Public Health PIG Report, Spring 2023

Alissa Cordner, Sociology – Project Lead
Ellen Defossez, RWPD
Leena Knight, Biology
Nina Lerman, History
Kimberly Mueller, Director of Health Professions Advising
Jason Pribilsky, Anthropology
Jim Russo, BBMB
Wenging Zhao, Philosophy

In Spring 2023, our group of faculty and staff received a PIG to understand what it would take to create a structured Public Health major, minor, or concentration at Whitman by reviewing information at peer institutions, soliciting ideas from students and faculty, and gathering other information. We also had two wonderful student assistants, Nishtha Rajbhandari and Michelle Shin. Please note that throughout our work and this report, we are thinking about health-related courses of study broadly conceived, including Public Health, Community Health, Global Health, Health and Society, or something similar.

Here is a summary of how we gathered and evaluated information about health-related programming at Whitman and elsewhere:

- We developed an evaluative rubric for public health and health-adjacent programs at peer and aspirational schools, using the extended panel of 18 provided by the Institutional Research office. This spreadsheet contains ~20 columns of information about other schools' programs. Our student researchers reviewed programs at our 18 peer institutions to complete the comparative spreadsheet.
- We developed a summary document describing commonalities between programs at different schools, with attention to concentrations/certificates, minors, and majors.
- We reached out to faculty at peer institutions with majors and minors, and have compiled additional information about the history of those programs and the resources that support them in this report.
- We administered a survey to students and received nearly 70 replies. We analyzed this survey and results are included in this report.
- We held two focus group lunches with students to discuss public health options, attended by 17 students total, to gather feedback in a discussion format. These lunches were facilitated by our student assistants. We took detailed notes, and the results are summarized in this report.
- We gathered information about health-related Individually Planned Majors.
- We gathered information from Admissions about prospective student interest in public health
- We gathered information about Whitman alumni in public health school and/or public health fields.
- We had two informational meetings with faculty and discussion points from these meetings are included in this report.

We have received PIG funding for Fall 2023 for a smaller group (Cordner, Mueller, Russo, and joining us Matthew Tien, Biology) to continue this work. Specifically for this PIG2, we plan to:

- Identify one or more possible program models that we think are viable at Whitman, that are supported by faculty and administration, and are of interest to students.
- Meet with all Divisions and with interested departments to discuss the proposal(s).
- Meet with members of the Whitman administration to understand how public health might fit into the College's overall strategic priorities, and what resources might be available in the short term and longer term to support public health work.
- Develop a better understanding of local resources and connections that could relate to any required integrative, research, community-engagement, or applied component.
- Building on those conversations, determine the best path forward, possibly including: not putting forward a concrete proposal, sharing results with the faculty as a whole, or putting forward a formal curricular proposal to establish a new program.

We will briefly reflect on the questions posed by the CTL before summarizing the results of our research:

- What was the outcome of your project and how did it align with your original goals as stated in your application?
 - Our outcome is the following report, and it aligns very well with our original goals of the PIG application.
- What sense do you have at this point that your project has enhanced student learning and what will you be looking at in the future to know whether the project was successful?
 - Our project has not yet enhanced student learning but has significant potential to do so. We have initiated meaningful conversations about health-related curricula at Whitman and involved multiple students, faculty, and staff in these efforts. Their enthusiasm for this work is evidenced by the outpouring of student response we had to our survey and focus groups, and by the frequent emails and side conversations initiated by members of the Whitman community (broadly conceived) with our PIG team. The biggest enhancement of student learning would come if our PIG2 in the fall leads to the proposal of a new course of study for Whitman, but this depends fully on work to be done in the fall.
- What were the limitations or failings of this project, and how, in retrospect, might they have been better addressed or remedied?
 - For the most part, this is unknown because we are continuing this work in the fall.
 We do know generally that faculty in many parts of the campus who could support health-related curricula are already stretched thin with ability to offer courses, and this is something we will pay close attention to in the fall.
- How do you envision sharing the results of your work with other colleagues at Whitman (or elsewhere)?
 - We held two focus groups with students and two listening sessions with faculty this spring. In the fall as part of PIG2, we will share our initial recommendations

with the full faculty, meet with Divisions and interested departments, and consider next steps based on those conversations.

The remainder of this report contains a summary of our work and research this spring. It was collectively written by all members of the PIG group.

