Igniting Passion for Science Across a Vast Ocean: Nurturing a New Generation of Pacific Island Scientists

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INTRODUCTION

Health disparities and their disproportionate burden on minority and disadvantaged populations continue to plague communities across the United States (healthypeople.gov). Because they tend to manifest in other areas including education, employment, and socioeconomic status, the issue has further implications that transcend just the issue of health but also that of a person’s overall well-being and future prospects.

The geographical and cultural milieu of the Pacific make it unique. Despite its majestic setting, the Pacific Islands are not exempt from its share of health issues. Resource limitations exacerbated by the sheer remoteness of many island communities perpetuate health disparities. In the Marshall Islands, limited economic and medical resources compounded by crowded living conditions have given rise to increasingly serious health concerns for diseases such as tuberculosis and leprosy (WHO 2014; US Embassy RMI 2005). In American Samoa, Type II diabetes has reached epidemic proportions. In a place where food preferences have transitioned from fresh to fried, and where there are social and cultural expectations related to food consumption, the problem continues to persist (Rosen et al., 2008). It is widely agreed upon that health disparities in such communities are best tackled by healthcare professionals and researchers who are culturally sensitive and who have intimate ties with the local population. Knowing this, the education and professional development of young and eager students in these Pacific communities is of utmost priority.

The NIH/NIDDK STEP-UP Program was launched in 1994 in order to address health disparities among minority and disadvantaged populations across the US and has since developed to extend to much of the Pacific region. This includes Hawaii as well as the US-affiliated territories and compact states: American Samoa, Guam, the Commonwealth of the
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Northern Mariana Islands, the Federated States of Micronesia, the Republic of Palau, and the Republic of the Marshall Islands. STEP-UP provides enthusiastic high school students with the opportunity to further develop their interests and commitment to careers in science and research and as a result diversify the biomedical and healthcare work forces essential to meeting the needs of their underserved communities.

In recent years, it has been a priority of Pacific STEP-UP, a component of the national program, to create opportunities for high school students to gain hands-on laboratory experience in their local settings. Since 2010, five laboratories capable of both basic as well as more sophisticated molecular biology research and activities have been established at local colleges across the Pacific. Not only do these facilities provide opportunities for students to actively engage in science, it strengthens the infrastructure and capabilities of both the local colleges and the wider community. It is the hope of Pacific STEP-UP that these efforts continue to evolve and lead to sustainable solutions that address health disparities in Native Hawaiian and Pacific Island communities.

Dr. Hui and Ms. Clements are extremely grateful for the opportunity to be a part of such a meaningful and rewarding program. STEP-UP in the Pacific has been a collaborative effort and we wish to thank the other Coordinating Centers, NIH partners, as well as institutions and agencies across the Pacific who continue to support and promote STEP-UP’s mission in our island communities. To the countless individuals who have given selflessly of their time, mentorship and support, the program would not be possible without you and we cannot thank you enough. Pacific STEP-UP is funded by NIH/NIDDK grant number R25DK078386.

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