

Ensuring access for underserved populations in biomedical research

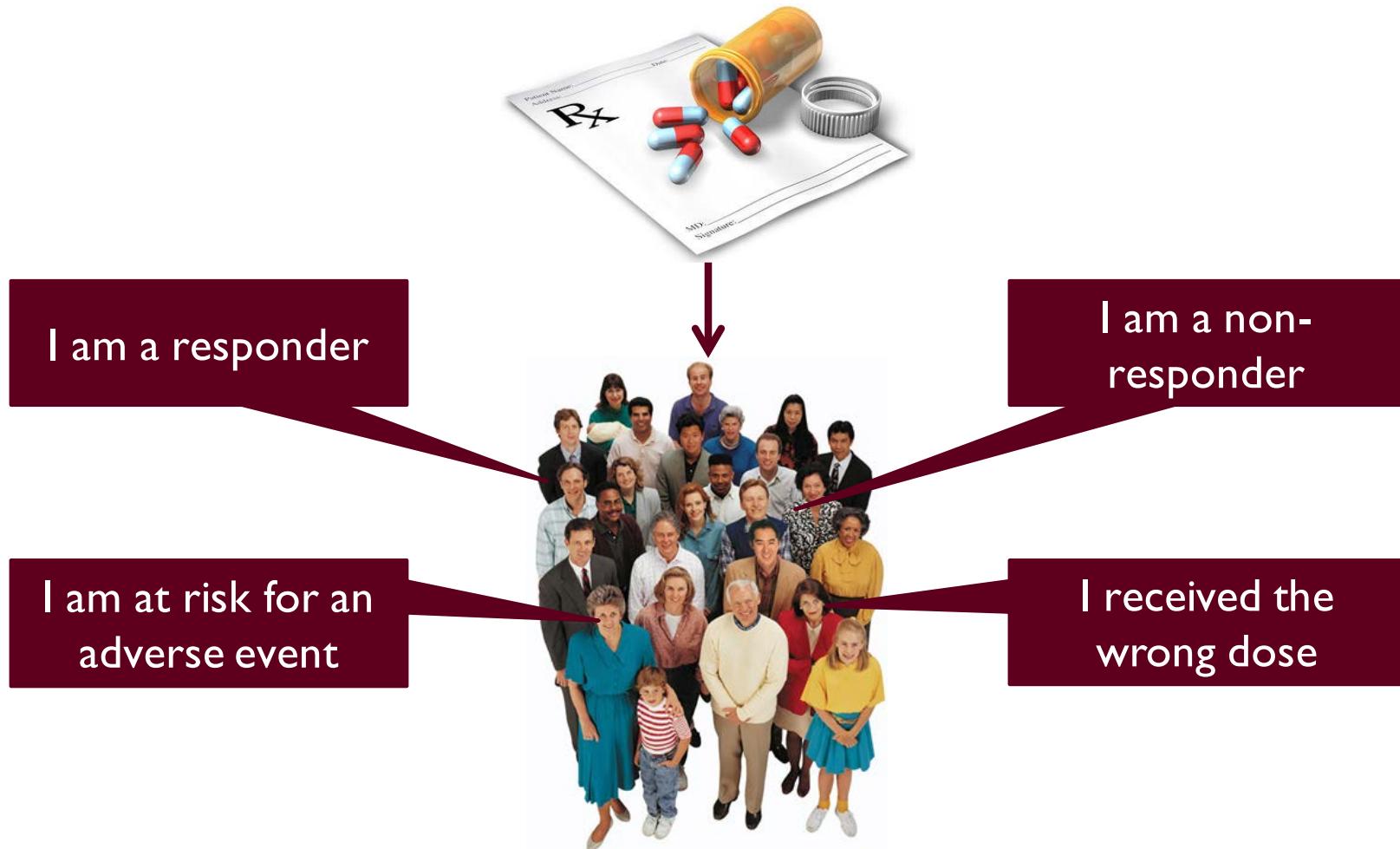
Erica L. Woodahl, Ph.D.

