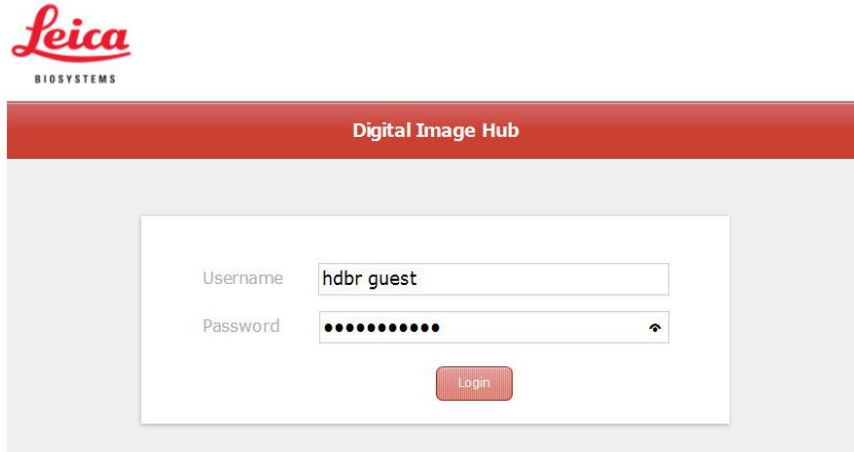


Viewing HDBR slides in Digital Image Hub


You will be given a username and password when you register with us, or you can request a login by emailing hdb@ncl.ac.uk

Once you have these details, log in at the website: <http://nbb-slidepath.ncl.ac.uk/dih/login.php>



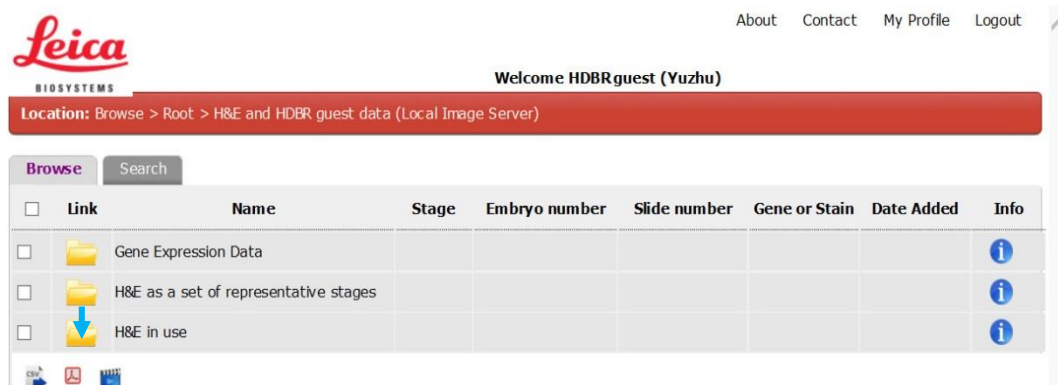
The image shows the login page of the Leica BIOSYSTEMS Digital Image Hub. At the top left is the Leica BIOSYSTEMS logo. Below it is a red header bar with the text "Digital Image Hub". The main content area is a white box containing a login form. The form has two input fields: "Username" with the text "hdb guest" and "Password" with a masked password of ten dots. Below the password field is a "Login" button.

There are two tabs on the top of the page; the browse tab is selected by default (circled in light blue below). Click the yellow folder icon to open the folder (light blue arrow).



The image shows the browse page of the Leica BIOSYSTEMS Digital Image Hub. At the top left is the Leica BIOSYSTEMS logo. At the top right are links for "About", "Contact", "My Profile", and "Logout". Below the logo is a red header bar with the text "Welcome HDBRguest (Yuzhu)". Below the header bar is a red bar with the text "Location: Browse > Root". Below the red bar are two tabs: "Browse" (circled in light blue) and "Search". Below the tabs is a table with two columns: "Link" and "Name". The table has one row with a yellow folder icon in the "Link" column and the text "H&E and HDBR guest data (Local Image Server)" in the "Name" column. A light blue arrow points to the folder icon.

If there are any subfolders a new window opens. Click the folder which contains the data you would like to view.



The image shows the browse page of the Leica BIOSYSTEMS Digital Image Hub. At the top left is the Leica BIOSYSTEMS logo. At the top right are links for "About", "Contact", "My Profile", and "Logout". Below the logo is a red header bar with the text "Welcome HDBRguest (Yuzhu)". Below the header bar is a red bar with the text "Location: Browse > Root > H&E and HDBR guest data (Local Image Server)". Below the red bar are two tabs: "Browse" (circled in light blue) and "Search". Below the tabs is a table with columns: "Link", "Name", "Stage", "Embryo number", "Slide number", "Gene or Stain", "Date Added", and "Info". The table has three rows: "Gene Expression Data", "H&E as a set of representative stages", and "H&E in use". Each row has a folder icon in the "Link" column and an information icon in the "Info" column. A light blue arrow points to the folder icon in the "H&E in use" row.

Each set of H&Es is arranged by stage and displayed as an individual folder on the left hand side. By default, 10 folders are displayed per page.