Part 1: What is already happening at Whitman related to health?

Part 2: Student Experiences and Interest

Part 3: What are Whitman alumni doing in terms of public health?

Part 4: What is already out there at other programs?

Part 1: What is already happening at Whitman related to health?

We looked through Whitman's catalog to identify health-related courses, and identified thirty-eight courses in the fall and spring semesters of AY' 23-24 taught in 14 academic programs and departments (Anthropology, BBMB, Biology, Computer Sciences, Economics, Environmental Sciences, French, History, Interdisciplinary Studies, Mathematics, Political Science, Psychology, Writing, Rhetoric, and Public Discourse, and Sociology). These courses could support students pursuing the many public health pathways, including behavioral and social science, biostatistics and informatics, epidemiology, environmental health, global health, health policy, and management, health promotion and communication, maternal and child health, and minority health and health disparities. Fifty-four additional courses not offered in AY' 23-24 were identified, which would be appropriate and of interest.

Despite the substantial number of identified courses, we note several caveats. First, while some of the courses we identified focus directly on health, many others include health in only a minor way or could *support* a health related program but are not focused on health. Second, as we note below, we have concerns about the frequency of related courses and the number of available seats for interested students. For the full list:

https://docs.google.com/spreadsheets/d/1JglhoNHFV9VmxNnh5EgFFbGJg1d7FhHY/edit?usp=sharing&ouid=108681518391810160291&rtpof=true&sd=true

Individual Planned Majors:

Given the assortment of health-related courses across the curriculum, a significant number of students have elected to create independently planned majors (IPMs) centered on health-related themes (e.g., public health, global health, health and development). Since 2003 (the first year a student initiated a health-related IPM), the Registrar reports that there have been eight such projects. (We actually believe this number is slightly higher than the Registrar's data given the naming of IPMs and students currently working on them.) These health-related IPMs were designed along interdisciplinary lines whereby students gathered together coursework that represented at least three distinct perspectives: humanities-related health courses, social sciences (with a strong emphasis on issues of international development, behavioral approaches, and policy), and the natural sciences. Students composed 3-faculty committees including a primary advisor to oversee their work. In each case, students capped their coursework with a year-long thesis. These projects have included projects on disability

studies, global vaccine programs, drug-testing, health education, and traditional/indigenous medicine. In addition to coursework, most IPM students supplemented their studies with internships and volunteer work in local public health agencies and at research labs and centers (e.g. The Fred Hutchinson Cancer Center). In many cases, the IPM route proved a good basis for post-Whitman career and study goals. Two of our recent graduates are currently in medical school; others have pursued advanced degrees in nursing, public health, and health administration. A 2023 IPM graduate parlayed her major into a prestigious Watson Fellowship to study traditional medicine around the world.

The IPM model appears to be a successful conduit to channel student interest in public health and help orient future health-related endeavors. However, it is not without some drawbacks. First, faculty who instruct IPMs are not compensated for this work and it is an overload beyond their standard departmental/program thesis advising. Second, IPM students also lack a cohort of students with whom they can share their program and development. (In a couple of cases, however, students have been able to join the anthropology fall senior seminar to be able to have the experience of collectively working on their capstone projects.)

Off-campus Studies Programs:

According to Susan Holmes, Director of Off-Campus Studies, "a fair number of students express interest in pursuing studies in these fields while abroad." She also provided a list of five programs currently supported by Whitman that have significant health-related components or offerings.

Interests of Prospective Students:

Nationally, interest in public health programs is clearly on the rise. According to a recent article in *Inside Higher Ed*, the growth is predominantly at the undergraduate level: t[T]he number of graduates with an undergraduate degree in public health jumped by more than 1,100 percent between 2001 and 2020, outpacing master's degrees as the most popular public health degree by 2020." With respect to our comparison schools, we can also see substantial interest from students who attend our peer and aspirational institutions (see below).

We queried the Admissions Office about prospective student interest in public health. Since Admissions does not explicitly ask about public health interest, they don't have reliable data around this. (Nor does the College Board or ACT provide any conclusive data.) Anecdotally, Whitman's Admissions Office does report students asking about public health at the college from time to time.