Professor

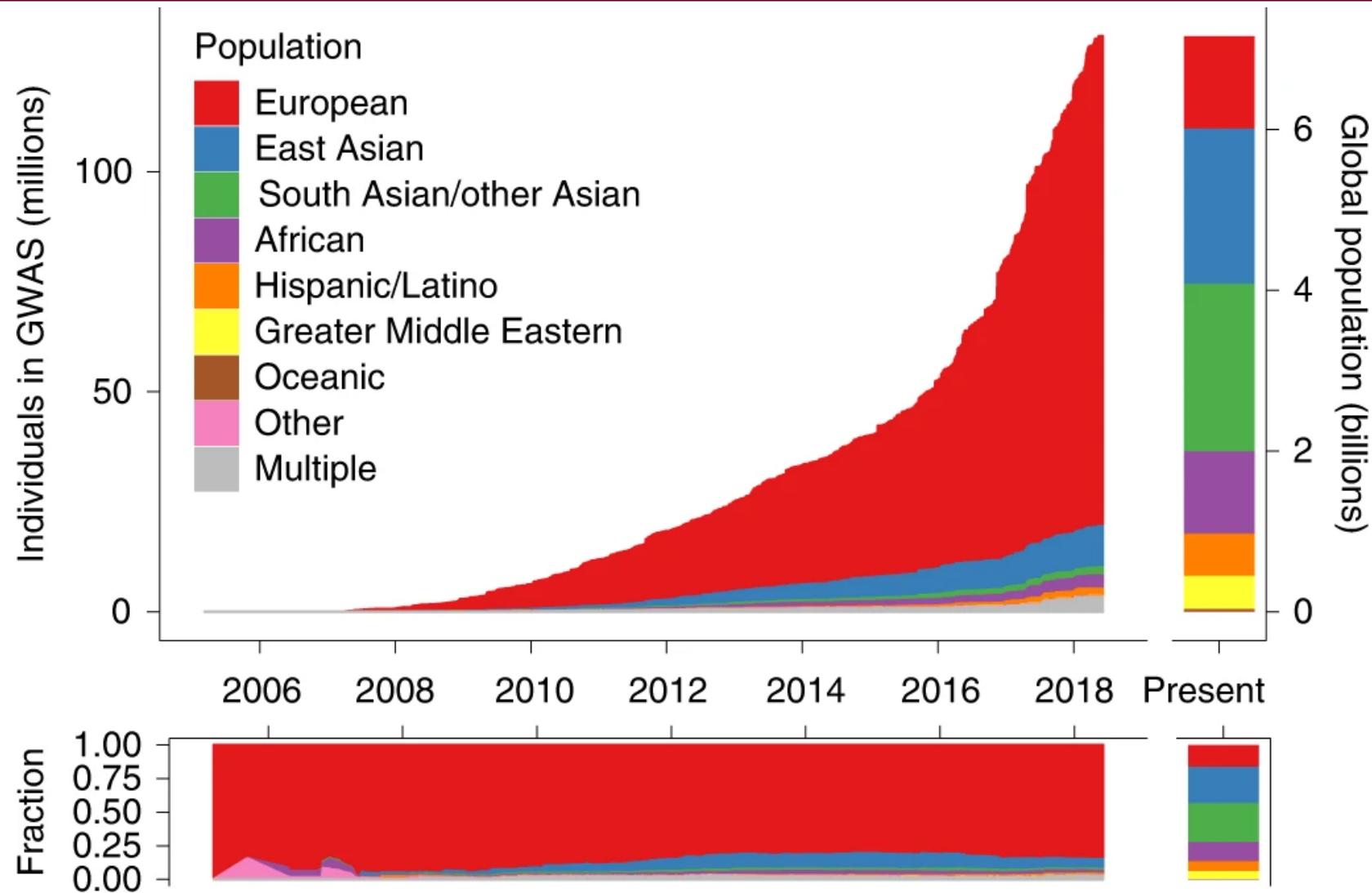
Department of Biomedical and Pharmaceutical Sciences

