

Standard Operating Procedures

Biomedical and Obesity Research Core (BORC)



SOP#: Date Issued: 8/03 Date Revised: 7/08

TITLE: UltraFocus DXA SCOPE: Research Personnel

RESPONSIBILITY: BORC staff and Life Scienc Annex personnel

PURPOSE: To outline the proper procedures for use and maintenance of the

UltraFocus DXA.

1 PURPOSE

This SOP explains how to use UltraFocus for ultra-high-resolution imaging and dualenergy x-ray absorptiometry (DXA) analysis.

2 RESPONSIBILITY

It is the responsibility of the BORC staff to ensure that equipment is appropriately cleaned, maintained in good working order, and available for research personnel as requested. Life Scienc Annex personnel is responsible for granting research personnel access to the room hosting UltraFocus DXA.

3 BEFORE CONDUCTING YOUR EXPERIMENT

UltraFocusDXA is a fully shielded x-ray cabinet designed for ultra-high-resolution imaging and dual-energy x-ray absorptiometry (DXA) analysis. All users have to be trained before operating the instrument. A document has to be signed by both trainee and instructor. Documentation of the initial training will be on file at EHS. Annual refresher training may be required.

4 PROCEDURES

4.1 Start up

Press gray ON/OFF button until audible beep is heard. Turn KEY on front of cabinet to ON. Verify there is nothing in the BioVision x-ray chamber. Double click the VISION icon in the center of the desktop. Enter the PASSWORD. Calibration will occur automatically once you enter the software

4.2 Start procedure

Select:

- Start Procedure
- Patient Data (mouse information)
- Select from Worklist (alternatively you may enter patient data manually)
- · Locate patient's name and double click it
- START

4.3 Take x-ray image



Standard Operating Procedures

Biomedical and Obesity Research Core (BORC)



Place specimen(s) in the BioVision x-ray chamber. Use magnification tray when possible. Press the green X-Ray button to activate x-rays, image will appear after a few seconds. Hold down the left mouse button and drag the mouse to change brightness and contrast for window/level function. Adjust Zoom to enlarge the image for viewing.

4.4 Store image data

- Choose PACS Store button on left side of screen
- Choose PACS Print button on left side of screen

4.5 Shutdown instrument

- Click EXIT, Select SYSTEMSHUTDOWN, then click OK
- An audible beep is heard when the system has completed shutdown

5 MAINTENANCE

The instrument requires periodically cleaning all exposed surfaces and inspecting/cleaning inside of cabinet.

6 REFERENCES

Refer to the manufacturer's manual for additional information.

END OF DOCUMENT