

Imi Ho'ola Post-Baccalaureate Program: recruitment, retention, and graduation of Asian American and Pacific Islander students in medicine

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outstanding track record of providing educational opportunities for individuals from underrepresented minority and disadvantaged backgrounds. The program has 28 years of experience producing medical doctors and other health professionals from Hawai'i, Guam, American Samoa, the U.S. Associated Pacific Islands (USAPI), and the continental United States.

Abstract

Imi Ho'ola has been a successful model for training underrepresented minorities and disadvantaged individuals in medicine at the University of Hawai'i. This program has 28 years of experience assisting students to prepare for, qualify for, and complete the M.D. program, thereby producing medical doctors and other health professionals for Hawai'i, Guam, American Samoa, the U.S. Associated Pacific Islands (USAPI), and the continental U.S. Recently, Imi Ho'ola has expanded its outreach efforts to create an educational pathway for local high school and college students encouraging them to pursue higher education and health careers. A description of the Imi Ho'ola is presented with emphasis on its post-baccalaureate curriculum begun in 1995.

Imi Ho'ola has been a successful model for training underrepresented minorities and disadvantaged individuals in medicine at the University of Hawai'i.

This article describes the program's early efforts in 1973 as a premedical enrichment model (with no guarantee of medical school acceptance). The present article also emphasizes the efforts made in 1995 to develop into a post-baccalaureate model (with provisional medical school acceptance) at JABSOM. More recently, Imi Ho'ola has expanded its outreach efforts and has developed partnerships with local high schools and community-based organizations.

Brief history

The history of the medical school's formation at the University of Hawai'i in 1967 has been outlined in Dr. Benjamin Young's article, "A History of Imi Ho'ola" in an earlier issue of the *Pacific Health Dialog*. Dr. Young, the first psychiatrist of Hawaiian ancestry and former Dean of Students at the medical school, directed the educational-opportunity programs that targeted Native Hawaiians and other Pacific Islanders in an effort to achieve ethnic parity among the physician workforce in Hawai'i, American Samoa, and the U.S. Associated Pacific Islands. Under the leadership of Dean Windsor Cutting and then Dean Terence Rogers, the Dean's Guest Program and Imi Ho'ola were established at JABSOM.

Introduction

Imi Ho'ola (Hawaiian for *those who seek to heal*) is a program of the John A. Burns School of Medicine (JABSOM) at the University of Hawai'i at Mānoa. Imi Ho'ola has an

Imi Ho'ola was an enrichment program that prepared students in pre-medical sciences and English language skills in order to foster more competitive medical school applicants. Once accepted into JABSOM, the majority of the students participated in the Dean's Guest Program, which was later renamed the Kūlia Program (Hawaiian for *To Strive*, as in *Strive to Reach the Summit*). To ensure success, the program allowed students to complete their first two years of medical school in three years, thereby expanding the medical school curriculum over a period of five years.

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Table 1. Imi Ho'ola graduates, by ethnicity, 1979 - 2000

Ethnicity	Number of graduates	Percent
Hawaiian	53	41
Filipino	27	21
Samoan	11	9
Chamorro	10	8
Japanese	8	6
American Indian	2	2
Caucasian	2	2
Palauan	3	2
Vietnamese	2	2
Cambodian	2	2
Yapese	2	2
Marshallese	2	2
Chinese	1	1
Hispanic	1	1
Kosraen	1	1
Puerto Rican/Samoan	1	1
Pohnpeian	1	1
Total	129	100*

**more than 100% due to rounding*

The goal of the Imi Ho'ola Program has remained unchanged—that is, to increase the number of individuals from underrepresented minority and disadvantaged backgrounds in medicine from Hawai'i and the broader Pacific Basin. This program focuses on providing educational opportunities for Hawaiians, Filipinos, Micronesians, Chamorros, Samoans, and other individuals from underrepresented and disadvantaged groups, such as Native Americans, Vietnamese, Laotians, and Cambodians. To date, 129 Imi Ho'ola students have graduated from JABSOM attesting to the program's success, including on traditional indicators (e.g., passing on standardized tests). Only 20 have not completed medical school subsequent to entering into JABSOM, either due to being dismissed or withdrawing. Thirty-five students are currently enrolled. Tables 1 and 2 provide the ethnic data on

graduates and on former Imi Ho'ola students enrolled at JABSOM.

Critical to the continued success of the program has been the establishment of an Advisory Committee that assists in the selection of students and promotion of the program in the community. Moreover, the continued support of Hawai'i's Congressional Delegation, particularly U.S. Senator Daniel K. Inouye, has contributed to the promotion and development of an indigenous health workforce for Native Hawaiians and Pacific Islanders.

Having been funded by the federal government with some support from the State of Hawai'i, Imi Ho'ola underwent programmatic changes in 1995. Priority for federal funding was directed to medical schools with

Table 2. Former Imi Ho'ola students enrolled at JABSOM, academic year 2000-2001

Ethnicity	Number of students	Percent
Hawaiian	12	34
Filipino	13	37
Samoan	3	9
Vietnamese	3	9
Chamorro	1	3
Laotian	1	3
Palauan	1	3
Chinese	1	3
Total	35	100*

**more than 100% due to rounding*

innovative approaches that enhanced “academic preparedness” for unsuccessful applicants. The new mandate required that programs provide structured academic programs with counseling, tutoring, and psychosocial support, which prepared participants for the rigors of medical school. Upon entry into the program, students who successfully completed the post-baccalaureate program were assured enrollment in the first-year class of medical school.

