



401 N. Lindbergh Blvd.
St. Louis, MO 63141
Tel.: 314.993.1700, #546
Toll Free: 800.424.2841, #546
Fax: 800.708.1364
Cell: 314.283.1983

Send via email to: jbode@aaortho.org and/or cyoung@aaortho.org
AAO Foundation NCE request
(a/o 1/3/2018)

1. Type of Award (Check One):

- Orthodontic Faculty Development Fellowship Award
- Postdoctoral Fellowship Award
- Biomedical Research Award
- Center Award
- Educational Innovation Award
- Program Award
- Research Aid Award

- 2. Name(s) of Principal Investigator(s): **Helder Baldi Jacob**
- 3. Institution: **The University of Texas Health Science Center at Houston (UTHealth)**
- 4. Period of AAOF support (e.g. 07-01-19 to 6-30-20): **07/01/2019 to 06/30/2020**
- 5. Amount of AAOF Funding: **\$14,700.00**

Signature: Helder Baldi Jacob Date: **06/30/2020**

- I. PLEASE ADDRESS THE REASON AND CIRCUMSTANCES THAT HAVE LED YOU TO REQUEST AN NCE (NOT TO EXCEED ONE PAGE SINGLE LINE SPACE)

The study relies on foreign collaboration to collect data. The Mexican-Mestizo group needs data from Mexico and our collaborators have not sent the data. Due to COVID-19 Pandemic I am not able to go to Mexico and I requested the data with no success yet. I contacted an orthodontist in Veracruz, Mexico, who provided me 500 potential subjects based on facial appearance and last name. Our collaborator in Monterrey, Mexico, is collecting data from the dental school that is easier to select the Mexico-Mestizos subjects. If it is necessary, I am planning to travel to Mexico to collect data as soon as travel ban is possible.

- I. PLEASE PROVIDE A RECENT PROGRESS REPORT (WITHIN 6 MONTHS) OR PROVIDE THE INFORMATION BELOW

1. Specific Aims

Question: Can the American-Caucasian dental maturity standards be applied to AmericanMestizos and to Mexican-Mestizos?

Rationale: The basic problem is that the clinical community does not have good and reliable reference dental maturity standards for Mexican-Mestizos and American-Mestizos. The Caucasian standards typically used are not appropriate for American-Mestizos and MexicanMestizos, height and weight being the only references standards developed for these populations to-date.

Purpose: We have one primary and one secondary aim:

Primary Aim: Develop dental maturity standards for American-Mestizos and Mexican-Mestizos.

Secondary Aim: Detect potential differences in dental maturation between American-Mestizos, Mexican-Mestizos.

2. Studies and Results

I am still collecting data. I have collected 151 data from American-Mestizos subjects (133 from UHealth and 18 from a Private practice in Houston area). Few weeks ago, I received a file (500 subjects) with potential to be part of the Mexican-Mestizo group from a Veracruz (Mexico). I am still waiting from Monterrey (Mexico) data. No preliminary results at this time.

3. Progress Report

151 subjects' data were collected at this moment. I was planning to go to Mexico to collect the Mexican-Mestizos' data early this year, but due COVID_19 pandemic I was not able; then I have to rely on Mexican collaborators to select potential Mexican-Mestizos subjects. I am planning to have data collected and data analyzed within few months. My chairman (Dr. Jeryl D. English) is requiring me to use this research as part of my advanced program as a requisite for graduation; if the AAOF agrees the manuscript will be ready for submission mid-late in 2021.

a) Progress to date

- No preliminary data at this moment.

- 151 subjects' data were collected at this moment.
 - b) Plans for the next 6 months**
 - Keeping the original plan sequence to complete the study, but at different deadline.
 - Receive the Mexica-Mestizo data or travel to Mexico to acquire the data.
 - c) Subjects (detailed description of sample, including information gender and age)**
 - 151 American-Mestizo subjects selected (95 females and 56 males)
 - d) Publications/presentations**
 - No publications and/or presentations at this time.
 - e) Listing of investigators, nature of involvement in research, and time allotted since beginning of research**
 - Dr. Helder B. Jacob and Dr. Peter H. Buschang. Dr. Jacob is responsible for data collection and evaluation; Dr. Buschang is going to be part once all data be collected (from data analysis to writing). Collaborators from Mexico, and Houston and Dallas areas are helping to find the sample size.
 - f) Percentage funding from AAOF and other sources; amount of grant funds already spent**
 - 100% of the total fund was spent (done in June 2020). The Institution has received the money and uses to pay part of my salary biweekly. I have no increment in my salary or income.
 - g) Request/justification for extension of present cycle: do the investigator(s) foresee a time extension for this project and why?**
 - At this moment, I am requesting for extension. The COVID-19 pandemic has delayed my receiving data (Mexican-Mestizos group). Due to the lack of contribution I found an orthodontist in Veracruz to provide me some Mexican-Mestizo sample. The difficulty has been gathering information from Mexican-Mestizo group. I am still waiting for the Monterrey connection (I proposed to travel to collect data and I was told it was not necessary). I have my Tuesdays (PM) blocked 4 hours/week (protected research time for this study in accordance with my Department) until the study completion.
 - We are relying in our Mexican collaborators to provide the data. I was planning to travel to Mexico to collect data. I was told I would receive the data early 2020. Having at least protected time for research, the evaluation and data analysis should be within three months and another three months should be adequate to write the manuscript draft. The literature review is updated, and the material and methods are complete (final adjustments will be necessary after total sample being collected).
 - Once the project be completed will support my career to promotion and further grant requests.

4. Addendum

