

2009 Course Catalog

Aperio University was developed to provide the fundamental and essential training that you require and expect from the world leader in Digital Pathology systems and services. Aperio University is your learning partner to help you leverage your ScanScope and software investment.

Our modern training facility is located in our corporate office in Vista, CA, just a few miles from the Pacific Ocean, the world famous San Diego Zoo, Wild Animal Park and SeaWorld.

Come join us in our learning adventure.



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Course Offerings:

Instructor-led courses are held at Aperio's corporate training facility in Vista, Ca. Training tuition is included for two individuals with a ScanScope purchase. Attendees are responsible for all travel expenses to Vista, CA. Some instructor-led courses may be conducted remotely via web conference or at a customer site. Web conferencing or site training constitutes additional charges with a Professional Services agreement.

Instructor-led User Training Package Included with ScanScope Purchase:



New Site User Training Package		3 days
Course #	Course Title	Hours
TRN-0002	ScanScope Overview	0.5
TRN-0004	ScanScope User Basics	3.0
TRN-0005	ScanScope Advanced Scanning	2.0
TRN-0006	Image Viewing with ImageScope	1.0
TRN-0018	Image Viewing with WebScope	0.5
TRN-0009	Spectrum Plus Overview	0.5
TRN-0016	Spectrum Plus User Basics	1.0
TRN-0010	Spectrum Plus Administration	4.0
TRN-0011	Spectrum Plus Data Management	1.0
TRN-0012	Image Analysis 101	4.0
MAN-0037	Digital Slide Studio	0.5
TRN-0008	TelePath Live and Digital Slide Conferencing	1.0
TRN-0013	TMA Lab*	1.0
TRN-0017	Genie*	2.0
MAN-0099	Digital IHC Pathologist Training *	2.0

* Training included with purchase or available upon request during day 3.

List of all courses:

ScanScope

Course #	Course Title	Hours
TRN-0002	ScanScope Overview	0.5
TRN-0004	ScanScope User Basics	3.0
TRN-0005	ScanScope Advanced Scanning	2.0

Image Viewing

Course #	Course Title	Hours
TRN-0006	Image Viewing with ImageScope (delivered with TRN-0018)	1.0
TRN-0018	Image Viewing With WebScope (delivered with TRN-0006)	0.5
MAN-0095	Image Quality	0.5
MAN-0037	Digital Slide Studio	0.5
TRN-0008	TelePath Live and Digital Slide Conferencing	1.0

Spectrum Plus

Course #	Course Title	Hours
TRN-0009	Spectrum Plus Overview	0.5
TRN-0016	Spectrum Plus User Basics	1.0
TRN-0011	Spectrum Plus Data Management	1.0
TRN-0010	Spectrum Administration	1.0
MAN-0044	Spectrum Compliance Training	1.0
MAN-0109	Spectrum Education	1.0

TMALab

Course #	Course Title	Hours
TRN-0013	TMALab	1.0

Image Analysis

Course #	Course Title	Hours
TRN-0012	Image Analysis 101	4.0
TRN-0014	Image Analysis Basic Tuning	2.0
TRN-0017	Genie	2.0

Digital IHC

Course #	Course Title	Hours
MAN-0099	Digital IHC Pathologist Training	2.0
MAN-0099	Digital IHC Operator Training	2.0
MAN-0099	IHC Image Analysis & Validation Setup Training	2.0

Pathologist Software Training

Course #	Course Title	Hours
TRN-0001	Spectrum Plus and Image Viewing for the Pathologist's Workflow	2.0

Course Descriptions:

ScanScope Overview Course: #TRN-0002



Overview

Learn about the hardware and software components of our ScanScope® scanners and why our patented (line) scanning method has set a new standard for scanning performance and image quality.

Who Should Attend

This course is designed for new users.

Prerequisites

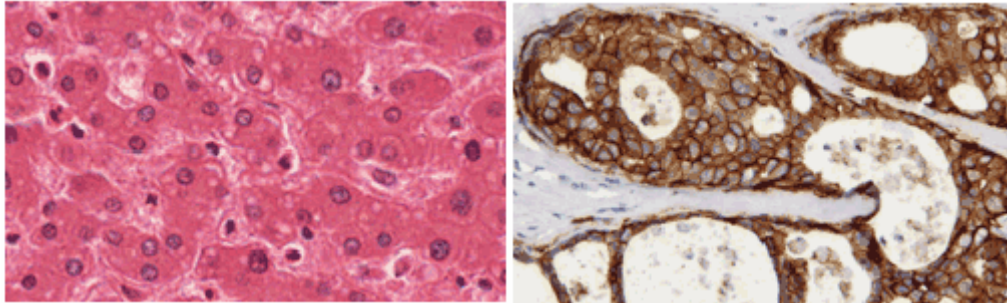
N/A

Course Length

0.5 hrs.

