

Digital Image Hub Overview

Descriptions of the features present in the Digital Image Hub
Hosted by the Digital Histology Shared Resource / VUMC

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Logging In to the Digital Image Hub



Digital Image Hub

Username

Password

Login

For further information, please contact customersupport@slidepath.com

Username

Enter the username you requested on the DIH Account Request Form

Password

Enter your password. If this is your first time logging in, or your password has recently been reset, enter 1234.

Do Not Click This Email Address!

This email goes to Dublin, Ireland
If you require assistance, email:
digital.histology@vanderbilt.edu

Browse Mode

This is the view when you initially log in








Leica
BIOSYSTEMS




About Contact My Profile Logout

Welcome

Location: Browse > Root > PathLab (Digital Histology Shared Resource) > PathLab

Browse Search Conference

<input type="checkbox"/>	Link	Name	Alt Name	Info
<input type="checkbox"/>		Consultation Slides		
<input type="checkbox"/>		Cytology		
<input type="checkbox"/>		Legal		
<input type="checkbox"/>		Unknowns Conference Series		

Folder Icon
Click to enter that folder

Conference Tool
Click to launch the Conference tool (If activated)

CSV Export

PDF Export

Send to Viewer











Folder View



[About](#) [Contact](#) [My Profile](#) [Logout](#)

Welcome

Location: [Browse](#) > [Root](#) > [PathLab \(Digital Histology Shared Resource\)](#) > [PathLab](#) > [Unknowns Conference Series](#) >

<input type="checkbox"/>	Link	Name	Alt Name	Info
<input type="checkbox"/>	 01	01.scn		
<input type="checkbox"/>	 02	02.scn		
<input type="checkbox"/>	 03	03.scn		
<input type="checkbox"/>	 04a	04a.scn		
<input type="checkbox"/>	 04b	04b.scn		
<input type="checkbox"/>	 05	05.scn		
<input type="checkbox"/>	 06	06.scn		
<input type="checkbox"/>	 07	07.scn		

Slide Thumbnail
Click to open that slide

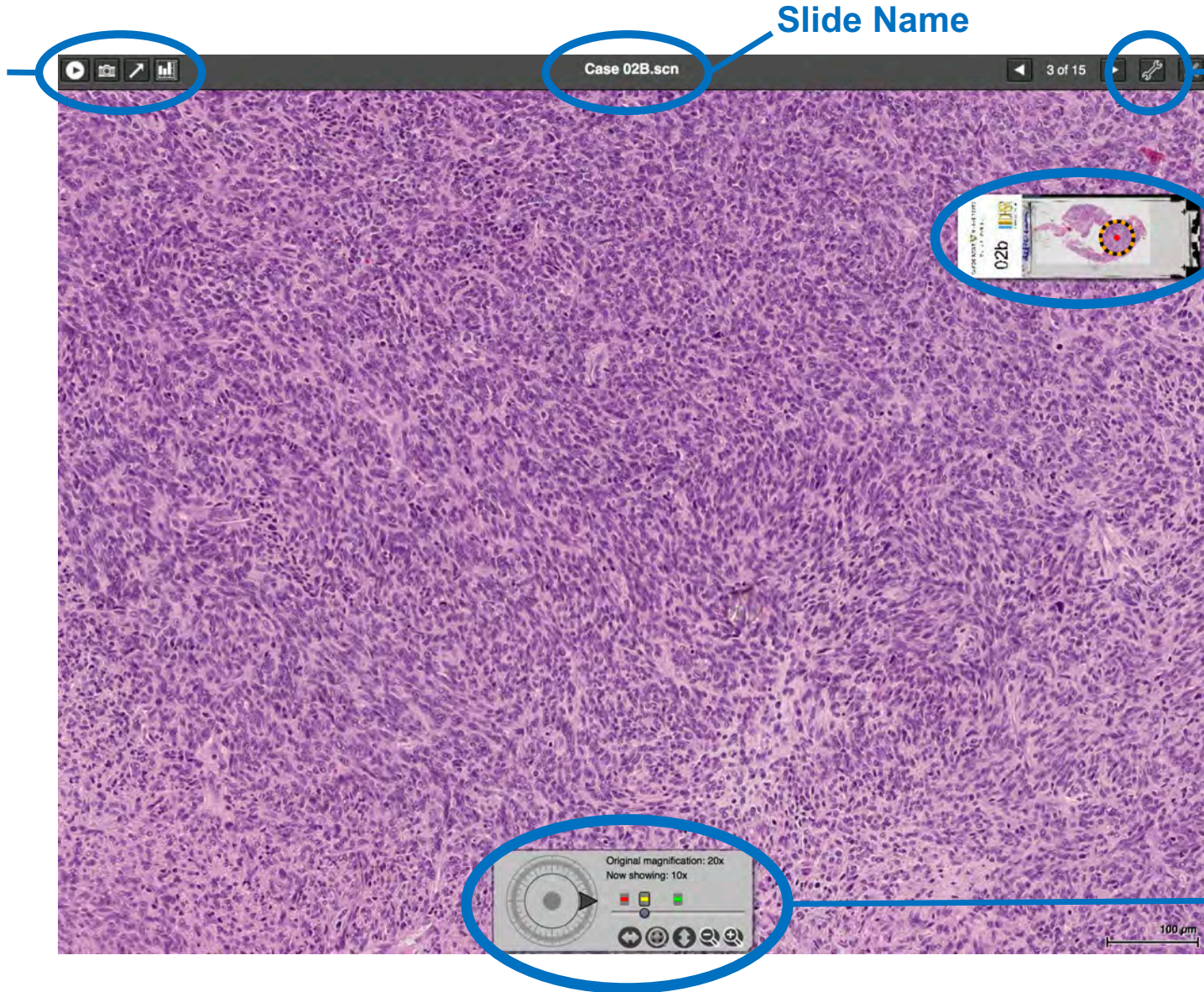
Info
Click this to view the meta data associated with this slide

Checkbox
Click to add slide to a list – use on one or more slides in conjunction with the conference tool, export to CSV, PDF or send to viewer

