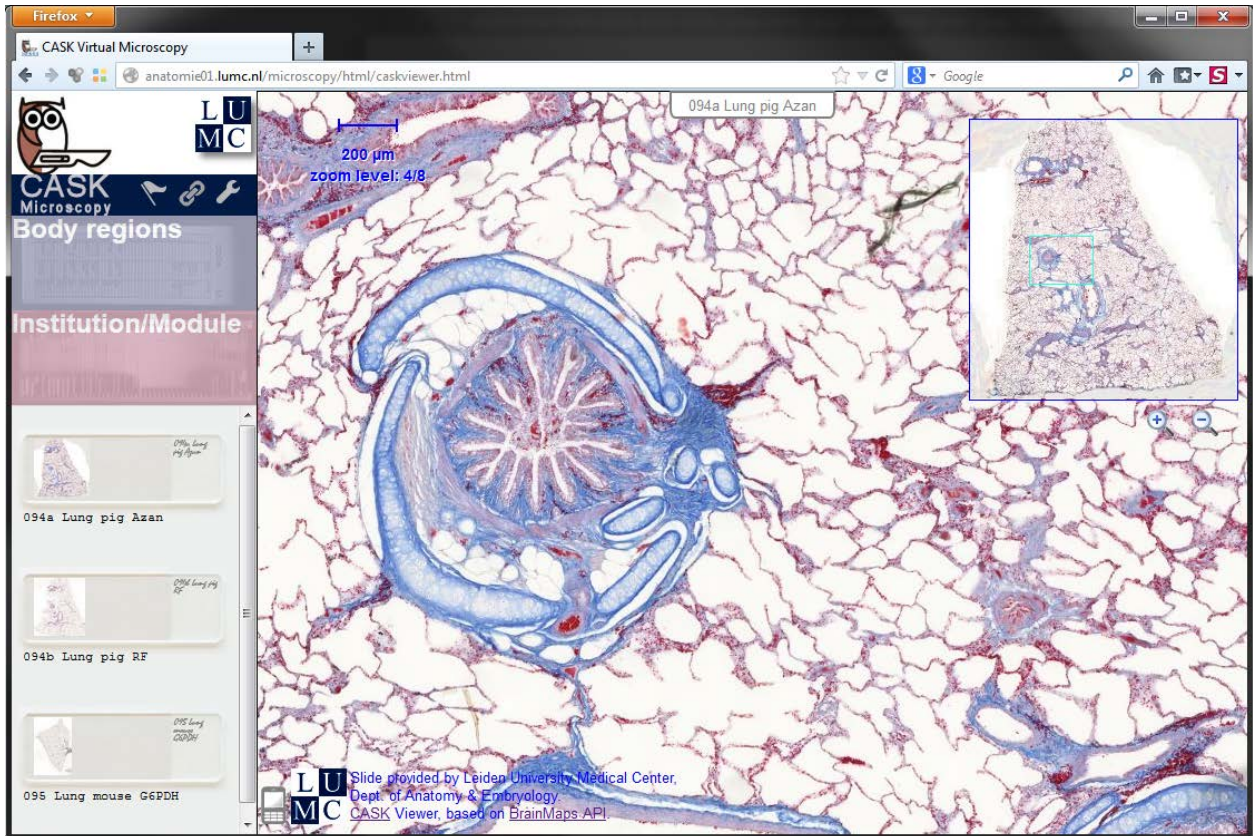# User Manual CASK Microscopy Viewer

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This manual regards CASK Microscopy Viewer Version 2.1.736, last updated 3 April 2013

Contents

Starting

To start the CASK viewer:

- online: go to the website, e.g. www.caskanatomy.info/microscopy, or
- local (on your computer): double-click the file 'index.html' in the top folder. This assumes you have the viewer and all its data on your computer.

To open a slide

Navigate the menus on the left side of the viewer. Click on the thumbnail of the desired slide. The slide will open in the right hand panel.

Desktop usage

To pan, either:
- drag the slide with the mouse, or
- drag the view-indicator* on the slide-thumbnail, or
- click on the slide-thumbnail at the location you want the slide to go to.

* On Internet Explorer the view-indicator only moves when you stop dragging. Other browsers update the position during dragging.

To zoom-in, either:
- double-click the slide. The slide will zoom centered at your mouse-position.
- click the + magnify button. The slide will zoom centered on the middle of the view.
- rotate** the scroll-wheel toward you. The slide will zoom centered on the middle of the view.

