

NEWS



AAO FOUNDATION

CRANIOFACIAL GROWTH LEGACY COLLECTIONS PROJECT OFFERS ONLINE DATABASE OF IMAGES, PHYSICAL RECORDS FREE TO RESEARCHERS

Website Houses Irreplaceable Collections of Detailed Growth Records of Children Who Did Not Have Orthodontic Treatment

St. Louis, June 19, 2018 – A rich and irreplaceable collection of growth records of 752 children who did not have orthodontic treatment has been digitized and is available to researchers, clinicians, craniofacial investigators, students, physical anthropologists, and other interested persons at no charge. Known as the [AAO Foundation \(AAOF\) Craniofacial Growth Legacy Collections Project](#), it serves as a repository for longitudinal records that document development of children who did not receive orthodontic treatment and as a unique resource for teaching and research.

Materials in the Legacy Collections are representative samples from nine of the eleven known longitudinal craniofacial growth collections in the U.S. and Canada. Records were taken between 1930 and 1985. The materials are literally irreplaceable. Radiographic (x-ray) images were deteriorating with age. Such detailed longitudinal radiographic images could not be repeated today because of the possibility of overexposing subjects to radiation.

The children studied were measured at least annually, beginning as young as age 2, and continuing, in many cases, until subjects were in their mid-20s. The records include x-rays of the head and hand-wrist, plaster study casts of the teeth, photographs, and written records charting through time the physical development of children of different ethnicities and growth patterns such as their height, weight, dietary information, and medical history.

Dr. Mark Hans, Professor and Chair of the Department of Orthodontics at Case Western Reserve University in Cleveland, Ohio and member of the AAOF Legacy Collections Project steering committee, was instrumental in bringing together institutions interested in sharing their collections. He noted that the Legacy Collections Project was a dream of the late Dr. Sheldon Baumrind, "...that started in the 1970s. He was a prescient leader in orthodontic imaging whose immense intellect and contagious enthusiasm was an inspiration to all academic orthodontists." Dr. Baumrind served as the curator and Administrative Principal Investigator for the Legacy Collections Project until his death in 2017. Case Western houses records from the Bolton-Brush Growth Study and the Broadbent-Bolton Growth Study, which now comprise a portion of the AAOF Legacy Collections. Other collections represented are: Burlington Growth; Denver Growth; Fels Longitudinal; Forsyth Twin; Iowa Growth; Mathews Growth; Michigan Growth; and Oregon Growth.

Dr. James McNamara, who is the Thomas M. and Doris Graber Endowed Professor of Dentistry Emeritus at the University of Michigan and Legacy Collections Project steering committee member, said of Dr. Baumrind, "In my opinion, he was the prime mover behind the Legacy Project.... Over the years, there had been many informal conversations about sharing...data

from the various North American growth collections, but [Dr. Baumrind] made it happen—of course with the financial and moral support of the AAOF.”

Dr. Heesoo Oh, Program Director at The University of the Pacific, Arthur A. Dugoni School of Dentistry Department of Orthodontics, “...has assumed the leadership of the Legacy Collections Project now that Dr. Baumrind is no longer with us,” Dr. McNamara stated. “She is from the same university...and she knows the collection well. Dr. Oh has a strong working relationship with Dr. Sean Curry who manages the vast amount of digital data gathered to date.”

The AAOF Legacy Collections contain more than 16,000 images in all, including:

- 10,200 lateral cephalometric radiographs
- 5,800 frontal cephalometric radiographs
- 500 hand-wrist radiographs

Website users are from 126 countries. “User requests are roughly equally divided between residents working on their research projects and researchers at Dental and Medical Schools,” Dr. Oh reported. 29,820 high resolution images have been delivered to date.

A growing number of published papers in peer-reviewed scientific journals worldwide acknowledge the AAOF for its support of the Legacy Collections Project and for the assistance the authors received for their studies.

The AAOF Legacy Collections Project was made possible by funds raised through the AAOF Legacy 300 Campaign, a 14-month effort that realized \$1.5 million in pledges; each of the 300 donors pledged a minimum of \$5,000.

The AAOF contributes \$50,000 annually to maintain the [Legacy Collection](#) website and fulfill requests for images. Access to this one-of-a-kind collection is offered at no charge, a decision made by the Legacy Collection Project’s curators, owing to the continuing support of the AAOF. “The Legacy Collection Project solicits donations, but no one is denied access to the data based on finances,” Dr. McNamara said.

Those who wish to support the AAOF Craniofacial Growth Legacy Collections Project through a [donation](#) will help to fund its continued existence and enable further collaborative studies that will enrich and refine the collective knowledge of craniofacial growth in untreated children and adolescents.

About the AAO Foundation

The AAO Foundation (AAOF), the charitable arm of the American Association of Orthodontists, provides support to orthodontic education programs and orthodontic research. Its mission is to advance the orthodontic specialty by supporting quality education and research that leads to excellence in patient care. Foundation funding ensures the future viability of the specialty by investing in the next generation of educators and researchers.

Since 1994, the AAO Foundation Awards Program has provided more than \$12.3 million in funding, primarily in support of junior faculty. The AAOF is incorporated as a 501 (c) (3) not-for-profit corporation in the state of Missouri. The website is aaofoundation.net.

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