Slide View

Quick Functions

- Open/Close Panel
- Take Snapshot
- Add Annotation
- Image Analysis



Slide Name

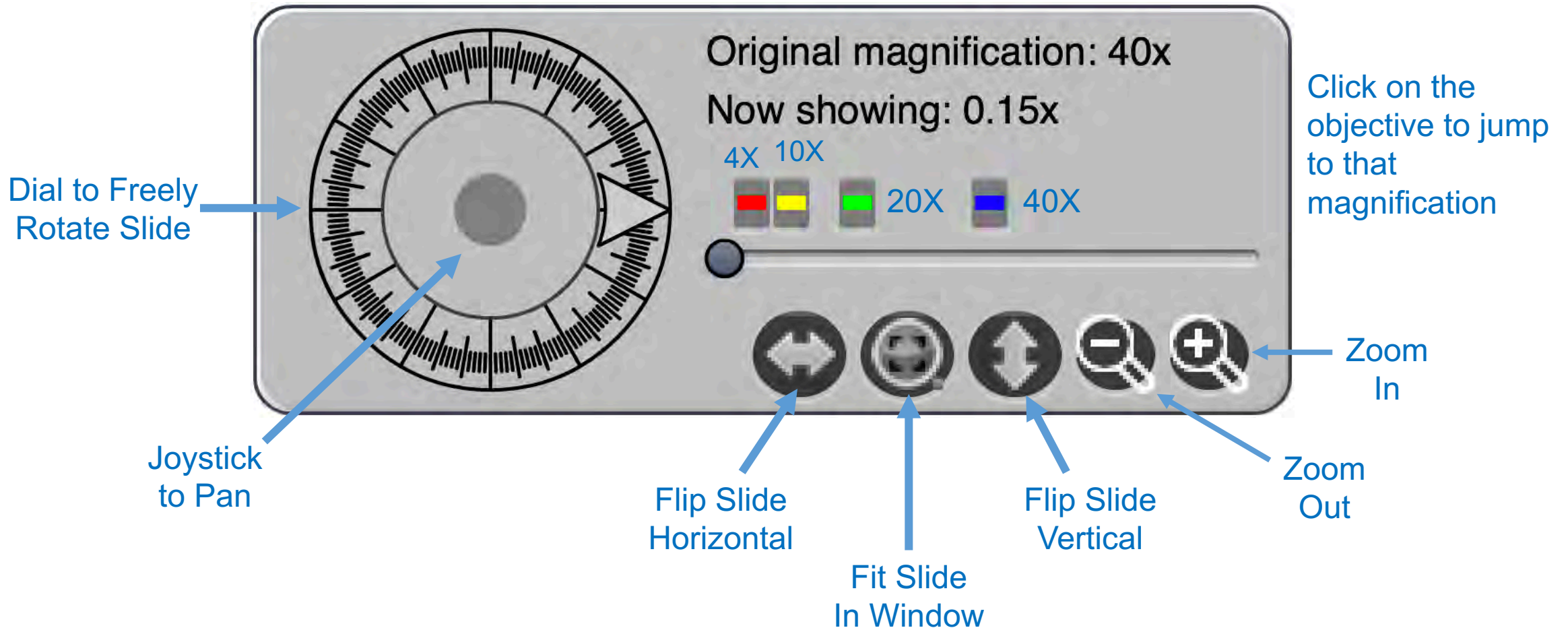
Display Settings

Image overview

Click anywhere inside to immediately navigate to that spot

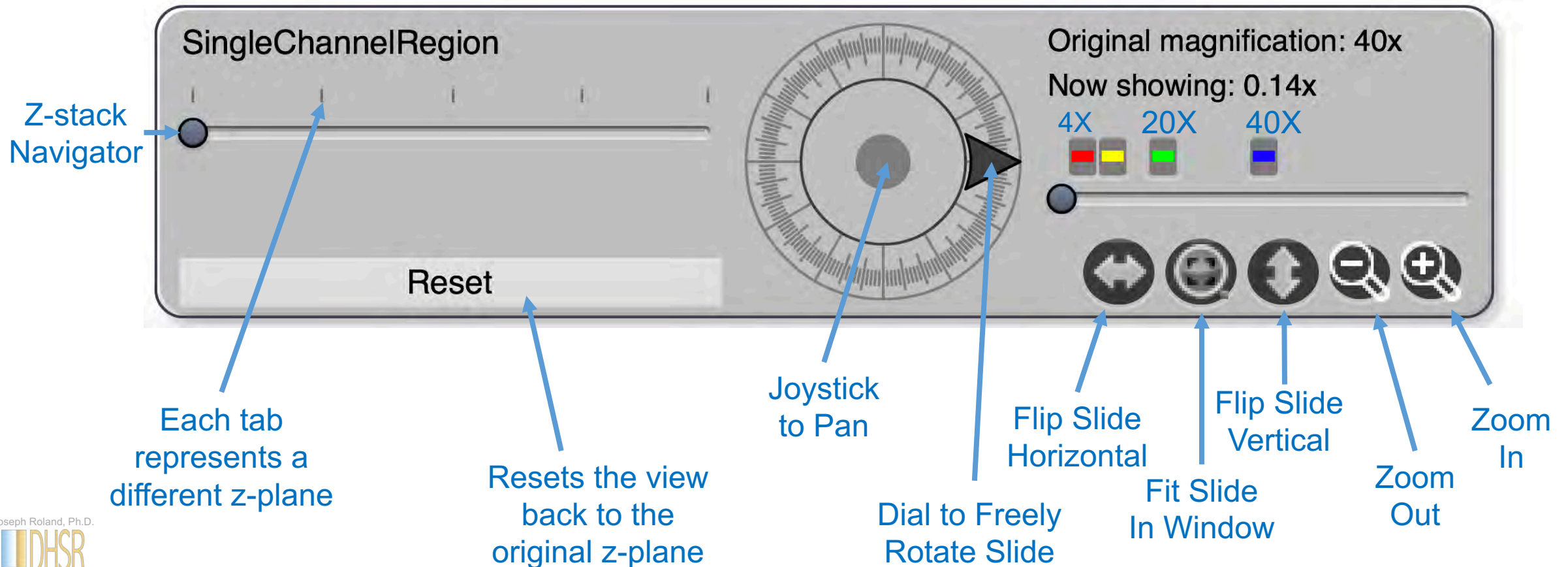
Navigation Controls
Rotate, flip, zoom, pan

Navigation Controls

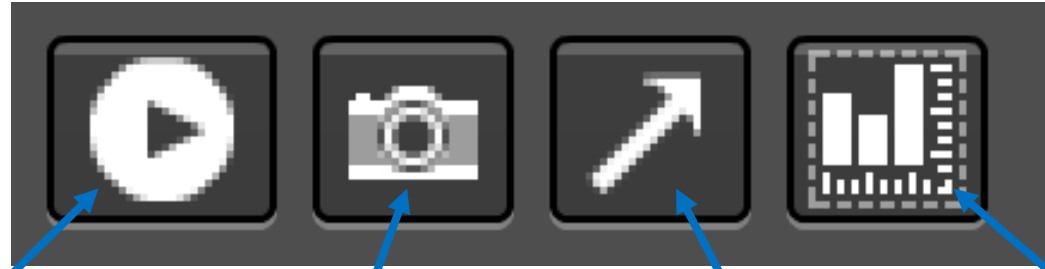


Navigation Controls – Z stacks

Some slides are scanned with multiple focal planes – often found in Cytology slides
(in digital micrographs, this is referred to as a Z-stack)



Quick Functions



Open/Close
Panel

Take
Snapshot

Add
Annotation

Image
Analysis

(If activated)

