Fulbright-Fogarty Fellowship 2023-2024: My Experience Working in Puno, Peru

Jennifer Y. Rha[1], Elena Morales[2], Rayner Q. Valero[2], Haydee C. Pari[2], Rayner Q. Valero[2], Willy A. P. Mayta[2], Laura Nicolaou[3], William Checkley[3]

[1]Fulbright-Fogarty Fellowships in Public Health, [2]Asociación Benéfica PRISMA; [3]Division of Pulmonary and Critical Care, School of Medicine, Johns Hopkins University, Baltimore, USA.

Abstract

This poster aims to detail the highlights of my Fulbright-Fogarty experience working with community health workers and field workers on an NIH-funded implementation study and additional follow-up study in Puno, Peru. I was integrated into the field team of two studies, ANDES (Addressing Hypertension and Diabetes through Community-Engaged Systems) and HAPIN follow-up (Household Air Pollution Intervention Network) during which I acted as a liaison and operations support for the environmental data collection within the studies. However, my duties were not limited to the environmental components and I supported other aspects of the studies including the HbA1c, community health worker intervention, and implementation science components. This poster will mostly discuss my experiences in Puno as they relate to research and living in one of the world's highest cities as well as some facts about the culture and population of Puno. With pictures and captions, I hope to show what my day-to-day work was like, and my experience going on field visits both within the city and in rural parts of Puno.

Conclusions

- This Fulbright-Fogarty in Public Health Fellowship Award allowed me to become an integral team member of multiple global health studies in Puno, Peru.
- It was a highly informative research experience in global health that taught me the importance of community relationships, collaborative teamwork, and resourcefulness in global health research within under-resourced areas.
- With the skills I learned, I am motivated to continue pursuing global health research as a physician, with the intention of improving access to the management of chronic noncommunicable diseases and strengthening health systems as they relate to providing primary care.

Acknowledgements

I am grateful to Fulbright-Fogarty for awarding me this fellowship, Dr. Checkley for his mentorship and granting me the opportunity to work within his study, Dr. Nicolaou for her guidance throughout the project, my team members in Puno including Elena, Wily, Julio, Haydee, and Rayner in addition to the rest of the PRISMA staff who welcomed and assisted me throughout my fellowship. I am also grateful to Dr. Kendra Williams, Dr. Lindsay Underhill, and Dr. Arman Majidulla, Fulbright Peru, and my friends and family who supported me throughout this process and in my global health endeavors.

1. Puno, Peru



Location of Puno (L), Opening Parade of Candelaria (R)

- Capital City of Puno Region on the shores of Lake Titicaca
- Alt. 12,500ft or ~2.37 miles
- Peruvian Folklore Capital and Cradle of the Incan Empire
- Primarily indigenous population of Quechua (pop: 537,972) and Aymara (pop: 318,363) Andean people, ~72% of the population







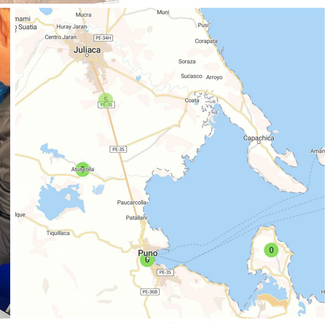
Puno City's main plaza, Plaza de Armas (Top), Aramu Muru, an Incan Gateway to the Gods (Bottom L), a chullpa (tomb) at Sillustani, a pre-Incan cemetery (Bottom R) (b-c)

2. HAPIN Follow-up & ANDES

HAPIN Follow-up





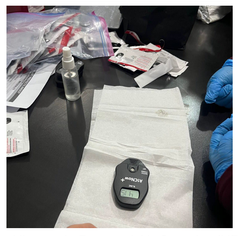


- Lung function of children in fetal development during HAPIN trial (included health assessments of pregnant people randomized to gas stoves or biomass stoves)

Installation of PurpleAir monitors at local health centers (Top), Oscillometry to gather lung function in children (Bottom L), Map of PurpleAir monitors and air quality in Puno Region (Bottom R)

ANDES







Ultrasonic Personal Air Sampler (UPAS) samples particulate matter (PM) air pollution onto filters (Top L), POC HbA1c (Bottom L), Spirometry procedure (R)

- Randomized superiority trial to evaluate effectiveness of a community health worker-led intervention in reducing blood pressure and improving diabetes control in patients from rural and urban Puno.
- Environmental measurements included POC HbA1c spirometry, 24hour blood pressure monitoring, and personal and kitchen air quality control measurements

3. Team & Community











Amazing, unforgettable times with the team.