

Mobilizing Interdisciplinary Students in the Fight Against Covid-19

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I. Specific Education Aims

1. To evaluate the effectiveness of PEDS 220 student projects in addressing community health needs created by the pandemic.
2. To evaluate the course curriculum, mentorship, and community partnership facilitated by PEDS 220 in promoting the sustainability of course projects and community collaborations.
3. To evaluate the effectiveness of the course curriculum, mentorship, and community partnership in meeting student's academic and professional goals.

This proposal addresses many of the Academy Innovation Grant Program's funding priorities, including Collaboration and Impact and Sustainability.

II. Project Rationale

Many premier medical schools, such as the Stanford University School of Medicine, do not explicitly prioritize community service and engagement in their mission statements.^{1,2} Community engagement, when incorporated into the curricular structure of the academic medical center, has been shown to foster the creation of significant, and highly impactful advancements in community health.³ Not only does community-engaged learning facilitate the creation of novel community health interventions that may not result from traditional methods of clinical education, but also it has been noted to directly strengthen and diversify traditional clinical education, serving to strengthen existing medical education.⁴

PEDS 220: Covid-19 Elective, has allowed any Stanford student to apply lessons from our interdisciplinary medical coursework to solve pressing community health needs created by the pandemic. To date, our course has taught 458 students representing 33 undergraduate and 43 graduate programs, and facilitated 22 community engagement projects related to Covid-19. We have seen the incredible commitment and progress students have made with projects, underscoring the need to collect data on the short and long-term impacts of the course structure on student, project, and community outcomes. We hypothesize that the partnerships that students create during course projects provides them with authentic and value-added roles in various community health ventures while fostering their own personal and professional development. Medical education and community health systems have traditionally operated in silos⁵, and this innovative elective course may create a generation of leaders prepared to enact the health systems change needed to bridge this gap.

PEDS 220 has suggested the possibility of effectively satisfying community health needs through a structured mentorship program, helping the School of Medicine center community service in its mission. We request funding to achieve the aforementioned aims with the ultimate goal of evaluating the feasibility of our course's educational framework in becoming a long-term mechanism capable of addressing a variety of future emergent health issues, from other infectious diseases to chronic illnesses.

III. Approach

Impact: Students will be surveyed to determine how the course impacted their ability to meet personal and academic goals, in addition to promoting project and community partnership sustainability, using a combination of surveys, including the Haas Center for Public Service student survey and the validated Course Experience Questionnaire.⁶ Additionally, a phenomenological orientation will guide our semi-structured interviews over Zoom, which will be conducted to explore how course project students

experience the development of their personal and professional identity. Community partners will be surveyed in their capacity as community experts to better understand the students' impact on community health using the Community Impact Scale.⁷ At the conclusion of each course offering, students and community partners will be surveyed to provide metrics on the impact of their community interventions and collaborations. Collated data will inform the extent to which the course has facilitated improved health outcomes and individuals reached.

Quality Assessment and Sustainability: To determine the success of our framework, we will evaluate the effect of the course on students' professional development, target communities, and the sustainability of the projects. We will evaluate the effect of the student projects in the community using surveys sent to the community partners and interviews with them after the conclusion of the quarter. We will measure the effectiveness of the course in promoting community collaborations and students' professional development by utilizing the mid- and end-of-quarter course evaluations and feedback surveys. We will also conduct interviews with students after the conclusion of the quarter to evaluate course structure, student experience, and community partnerships. Lastly, we will perform long term follow up with the students and community partners to evaluate the sustainability of course's effect on the community and students' professional development.

IV. Timeline

July-August 2021: (1) Develop survey tools and interview questions. (2) Apply for IRB approval. (3) Recruit students for post-course evaluation and interview. (4) Perform community partner surveys.

October 2021-March 2022: (1) Administer mid- and end-of-quarter student evaluations. (2) Collect community partner feedback. (3) Perform interviews with students and community partners after the conclusion of each quarter.

April-July 2022: (1) Perform the long-term sustainability assessment of the cohort of students who have conducted course projects. (2) Analyze interviews. (3) Submit framework and outcomes for manuscript and conference presentations.

V. Anticipated Work Product

- PEDS 220: Covid-19 Elective course offered in the Fall, Winter, and Spring quarters of 2021-2022 academic year.
- Student community engagement projects and scholarly work addressing identified community health needs.
- Data and feedback from students and other applicable sources on the course and community collaborations.
- Scholarly work authored by the Teaching Team describing impact and applications for PEDS 220 course design/framework. The lessons learned may be useful for other universities that are implementing similar courses about the impact of the pandemic or other emergent health issues.

VI. Evaluation plan: Our research on the student and community outcomes of the course will be evaluated by collecting data on metrics such as survey uptake percentage, percentage of course project students successfully interviewed, percentage of community partners interviewed, and the clarity of the data gathered. In the long term, we will conduct focus groups of students and community partners to assess the sustained impact of the course.

VII. Dissemination of results: We will submit the results of this work for presentation at the Stanford Innovation in Medical Education Conference and national conferences (AAMC, SNMA). We will also submit our findings to a medical education journal, such as the *Journal of Graduate Medical Education* or *Academic Medicine*.

Appendix

References:

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4. Young S, Bates T, Wolff M, and Maurana CA. (2002). Service-Learning in Healthy Aging for Medical Students and Family Medicine Residents. *Education for Health*, 15(3), 353-361.
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7. Srinivas T, Meenan CE, Drogin E, and DePrince AP. (2015). Development of the Community Impact Scale Measuring Community Organization Perceptions of Partnership Benefits and Costs. *Michigan Journal of Community Service Learning*, 5-21.