Part 2: Student Experiences and Interest

We administered a survey to students and received nearly 70 replies. Within that survey, students volunteered to participate in focus groups. We held two focus group lunches with

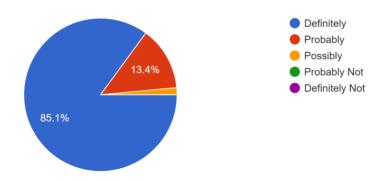
¹ Alonso, "Could Undergrads Save the Public Health Workforce?" Inside Higher Ed. (January 5, 2023) Accessed on 6/5/2023 @ https://www.insidehighered.com/news/2023/01/06/public-health-majors-grow-more-1000-percent

students to discuss public health options, attended by 17 students total, to gather feedback in a discussion format.

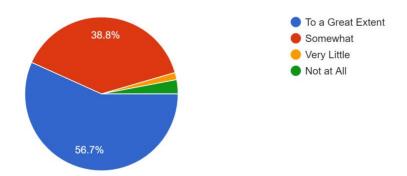
Summary of Student Survey Responses

The student survey shows a thirst for public health related subjects and programs at Whitman. 85% of surveyed students believe that Whitman *definitely* should offer a public health program, and 57% are personally interested in doing a public health program.

Do you think Whitman should have some type of Public Health program? (Remember that we are interested in "public health" really broadly conceiv... Health, Community Health, and Health and Society) 67 responses



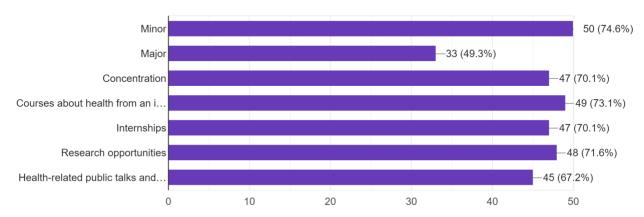
Would you personally be interested in a Public Health Program at Whitman? 67 responses



Students expressed interest in multiple curricular models, with 75% expressing interest in a minor; 50% in a major; and 70% in a concentration (though we learned in focus groups that there is very limited understanding of what a 'concentration' is among students). A strong majority were also interested in interdisciplinary courses, internships, research opportunities, and health-related talks and on-campus events.

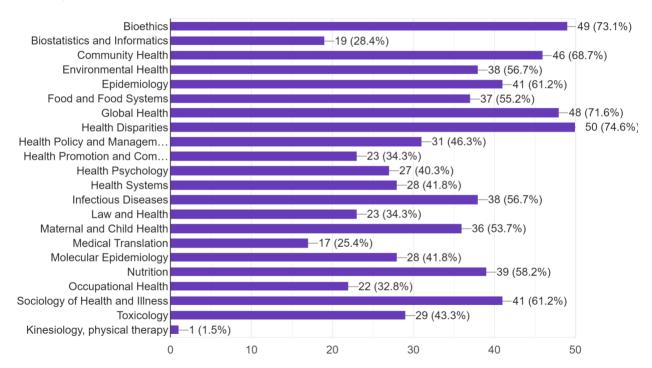
If offered, which of the following would you possibly be interested in? Choose all that apply. (In general, a Minor is a scaled-down version of a Maj...or and includes topics from multiple departments.)

67 responses



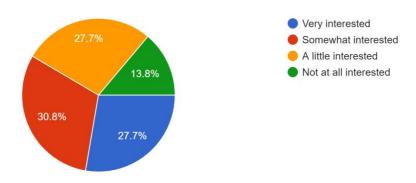
Students expressed interest in a broad range of health-related courses. The most popular health-related topics, of interest to >50% of respondents, were: Health Disparities, Bioethics, Food and Food Systems, Community Health, Epidemiology, Sociology of Health and Illness, Nutrition, Environmental Health, Food and Food Systems, Infectious Diseases, and Maternal and Child Health. The demand for diverse course offerings echoes the diverse student interests in public health related careers after-Whitman.

Are you interested in any of these health-related topics? Check all that apply. 67 responses



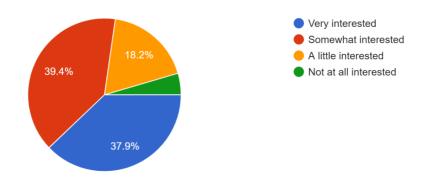
The survey also shows that the students take a great initiative in planning their education related to public health: Over 30% of surveyed students would be interested in joining a public health club and connecting with undergraduates in public health from other PNW institutions.

