

Rules and Instructions for Use of the Broadbent-Bolton Collection at the Bolton-Brush Growth Study Center

Thank you for your interest in the Broadbent-Bolton Collection, one of the most important collections of its kind in the world.

This packet contains what you need to know before using the Collection for your research. Please read it carefully. Before you may use the Collection, you must submit to the Center the following four items:

1. A protocol statement that summarizes the research you are doing and how you plan to use the data you wish to collect from the Center. The statement should be about one to two pages long and should include the research question you are asking and how you plan to address it.
2. A signed Researcher's Agreement (one for each researcher that will have access to the data), stating that your use of the Collection will conform to the rules delineated in this packet
3. A Letter of Guaranty, ordinarily from the Chairman of your academic department that guarantees payment of any fees you should incur according to the cost schedule included in the Research Packet -OR- a check or purchase order number to cover the cost of fees incurred according to the cost schedule included in the Research Packet.

Again, all of these items must be submitted to the Center BEFORE you may begin to use the Collection. I will be happy to address any questions you may have.

Sincerely,

Mark Hans
mgh4@case.edu

Use of the Broadbent-Bolton Radiographic Collections

Fee Schedule for:

DIGITAL RADIOGRAPH USE

The charge for the use of digital radiographs *on-site at the Center* is \$75 per day- access hours 9:00 a.m. to 5:00 p.m. Monday through Friday

The fee to borrow digital images is \$15 per x-ray. Therefore, a typical study involving 30 untreated age-matched controls would require a total of 60 images over 30 visits, and the loan fee would be \$900. There is a \$450 dollar minimum charge.

Radiographs can be selected by visiting the AAOF Legacy website and selecting the search option "Search the Entire Bolton Brush Collection". (https://www.aoflegacycollection.org/aaof_searchDemog.html) The search returns a list of subjects with the age at each visit. You cannot "see" the images only the ages at which they were taken. If you search the Legacy Site you can both see the age of the visit and you can see a low resolution version of the image. However, only about 100 of the 4309 subjects are part of the Legacy Collection. The other 4209 can only be accessed through the BBGSC.

One-half of the loan fee must be paid before the sharable Google Drive Folder is created and the balance payable when the Google Drive Folder is shared.

If you come to the Center then a bill for access fees will be issued at the conclusion of the visit and payment is due within 30 days.

Digital copies are scanned at 12 bit grayscale resolution with a spatial resolution of 0.1 mm per pixel are stored on Google Drive. Each image is approximately 40 MB in size when stored in uncompressed TIFF format. These images are readable by Adobe Photoshop and can be optimized by the researcher for analysis and display on commercially available software programs. Researchers should contact the commercial vendor of the analysis and display software they plan to use to determine compatibility with Broadbent-Bolton images. To test compatibility, researchers can download some of the low resolution images available on the AAOF Legacy website. Researchers may request radiographs at two time periods for up to 60 untreated subject. Early records have a 100 mm lead impregnated scale placed at the mid-sagittal plane on the nasion rest that is projected onto the x-ray image. Later records have 3 lead dots spaced at 50 mm intervals that serve the same purpose. All films have a recorded distance (in cm) of the film from the mid-sagittal plan (lateral "ML") and from the porianic axis (frontal, "P+"). A conversion table in the book "Bolton Standards of Dentofacial Developmental Growth" allows for easy conversion to percent of enlargement.

FEE SCHEDULE
for

RESEARCH USE OF NON-DIGITAL RADIOGRAPHS:

Sixty-four dollars (\$64) per Bolton Subject used, plus \$8 for each radiograph or set of study casts used. A typical case control study would cost the investigator \$80 per control subject (\$64 subject, \$8 for the control time – 1 film and \$8 for the control time – 2 film), e.g., 30 control subjects with 2 x-rays each would total \$2,400.

**RESEARCHERS ARE URGED NOT TO USE
RECORDS USE. THESE WILL BE**

\$35 per subject plus \$8 per radiograph