To zoom-out, either:
- push the mouse-button and hold it pressed on the slide. The slide will zoom centered at your mouse-position.
- click the - magnify button. The slide will zoom centered on the middle of the view.
- rotate** the scroll-wheel away from you. The slide will zoom centered on the middle of the view.

** To reverse the direction (rotating the wheel up causes zoom in or out), see chapter 'Settings'.

The slide-thumbnail with the view indicator (the blue rectangle) and the + and – magnifier zoom-buttons.

Labels
Hold the mouse above a label to see possible additional information in a tooltip.

Tooltip appearing on a label

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Tablet (iPad etc) usage

iPad

To pan, either:
- drag the slide with your finger on the screen, or
- drag the view-indicator on the slide-thumbnail with your finger, or
- tap with your finger on the slide-thumbnail at the location you want the slide to go to.

To zoom-in, either:
- spread two fingers placed on the screen. The slide will zoom centered at your mouse-position.
- tap the + magnify button. The slide will zoom centered on the middle of the view.

To zoom-out, either:
- push the mouse-button and hold it pressed on the slide. The slide will zoom centered
- move two fingers placed on the screen towards each other (pinch). The slide will zoom centered at your mouse-position.
- tap the - magnify button. The slide will zoom centered on the middle of the view.

Note 1: on a bad wireless connection it may take a while before the slide appears.
Note 2: if you enlarge the whole page (slide plus menus) and thereafter reduce it again, it may only show a half page. Rotate (and reverse rotate) the iPad once to bring back the full page.

Labels
Tap the screen above a label to see possible extra information in a tooltip. The tooltip will automatically vanish after releasing. Tap and hold your finger on the screen to keep the tooltip visible.
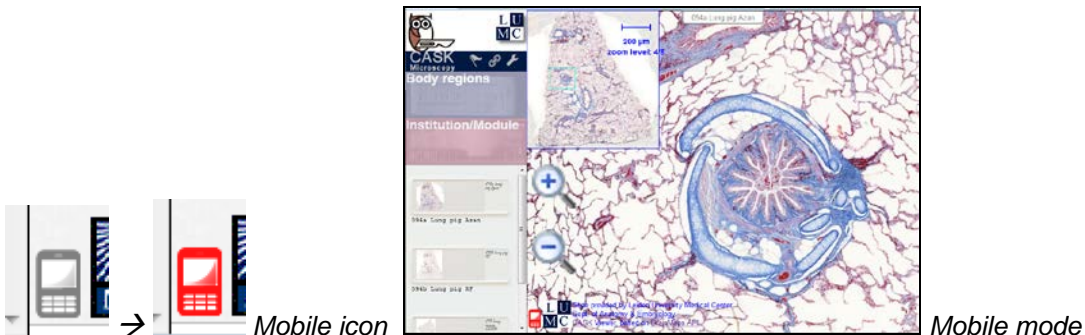
Android tablets
As iPad, but spread/pinch zooming not yet supported.

Mobile usage

On mobile phones, devices with small viewports
Tap the 'mobile' icon to switch mobile mode on or off. In mobile mode:
- the slide-thumbnail is placed to the left
- the magnifier zoom-buttons are enlarged for easy tapping.
- the mobile icon is red.