Topics Covered

- ScanScope – What Is it?
 - ScanScope Models and applications
- Hardware and System Components
 - ScanScope PC
 - ScanScope Scanner
 - Scanner Components
 - ScanScope Connections
 - Typical System Layout
- Software
 - ScanScope Console
 - Associated User Applications
 - Aperio Service Manager

ScanScope User Basics Course: #TRN-0004**Overview**

Learn to navigate the ScanScope console software to scan glass slides to create seamless true color digital slide images. Perform manual and automatic scanning and light maintenance of your ScanScope.

Who Should Attend

This course is designed for new users.

Prerequisites

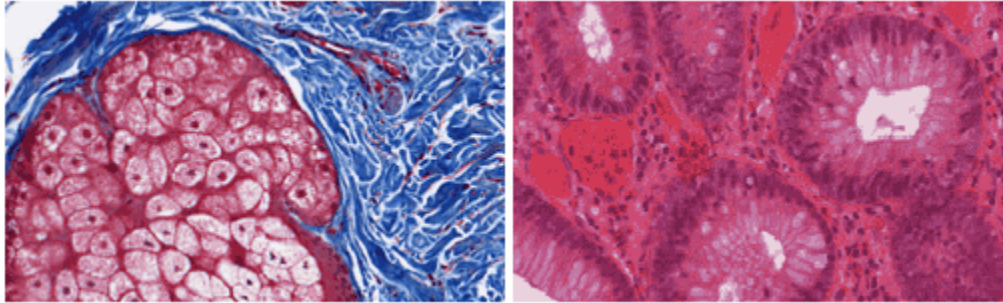
ScanScope Overview, TRN-0002 (recommended)

Course Length

3.0 hrs.

Topics Covered

- Describe the Recommended Operating Environment
- Describe ScanScope Components
- ScanScope Initialization
- Clean/Inspect Slides Before Scanning
- Describe Scanning Steps
- Access/Use ScanScope Console
 - View Slide/Rack Status
 - Access/Use of Slide Operations Menu, Main Menu
- Perform Manual Scanning using Console
 - Access/Use Start Tab
 - Access/Use Scan Area Tab
 - Access/Use Focus Tab
 - Access/Use Calibrate Tab
 - Access/Use Scan Tab
- Perform Snapshot
- Perform Automatic Scanning
- Perform Light Maintenance

ScanScope Advanced Scanning Course: #TRN-0005**Overview**

Build on your ScanScope user knowledge and learn to adjust specific scan area and focus point parameters to obtain optimal results. Learn additional light maintenance functions.

Who Should Attend

This course is designed for new users.

Prerequisites

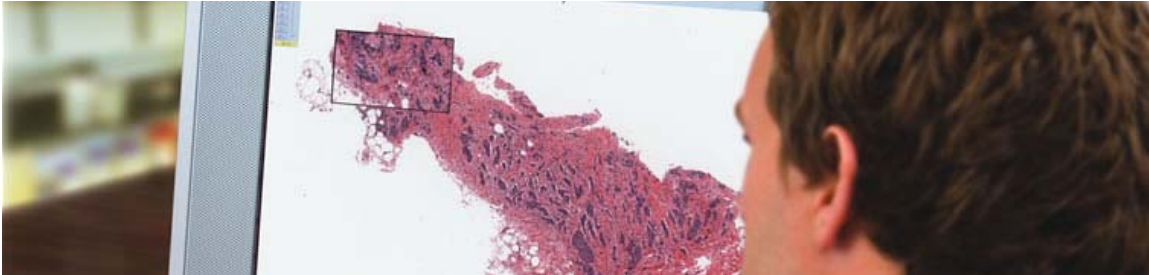
ScanScope Overview, TRN-0002 (recommended)
ScanScope User Basics, TRN-0004 (recommended)

Course Length

2.0 hrs.

Topics Covered

- Scan Area Adjustments
 - Wide vs. Narrow Stripe
 - Focus – Interstripe vs. Pre-focus
 - CWS Files
- Focus Adjustments
 - Manual Focus Point Placement
 - Focusing with Live Window
 - Focus Offset
- Calibration Adjustments
 - Default Stripe
- Configuration
 - Motion Properties
 - ScanScope Properties
- Parameter Sets
- Maintenance
 - Presnap
 - Camera Gains

Image Viewing (ImageScope and WebScope) Course: #TRN 0006, TRN 0018**Overview**

Learn to view, navigate and annotate digital images using our ImageScope software.

Who Should Attend

This course is designed for new users.

Prerequisites

N/A

Course Length

1.5 hrs.

Topics Covered

- ImageScope
 - Components (Tools/Menus)
 - Basic Features
 - Pan
 - Zoom
 - Rotation
 - Viewing Multiple images simultaneously
 - Annotate images
 - Pens
 - Shapes
 - Ruler
 - Image Analysis
 - Report Images
 - Image Capture
 - Save Images/Snapshots
 - Extract regions
 - Image Quality Overview
- WebScope
 - Different Views and Image Menu/Tools
 - Annotations and Analysis

Image Quality (IQ) Course: #MAN-0095**Overview**

The Image Quality Enhancement module for ImageScope is a separately licensed feature of ImageScope that provides advanced viewing options based on the digital slide's stains. Aperio Image Quality (IQ) technology gives pathologists and other scientists who view digital slides the ability to customize the view of those slides to boost productivity and visual clarity by digitally adjusting the stain colors, viewing the individual stain images, and/or re-mixing the stains on the fly while they navigate the image. IQ allows you to choose for yourself what view of the digital slide gives you the best results and makes it easier for you to identify the features of the slide you are most interested in. This course is available through web-conferencing.

Who Should Attend

This course is designed for Users.

Prerequisites

Product purchase required.

ImageScope must be installed on each workstation on which users will be viewing digital slides.

Image Viewing with ImageScope, TRN-0006 (recommended)

Course Length

0.5 hrs.

Topics Covered

- IQ features
- How IQ works
 - Stains
 - Stain sets
- Opening an H&E Digital Slide in ImageScope
- Viewing individual stains
- Measuring stains
- Defining the stain set
- Identifying stains
- Re-mixing stains
- Re-coloring stains

Digital Slide Studio Course: #MAN-0037**Overview**

Learn to crop, scale, adjust, filter, and transform digital images using our Digital Slide Studio software.

Who Should Attend

This course is designed for new users.

Prerequisites

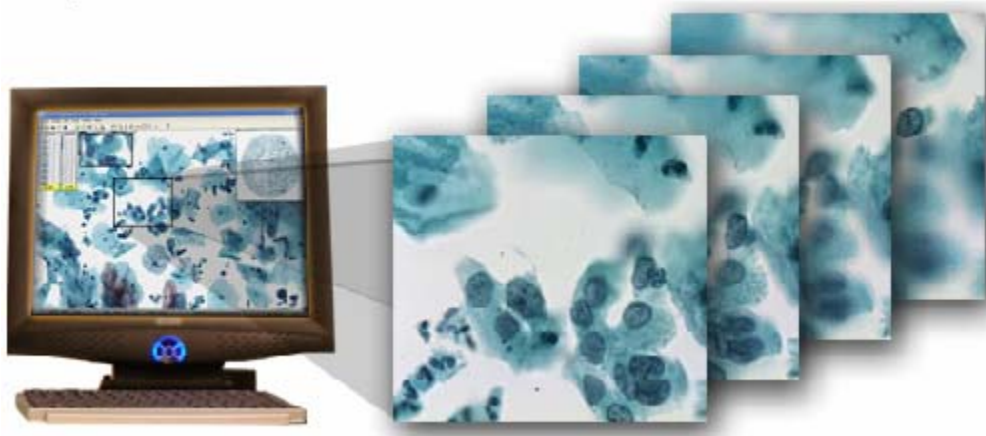
Image Viewing with ImageScope, TRN-0006 (recommended)

Course Length

0.5 hrs.

Topics Covered

- Scale and crop digital slides
- Rotate digital slides, labels, and macro images
- Convert digital slides from one file format to another using various compression methods
- Generate a thumbnail image with custom dimensions
- Batch convert a group of digital slides to a new file format or compression type
- Adjust digital slides (for example, adjust color balance or contrast and brightness)
- Apply a convolution filter to a digital slide

TelePath Live and Digital Slide Conferencing Course: #TRN-0008**Overview**

Learn how to use our ImageScope software to conduct dynamic remote telepathology sessions and Digital Slide Conferences. Enable remote users with live video of digital slides with the ability to move to any location and focus. Learn how to create three-dimensional images to allow remote users to move up and down through focal planes of slide specimens. Learn how to conduct a Digital Slide Conference to share digital slide images with remote users allowing them to see your annotations and create their own.