Under the leadership of Dean Christian Gulbrandsen and Associate Dean Satoru Izutsu, Imi Ho’ola was restructured to a post-baccalaureate program that included provisional acceptance into JABSOM. Ten students were selected to participate in this 12-month program designed to better prepare students for the Problem-Based Learning curriculum at JABSOM. Upon successful completion of the 12-month post-baccalaureate program, students entered JABSOM as first-year medical students.

Imi Ho’ola Post-Baccalaureate program

The 12-month post-baccalaureate program equips students with knowledge of the basic sciences and learning skills needed to successfully complete their first-year in medical school. The curriculum emphasizes the integration of concepts and principles in the sciences and humanities, and further develops students’ critical-thinking and communication skills. The program is made up of three components: Phase I, Summer Orientation and Assessment (six weeks in the summer); Phase II, Post-Baccalaureate Enrichment (fall & spring semesters); and Phase III, Pre-Matriculation (six weeks in the following summer).

In Phase I, a Learning Specialist collects baseline data on the students’ knowledge in biology, biochemistry, chemistry, reading, and critical thinking skills. A battery of assessments is administered, including the Myers-Briggs Type Indicator, Learning and Study Skills Inventory (LASSI), Watson-Glaser Critical-Thinking Appraisal, Whimby Analytical Skills Inventory, and Nelson-Denny Reading Test. Based on these assessments, an individualized educational plan is developed for each student.

The Program Director and Learning Specialist meet six times throughout the year to provide students with feedback on their performance—highlighting strengths and areas requiring development. In general, there are definite trends in students’ learning styles. For example, Imi Ho’ola students tend to be sensory learners as seen in the Myer-Briggs Type Indicator. Therefore, program fac-

ulty provide hands-on laboratory classes for students to apply newly learned concepts and principles.

Phase II is conducted during the academic school year by medical school faculty. In this component of the program, students are taught biology, chemistry/biochemistry, the scientific basis of medicine, speech, and ethics in health care. An integrated approach to learning is emphasized, whereby students learn to improve their critical-thinking and problem-solving skills in content areas. In this phase, students continue to develop their learning skills in organization, time-management, note-taking, and test-taking. If needed, individual students who require additional educational support are provided tutorial assistance and counseling.

Phase III is the bridging component of the program, easing students’ transition from Imi Ho’ola into their first year in medical school. Students obtain hands-on experience in Problem-Based Learning and are evaluated with tools utilized in JABSOM. The Introduction to Clinical Skills course is taught by an alumnus of Imi Ho’ola. This instructor focuses on developing the doctor-patient relationship through history-taking. Students are also taught how to obtain vital signs, including blood pressure and pulse. For a two-week period, students participate in a community health experience in rural settings throughout the State of Hawai’i. Alumni of Imi Ho’ola serve as role models and mentors for these students.

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To date, five post-baccalaureate classes have been enrolled at JABSOM. The profile of an entering Imi Ho’ola

student is: Science grade point average (GPA) of 3.08, total GPA average of 3.26, and average Medical College Admission Test (MCAT) scores in Verbal Reasoning of 7.37 (on a scale of 1 to 15, 15 being the highest), in Physical Sciences of 7.18, and in Biological Sciences of 7.87. The first class of this newly restructured Imi Ho’ola post-baccalaureate program graduated from JABSOM in May 2001.

Outreach efforts

Beginning in 2000, Imi Ho’ola expanded its outreach efforts by developing partnerships between the University of Hawai’i, local high schools, and community organizations to create an educational pathway for underrepresented minority and disadvantaged students to enter college and pursue health and allied health careers. Over the next five years, a new program will provide educational opportunities in college preparation and exposure to health careers for nearly 400 high school and college students.

Table 3. Geographic distribution of Imi Ho'ola alumni	
Practicing sites	Number of physicians
Hawai'i	63
Guam, Federated States of Micronesia, Commonwealth of the Northern Mariana Islands, Republic of Palau, American Samoa	8
U.S. Continent	30
Unknown (no recent addresses)	5
Residency training	
Hawai'i	11
U.S. Continent	6
Post-graduate training Fellowship	
	4
Deceased	
	2
Total	
	129

Institutionalization

Imi Ho'ola is important to Hawai'i because of its contribution in ensuring diversity and quality in the health-care workforce. Under the leadership of Dr. Edwin Cadman, Dean, and Dr. T. Samuel Shomaker, Vice-Dean of Academic Affairs and Education, efforts are directed at institutionalizing the program at JABSOM by incorporating it into the medical school curriculum and budget. The recently formed non-profit alumni organization known as "Friends of Imi Ho'ola" is working collaboratively with the medical school to obtain monetary support for the program and scholarships for students. Graduates practicing medicine in Hawai'i, Guam, the Federated States of Micronesia, the Commonwealth of the Northern Mariana Islands, the Republic of Palau, American Samoa, and the continental U.S., are working to ensure continued funding support for Imi Ho'ola (see Table 3 for geographic distribution of Imi Ho'ola alumni).

Conclusion

Continued efforts are needed to address the under-representation of Hawaiians, Filipinos, Micronesians, Chamorros, Samoans, and other population groups in the health field. Imi Ho'ola has been a very successful model of training underrepresented minorities and disadvantaged individuals in medicine. Additional training initiatives similar to Imi Ho'ola will need to be developed in disciplines such as nursing and public health. It is critical in a geopolitical context that the University of Hawai'i remains engaged in the development of the indigenous peoples of the Pacific Basin.

Acknowledgement

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Ka leo o ke ola
 The voice of life
*Said of any helpful advice or suggestion,
 or of a kindly invitation to eat*