# Quick Start Guide: Acquire Images Using Quantum µFX CT Instrument

1. Log on to the Quantum µFX CT workstation (enter user ID: "CTadmin", password: "ct2admin"). The control panel and Database window appear.

**Figure 1.1** Control Panel and Database Window

Warm-up button
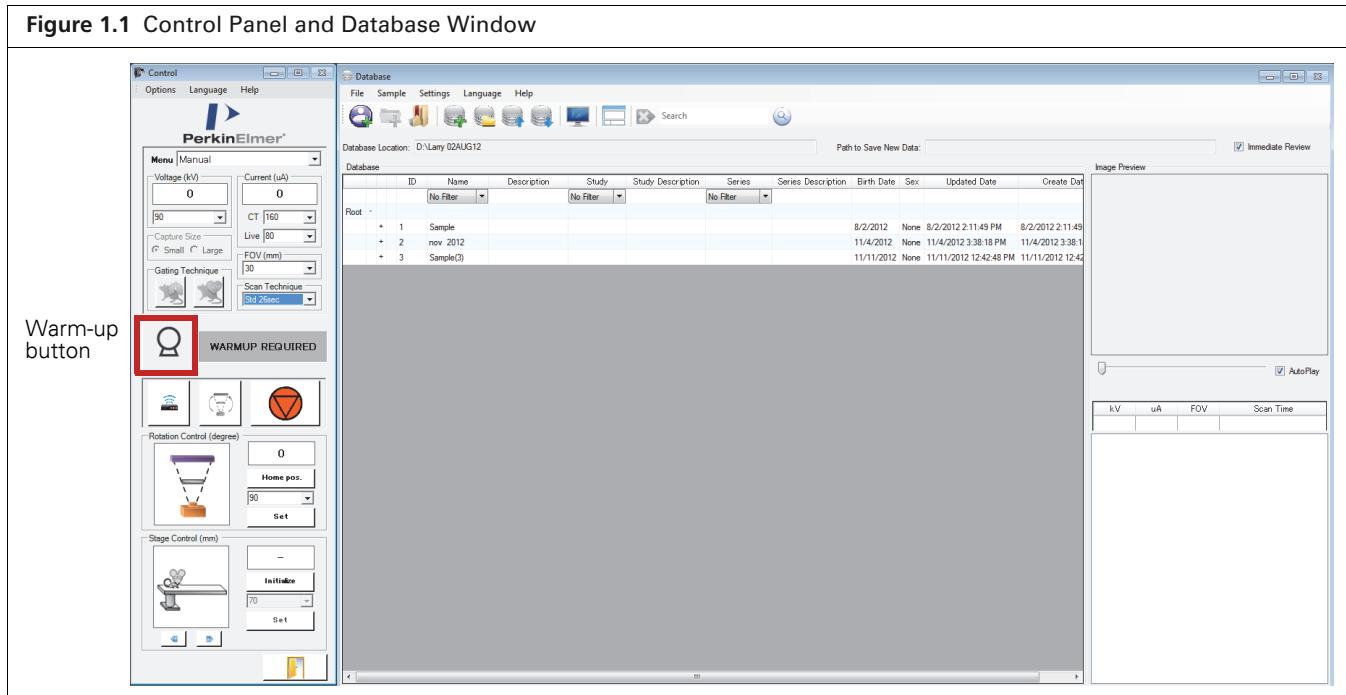
2. Confirm that the instrument door is closed.

> **NOTE:** The Quantum µFX CT instrument does not generate X-rays unless the door is properly closed and the safety interlock is engaged. When sliding the door closed, you will hear an audible "click" when the the safety interlock engages.