Who Should Attend

This course is designed for new users.

Prerequisites

Image Viewing with ImageScope, TRN-0006 (recommended)

Course Length

1.0 hrs.

Topics Covered

- Define and Describe uses for TelePath Live
- Describe the difference between Live video & Z-Stack
- Configure and Connect
- View Live and Capture Z-Stacks
- Define and Describe uses for a Digital Slide Conference
- Initiate, configure and conduct Digital Slide Conference
- Join a Digital Slide Conference

Spectrum Plus Overview Course: #TRN-0009



Overview

Learn about our web-based digital pathology information management software, Spectrum Plus, developed for digital slide viewing and conferencing, workflow management, data archival, intelligent data retrieval, and image analysis.

Who Should Attend

This course is designed for new users.

Prerequisites

N/A

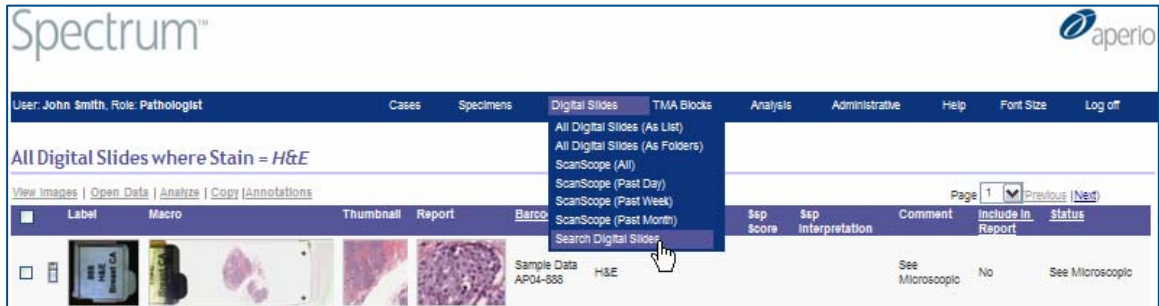
Course Length

0.5 hrs.

Topics Covered

- Applications and Workflow
- Data and Image Management
- Intelligent Data Retrieval
- Security and Data Groups
- Image Viewing (ImageScope)
 - Viewing Images
 - TelePath Live
 - Digital Slide Conferencing
- Connectivity and Interfacing
- Spectrum Plus Add-ons
 - Reports
 - TMA Lab
 - Image Analysis

Spectrum Plus User Basics Course: #TRN-0016



Overview

Learn how to use our web-based digital pathology information management software, Spectrum Plus, to efficiently store and organize digital slide images and associated data. Learn to quickly access images and data to review or edit and learn how to generate reports.

Who Should Attend

This course is designed for any basic user.

Prerequisites

Spectrum Plus Overview, TRN-0009 (recommended)

Course Length

1.0 hrs.

Topics Covered

- Spectrum Login
- View and Change My Settings
- Access Menus and Toolbars
- Access Cases/Projects, Specimens, Slides/Images
- Search Features
- Generate Reports

Spectrum Plus Data Management Course: #TRN-0011**Overview**

Learn how to use our web-based digital pathology information management software, Spectrum Plus, to efficiently store and organize digital slide images and associated data. Learn to quickly access images and data to review or edit and learn how to generate reports.

Who Should Attend

This course is designed for super users/supervisors who want to use our Digital Pathology Information Management System, Spectrum Plus, to manage digital slide images and associated data.

Prerequisites

Spectrum Plus Overview, TRN-0009 (recommended)
Spectrum Plus User Basics, TRN-0016 (recommended)

Course Length

1.0 hrs.

Topics Covered

- Workflow
- Slide Data
- Setting Scan Data Group
- Building Data Hierarchy
- Adding Slides/Images Manually
- Batch Analysis
- Compliance
- Exporting Data
- Copying Images

Spectrum Plus Administration Course: #TRN-0010**Overview**

Learn to perform administrative functions and to custom configure our web-based digital pathology information management software, Spectrum Plus. Configure Spectrum Plus to match your organization's workflow to make slide image/data management easy and to provide secure, remote, instant access to multiple user groups.

Who Should Attend

This course is designed for system administrators.