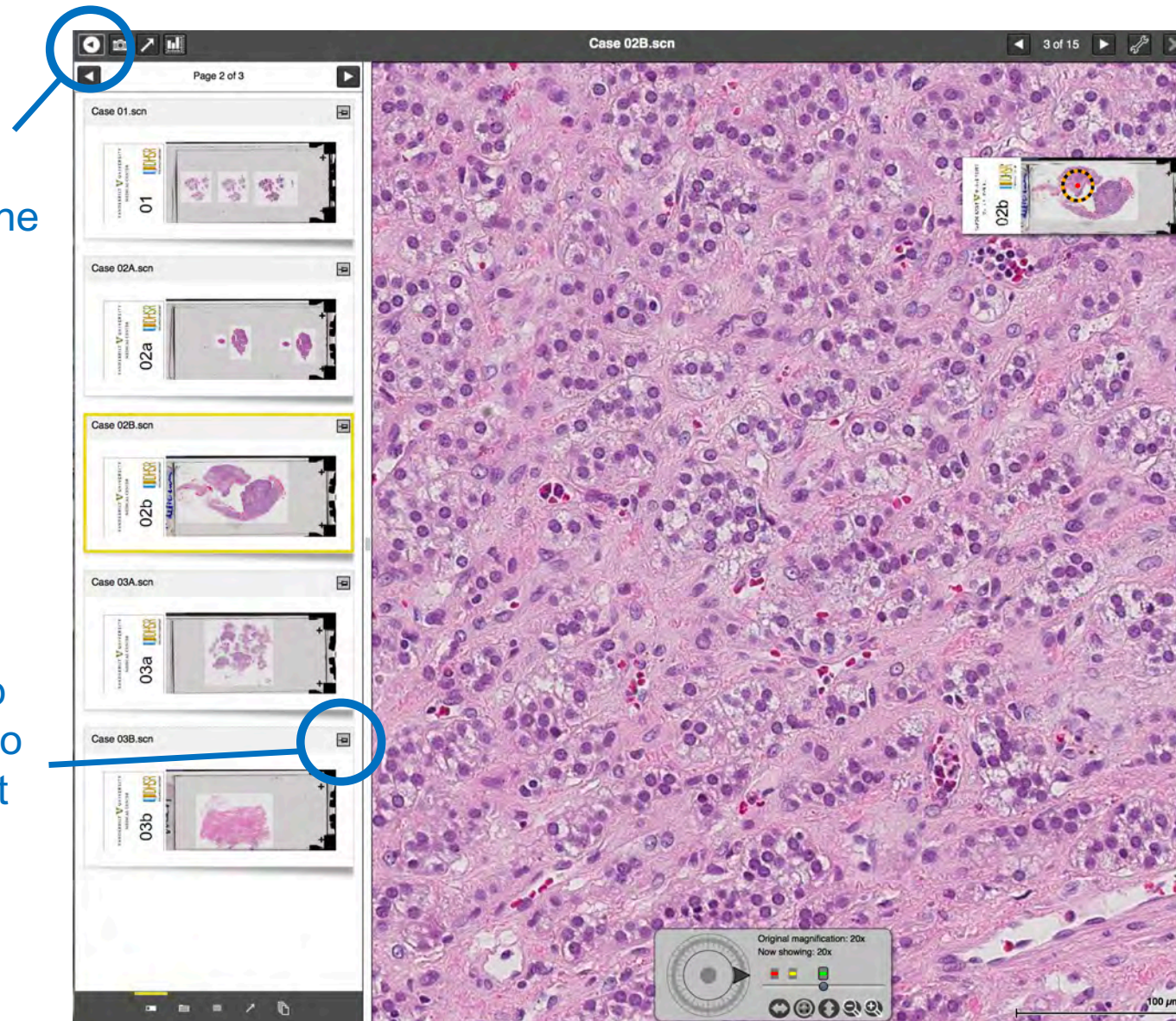
**Ensure your browser will allow the snapshot window to be created.
These are often blocked by default as they appear like a pop-up.*

Opening the slide panel



Opening the slide panel allows you to view other slides in the same folder quickly.

Clicking on the thumb tack icon allows you to view multiple slides at the same time.



Taking a Snapshot



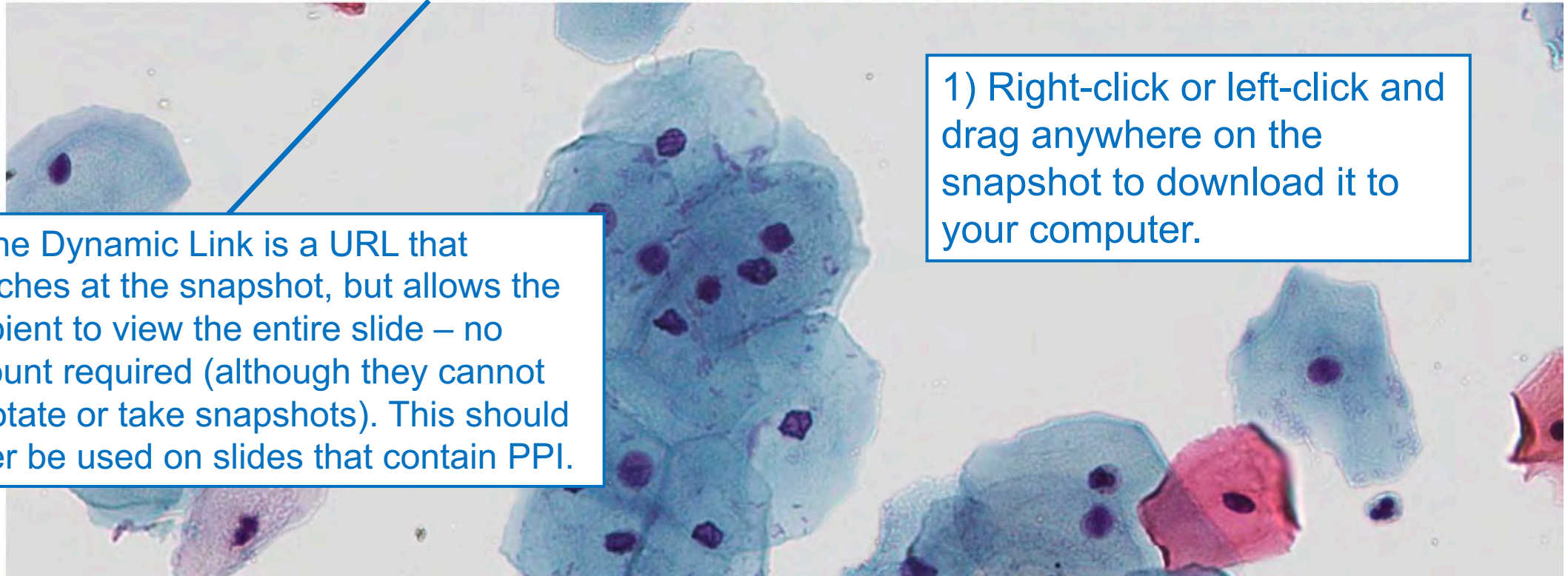
A snapshot gives you three export options:

2) The Static Link is a URL to this exact snapshot. Use this to send the link, not the image via email.

Static link for snapshot: <http://ebcdih.mc.vanderbilt.edu/dih/bitmap.php?snapshotId=14719953758357>
Dynamic link for opening snapshot in viewer: <http://ebcdih.mc.vanderbilt.edu/dih/webViewer.php?snapshotId=14719953758357>

1) Right-click or left-click and drag anywhere on the snapshot to download it to your computer.

3) The Dynamic Link is a URL that launches at the snapshot, but allows the recipient to view the entire slide – no account required (although they cannot annotate or take snapshots). This should never be used on slides that contain PPI.



Making an Annotation



See Annotations sections for more information:

The screenshot shows the 'Annotation' toolbar with the following elements and callouts:

- Draw Rectangle**: Callout pointing to the rectangle tool icon.
- Draw Ellipse**: Callout pointing to the ellipse tool icon.
- Draw Polygon**: Callout pointing to the polygon tool icon.
- Draw Arrow**: Callout pointing to the arrow tool icon.
- Draw Freehand**: Callout pointing to the freehand tool icon.
- Draw Ruler**: Callout pointing to the ruler tool icon.
- Drop Thumbtack**: Callout pointing to the thumbtack tool icon.
- Toggle Eraser**: Callout pointing to the eraser tool icon.
- Choose a color for the annotation**: Callout pointing to the color selection dropdown in the 'Annotation Settings' section.
- Make the annotation invisible until mouseover**: Callout pointing to the 'invisible' icon in the 'Annotation Settings' section.
- Select between making a filled or empty shape for the annotation**: Callout pointing to the 'filled' and 'empty' icons in the 'Annotation Settings' section.