University of Montana

Precision Medicine and Pharmacogenomics



Genomics is failing on diversity



Genomics is leaving rural populations behind

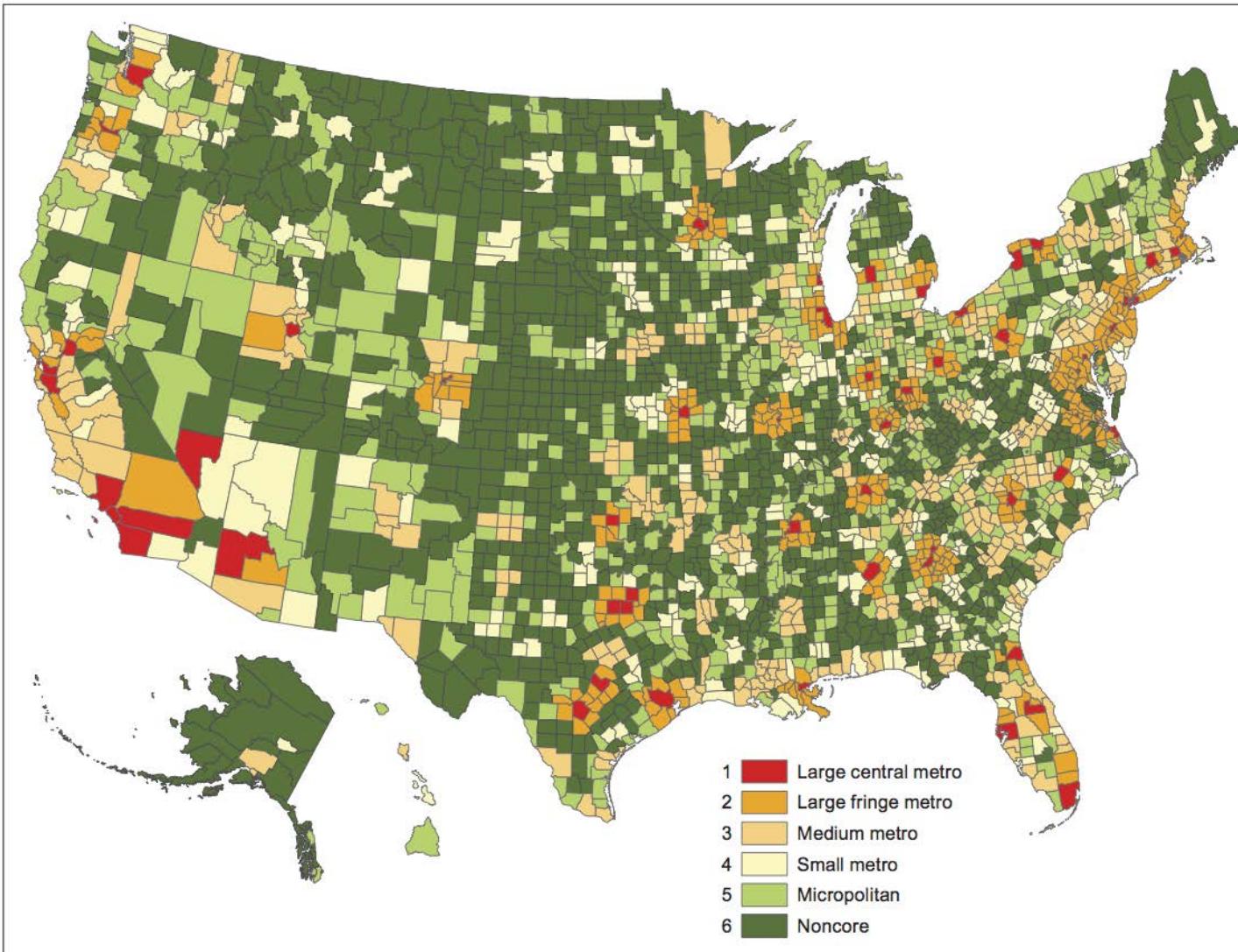
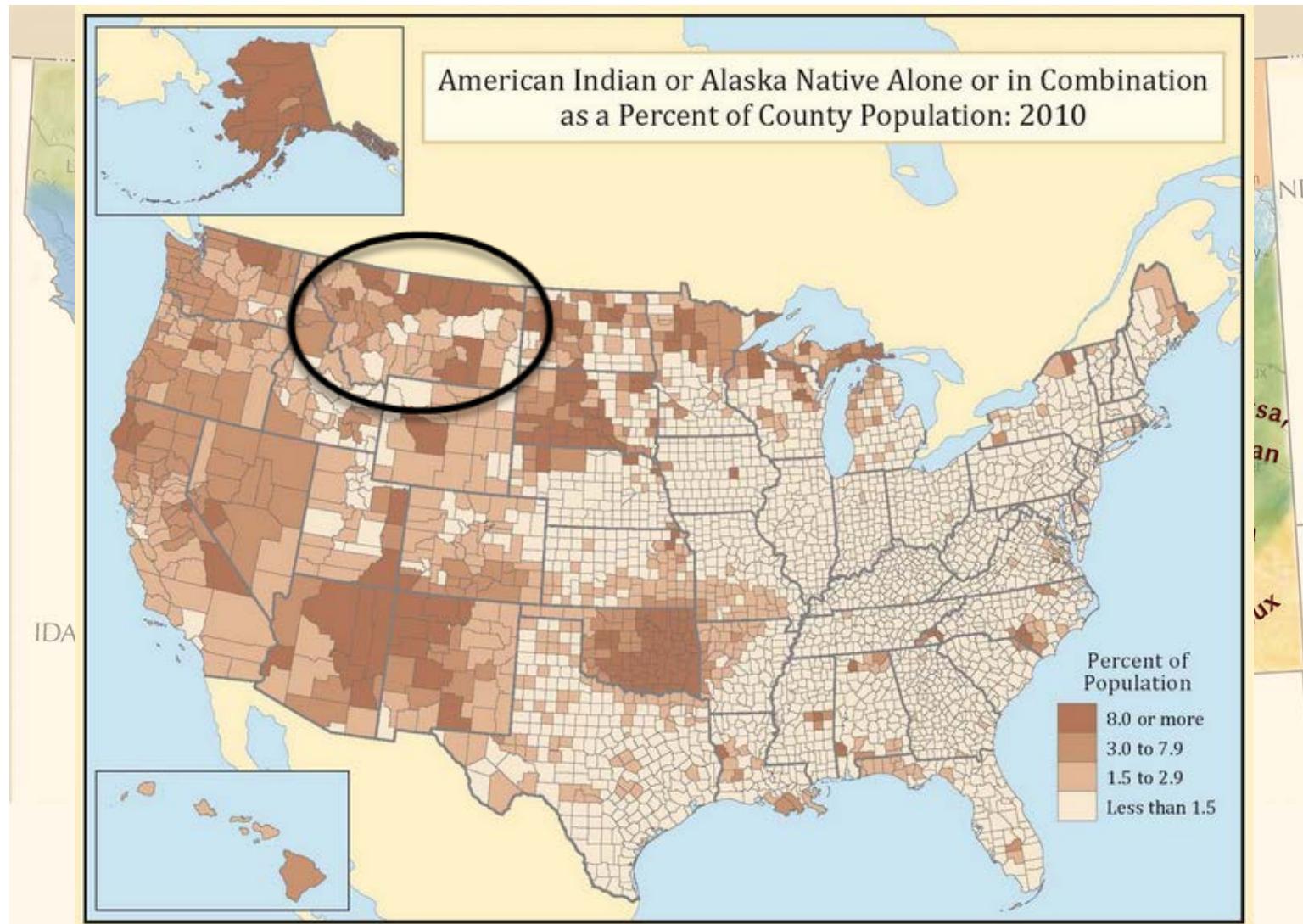


