Background

The Master of Arts in Medical Sciences (MAMS) degree at Heritage University, a predominantly Native American and Hispanic-serving institution, is a one-year bridge or pipeline program to graduate health professional schools. The degree program is operated in collaboration with Pacific Northwest University of Health Sciences College of Osteopathic Medicine and Washington State University College of Pharmacy. MAMS students are typically first generation, minority, late-blooming, or disadvantaged individuals. Coursework taken alongside first-year medical students at Pacific Northwest University of Health Sciences as well as first-year pharmacy students at Washington State University coupled with standardized exam preparation, service-learning opportunities, mentorship, study strategies, club participation, and access to medical, physician assistant, and pharmacy school faculty/staff/students provide MAMS students with the capability to strengthen their applications as well as demonstrate their readiness for professional school. The curriculum is interprofessional education (IPE) rich and focuses on the cell/molecular basis of health and disease. Additional instruction is provided in medical skills as well as the psychosocial basis of disease and treatment. Delivery of course content utilizes lectures, in-class discussion, case-based learning, small-group learning, computer-facilitated learning, and laboratory activities.

About the Universities

Heritage University
- private liberal arts university, awards bachelor/master degrees; MAMS
- located in Toppenish, WA on Yakama Nation Tribal Land
- enrolls 1,100 students; 75% are Native American and Hispanic
- dedicated to honoring the legacy of the Northwest Indian

Pacific Northwest University of Health Sciences
- operates a College of Osteopathic Medicine; awards D.O. degree
- entry class size of 135 students; 4-year curriculum (2 didactic, 2 clinical)
- located in Yakima, WA; a private American grass roots medical school
- educates/trains health professionals for rural and underserved areas

Washington State University
- comprehensive, research, land grant public university
- maintains a College of Pharmacy satellite campus on PNWU campus
- matriculates 35 first-year students annually into a 4-year curriculum
- prepares pharmacists for working with rural and underserved populations

Curriculum/Methods

**FALL SEMESTER**

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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>BIOL 511</td>
<td>Scientific Foundations of Medicine*</td>
<td>10</td>
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<tr>
<td>BIOL 505</td>
<td>Medical Skills and Theory I</td>
<td>4</td>
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<td>BIOL 507</td>
<td>Biomedical Ethics</td>
<td>3</td>
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<td>BIOL 509</td>
<td>Health Professions I</td>
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*Scientific Foundations includes topics such as immunology, microbiology, embryology, biochemical metabolism, genetics, medical physiology, histology, and cell biology.

**SPRING SEMESTER**

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<tr>
<td>BIOL 512</td>
<td>Foundations of Personalized Medicine**</td>
<td>10</td>
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<tr>
<td>BIOL 506</td>
<td>Medical Skills and Theory II</td>
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<td>BIOL 510</td>
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**Foundations of Personalized Medicine includes topics such as health communications, behavioral health, health disparities, and pharmacogenomics.

VALUE ADDED SERVICES

- Standardized Exam Guidance
- Service Learning Opportunities
- Mentoring System
- Personal Statement Review
- Monthly Progress Meetings
- Mock Interviews
- Career Development

Results and Comparative Data

Students

First Generation, Resilience, Rural or Underserved, Disadvantaged, Minority, Second Chance

Discussion/Conclusion

The Heritage / PNWU Bridge Program, the only one-year master’s degree in the Pacific Northwest focused on preparing students for health professional school, is successfully strengthening applications and demonstrating student readiness for professional school. Since the program’s inception in 2012, 100% of students have graduated, 41% of students have been minorities, nearly 90% of graduates have gained admission into a health professional school of their choice, and 98% of MAMS students in professional schools have remained in good academic standing. MAMS students have been admitted to medical, dental, optometry, podiatry, pharmacy, and physician assistant schools at nearly twice (2X) the rate of most post-baccalaureate program graduates. MAMS students admitted to professional schools have achieved equivalent class grades and board scores compared to other admitted students. Overall student satisfaction is running approximately 90% as measured by survey. Cost of attendance is in the bottom quartile of comparable programs.

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Admission Personnel and Staff: Hope Ennis, Mike Riggins, LeAnn Hunter, and Kathy Kammenderer

Co-Directors: Tyson Miller and Mark Taylor (PNWU, 200 University Parkway, Yakima WA 98901, mtaylor@pnwu.edu, 509-249-7712)

References: AACOM, AAMC, and Institutional Reports