The toolbar includes a 'Save' button and a 'Cancel' button at the bottom.

Display Settings



Display Settings

Colour Settings

Create profile Edit Profile Delete Profile

Current profile: System Default Profile

Reset

Display negative image Display as greyscale

Other Settings

- Keyboard Shortcuts
- Scale Bar
- Image Overview
- Navigation Controls
- Display Placeable Grid
- Normalised Scaling

Keyboard Shortcuts

Focus through z-stack (where available)	R / F
Zoom in / out	W / S
Pan	Arrow keys
Free rotate	A / D
Previous / Next slide	Q / E
Snap image	P
Zoom to overview scale	NUM0 (strike twice to center)
Discrete zoom, 4x, 10x, 20x, 40x	NUM1 / NUM4 / NUM7 / NUM8
90° rotate	CTRL+F

Annotations

Adding, editing, and deleting annotations



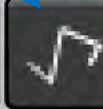

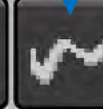



Making an Annotation

Click the arrow button in the quick functions list found at the top left of an open slide screen






Draw Rectangle Draw Ellipse Draw Polygon Draw Arrow Draw Freehand Draw Ruler Drop Thumbtack

Annotation

Drawing Tools:        

Toggle Eraser

Annotation Settings:   

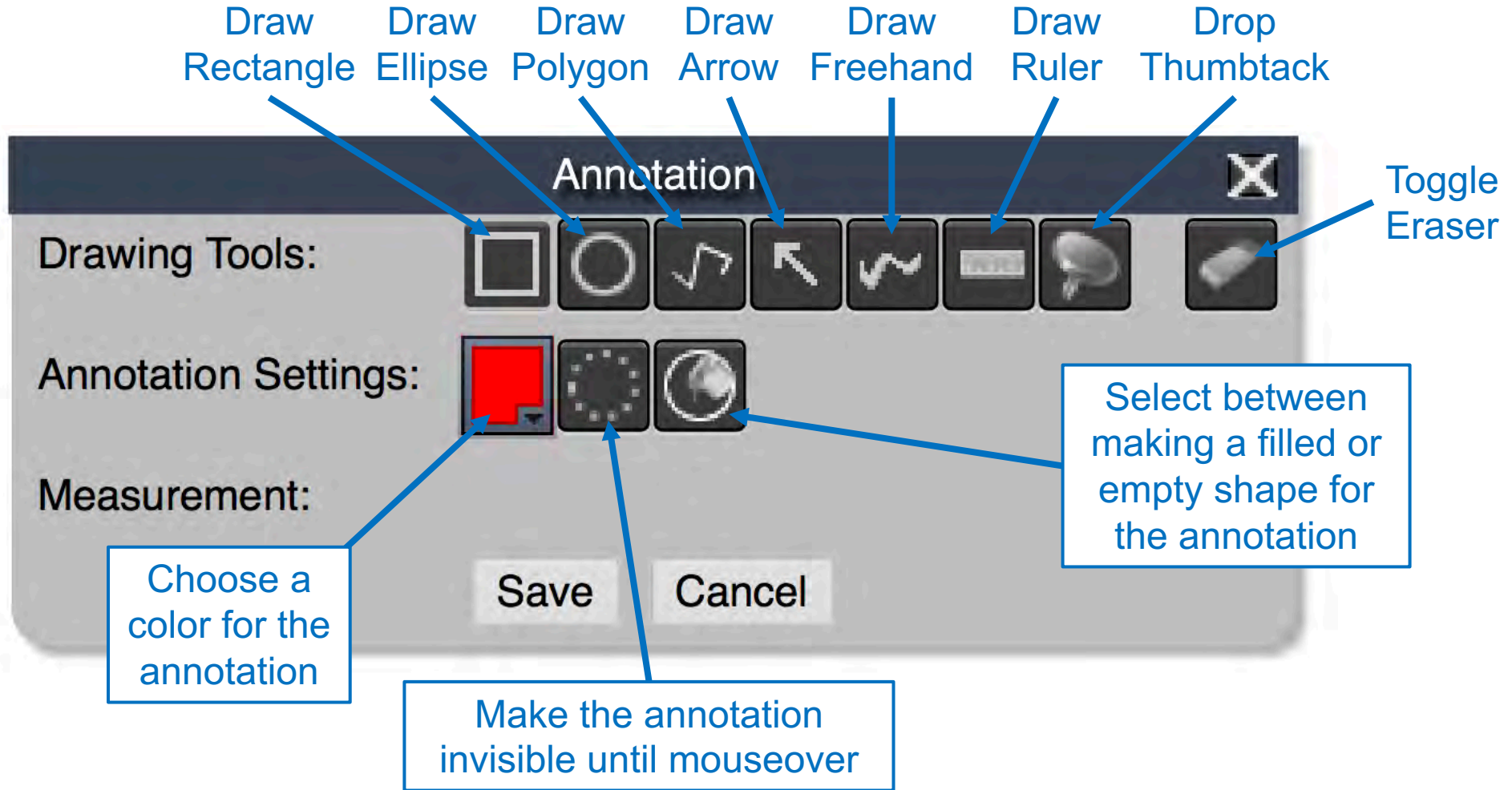
Choose a color for the annotation

Select between making a filled or empty shape for the annotation

Measurement:

