital Signage & Micro Tiles
Webinars & Webcasting

• **Webinar** – a lecture, presentation, or seminar that is transmitted over the Web
• Interactivity between parties really brings value to Webinars
• Penn Medicine mainly focus on Webcasting
• **Webcasting** is one way data transmission, not allowed to interact
• Mediasite gives you flexibility
Areas of focus for Webcasting

Education

Administration

Clinical – Grand Rounds

Research
Resting CD4+ Cell Outgrowth Assay:
Gold standard method for quantification of replication-competent HIV ("latency")

4 billion lymphocytes from aviremic patient on HAART

Mix cells with Antibody-magnetic bead cocktail

Purified Resting cells

Antibodies Used:
CD4 purification
CD8, CD14, CD16
CD19, CD56
Glycophorin A
Resting cell cocktail
CD41, CD25, HLA-DR

Magnet

Immediate RNA assay

6 hr drug exposure then RNA assay
## 10 Most Recent Virtual Lectures

<table>
<thead>
<tr>
<th>Title</th>
<th>Video</th>
<th>Lecturer</th>
<th>Module</th>
<th>Date</th>
<th>Slides</th>
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<tbody>
<tr>
<td>Hematopathology - Acute Leukemia</td>
<td></td>
<td>Alexander Perl</td>
<td>2</td>
<td>1/27/2011</td>
<td></td>
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<tr>
<td>- Leukemia</td>
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<td>Intro to Bone Marrow Pathology</td>
<td></td>
<td>Gershon Wertheim</td>
<td>2</td>
<td>1/27/2014</td>
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<td>- Bone Marrow Pathology</td>
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<tr>
<td>Introduction to Evidence Based Medicine</td>
<td></td>
<td>Greg Unschuld</td>
<td>6</td>
<td>1/24/2014</td>
<td>No additional material</td>
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<tr>
<td>Pathology Hodgkin Lymphoma</td>
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<td>Adam Bagg</td>
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<td>1/24/2016</td>
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<tr>
<td>Pathology Myeloma Highgrade Lymphomas</td>
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<td>Dave Frank</td>
<td>2</td>
<td>1/24/2016</td>
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<tr>
<td>A Patient's Journey With Melanoma</td>
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<td>Lynn Schuchter</td>
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<td>1/23/2011</td>
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<tr>
<td>Pathology Small B-Cell Lymphomas</td>
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<td>Dave Frank</td>
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<td>1/23/2014</td>
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<tr>
<td>Pathology Lymph Node Morphology Overview of Lymphoma</td>
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<td>Dave Frank</td>
<td>2</td>
<td>1/23/2014</td>
<td></td>
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<tr>
<td>Pharmacology Antineoplastic Agents II</td>
<td></td>
<td>Roger Cohen</td>
<td>2</td>
<td>1/23/2014</td>
<td></td>
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<tr>
<td>Pharmacology Antineoplastic Agents I</td>
<td></td>
<td>Roger Cohen</td>
<td>1</td>
<td>1/23/2014</td>
<td></td>
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</tbody>
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Front-end Structure
Basic Transmission Information

- 16:9 video is 640 x 360 @ 350Kbps with frame rate of 15fps. Audio is 48kbps, 44kHz.
- 4:3 video is 400 x 300 @ 350Kbps with frame rate of 15fps. Audio is 48kbps, 44kHz.
- Based on a 1 hour capture and stream:
  About 200-300MB. Also depends on the amount of slides captured
- At the encoding rate of 350Kbps, an average of 3mb per minute
Classroom Technology

• 75% of Lecture Halls are true 1080 digital spaces
• Mediasite and Video Conferencing
• Smart & Audience Responses Technology
• Future: Collaboration & Touch Screen Displays
Video Production Services
MEDIA TECHNOLOGY & PRODUCTION

COMPLETED COURSERA COURSES FY2013

Cardiac Arrest, Hypothermia, and Resuscitation Science
May 20th 2013
Benjamin Abella
Assistant Professor of Emergency Medicine
Perelman School of Medicine

35,857 Enrolled

Neuroethics
September 2013
Jonathan D. Moreno
Professor

26,187 Enrolled

“Pay Attention!!” ADHD Through the Lifespan
Mar 18th 2013
Anthony L. Roestain
Professor of Psychiatry and Pediatrics
Perelman School of Medicine

22,029 Enrolled

Health Policy and the Affordable Care Act
Mar 25th 2013
Ezekiel J. Emanuel
Evan M. Jarvi and Robert H. Jaffe University Professor
Department of Medical Ethics and Health Policy

17,517 Enrolled

RECORD BREAKING ENROLLMENT & COMPLETION NUMBERS

MORE THAN 331,000 STUDENTS WORLDWIDE ENROLLED IN PENN MED COURSES

Experimental Genome Science
Date to be announced.
John Hogenesch

1,023 Enrolled

Fundamentals of Pharmacology
Date to be announced
Emma Anne Maughar
Associate Professor of Medicine and Pharmacology

36,299 Enrolled

Vaccines
Date to be announced
Paul A. Offit
Professor

10,295 Enrolled

Basic Behavioral Neurology
Date to be announced
Ray Hamilton
Assistant Professor of Psychology
Perelman School of Medicine

73,289 Enrolled
The Fiber Control Room Management Pods allow a manager to be located in each control room with the ability to control technology devices and route content (video, audio and data) within the Penn Medicine campus.
The Fiber Controlled Technology Spaces allow technicians to control and route content (video, audio and data) among the fiber controlled technology spaces and the fiber control room management pods.
MT&P FIBER MANAGEMENT CORE

In addition to controlling and routing content (video, audio and data) among the fiber controlled technology spaces and the fiber control room management pods, MT&P can externally broadcast content from these locations. As part of a contingency plan, MT&P has the ability to reassign technology devices to other fiber control technology spaces.

Legend

= Control Room
= Control Room
--- = Fiber Connection
••• = Control Only

Devices Include:
Mediasite Recorders
Videoconferencing Codecs
Penn Video Network
Computer Data
Any external content from fiber management core
Farming concept for Mediasite

Multiple Sites

- Conference Room 1
- Conference Room 2
- Conference Room 3
- Rubinstein Auditorium
- Classroom A
- Classroom B

Head End
Farming concept for Video Conferencing

Head End

Multiple Sites

Conference Room 1
Conference Room 2
Conference Room 3
Conference Room 4
Conference Room 5
Conference Room 6
Micro Tile Wall & Digital Signage
• 180 Tiles, Size 27’W X 9’H X 16” D, Weight 6,600 lbs (3.3 tons)
• Current 6040 X 3034 resolution using 6 ECU’s and one Vista Spyder
• Upgrade to 9300 X 3132 resolution, 12 ECU’s, and 2 Vista Spyders
• Max resolution 14,400x4860
Digital Signage
• Help Desk support - GVE & AMX controls
• Farming out VC and Mediasite
• Support multiple conference rooms from control rooms pods