Course Schedule

09:30-10:30  Session 1 – Understanding the Basics

10:45-12:30  Session 2 – Initial Scene Objects, Taking Snapshots and Making Movies

13:30-15:00  Session 3 – Creating Spots and Surfaces, Annotation

15:30-17:00  Session 4 – Creating Cells
Session 2 – Initial Scene Objects

1. Scene
2. Frame
3. Light Source
4. Volume
Initial Scene Objects

These are the initial Objects that will appear in a scene. All ticked items will be displayed:

- Scene is the top level that contains everything else
- Light Source shows the direction of the illuminating light and will only be relevant for certain render options
- Frame is the box displayed around the image volume
- Volume is the image data

Left-click any Object to select. Only properties of the selected object will be shown.
Initial Scene Objects

Frame Settings

Most settings are self-explanatory, changing the appearance of the frame or turning features of the frame on and off.
Initial Scene Objects

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Fix Decorations will stick labels to the axis rather than dynamically shifting them during e.g. rotation.
Initial Scene Objects

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Checking the Shading and Shadow option can introduce a new perspective to the view. Light Source is now relevant.
Initial Scene Objects

Left click and drag the cone to move the position of the light source.

Left click and move the cylinder to adjust the height of the light source (it won’t do much in the current view).

Select Light Source

Switch Pointer to Select
Initial Scene Objects

**Volume Settings**

Settings tab most relevant
Draw and Stats rarely, if ever used
Introduction to Imaris Imaging Facility

Initial Scene Objects

Volume Settings
Maximum Intensity Projection (MIP)

Only the brightest point along the viewing direction is displayed
Initial Scene Objects

Volume Settings

Adjust Opacity to make object look more or less solid
Initial Scene Objects

Volume Settings

Adjust Opacity to make object look more or less solid.

Adjust Min/Max to change working range of grey levels.
Initial Scene Objects

Adjust Opacity to make object look more or less solid

Adjust Min/Max to change working range of grey levels

Use Display Adjustment to change brightness & contrast
Initial Scene Objects

Volume Settings

Blend

- All values along the viewing direction are used
- Depth effect, edges appear dark
- Data closest to the viewer are visible
- Data further away obscured
Initial Scene Objects

**Volume Settings**

Normal Shading

- Uses artificial light source
- Surfaces turned away from light source appear darker
- Depth effect
- Light source active
Initial Scene Objects

Volume Settings
Shadow Projection

- Uses artificial light source
- An object between the light source and the object projects a shadow onto the object
- Difficult to predict result
- Very slow, therefore not an interactive mode!
Session 2 – Taking Snapshots, Making Movies
Taking Snapshots

Simply click on the Snapshot icon, or Ctrl+C
Making Movies (Animation)

Animation pane appears below View Area
• Initial settings will create an animation of 100 frames
• Each frame is represented by a dark blue line on the horizontal strip
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• Initial settings will create an animation of 100 frames
• Each frame is represented by a dark blue line on the horizontal strip
• Animation requires input of Key Frames
• A Key Frame is a view of your data that you want to show in the movie
• Key frames are added by clicking + Add and removed using X Delete, or X Delete All…
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- Key Frames will be shown in light blue on the horizontal strip
- The first key frame to be added will also be the last (ensures the movie ends where it starts)
- Imaris will interpolate between Key Frames to create the movie
Making Movies (Animation)

- The white line indicates the current position in the movie sequence
- Left-click on the horizontal bar to move the current position
Making Movies (Animation)

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- Left-click on the horizontal bar to move the current position.
- Use the dropdown menu to create rotations using predefined Key Frames.
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- Review your animation using the Play button
Making Movies (Animation)

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• Left-click on the horizontal bar to move the current position
• Use the dropdown menu to create rotations using predefined Key Frames
• Review your animation using the Play button
• Record your animation using the Record button (animation speed defined in Settings)
• Different file formats available, be aware of file size vs image quality
Making Movies (Animation)

- The white line indicates the current position in the movie sequence
- Left-click on the horizontal bar to move the current position
- Use the dropdown menu to create rotations using predefined Key Frames
- Review your animation using the Play button
- Record your animation using the Record button (animation speed defined in Settings)
- Different file formats available, be aware of file size vs image quality
- Play Back Options determine what parameters are modified during Key Frame interpolation
Making Movies (Animation)

Group Exercise 3

Make a nice movie!

Tips:

• Increasing the number of frames will make a smoother animation
• Don’t go crazy zooming in and out, rotating too fast etc.
• Use ‘Modify’ to adjust your Key Frames