Save Cancel

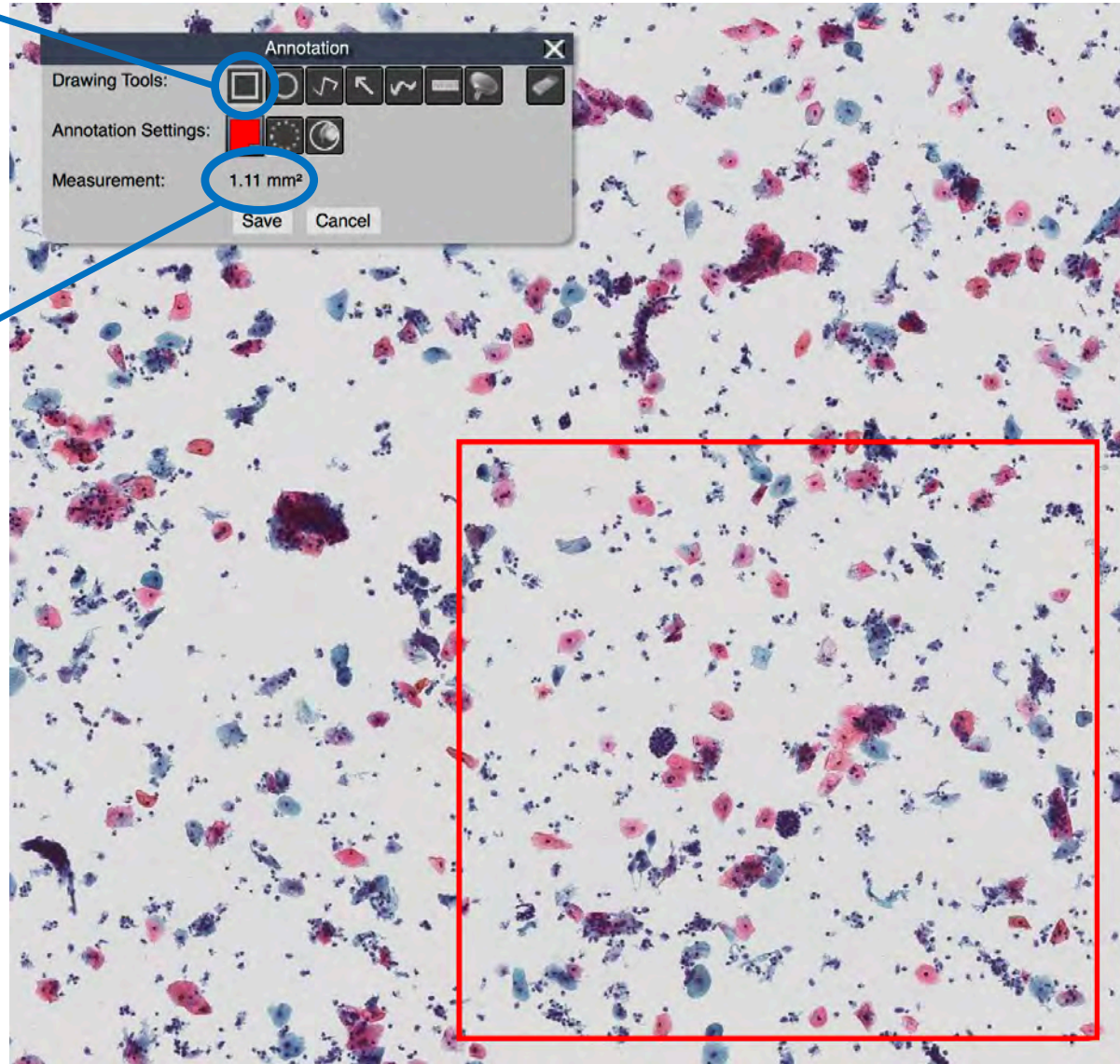
Make the annotation invisible until mouseover

A screenshot of a software toolbar titled "Annotation". It features a row of drawing tools: Rectangle, Ellipse, Polygon, Arrow, Freehand, Ruler, and Thumbtack. Below this is a "Toggle Eraser" button. Underneath are "Annotation Settings" with three icons: a red filled square, a dotted square, and a square with a grey background. At the bottom are "Measurement" options and "Save" and "Cancel" buttons. Blue callout boxes provide instructions: "Choose a color for the annotation" points to the red square; "Select between making a filled or empty shape for the annotation" points to the dotted square; "Make the annotation invisible until mouseover" points to the grey square.

Rectangle Annotation

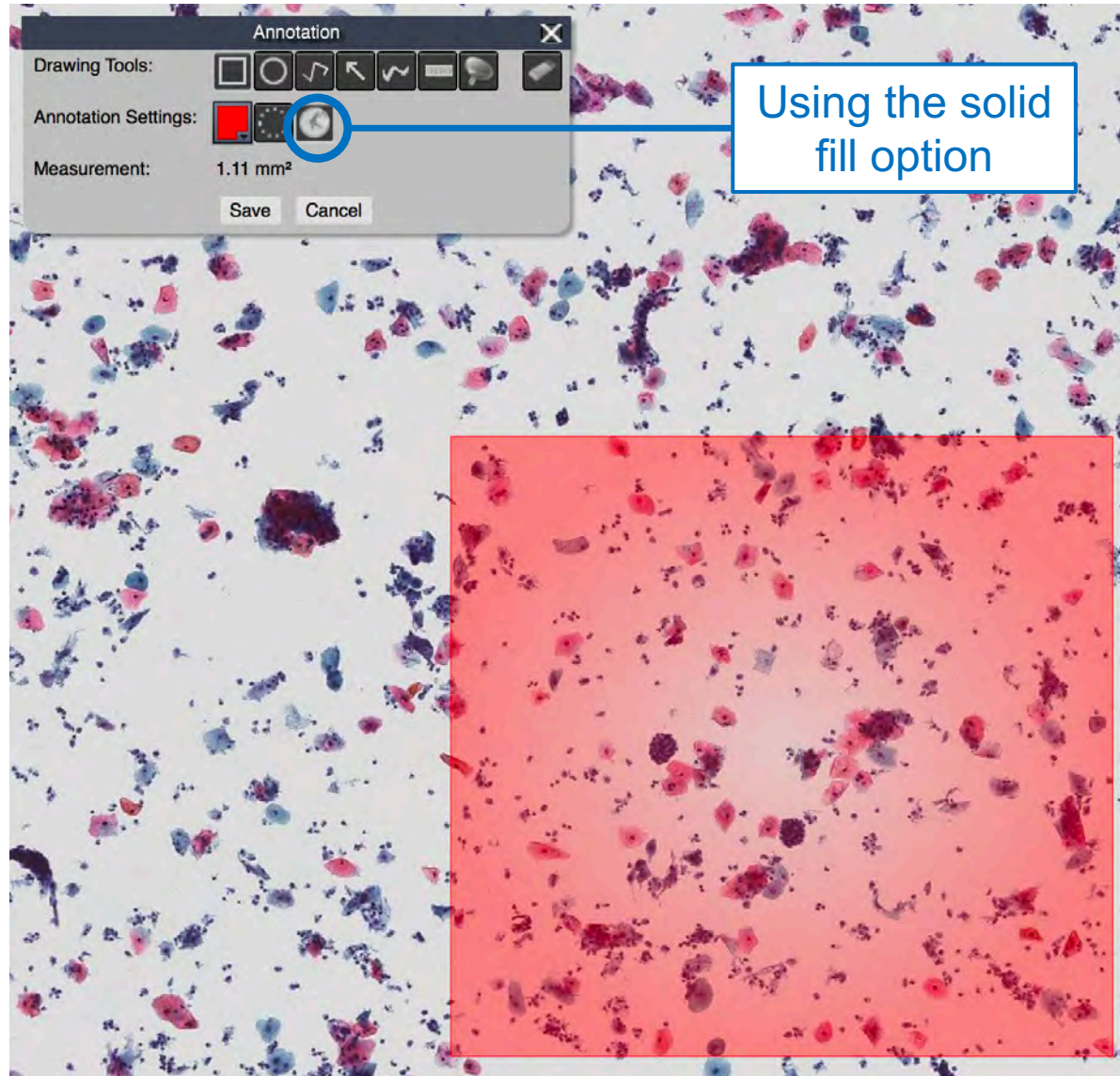
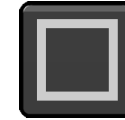