There may be more than one page of results. To view other pages click on the page number at the bottom of the screen

The screenshot shows the Leica BIOSYSTEMS web interface. At the top, there is a navigation bar with links for 'About', 'Contact', 'My Profile', and 'Logout'. Below this, a red banner displays the user's name 'Welcome HD&R guest (Yuzhu)'. A breadcrumb trail indicates the current location: 'Location: Browse > Root > H&E and HD&R guest data (Local Image Server) > H&E as a set of representative stages'. Below the breadcrumb, there are 'Browse' and 'Search' buttons. The main content is a table with columns: 'Link', 'Name', 'Stage', 'Embryo number', 'Slide number', 'Gene or Stain', 'Date Added', and 'Info'. The table lists ten folders: CS11_165, CS12, CS14, CS15, CS16, CS17_N365_TS, CS18, CS19_N454_TS, CS21, and CS23. Each folder has a checkbox, a folder icon, and an 'Info' icon. At the bottom of the table, there are icons for 'CSV', 'PDF', and 'HTML' exports, and a pagination control showing '1' and '2'.

Clicking on one of these folders allows you to view the slides contained within them.

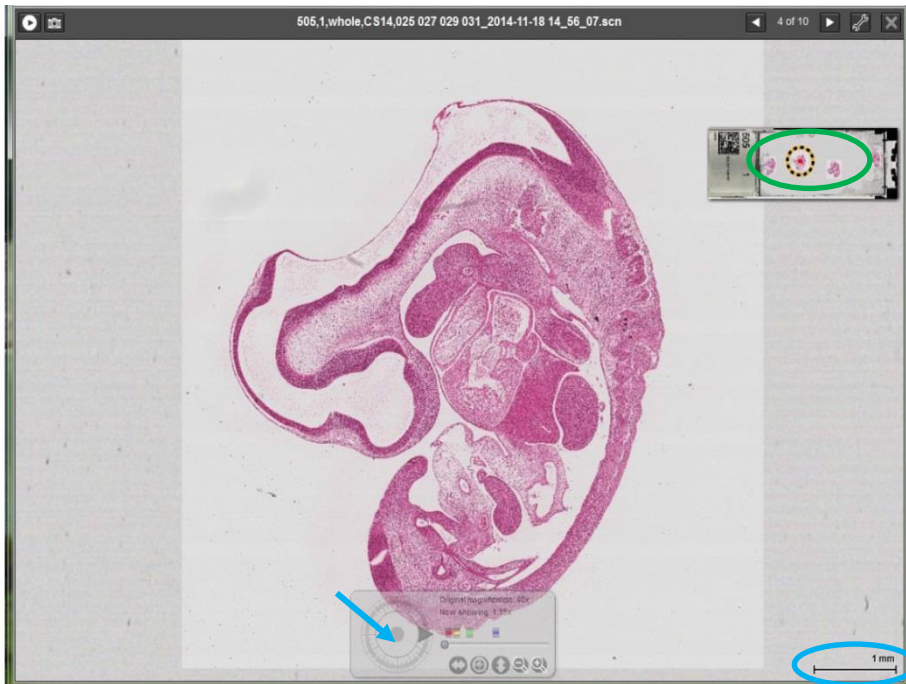
The naming convention for most of the folders is stage_sample number_block number_anatomy_plane of section_karyotype.

In the H&E in use folder, subfolders are arranged by stage and then by sample number.

View the scanned slide by clicking on the thumbnail. A new window will open displaying the selected slide. When you close the slide viewer you will return to the slide list view.

The screenshot shows the Leica BIOSYSTEMS web interface with a more detailed view of scanned slides. The navigation bar and breadcrumb trail are similar to the previous screenshot, but the breadcrumb trail is more specific: 'Location: Browse > Root > H&E and HD&R guest data (Local Image Server) > H&E as a set of representative stages > CS14 > CS14_505_SG'. The table below has columns: 'Link', 'Name', 'Stage', 'Embryo number', 'Slide number', 'Gene or Stain', 'Date Added', and 'Info'. Each row includes a thumbnail image of a slide, a checkbox, and an 'Info' icon. The table lists ten slides with their respective names, stages, embryo numbers, and slide numbers. At the bottom of the table, there are icons for 'CSV', 'PDF', and 'HTML' exports.

To navigate around the slide use the joystick to flip/rotate the image, centre it, or change the magnification. A scale bar is shown at the right bottom of the page (circled in light blue). Pan across the slide with the navigation tool (circled in green). Additional options can be accessed by right clicking anywhere on the screen.



When you are in slide viewer mode, there is a black toolbar at the top of the window. On the right hand side are arrows that let you click from one image to the next as well as a x that closes the slide viewer window and returns you to the list view

In general sections are 6-8 μ m thick, and usually there are 4 sections per slide although this number reduces as sections get bigger. Section number one is the furthest away from the frosted end of the slide.

When sectioning tissue, 8 sections (2 slides) are cut and every ninth section is taken for H&E staining.

Slides with sections for experiments are numbered 1 to XX, depending on the size of the sample.

