Title: Engaging Diverse Communities to Understand How Precision Health Research Can Address Health Disparities

Authors: Lisa Goldman Rosas, PhD MPH Sean David, MD, DPhil Rhonda McClinton-Brown, MPH Jill Evans, MPH Van Ta Park, PhD MPH Ysabel Duran Jan Vasquez, MPH Owen Garrick, MD Riccesha Hattin Lily Liang, MPH Christopher Martin Mildred Cho, PhD

Abstract: The goal of this learning lab is to provide participants with skills, resources, and best practices for engaging diverse community groups in precision health research aimed at addressing health disparities. The learning lab will be based on our experience as part of the Stanford Precision Health for Ethnic and Racial Equity (SPHERE) project. The goal of SPHERE is to promote effective dissemination and adoption of *precision health* approaches to ameliorate health disparities. Precision health includes disease prevention and treatment for maintenance of health and wellness across the lifecourse that is *proactive, predictive, effective, efficient, and equitable*. Precision health holds great potential for revolutionizing health and health care through a better understanding of the complex interplay between biological, behavioral, environmental, and social factors that contribute to health inequalities and influence population health. However, the precision health movement may widen disparities if barriers (e.g., socioeconomic, language, racial/ethnic) prevent health disparities populations from being included in research and gaining access to precision health approaches that develop from this research.

Engagement of racial/ethnic minority communities is critical for informing and testing relevant and effective precision health strategies that will address health disparities. However, barriers to engaging racial/ethnic minority communities in precision health research include researchers' lack of experience engaging the community in this topic, low awareness/knowledge of precision health among community members, conflicting priorities in low resource settings, and ethical and trust concerns. As a first step in addressing these barriers, we developed a community-university partnership with 5 organizations to engage diverse racial/ethnic communities and the providers that serve them. To develop the partnership, we collaboratively designed a study to gain a deeper understanding of perceptions of precision health, potential for precision health research, and ideas for increasing awareness about precision health research in racial/ethnic minority communities. We conducted 12 focus groups with 5 racial/ethnic minority communities (Vietnamese, Chinese, American Indian, Latino, African American) and providers in English and, if relevant, in the native language. During the learning lab, we will discuss:

1) best practices in developing partnerships for precision health research; 2) skills for designing a qualitative study that is able to obtain input from 6 diverse communities; 3) resources for increasing awareness about precision health research in diverse communities; 4) methodology for analyzing data from diverse community groups; and, 5) similarities and differences in results across the 6 groups.

Learning objectives:

- 1. Discuss the barriers and facilitators of developing and implementing precision health research in diverse racial/ethnic communities.
- 2. Identify best practices for developing community-university partnerships for precision health research.
- 3. Understand how to develop and implement research to engage diverse communities in precision health research.
- 4. Identify best practices for working with researchers from diverse disciplines to incorporate community engagement in their research.
- 5. Become familiar with existing resources for increasing communities' capacity for engaging in precision health research.
- 6. Discuss diverse community's understanding and perception of precision health research and related best practices for implementation of precision health research.

Agenda:

Time	Торіс	Facilitator(s)
0-15 mins	Introduction: The Challenge: Precision Health Research to Address Health Disparities (include audience participation via text voting to assess perceptions of precision health)	Lisa Goldman Rosas, PhD MPH
15-35 mins	Group debate: Group 1: Precision health research can address health disparities Group 2: Precision health research cannot address health disparities	Jill Evans, MPH Rhonda McClinton-Brown, MPH
35-75 mins	Work groups with report back: Group 1: Strategies and best practices for identifying and initially engaging partner organizations Group 2: Strategies and best practices for working with partners to engage community members and key stakeholders Group 3: Strategies and best practices for working with diverse researchers to	Group 1: Rhonda McClinton- Brown, MPH Group 2: Jill Evans, MPH Group 3: Lisa Goldman Rosas, PhD MPH

	incorporate community engagement	
75-90 mins	Conclusion: Summary of best practices, lessons learned, and strategies for evaluation	Lisa Goldman Rosas, PhD MPH

Statement of relevance of the work to community engaged research: Understanding best practices for engaging racial/ethnic minority communities in precision health research is critical for developing effective precision health strategies that will address health disparities.