Draw
Rectangle
Tool



Area
encompassed
by of the
annotation

Rectangle Annotation



Ellipse Annotation

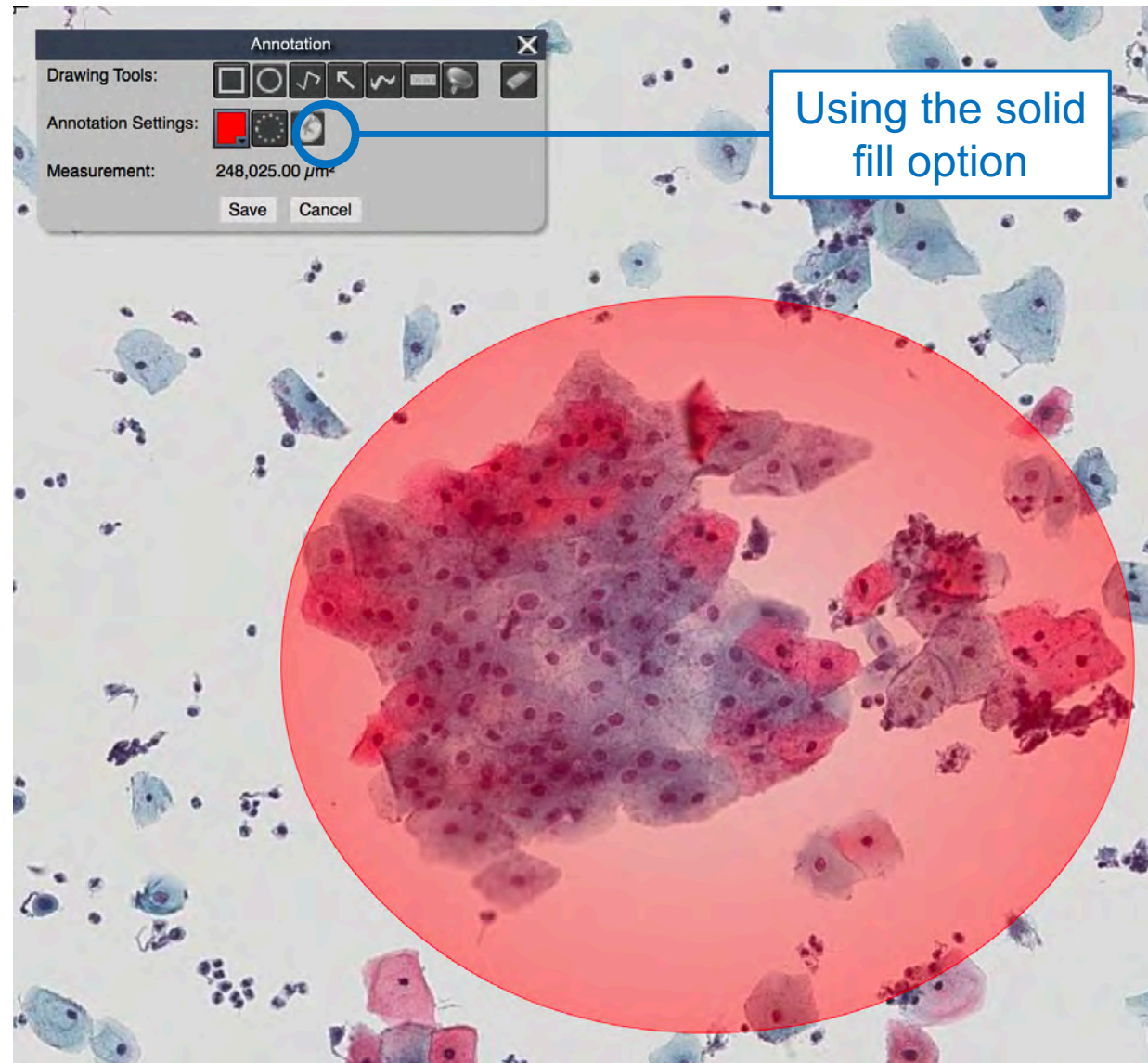


Draw
Ellipse
Tool



Area
encompassed
by of the
annotation

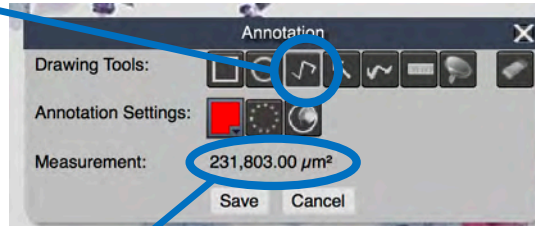
Ellipse Annotation



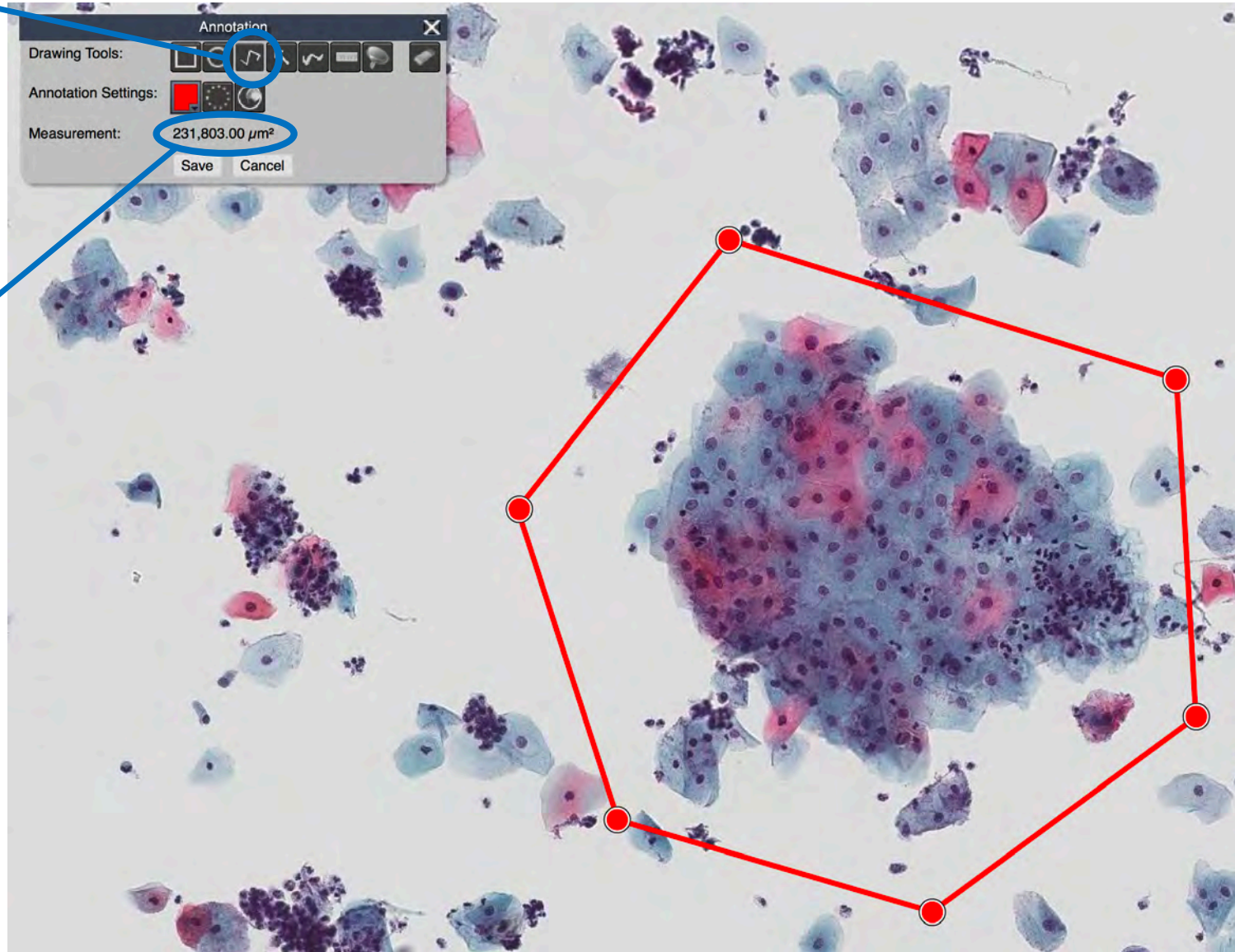
Polygon Annotation



Draw
Polygon
Tool



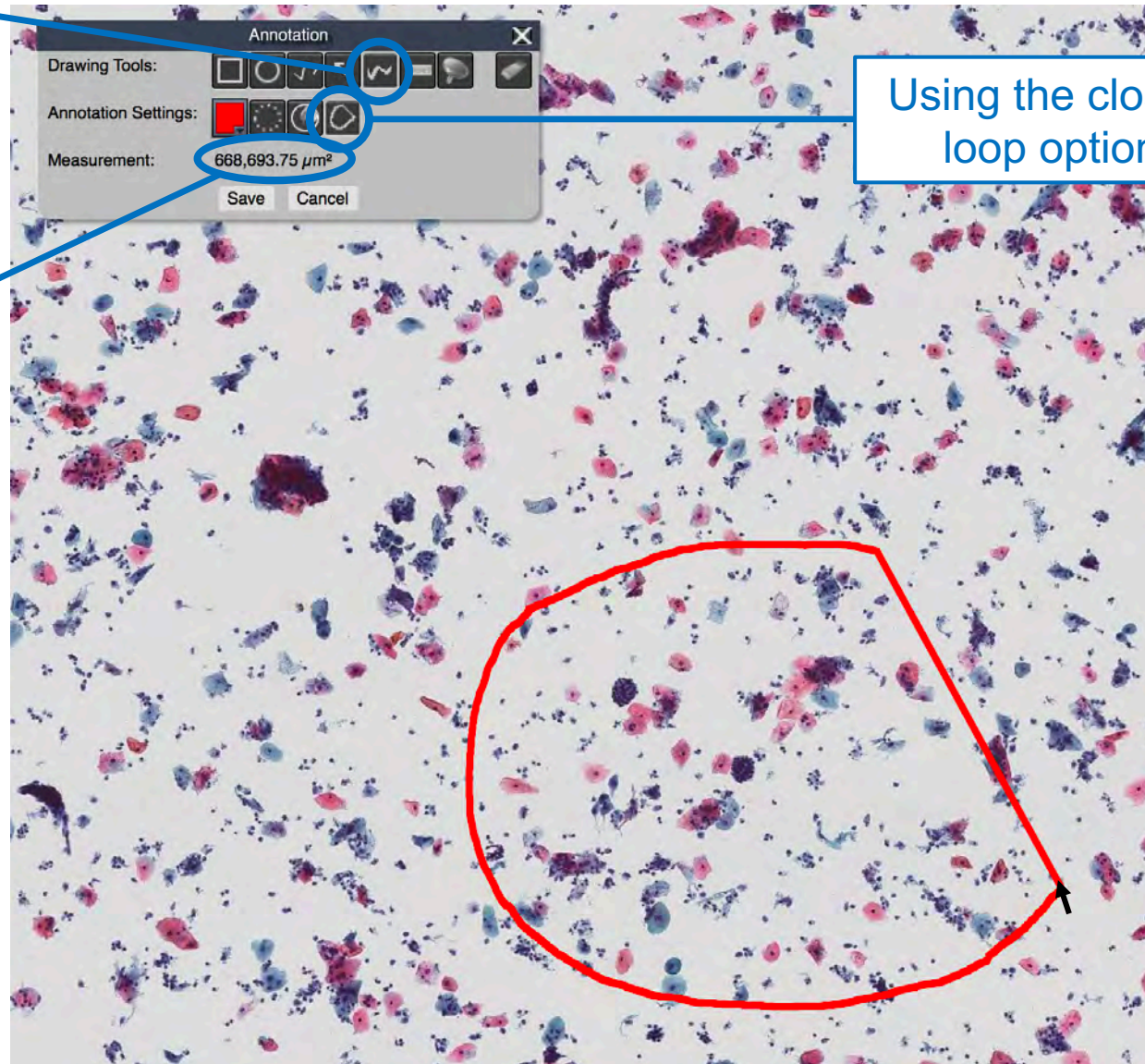
Area
encompassed
by of the
annotation



Freehand Annotation



Draw
Freehand
Tool



Using the closed
loop option

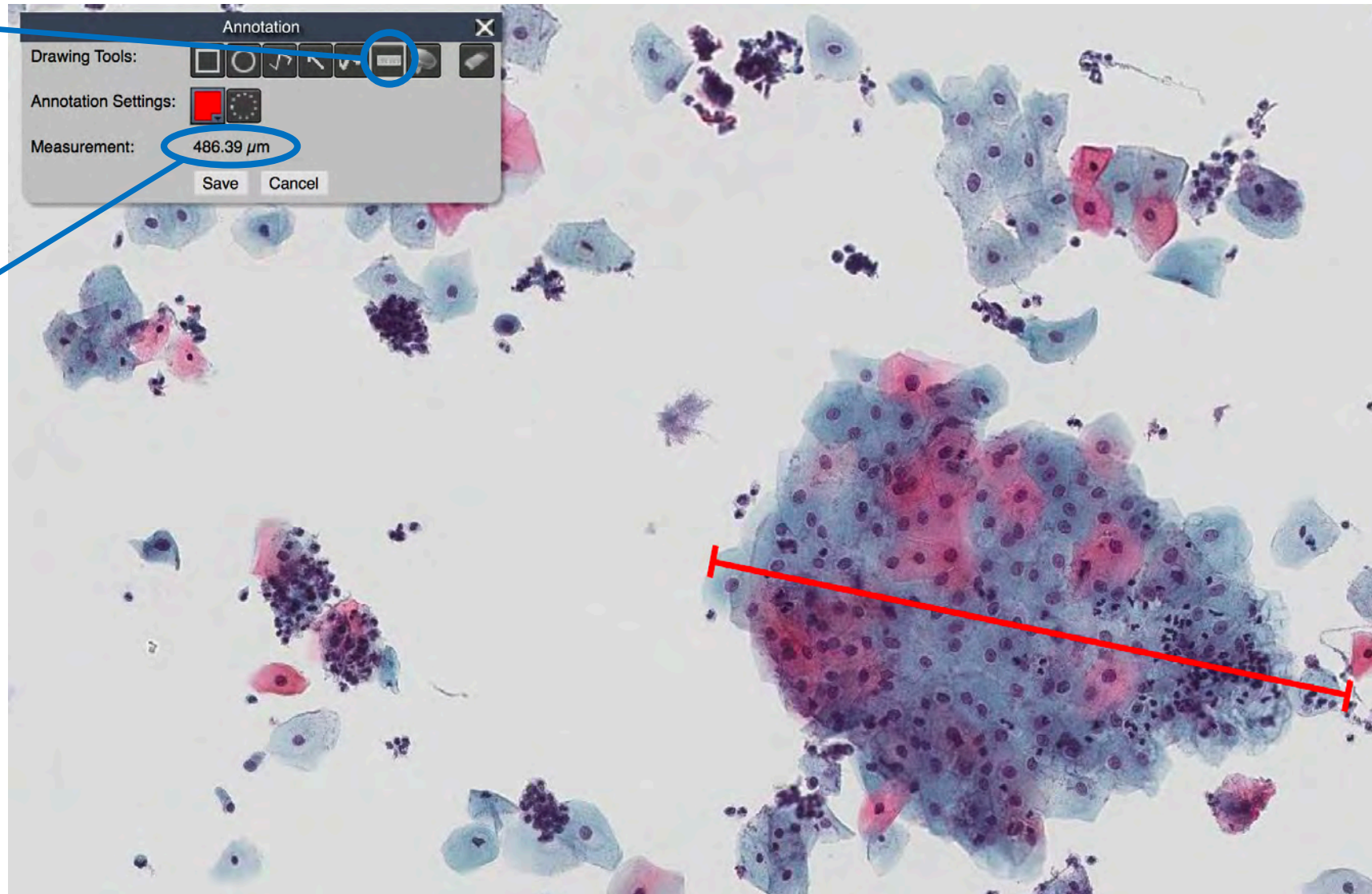
Area
encompassed
by of the
annotation

Ruler Annotation



Ruler
Tool

Measured
Length



Creating a Conference

Selecting slides to use in a virtual conference



Creating a Conference

While in the Browse tab, select the slides you wish to include in your conference by checking the box to the left of the slide

Once selected, click the conference icon at the bottom of the window

Location: Browse > Root > PathLab (Digital Histology Shared Resource) > PathLab > Unknowns Conference Series > 2016 > 011316-Margaret Compton

Browse Search Conference

	Link	Name	Alt Name	Info
<input checked="" type="checkbox"/>		1.scn		
<input checked="" type="checkbox"/>		2.scn		
<input type="checkbox"/>		3.scn		
<input type="checkbox"/>		4.scn		
<input checked="" type="checkbox"/>		5.scn		
<input type="checkbox"/>		6.scn		
<input type="checkbox"/>		7.scn		
<input type="checkbox"/>		8.scn		
<input type="checkbox"/>		9.scn		

Creating a Conference

Location: Conference > Create

Browse Search **Conference**

Conferencing Wizard

Please choose one of the following options:

OPTION 1: Create a new conference


Enter a conference name: Path Conference

Attendees must authenticate using DIH?

OPTION 2: Add images to an existing Conference

Choose an existing conference: Teaching set 1

Cancel Submit



Choose Option 1 to create a new conference. Give the new conference a unique name. DIH authentication ensures that participants have a DIH account. Otherwise the conference is considered public.

Choose Option 2 to add the selected slides to an existing conference – useful when you need to collect slides from multiple folders

Creating a Conference

Click the green arrow to launch the conference

Location: Conference > Create