Would you be interested in joining a student-led Public Health club? 65 responses



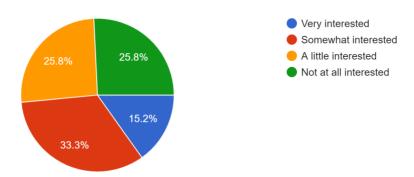
How interested would you be in meeting with Public Health undergraduate students from other colleges and universities in the Pacific Northwest?

66 responses



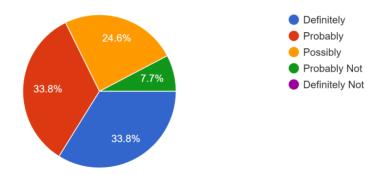
When asked about their career interests, students gave a diverse list of answers that ranged from community health research, dental school, and law, to bioethics and sustainable development. The following themes emerged from the qualitative responses from the students: Broaden understanding of systemic medical issues; help in getting an internship and getting involved with a mixture of government-run entities, NGOs, and privately-owned companies/hospitals; and preparation for professional schools after Whitman. While about 15% of respondents said they were 'very' or 'somewhat' interested in some sort of public health grad school, over half were "a little" or "not at all" interested, demonstrating that our sample is not just made up of people intending to go to grad school in this field.

Are you interested in attending a Public Health graduate school of some kind? (Examples include Masters in Public Health (MPH), Masters in Bioet... JD-MPH, Dual-degree MD-MPH, Nursing-MPH, etc.) 66 responses



The student survey suggests that they are attracted to a public health program with the following elements: internships and community outreach, after-Whitman career and academic options, and having a wide variety of classes. More specifically, two thirds of surveyed students think that the program should probably or definitely require an applied or research experience component, such as an internship, research experience, or community-engagement placement.

If a Public Health program was implemented at Whitman, do you think it should include a required applied or research experience component, such ...experience, or community-engagement placement? 65 responses



Student Focus Group Conversations

At the end of the survey, students were invited to leave their emails to sign up for a focus group (with lunch, thanks to the PIG funding). Over 30 expressed interest in this, and given people's schedules, approximately 15 students joined us for two focus group lunches. We asked them questions about their pre-Whitman interest in health-related topics; classes they have taken; changes in their health interests; experiences with health classes and other programs; desires for health-related courses in the figure; and other things our PIG group should consider.

Students mentioned that health was relevant across many majors. While there were a number of Biology and BBMB majors in the two focus groups, other majors represented

included English, Sociology, and Environmental Studies-combined majors. Some but not all students were formally pursuing pre-health programs of study or were interested in these.

Students noted that health-related classes are offered too infrequently to accommodate student demand. Students specifically noted classes such as Infectious Disease, Bioethics, and Sociology of Health and Illness as being offered too infrequently and with too few spaces to accommodate student interest. Students also noted that they have a hard time finding out about courses related to health that are outside their departments they associate with their major, particularly since they look for classes using the "course search" feature in mywhitman, which limits things by department. Students also would like more advanced courses on health-related topics; more discussion-based courses; courses on health inequality and justice; courses on health care policy and access to care; and courses in the history of health-related topics. Students noted that courses taken on campus had widened their perspectives by situating health within a broader context; this was particularly valuable for science majors, they said.

Students reported interest in all types of possible programs (major, minor, concentration - though we had to explain to them what a concentration was and almost all of them had never heard of our existing concentrations). In one focus group, students spoke with enthusiasm about a set of Health-combined majors similar to Whitman's ENVS-combined majors - for example, "Health-Science" or "Health-Policy and Social Science". Thinking about requirements for a health-related program, they encouraged us not to require lots of science courses with many technical prerequisites, so that the program could be accessible to students majoring in arts, humanities, and social sciences in addition to being accessible to students majoring in the physical and natural sciences.

Students in one focus group specifically mentioned that classes with health-related external speakers helped to bridge the gaps between theory/academic discussions and practice, and increased ideological diversity within courses. They also said that outside speakers were more accessible when part of courses rather than in the evenings. Finally, students said they were more interested in broadly learning about public health and health-related topics, rather than being "workforce ready" for public health careers.

Part 3: What are Whitman alumni doing in terms of public health?