Figure 2. Distribution of counties according to the 2013 NCHS Urban–Rural Classification Scheme for Counties

Precision Medicine Research with American Indian and Alaska Native (AIAN) People



Challenges in increasing diversity in research

- ▶ Perception that past research has provided little benefit
- ▶ Mistrust and lack of receptivity to participating in research
- ▶ Concerns about research questions or study methods
- ▶ Geographical remoteness of communities
- ▶ Hesitation of communities to relinquish control of data
- ▶ Lack of laboratory infrastructure
- ▶ Shortage of expert personnel

Democratizing research through community engagement



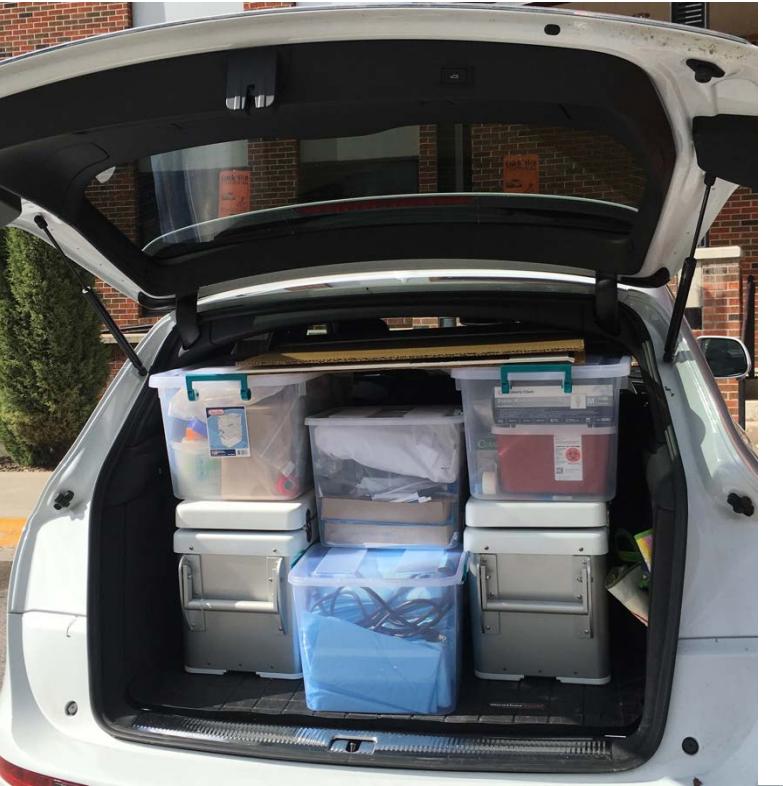