Browse Search **Conference**

Start conference	Conference Name	Date Created	Actions
	Path Conference	22-08-2016 18:20:23	 
	Teaching set 1	04-03-2016 13:56:45	 
	Lecture 1	02-03-2016 16:42:07	 
	tma conf.	14-03-2013 10:27:46	 

Click the link icon to access conference's URL. This URL can be sent to other participants via email.

Creating a Conference

Location: Conference

Browse

Search

Conference : Path Conference

Please copy the URL below and distribute to those who need it.

http://ebcdih.mc.vanderbilt.edu/dih/conference_register.php?id=OTBoZ2o2MjN2MWZ5

[Send url as e-mail](#)

↑
Use the provided URL to give others access to the conference

Back

Using the search function

Metadata-directed searching

Search Mode

You can use the search tab to look up specific slides or types of slides

Location: Search

Browse **Search** **Conference**

Search Saved Searches

Parameter	Operator	Search Entry
File Name	equals	
Date Added	✓ equals	
File Type	not equals	
Select folder metadata	contains	
Select image metadata		
Select annotation metadata		

Run Search **View Images** **Reset Form** **Save Search**

You can search for specific slides based on the slide name (accession number), date it was scanned, etc.

Typically, you will want to choose the “Contains” option from the Operator pull-down tabs. This will help ensure you get all slides that fit your criteria.

Using the Search Function

You can use the search tab to look up specific types of cases from all previous unknowns

The screenshot shows a search interface with a red header bar labeled "Location: Search". Below the header are three tabs: "Browse", "Search" (which is circled in blue), and "Conference". Under the "Search" tab, there is a "Search" button and a "Saved Searches" section. The main area is a table with three columns: "Parameter", "Operator", and "Search Entry". The "Parameter" column has a pull-down menu open, showing a list of search parameters. The "Operator" column has three dropdown menus, each set to "equals". The "Search Entry" column has three empty text input fields. The pull-down menu is open, showing a list of parameters: "Select folder metadata", "Select image metadata" (circled in blue), "Experiment Name", "Treatment", "History", "Text", "Slide", "Alt Name", "Protein of Interest", "Slide Details", "Stain", "standard", "barcode", "base_magnification", "file_name", "Tissue info", "Mouse info", "Unknowns Conference", "AGE (Years)", "CASE #", "CLINICAL", "DIAGNOSIS", "GENDER", and "TISSUE/ORGAN" (highlighted in blue at the bottom).