Mobile icon   *Mobile mode*

Getting a direct link showing the slide at a specific location or zoom-level

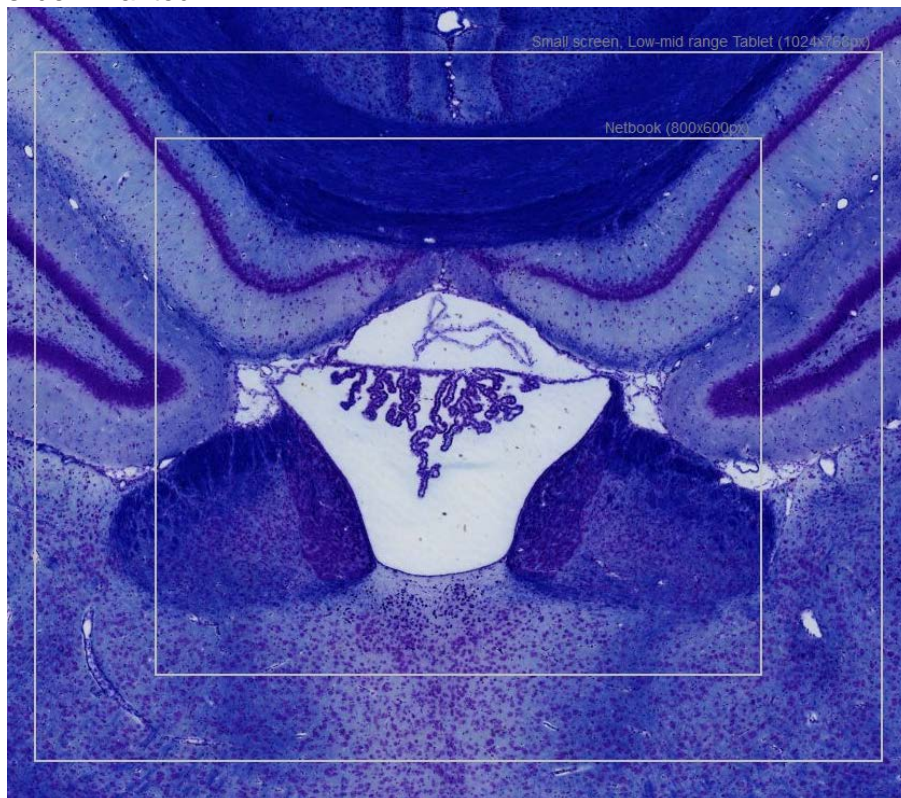- Pan and zoom the image to the position you want to 'capture'.

- Click the 'Get a link' button

- The link (URL) will appear:

- Note that indicators on the screen show the visible area on small screens. Adjust the slide if wanted.

- Copy the URL. The URL holds a direct link to this view.

Note 1: You can use URL's up to approximately 2000 characters. This is the upper limit handled by Internet Explorer. Other browsers accept higher amounts, but if you want to use IE this is the limit. If you need more text, store the URL in a so-called 'view' (see next section). These are handled in a different way, there is no upper limit then.

Note 2: Getting a direct link is not yet supported on touch-devices (tablets, mobile, etc).

Adding or editing labels
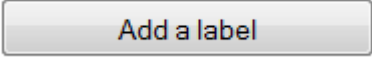
- Click the 'Add or edit labels' button . The 'Add or edit labels' panel appears.

 Add/edit labels-panel

Note: Labeling is not yet supported on touch-devices (tablets, mobile, etc).
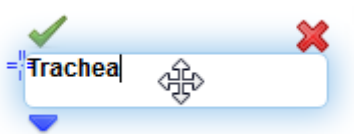
Add a label

- Click the button in the label-panel.

- A new label appears.
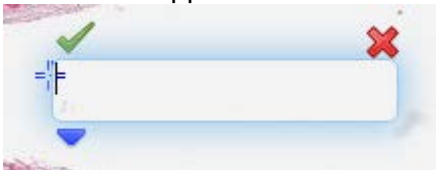
- Type the label text in the text-box.
  Note: < and > characters will be removed for security reasons.

- Drag the label to the desired position.

- The label will be affixed at the position of the cross-hair.

- (Optional) Click the blue arrow (or press 'Tab') to open the area where you can enter the tooltip text

- (Optional) Click the blue arrow (or press 'Shift-Tab') to close the area where you can enter the tooltip text.

- (Optional) Click the green check mark to exit edit-mode and fix the label to the present position.
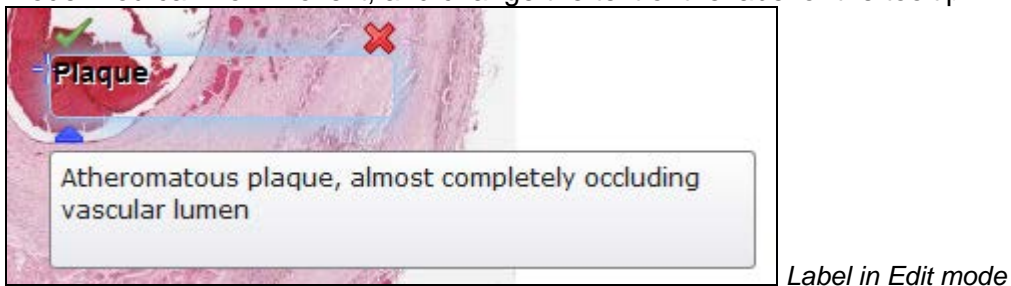
- (Optional) Click the red cross to delete the label.