Prerequisites

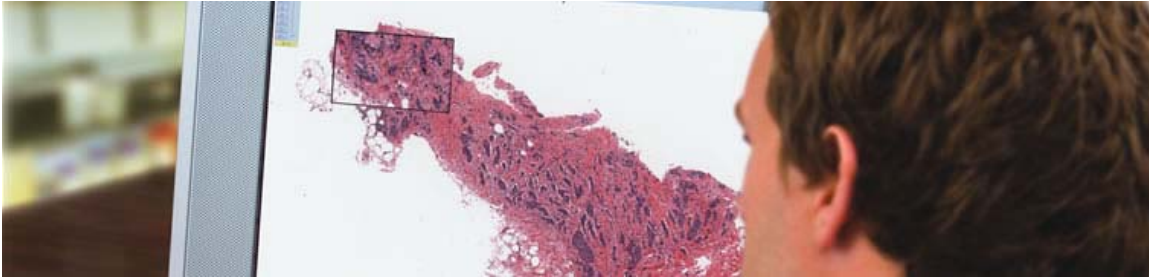
Spectrum Plus Overview, TRN-0009 (recommended)
Spectrum Plus User Basics, TRN-0016 (recommended)
Spectrum Plus Data Management, TRN-0011 (recommended)

Course Length

4.0 hrs.

Topics Covered

- Open Service Manager and check services
- Set Spectrum Plus configuration
- Login to Spectrum Plus and set system settings
- Create Data Groups
- Create Users and Roles
- Edit Data Tables
- Add Stains
- Add Body Sites
- Create Customers
- Add Report Comments
- Slide Specific Processing

Spectrum Compliance Training Course: #MAN-0044**Overview**

Spectrum Plus contains several features that assist your organization in complying with regulatory requirements such as FDA 21 CFR Part 11, HIPAA, and GLP. The optional Spectrum Compliance Module contains additional features that address specific regulatory requirements. The responsibility of regulatory compliance rests with the individual practice, hospital, reference lab, or clinical trial, and is a business problem involving policies, procedures, training, etc. Although using the Spectrum Compliance module will not in itself make your site compliant with regulatory requirements, it can be an important part of your regulatory compliance process.

Who Should Attend

This course is designed for individuals responsible for regulatory compliance at their workplace.

Prerequisites

Product purchase required.

Spectrum Plus Overview, TRN-0009 (recommended)

Spectrum Plus User Basics, TRN-0016 (recommended)

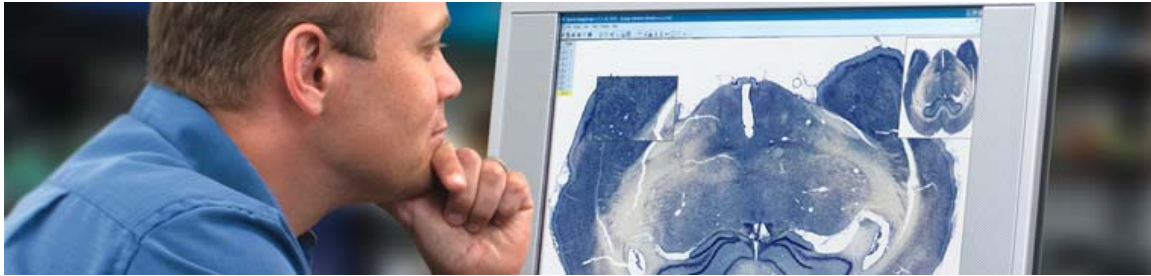
Spectrum Plus Administration, TRN-0010 (recommended)

Course Length

2.0 hrs.

Topics Covered

- Spectrum User Roles
 - Spectrum Global Administrator
 - Defining User Roles
 - Setting Role Permissions for Data Table Fields and Application Commands
 - Multiple User Roles for a Single Operator
 - Allowing Viewing of Digital Slide Label Images
 - ScanScope Operator Scanning Permissions
 - ScanScope Console Login
- Spectrum Compliance Module
 - Installing Spectrum Compliance
 - Enabling Data Auditing and Electronic Signatures
 - Configuring and Viewing an Audit Report
 - Creating a formatted report
 - Using e-signature with 'Status' fields

Spectrum Education Course: Man-0109**Overview**

Spectrum customers who are educators have different needs than clinical and research customers. Release 10 offers Spectrum Education, an optional product configured specifically for education use. By eliminating many of the inefficiencies associated with maintaining traditional glass slide sets, Spectrum Education provides your students with access to digital slides anywhere, any time. Spectrum Education also provides the ability to create a comprehensive, interactive, virtual classroom, allowing you to organize educational content into courses with individual lessons. This course is available through web-conferencing.

Who Should Attend

This course is designed and tailored specifically for the educator.

Prerequisites

Product purchase required.