H&E sections are numbered according to the corresponding experimental slides. For example, in the "H&E as a set of representative stages/CS16/CS16_565_Sagittal_46XY" folder, click on the first slide. On the label you'll see the embryo ID number (565) the stage (CS16) the block number (1), the anatomy (whole embryo) and 001, 003, 005, 007. These last 4 numbers mean that numbered from the "non-frosted" end, H&E section 001 corresponds to experimental slides 1 and 2, H&E section 003 corresponds to experimental slides 3 and 4 etc.

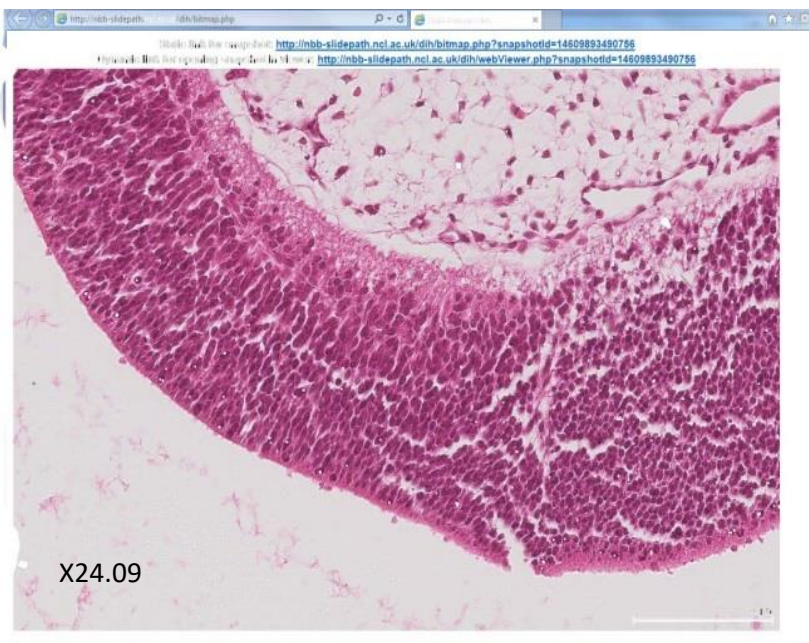
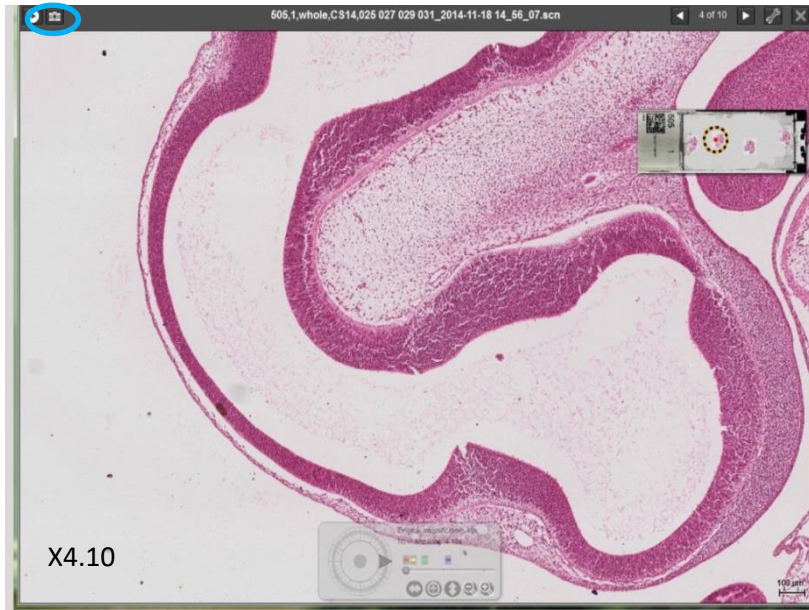
Please note that sometimes the slides are not listed in numerical order.

To capture a screenshot:

A snapshot (camera icon circled in light blue) captures an image of the current view. The snapshot image opens in a new window and can be accessed and shared by clicking on the URL links provided.

- ✓ Dynamic URL: the image can be shared and the user will have (read-only) access to whole slide, including all the navigation controls without needing a login.
- ✓ Static URL: the user will have access only to the snapshot field of view

To save the image as jpeg, right click the snapshot and select the "Save Image As" option.



To Search:

Clicking the search tab at the top of the slide list page, takes you to the search page.

By clicking the image metadata dropdown (red arrow), various searches can be performed (e.g. stage, sample number, gene or stain) using the specific operators - contains, equals, not equals in (light blue arrow) and a search entry (green arrow).

Search results are displayed by clicking run search icon on the bottom of the page (circled in light blue).

Leica
BIOSYSTEMS

About Contact My Profile Logout

Welcome HDBR guest (Yuzhu)

Location: Search

Browse Search

Search Saved Searches

Parameter	Operator	Search Entry
File Name	equals	
Date Added	equals	
File Type	equals	
Gene or Stain	contains	WNT
Select image metadata		
Select annotation metadata		

Run Search View Images Reset Form Save Search

Images found by the search can be accessed by clicking on the slide thumbnail which opens the slide viewer.

If you have any questions, please contact hdbbr@ncl.ac.uk