Parameter	Operator	Search Entry
File Name	equals	
Date Added	equals	
File Type	equals	
Select folder metadata		
Select image metadata		
Experiment Name		
Treatment		
History		
Text		
Slide		
Alt Name		
Protein of Interest		
Slide Details		
Stain		
standard		
barcode		
base_magnification		
file_name		
Tissue info		
Mouse info		
Unknowns Conference		
AGE (Years)		
CASE #		
CLINICAL		
DIAGNOSIS		
GENDER		
TISSUE/ORGAN		

From the pull down menu, you can search for a specific diagnosis, gender, tissue type etc...

Using the Search Function

Location: Search

Browse **Search** **Conference**

Search Saved Searches

Parameter	Operator	Search Entry
File Name	equals	
Date Added	equals	
File Type	equals	
Select folder metadata		
TISSUE/ORGAN	equals	Select attribute value
Select image metadata		✓ Select attribute value
Select annotation metadata		4AFS: Chest wall lateral margin; 5AFS: chest wall ...

Run Search **View Images** **Reset Form** **Save Search**

Select attribute value

- ✓ Select attribute value
- 4AFS: Chest wall lateral margin; 5AFS: chest wall ...
- Adrenal mass
- anus
- aorta
- Axillar sentinel lymph nodes
- bladder
- bone
- Bone Marrow
- brain
- Breast
- Cervical lymph node
- Cervical pap smear
- cervix
- cheek FNA
- Colon
- colonic serosa
- Cystectomy
- D&C
- Diaphragm lesion
- DUODENUM
- endometrium
- enucleation

Select "equals" to see all possible tissue/organ types

Example: If you want to see what tissue/organ sources are in the system... scroll through the options below and select

Using the Search Function

Location: Search

Browse **Search** Conference

Search Saved Searches

Parameter	Operator	Search Entry
File Name	equals	
Date Added	equals	
File Type	equals	
Select folder metadata		
TISSUE/ORGAN	contains	lung
Select image metadata		
Select annotation metadata		

Run Search View Images Reset Form Save Search

Select “contains” to search a specific organ

Example for “lung”
A case could have been entered as “middle lung lobe” so a general “lung” search would identify all lung cases