We conducted a comprehensive analysis of alumni data provided by the Whitman Office of Alumni Relations, in conjunction with a list of past and current Master of Public Health (MPH) graduates supplied by the Office of Health Professions Advising. In our initial investigation, we focused primarily on individuals who had obtained an MPH degree, as this subgroup could be readily identified. We identified a total of 115 such individuals within the dataset.

Our examination revealed that among the alumni cohort, 57% had chosen to exclusively pursue an MPH degree subsequent to their time at Whitman, while the remaining 43% had pursued Master's degrees in various alternative fields, including but not limited to the Arts (MA), Business Administration (MBA), Science (MS), Social Work (MSW), as well as advanced doctoral degrees such as Dentistry (DDS), Nursing (DNP), Medicine (MD), and Philosophy (Ph.D.). It is worth noting that some alumni had engaged in combined programs of study, such as an MD-MPH or MD-PhD, or pursued an MPH degree subsequent to obtaining their advanced degrees.

Beginning with the 2021-22 application cycle, the Schools of Public Health Application Service has authorized the release of information to professional academic advisors, which allowed us to also identify all Whitman alumni who have applied to and/or enrolled in MPH programs starting with that application cycle. As of June 2023, there are 25 identified alumni who have applied or are currently enrolled in an MPH program of study. We will also be able to have more comprehensive data on MPH enrollment as long as this data continues to be available in the coming years.

Whitman alumni are engaged in diverse professional settings, encompassing both the private for-profit and non-profit sectors, educational institutions, as well as governmental agencies operating at the international, federal, state, and local levels. A considerable number of alumni are directly involved in the healthcare sector, assuming roles as nurses, medical doctors, and researchers. Additionally, alumni have made significant contributions within graduate educational environments, serving as professors, assistant professors, and program administrators. It is worth noting that many individuals hold multiple appointments, concurrently working as medical doctors and researchers within non-profit or not-for-profit medical centers.

Part 4: What is already out there at other programs?

We gathered information about what our expanded panel of 19 schools offers in terms of public health curricula, broadly conceived. Whitman College is part of the one third of peer schools that do not offer a health-specific program of study in the form of either a major, minor, concentration, or certificate. Within the two thirds of peer institutions that do offer a health-specific program of study, majors are uncommon (offered by only 3 peer institutions), as are programs labeled "certificates" (offered by 1 peer institution) and "concentrations" (also offered by 1 peer institution). (Note that Whitman's current understanding of a "concentration" is more in line with the thematic or interdisciplinary minor approach at some other schools.)

Type of health-related program	Schools
No program	Bowdoin Carlton Colby Kenyon Pomona Reed Union
Certificate	Dickinson - Health studies
Concentration	Macalester - Community and global health
Minor	Colorado - "thematic minor" in Global Health Davidson - "interdisciplinary minor" in Public health Occidental - Public health Lewis & clark - Health Studies

	Middlebury - Global Health Willamette (also has a major) Rhodes (also has a major)
Major	Franklin & Marshall - Interdisciplinary Major in Public Health Rhodes - Major in Health Equity, as a sub-major of Urban Health Willamette - Public Health

The most common health-specific program of study is a minor, offered by 7 peer institutions. Minors typically consist of 5-6 health-related courses; some of these course sets are interdisciplinary in nature (with a broad focus on, for example, 'Health and Society'), while others are more focused, traditional Public Health offerings. Almost all minors require a shared introductory course in Public Health or something similar. Epidemiology and Bio/statistics are required courses in many, but not all minors. Community engagement is a common theme of emphasis across minors, but typically not a program requirement. Most programs do not offer an integrating senior capstone course.

Additionally, we were interested in understanding the process by which several comparison colleges which have major and/or minor programs in Public Health had established their curricula. Thus we had conversations with the current chairs/directors of four programs:

- 1) **Franklin & Marshall College** (F&M) established a Public Health major and minor in 2011, with students choosing from one of three tracks in biology, government-policy, or sociology.
- 2) Occidental College (Oxy) has offered a minor in Public Health since 2013.
- 3) **Willamette University** initiated a major and minor titled Public Health Ethics, Advocacy, & Leadership (PHEAL) in 2019.
- 4) Davidson College began offering its minor in Public Health in 2020.

