

**Sabbatical Leave Report**  
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Summary of Sabbatical Leave Project

1) **Anth 5 Training Manual:** my sabbatical project primarily consisted of creating a training manual for new El Camino College faculty members who teach Anth 5: Physical Anthropology Lab. The manual, a copy of which has been submitted to Karen Lam, includes:

- Information regarding the pedagogy behind teaching lab courses and guidelines for teaching Anth 5 at El Camino College (including the planning and selecting of appropriate assignments, structuring group activities, preparing students for lab activities, grading criteria, suggested course formats and recommended textbooks).
- A guide and catalog to our collection of fossil and bone replicas, casts, measuring instruments, genetics and DNA activity kits, and other lab materials.
- Various sections that provide instructors with recommendations and guidelines for specific weekly lab topics and lessons (each section matches the Anth 5 course outline of subject matter and course objectives, and provides details about suggested mini-lecture topics and lab activities, as well as online links that include interactive activities, animations, videos and other online material on some of the more recent findings within the disciplines of genetics and paleoanthropology for use in class demonstrations or within an instructor's class website; each section also includes various sample lab activities taken

from my own course materials and various popular physical anthropology lab textbooks currently on the market.

2) **Organizational and Labeling System:** my sabbatical project also consisted of creating a new organizational system for our fossil and bone replicas. I researched and found various small bins, trays and containers to house specimens within several cabinets in our physical anthropology lab classroom, which were purchased with BSS division funds. For each of our skull and bone replicas, I created labels that include a photograph of each item, making it easier to identify to which tray or bin the item needs to be returned after the lab activity is over, as well as the name of the item and its item number to allow for easy cross-referencing to the Bone Clones (our main vendor) catalog and website where detailed anatomical and geographical information about the item exists. I also created a color-coding system for our collection of human skulls, because the subtle variations in detail can be difficult for even an experienced eye to identify (please note that our department does not have dedicated lab assistants, so all of the preparations and clean up is the responsibility of the professor).

I ordered extra copies of various physical anthropology lab textbooks, the training manual I created and the latest Bones Clones catalog and placed them permanently in our lab room for future professors to use as a reference. These activities involved being on campus numerous times throughout the Spring 2016 semester to create and print labels, unpackage and set up new storage containers, photograph various skulls and bones, and create a color-coding system for the human skulls.

3) **Off-site Visits:** in February and March, I visited the newly renovated physical anthropology labs at Saddleback College in Mission Viejo and Fullerton College. On each trip I spoke with a faculty member responsible for the ordering of lab materials and they gave me a tour of their lab facilities, equipment and supplies. I was able to talk with them about the planning of their new facilities and their future plans to add to their existing collections.

**Purpose of the Project:** this project was undertaken because it has become clear to my full-time colleagues and I, as well as our dean, that I will likely need to provide some training to some of our future part-time faculty who are hired to teach Anth 5. Our collection of materials, which now includes over 110 skull and bone replicas, was also in great need of a new organizational system as it was becoming challenging for multiple professors to access the materials and keep them properly stored. Also, without the help of a lab assistant it can be very difficult for an instructor – particularly an adjunct instructor who may be traveling to or from another campus – to have enough time for prep and set up in advance of lab activities and clean up afterwards. Our new organizational system aims to make this process go more smoothly for instructors who may not have much time before or after class.

Recruitment efforts in recent years to find part-time faculty who are qualified to teach Anth 5 has proved to be very challenging. My department has recently seen less physical anthropologists who apply for our part-time positions and even fewer who are qualified to teach Anth 5, which is a unique course in our department in that it requires a deeper and more complex understanding of scientific principles and biological concepts (even more so than what is required for Anth 1, our physical

anthropology lecture course). Students who enroll in Anth 5 earn GE science lab credit and with the increased emphasis on scientific literacy in today's world, along with an increased focus on preparing students to enter STEM fields, it's critical for students to get a solid science education and have a physical anthropology lab instructor who is well versed in this area. Therefore, we anticipate that the training of new Anth 5 instructors will be necessary in the future.

Dr. Gloria Miranda, Dean of Behavioral and Social Sciences, is the person under whose direction I worked during this project. She has seen increased student demand in our Anth 5 sections in recent years, resulting in an increase from four sections to six in Fall 2016. Since I am the only full-time faculty member qualified to teach Anth 5 and teaching more than one section of a one-unit lab class results in a reduction in my course load, we rely heavily on part-time faculty to teach the rest of the Anth 5 sections each semester and there is a need at times to train these new faculty members.

Even when we hire instructors with prior Anth 5 teaching experience, some training is still very useful since each anthropology department has a different collection of hominin fossil casts, DNA kits, skulls and skeletons, etc. and instructors need to adjust their lessons, lab activities, etc. to fit with each department's particular collection.

#### How the Sabbatical Benefits Faculty Members and Students

We hired three new Anth 5 instructors over the summer, two of whom had never taught this course before and needed some guidance and direction in preparing for the

course. Because we now have an Anth 5 training manual and a new organizational system for our physical anthropology lab, the training session I conducted with our three new faculty members went very smoothly. They were each given a digital copy of the manual and a couple of them have mentioned to me how useful the lab activity samples have been in assisting them with creating their own activities, how they've used some of the online resources in their classrooms and have shared some of them with their students. Even our faculty members who are experienced in teaching Anth 5 can benefit from the manual, in that it provides samples from newly published physical anthropology lab textbooks, online resources that may be new to them and a guide to all of the bone and skull replicas in our collection (cross-referenced to the Bone Clones catalog and website, and color-coded in the case of the highly detailed human skulls). One of our seasoned Anth 5 adjunct instructors also recently told me that he finds the new organizational system to be very effective and a time-saver.

Students benefit from professors who are more accurate in terms of the skull and bone replicas used in their lab activities (i.e. many of the human and hominin skulls differ only slightly, making it easy for an instructor who is new to this collection to make errors in their identifications), and they benefit by having access to various online resources that can be used to prepare for upcoming lab activities and/or as exam study aids.

In addition, the resources included in the Anth 5 training manual – such as the links to online videos, interactive activities and websites, as well as some of the brief sample activities – are also very useful for our professors who teach Anth 1 (the physical anthropology lecture course). Some of these links provide professors with some of the

latest findings in the discipline of physical anthropology, while others can give them new ideas for interactive activities to do in the classroom or resources that can be shared with students to provide additional material to complement textbook chapters and/or lectures or for use as homework assignments.

### How the Sabbatical Increased My Proficiency

This project has been, and will continue to be, extremely useful for me in my teaching of the physical anthropology lab and lecture courses (both online and face-to-face).

As a result of researching various online teacher resources and sample lab activities, I have already added some of these to my Anth 1 and 5 classes this semester and will be updating several more lab activities, various lecture slides and incorporating some new teaching techniques in these courses later in the semester.

By researching various online vendors and visiting two physical anthropology labs at other colleges, I was introduced to several new skull and bone replicas and a new measuring instrument I wasn't aware of previously (i.e. a less expensive student version of the spreading caliper) and will be ordering these soon to add to our Anth 5 collection.

Our division will be moving to a newly renovated building on campus within the next 2-3 years and we'll have new physical anthropology laboratory facilities. I hope to participate to some degree in the planning of these facilities so I can share what I observed and learned by visiting the physical anthropology labs at Fullerton College and Saddleback College.