Skyscan 1076 in-vivo Micro-CT: Getting Started

DATA ACQUISITION:

Switch on computer and scanner . Start Skyscan1076 software .

Pass aging (only the first time) by switching on X-Ray .

Open the door by hand, unlock if necessary by pressing .
Put mouse or rat on the corresponding bed and close the door by hand.

Switch on X-Ray . Start scout scan .
Select scanning place by double clicking to the left mouse button in the scout image.
If necessary, choose the desired filter in Options->Filter (typically – Al 0.5mm).

To start scanning push and select scanning parameters: fill dataset name in Filename Prefix and choose a Data directory (make new subfolder if necessary). Select pixel size and set scanning width corresponding to the used animal bed (take into account scanning time estimation in the bottom of the dialog window).

After scanning unlock the door by , open it by hand and remove the object or select another scanning place by double clicking to the scout view.

Use to store the x-ray image or to print it. To take new x-ray image, use . Use Zoom In or Zoom Out from additional menu accessible by right mouse button if necessary.

For additional information use on-line help by with following selection of any item.

RECONSTRUCTION:

Start the Reconstruction program from toolbar or from shortcut on desktop
Choose Dataset Prefix. Start single reconstruction (choose fastest),

After reconstruction in one cross section set Cross Section to Image values (try Auto)

To invert images to negative one use and choose Negative.

Press button and choose Top, Bottom and Step (normally 2-10). Start All.

After reconstruction show results by as section-by-section movie or go to the 3D-rendering program by . Use for on-line help on the reconstruction program.

PHYSIOLOGICAL MONITORING:

Start Visualization & Physiological monitoring from the toolbar button in 1076-control program or from desktop shortcut . This program will show the real-time image of the animal on the bed and a Physiological Monitoring window. To open the Physiological Monitoring window type "PM" on keyboard (capital letters).

All measured parameters and modes are explained in the help-window: