

InterACTION LABS

//CLAVERITO, IQUITOS, PERU

POPULATION HEALTH INITIATIVE 2017: ORAL HEALTH

Overarching Goal: to develop an interdisciplinary, action-oriented program – InterACTION Labs – to improve human and animal health, environmental resilience and social equity through participatory design, implementation and assessment of projects, processes and technologies in vulnerable communities

Overarching Oral Health Goal: to improve the quality of life of the Claverito Community by enhancing their oral health

PLANNING

1

Goals: 1) To determine standards of a) calibration for oral exams, i.e. DMFS, Community Periodontal Index; b) selection of diet questionnaire, c) calibration for oral sampling; d) calibration on handling and storing samples; e) extraction of DNA; d) mailing process of samples to Seattle for microbiome analysis; 2) to create timelines; and 3) to recruit students and in-country partners.

Team: Seattle and Peruvian teams

Where: Seattle – communications with Peru

CALIBRATION

2

Goals: a) Select the criteria to be used for assessment of quality of life and for oral screenings; b) Calibration among the Seattle team; c) assessment of the Peruvian equipment and extraction of DNA; d) calibration between Seattle and Peruvian dental team.

Team: Seattle team and Peruvian team

BASELINE DATA COLLECTION

3

Goal: to 1) obtain baseline a) oral microbiome samples for DNA extraction, b) CPITN, OHIP14 Spanish version, c) DMFS; and to 2) mail DNA samples to UW

Team: Seattle and Peruvian teams.

Where: Peru

ANALYSIS

4

Goal: to sequence the oral samples and perform initial exploratory analyses, i.e. taxonomy, alpha diversity, beta diversity.

Team: Seattle team

Where: Seattle

POST INTERVENTION DATA COLLECTION

5

Goal: to obtain follow up data

Team: Seattle and Peruvian teams

Where: Peru

FUTURE INTERVENTION

6

Planning future interventions based on the results of this grant and with the input of the community.

Oct – Dec 2017: Refine tools, techniques, protocols, recruitment, and IRB submission. (Phase 1-2)

Mar – May 2018: Community participatory design and implementation of landscape intervention. (Phase 4)

July – Sept 2018: Conduct UW Exploration Seminar to document urban environmental changes and perform community impact assessment; develop pilot project report; apply for grants to further work. (Phase 6)

Jan – Feb 2018: Oral, gastrointestinal and environmental microbiome sampling; testing for environmental contamination; document current health seeking behaviors; begin analysis of pre-intervention findings. (Phase 2d & 3)

June 2018: Repeat microbiome testing; conduct Health Education Fair; begin analysis of follow-up findings. (Phase 5)