Spectrum Plus Overview, TRN-0009 (recommended)

Spectrum Plus User Basics, TRN-0016 (recommended)

Spectrum Plus Data Management TRN-0011 (recommended)

Spectrum Plus Administration, TRN-0010 (recommended)

Course Length

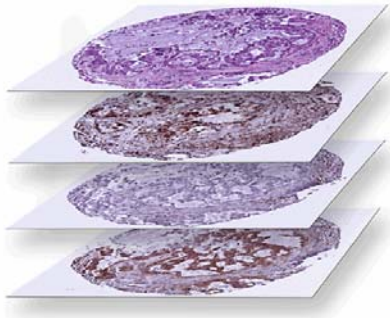
1.0 hrs.

Topics Covered

- Spectrum Education Features
 - Classroom System
 - Web-Based Viewing
- Spectrum Education Installation Overview
- Spectrum Education Installation

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TMALab Course: #TRN-0013



Overview

Learn how to store, analyze, score, and share high-resolution digital tissue micro array (TMA) slide and data using our web-based, cross-platform TMALab™ software. Learn how TMALab can decrease your research time by automating cumbersome manual tasks across hundreds of tissue cores, and provide secure, remote, instant access to multiple pathologists.

Who Should Attend

This course is designed for users interested in or currently working with Tissue Micro Arrays.

Prerequisites

Image Viewing with ImageScope, TRN-0006 (recommended)
Spectrum Plus User Basics, TRN-0016 (recommended)
Spectrum Plus Data Management, TRN-0011 (recommended)
Spectrum Plus Administration, TRN-0010 (recommended)
Image Analysis 101, TRN-0012 (recommended)

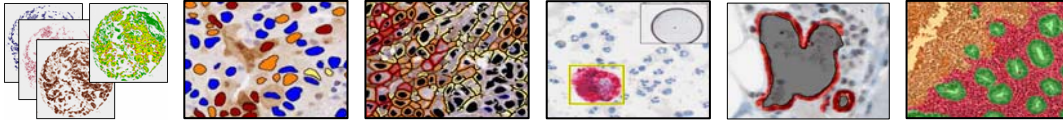
Course Length

1.0 hrs.

Topics Covered

- Describe Function/Application of TMA Lab
- Create TMA Block Templates
- Segment TMA Slides
- View TMA Spots
- Customizing TMALab Data Tables
- Associate TMA Cores to Specimens
- Analyze TMA Spots
- Export Metadata and Images

Image Analysis 101 Course: #TRN-0012



Overview

Learn about our image analysis tools, their applications and how to use them through an examination of each tool and hands-on exercises.

Who Should Attend

This course is designed for any user who wants to use our Image Analysis tools.

Prerequisites

Spectrum Plus Overview, TRN-0009 (recommended)
Spectrum Plus User Basics, TRN-0016 (recommended)
Image Viewing with ImageScope, TRN-0006 (recommended)

Course Length

4.0 hrs.

Topics Covered

- Overview of all Image Analysis Tools (purpose, input/output parameters, how to use)
 - Area Quantification (Positive Pixel Count, Color Deconvolution, Colocalization)
 - Cell Quantification (Nuclear, Membrane)
 - Rare Event Detection (Micromet)
 - Microvessel Analysis
 - Genie (Histology Pattern Recognition)
- Installation
- Creating and using Macros and Classifiers
- Managing Macros and Classifiers in Spectrum Plus
- Batch Processing in Spectrum Plus
- Exporting and analyzing Image Analysis Results (Excel)
- Scalable Processing Architecture (Load Balancing)
- Use Image Analysis Tools on Examples (hands-on)

Image Analysis Basic Tuning Course: #TRN-0014**Overview**

Learn about our Image Analysis tools parameters and how to tune them for specific applications.

Who Should Attend

This course is designed for users who want to tune our Image Analysis tools for specific applications.

Prerequisites

Spectrum Plus Data Management, TRN-0011 (recommended)

Image Viewing with ImageScope, TRN-0006 (recommended)

Image Analysis 101, TRN-0012 (recommended)

General Understanding of Image Analysis

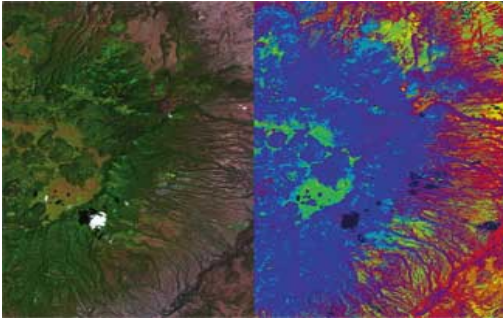
Course Length

2.0 hrs.