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Edit existing labels

- When you have clicked the 'Add or edit labels' button ![flag icon] an 'edit' icon (pencil) will have appeared on existing labels:

  ![Plaque label with pencil] *'Edit' icon (pencil) on a label*

- Click the edit icon (pencil) on the label you want to change. The label changes to edit mode. You can now move it, and change the text of the label or the tooltip.

  ![Plaque label in edit mode showing "Atheromatous plaque, almost completely occluding vascular lumen"] *Label in Edit mode*

- (Optional) Click the green check mark ![green check] to exit edit-mode and fix the label to its position.

Note!! Your labels are not yet saved!!

Saving labels

- Close the label-panel ![pin icon] , or

- Click the 'Get a link' button ![link icon]

An URL with your labels included will appear:

```
Direct link to this view (Note that what users will see depends on their screen-size, approximate viewing areas are indicated)
http://anatomie01.lumc.nl/microscopy/html/caskviewer.html?slide=P-2&zoom=2&x=0.8205&y=0.6
(0.3512,0.4457,Deposits,)(0.6295,0.7951,Int,Intima)(0.668,0.8223,Med,Media)(0.7269,0.8848
(0.4179,0.2775,Plaque,Atheromatous+plaque%2C+almost+completely+occluding+vascular+lumen)(
```

- Copy the URL. The URL holds a direct link to this view, inclusing the labels.

Note: You can use URL's up to approximately 2000 characters. This is the upper limit handled by Internet Explorer. Other browsers accept higher amounts, but if you want to use IE this is the limit. If you need more text, store the URL in a so-called 'view' (see next section). These are handled in a different way, there is no upper limit then.

## *Using your direct link (with or without labels)*

You can either:

- use the full (long) link, as is, e.g.:
  http://anatomie01.lumc.nl/microscopy/html/caskviewer.html?slide=093b_trachea_mens_azan_01&zoom=2&x=0.4999&y=0.5005&labels=(0.282,0.4017,Trachea,Note+the+cartilage+in+the+trachea+wall%21)

- let the administrator store the URL in the CASK-viewer (locally or on a server), as a so-called **'view'**. Now you can address this view with a short-cut URL, e.g.:
  http://anatomie01.lumc.nl/microscopy/html/caskviewer.html?**view=trachea**

- let the administrator connect the view with a thumb in the CASK-viewer. Now students can click the thumb to directly get the prepared view. For instance see:
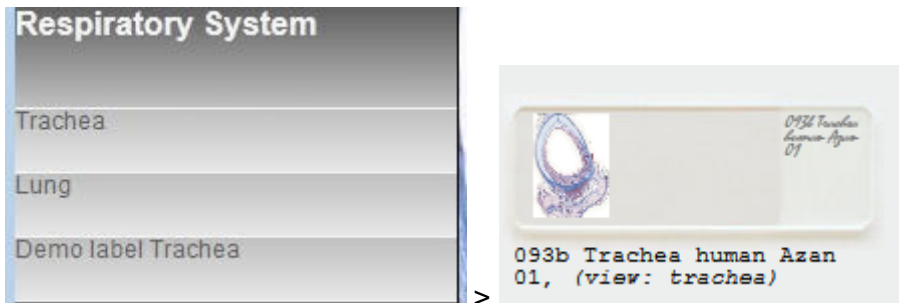
Note the addition "(view: trachea)" to the slide name.

Settings

Click the wrench-button to show the settings panel:
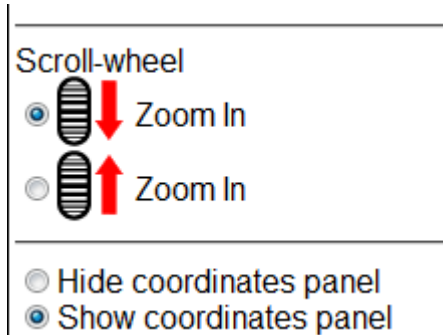
Scroll-wheel
Change the effect of rotation of the mouse scroll-wheel to zoom in or zoom out.