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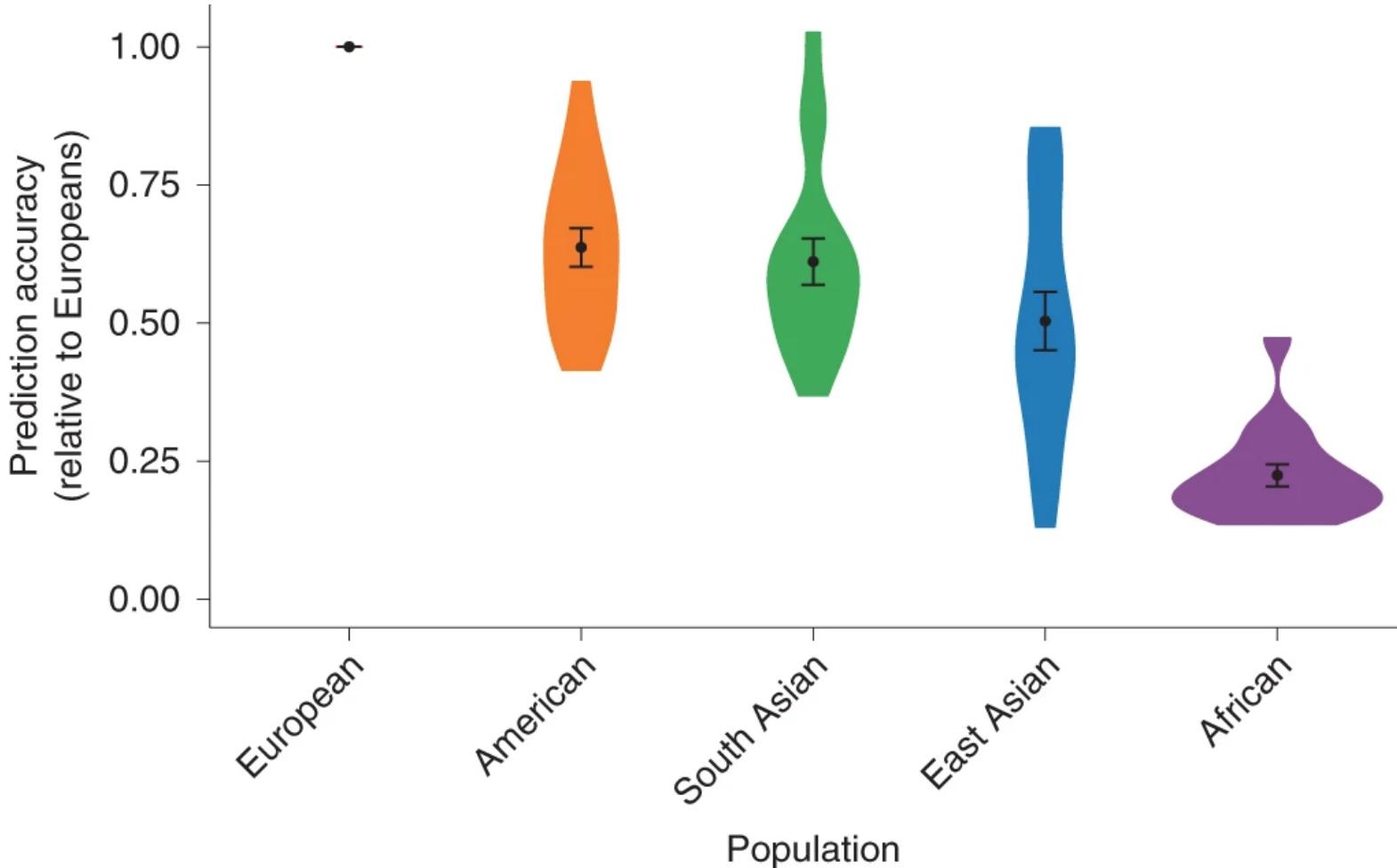
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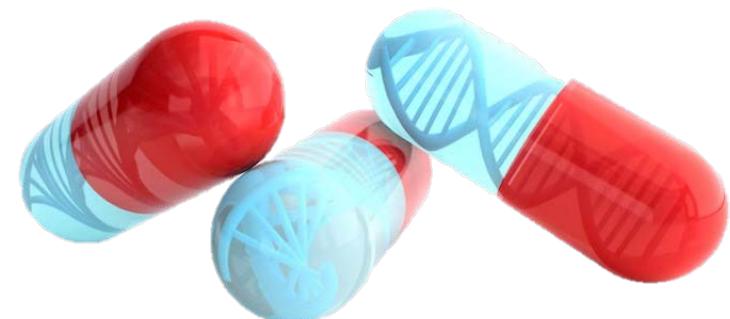


Ethnic and racial bias in discovery research is a barrier for widespread benefit



Summary

- ▶ Discovery and clinical research must consider unique challenges facing underserved communities
- ▶ Population-specific biorepositories are key to advancing research on chronic diseases
- ▶ Community engagement is essential in ensuring access to research for underserved populations and addressing healthcare disparities



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