3. Begin instrument warm (click the button). Warm-up is completed when "STANDBY" appears in the control panel.

4. When warm-up is complete, turn off Live Mode (click the button).

**Figure 1.2** Control Panel – Warmup Completed
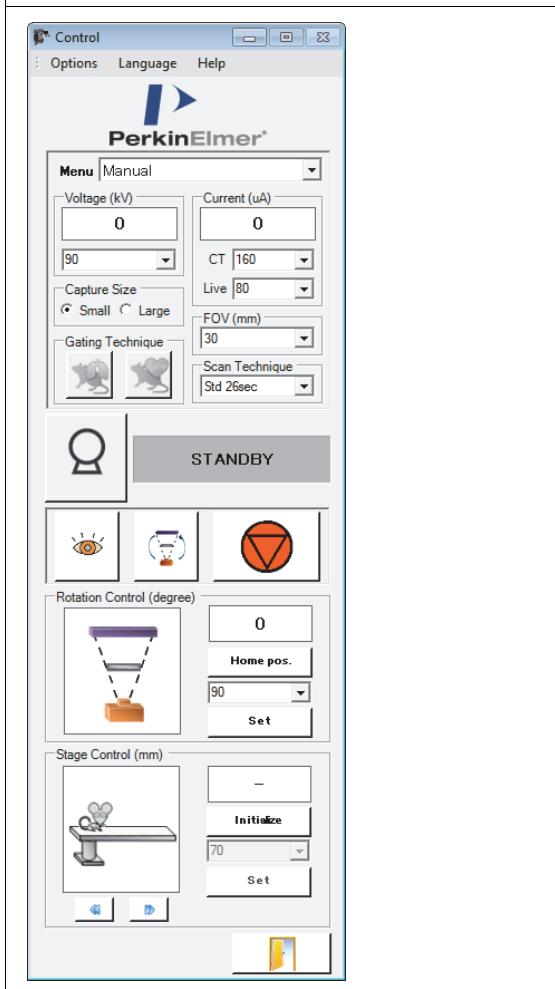
5. Specify where to save the image data (series). In the Database window:
   a. Select a sample or create a new sample.
   b. Select a study or create a new study.
   c. Click the ▦ button.
6. In the control panel:
   - Choose a preset acquisition or select "Manual" from the Menu drop-down list and enter the acquisition settings.
   - Optional: Select respiratory or cardiac gating.
7. Slide open the Quantum FX uCT door and pull out the sample table.
8. Place the anesthetized subject on the sample bed.

   If you are using the Mouse Imaging Shuttle, place the shuttle with the anesthetized subject on the sample bed. If needed, connect the gas anesthesia tubing.

   Push the sample table into the bore and slide the instrument door closed so that the interlock is properly engaged.
9. Turn on Live Mode (click the 👁 button).

   The Xcapture window appears and shows the subject in real time.
10. Use the arrows on the front panel of the instrument (z-axis controls) to move the sample table into the bore. Press and hold the Fast button + Z-axis up/down arrow.

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**Figure 1.3**  Quantum μFx CT Front Panel



X-ray irradiation Lamp

Rotate Drive Lamp

Stage X-axis Control

Figure 5

Stage Z-axis Control

Stage Y-axis Control

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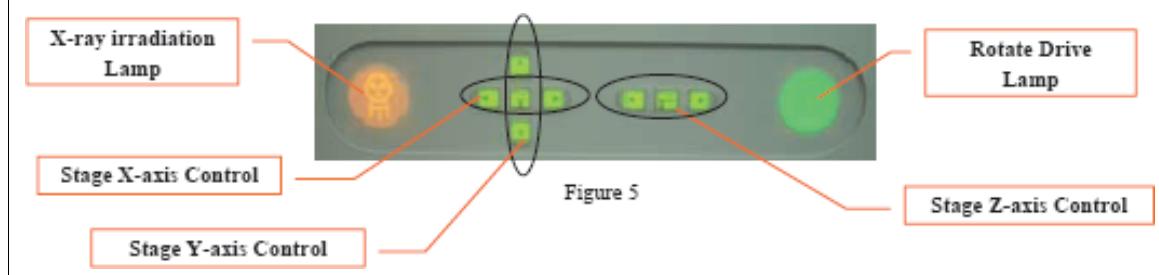
**11.** Check the subject position in the Xcapture window at the 0 deg gantry position. If necessary, use the left or right arrow buttons on the instrument front panel to center the subject in the Xcapture window.

> **NOTE:** If performing acquisition with gating, check to make sure that the ROI is correctly positioned.

**12.** Check the subject position in the Xcapture window at the 90 degree gantry position. If necessary, use the up or down arrow buttons on the instrument front panel to center the subject in the Xcapture window.

> **NOTE:** If performing acquisition with gating, check to make sure that the ROI is correctly positioned.

**13.** If necessary, turn off Live Mode (click the 👁 button).

> **NOTE:** Live Mode automatically times out after 150 minutes.

**14.** Click the CT Scan button .

**15.** After acquisition is complete, double-click the series (row) in the Database window to view the image data.