

**Project Title:**

THE DEVELOPMENT OF COMPUTER SOFTWARE FOR CALIBRATING LANDMARK IDENTIFICATION ON FRONTAL AND LATERAL CEPHALOGRAMS

**Principle Investigator:**

Sean K. Carlson, D.M.D., M.S. (Principal Investigator)  
Assistant Professor of Orthodontics, University of the Pacific

**Co-Investigators:**

Sheldon Baumrind, D.D.S., M.S. (Co-investigator)  
Professor of Orthodontics, University of the Pacific  
Clinical Professor of Orthodontics, UMDNJ  
Professor Emeritus, University of California San Francisco

Robert L. Boyd, D.D.S., M.Ed. (Co-investigator)  
Professor of Orthodontics, University of the Pacific  
Chairperson, Department of Orthodontics, University of the Pacific

**Description:**

This project involves the development of a specialized computer program to be used for calibrating multiple judges in the task of landmark identification on cephalometric and photographic images. Its aim is to facilitate inter-institutional collaboration in data acquisition for the purposes of clinical orthodontic research. The proposed program Calibrator is intended to help investigators improve their ability to acquire landmark information with consistent accuracy by providing judges with visual feedback of their performance.

We believe Calibrator can help to create a global orthodontic research environment that allows for increased pooling of data, increased access to qualified judges, and improved cross-study comparison abilities. In addition, we believe that such a tool can also serve as a valuable adjunct to cephalometric education in orthodontic teaching institutions.