The initiation of programs in Public Health at F&M, Oxy, and Willamette began with interest from faculty in existing departments (biology, politics, sociology, anthropology, exercise and health sciences) who were teaching courses related to public health. All schools have hired new faculty into tenure track positions to teach core courses in the program (epidemiology and introduction to public health). These new positions have been joint appointments between public health and existing departments (F&M has 6 new faculty, 2 each with appointments in biol/pol/soc) or as a new faculty position with appointment solely in the public health program (Oxy 1, Willamette 1, Davidson 2).

F&M and Willamette initiated their programs with existing faculty and added new faculty after the program began. Oxy (located in Los Angeles) used part-time adjuncts for several years before hiring a permanent faculty member to direct the program and teach the Intro to Public Health and Epidemiology courses. Davidson initiated its program after hiring a Director (from the CDC) as a new tenure track position. In the first year, they made a second new tenure track hire with expertise to teach epidemiology, health disparities, and nutrition, and formally created Public Health as a new department. At all four schools, the Director of Health Professionals Advising is a key contributor to the program.

One common challenge at all schools has been the establishment and retention of local and statewide partnerships with public and private organizations engaged in public health work in order to provide internships and community-based learning opportunities. Grant funding and alumni support have been key for sustaining these curricular needs.

Interdisciplinary nature of public health

Some of these undergraduate programs follow a model directed more toward the classic MPH (an interdisciplinary field already, but a focused one), while others take a deliberately Liberal Arts approach, more akin to what Whitman did with the "Race, Health, Justice" academic theme (2020-22). Similarly, among the student responses to the survey and lunch discussions, some students focused on topics we might designate as "health *sciences*," while others made inquiries in a frame more aptly called "health *studies*." (In the related fields formerly called sociology or history of medicine, "health" has been used in recent decades as a broadening rubric, incorporating a wide range of healers and publics and well or unwell bodies.)

The Health Studies approach can readily include not only the social sciences but also cultural studies of health as portrayed in literature or visual arts, as well as philosophical approaches (most obviously, but not only, ethics and bioethics), along with the range of sciences associated with Public Health (including epidemiology and infectious disease from more biological perspectives). Health Studies also readily connects with Environmental Studies issues, from toxic risk to green space access. As this summary makes clear, "Health Studies" can draw on ideas and resources from all over campus -- and likely also requires the kind of design (as in various concentrations) in which some kind of focus and synthesis is part of the student experience (or, scaled up, a plan with "tracks").

Two of the programs in "Public Health" discussed above, F&M and Davidson, situate the work in interdisciplinary terms but emphasize a "core program of study" (F&M) or made explicit public health hires (Davidson). As noted, the F&M major offers "concentration tracks" in government or sociology as well as biology. The topics on their website include "health in the context of human rights" and "the influence of culture on health" along with questions about communities and health systems. Davidson "draws from ...diverse academic disciplines, highlighting biological, economic, ethical, psychological, and sociocultural dimensions of public health problems and strategies intended to address them."

Three others take a more "health studies" perspective from the outset. Rhodes has a major in "Health Equity" under its umbrella of Urban Studies. Colorado College offers "Global Health" in a frame resonating with Whitman's Global Studies: "Recognizing that many global health problems stem from environmental change, and from economic, social, political, and health care inequalities, CC is designing an interdisciplinary program in global health studies that spans the breadth of disciplines at the College. ... Students will exit with a deeper understanding of the social, economic, and political determinants of health, and the history of global responses to health problems." Puget Sound has an expanded STS program, "Science, Technology, Health and Society" (STHS), posing questions sometimes slipping into "medicine" but nonetheless useful for a Health Studies framework: "How does society affect the development of science, technology, and health systems? How do science and medicine interact with religion and philosophy in shaping our worldview? How do science, medicine, economics, and social values interact in contemporary decision making?"

Interest in this type of interdisciplinary offering was evidenced in both qualitative student comments and the types of courses of interest to students in the survey. For example, one student expressed interest in public health related courses specifically "...if it included courses cross-listed with IRES, because (in my opinion) public health and epidemiology are most exciting when combined with deep knowledge of social structures," while another expressed interest "...if the environmental studies and politics departments were involved in the conversations and conceptions of the theoretical program." Others specifically talked about wanting interdisciplinary and intersectional courses, and courses that overlapped different divisions (without using the word 'division'). Additionally, top choices for topic interest included health disparities, bioethics, community health, sociology of health and illness, and environmental health, in addition to more traditional public health science topics of epidemiology and infectious diseases.