Topics Covered

- Tuning Aperio's Image Analysis Tools
 - Area Quantification (Positive Pixel Count, Color Deconvolution, Colocalization)
 - Cell Quantification (Nuclear, Membrane)
 - Rare Event Detection (Micromet)
 - Microvessel Analysis
 - Genie (Histology Pattern Recognition)
- Image Analysis Tuning on Examples (hands-on)

Genie Training Course: #MAN-0098



Overview

Genie is an interactive tool that “learns” from analyzing training slides, and then develops algorithms for locating and automatically annotating regions of interest in a vast number of digital slides.

Who Should Attend

The typical user is a pathologist or researcher who understands the structures, regions of interest and problems that the Genie algorithms are created to identify or resolve.

Prerequisites

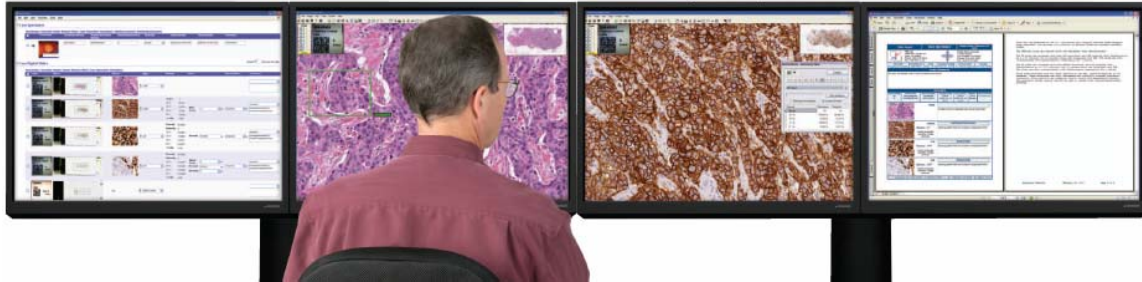
Product purchase required.
Spectrum Plus User Basics, TRN-0016 (recommended)
Spectrum Plus Data Management, TRN-0011 (recommended)
Image Analysis 101, TRN-0012 (optional)

Course Length

2.0 hrs.

Topics Covered

- Define Genie Terminology
- Describe Genie’s Origin/Background and Benefits.
- Describe Genie Development Workflow
- Create Genie Project
- Create Genie Training Set
- Add Slides to Training Set
- Create Classes
- Annotate Images
- Generate Montage
- Create a Classifier
- Test Classifier and Adjust
- Use Classifier
- Export/Import Classifier

Digital IHC Pathologist Training Course: #MAN-0099**Overview**

Learn about our Digital Pathology Information Management System, Spectrum Plus, for Immunohistochemistry (IHC) including simple step-by-step instructions on how to review IHC cases. Course includes basic use of Spectrum Plus, Image Viewing, Image Analysis and Reporting.

Who Should Attend

This course is designed for pathologists who want to use our Digital Pathology Information Management System, Spectrum Plus, for reviewing Immunohistochemistry cases (with and without quantitative image analysis).

Prerequisites

N/A

Course Length

2.0 hrs.

Topics Covered

- Personal Settings (Spectrum Plus, ImageScope)
- Login and logout
- Case management (work lists, open cases, change status, advance to next case)
- View cases, specimens and slide information
- View multiple slides synchronized side-by-side, pan and zoom, view separate stains, annotate, generate report images
- Run quantitative image analysis
- Automated data flow from analysis to reports (image analysis results, manual scores, automated score and interpretation calculators)
- Enter data accurately and quickly (canned comments)
- Create professional reports with slide images
- Aperio certification (demonstrate your skills)

Digital IHC Operator Training Course: #MAN-0099



Overview

Learn slide scanning parameters for Immunohistochemistry (IHC) and quality control. Learn slide preparation tips for optimum scanning results of IHC slides.

Who Should Attend

This course is designed for operators who want to scan Immunohistochemistry (IHC) slides on an Aperio ScanScope system.

Prerequisites

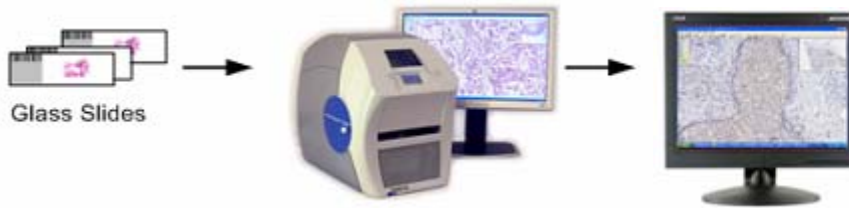
ScanScope Advanced Scanning, TRN-0005 (recommended)

Course Length

2.0 hrs.