Coordinates panel
This willl show a panel at the top of the virtual slide that displays the coordinates of the mouse held above the slide:
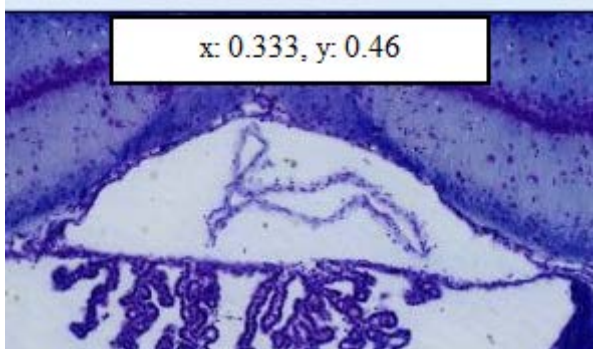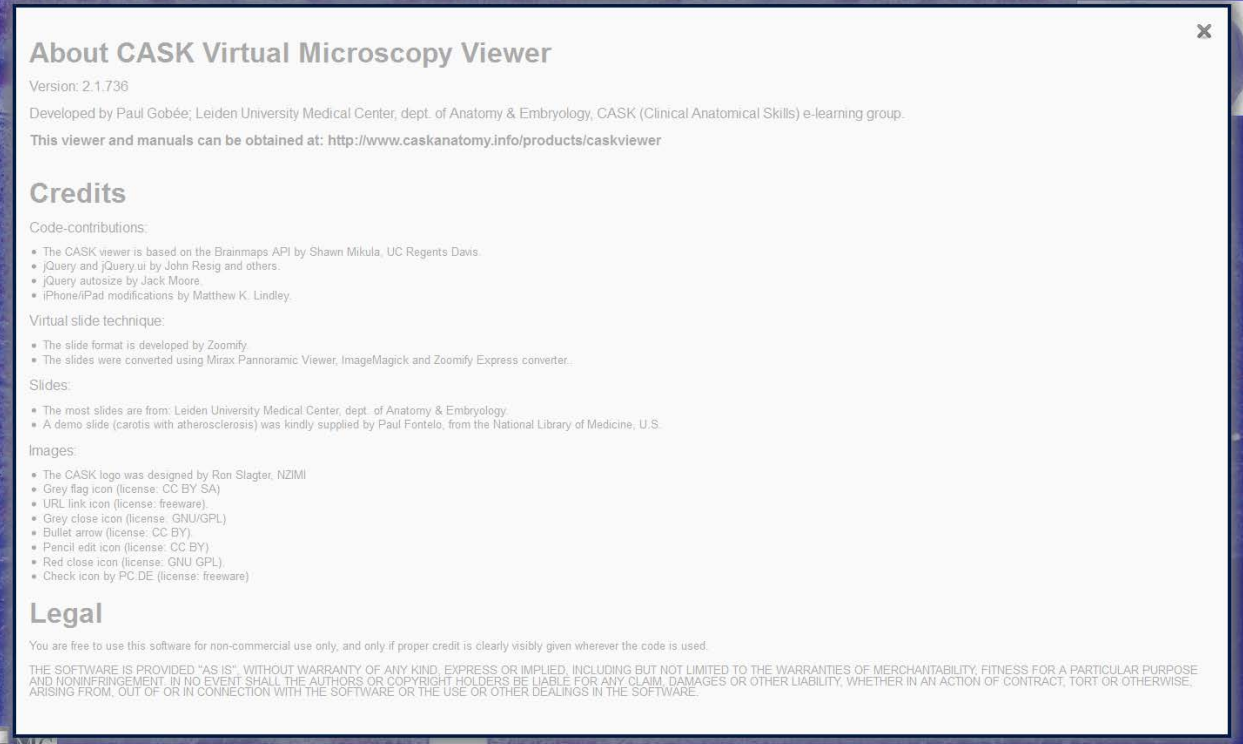

The coordinates are in fractions of the slide. So in the example shown above, the cursor is at 1/3 of the slide in x-direction (horizontal), and nearly halfway the slide form top to bottom (y-direction). These figures are independent of the zoom level.
You might use these coordinates to manually adjust the position of the slide or of labels in an URL.

About CASK Virtual Microscopy Viewer, credits and legal information

Click the 'get information' icon .

An information panel will appear, showing something like:

Click on the links in the text in the information panel to be referred to the respective sites.

Click the 'get information' icon again or click the grey 'x' to close the information panel.