Topics Covered

- Optimize slide preparation
 - Tissue Preparation
 - Mechanics
 - Staining
- Critical components of an imaging system
 - Imaging Technology
 - Calibration
 - Compression
 - Resolution
 - Image Filters
- IHC Scanning Parameter Set
- Quality Control
 - Slide Preparation
 - Slide Scanning
- Scanning IHC slides (hands-on)
- Aperio certification (demonstrate your skills)

Digital IHC & Validation Setup Training Course: #MAN-0099**Overview**

Learn how to tune our IHC Image Analysis for different reagents/kits (e.g. Dako, Ventana) and how to correlate the results with other test methods (e.g. Manual Microscopy, FISH, CISH). Learn how to use our Digital Pathology Information Management System, Spectrum Plus, for conducting performance validation studies.

Who Should Attend

This course is designed for super users/supervisors who want to tune our IHC Image Analysis or use our Digital Pathology Information Management Systems, Spectrum Plus, to conduct performance validation studies.

Prerequisites

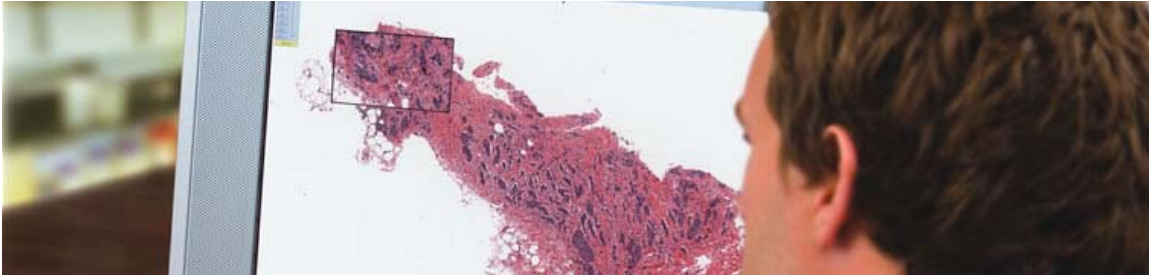
Spectrum Plus Data Management, TRN-0011 (recommended)
Image Analysis 101, TRN-0012 (optional)

Course Length

2.0 hrs.

Topics Covered

- IHC Image Analysis Tuning
 - Algorithm Installation
 - Identify and gather Training Data Set
 - Establish Scoring Standard (e.g. Manual Microscopy, Panel of Pathologists, FISH, CISH)
 - Organize Training Data Set in Spectrum Plus
 - Prepare Slides for Image Analysis (identify tumor regions, provide scoring standard)
 - Automatic Training Procedure
 - Create final Macro
- Performance Validation Study
 - Study Design Examples
 - Identify and gather Test Data Set
 - Establish Scores for Comparison Method (e.g. Manual Microscopy, Panel of Pathologists, FISH, CISH)
 - Organize Test Data Set in Spectrum Plus
 - Establish Scores for new Digital IHC Method (Reading slides on a computer monitor, IHC Image Analysis)
 - Export Data (Excel)
 - Statistical Analysis Examples

Spectrum Plus and Image Viewing for Pathologists Workflow Kit Course: #TRN-0001**Overview**

Training specifically designed for the Pathologist's Workflow. Learn exactly what you need to know to use Spectrum Plus and image viewing quickly and efficiently. With the "Pathologists Workflow Kit," you receive a CD with training materials and laminated step-by-step Quick Guides for reference. This course is available through web conferencing.

Who Should Attend

Pathologists

Prerequisites

Spectrum Overview TRN-0007 (recommended)
Spectrum Plus Data Management, TRN-0011 (recommended)

Course Length

1.0 hr.

Topics Covered

- Spectrum Plus General Information
- Viewing Cases or Projects
 - Login
 - Search/List Cases or Projects
 - Open Case or Project
 - Viewing Case or Project Slides
- Image Analysis of Slides
- Additional Tasks
 - Copying Images
 - Exporting Data
 - Generating Reports
- WebScope
 - Image Menu/Tools and Annotations
- ImageScope
 - Components (Tools/Menus)
 - Basic Features
 - Viewing Multiple images simultaneously
 - Annotate images
 - Image Analysis
 - Report Images
 - Image Capture
 - Save Images/Snapshots
 - Extract regions
 - Image Quality