

We propose an innovative **Transdisciplinary Research, Equity and Engagement Center for Advancing Behavioral Health (TREE Center)**. We will expand on and leverage the knowledge, research capacities and cross-sectoral collaborations established by the former NM CARES Health Disparities Center (P20 MD004811, R. Williams, PI). We will use these strengths to specifically target improvement of behavioral health disparities for socioeconomically disadvantaged and underserved rural populations with a southwest regional focus in New Mexico. Our Center's transdisciplinary academic-community team science will highlight the social determinants of behavioral health, including historical trauma, Adverse Childhood Experiences, and intersectional effects of poverty and discrimination to improve conditions and outcomes related to youth suicide, alcohol and drug misuse, depression, and access to behavioral health services.

The **TREE Center seeks to incorporate health equity as the foundation of our proposed work**. Health equity addresses the root causes of behavioral health outcomes of many disadvantages and access to social resources. Rooted in human rights ethics, achieving health equity in research requires the valuing of all individuals equally and recognizing and rectifying historical injustices through solution-based interventions. Health equity considers the conditions (including the health system) in which people are born, grow, live, work, and age, also known as the social determinants of health. Our TREE Center also uses community based-participatory research and tribal participatory research approaches that include bidirectional knowledge exchange and translation between academic researchers and diverse community stakeholders. Our theme of behavioral health is integrated in the aims and activities of the cores and research projects from the development of under-represented minority scholars in transdisciplinary research to implementation of multi-level interventions and co-dissemination of research findings. Drawing on the multi-level health disparities research framework, we will evaluate cultural-centered interventions to improve behavioral health outcomes for AI/AN, Latino and others affected by high concentrations of poverty and geographic isolation in the southwest region. By 2050, 50% of the US population is expected to be racial/ethnic minority underscoring the significance of disparities in behavioral-related health outcomes. New Mexico is a minority-majority state (48% of the population identify as Latino and 11% as AI/AN) where 34 % of the state's 2.1 million residents live in rural and frontier areas. Overall, this data suggests that there are serious disparities in behavioral health status across and within NM, making it an ideal setting to conduct research focused on behavioral health disparities and minority health and develop a workforce prepared to translate findings into sustainable systems level changes that promote health equity. While behavioral health issues can be described in isolation, one innovative element of the proposed center is the centrality of the theory of intersectionality, which highlights the role of social determinants of health as well as historical and lived trauma on the complex web of interconnected behavioral health issues. This approach leaves our center well situated to have significant impact beyond the state and meet its overall aim to evaluate multi-level intervention approaches to improve minority health and reduce the burden of behavioral health disparities.

The four aims of the TREE Center are to harness the collective knowledge of both academic and community partners to create a sustainable infrastructure to support behavioral health equity solutions:

1. Implement a co-leadership model in order to promote transdisciplinary, multi-level intervention research that will advance the knowledge and science to improve behavioral health outcomes.
2. Operationalize collaborative integration of theories, study design, and analysis into multi-level interventions that improve behavioral health outcomes for socioeconomically disadvantaged and underserved rural populations with a southwest regional focus.
3. Expand the development of a diverse scientific workforce by training new and early stage under-represented minority investigators in a transdisciplinary context, to conduct community engaged, multi-level intervention behavioral health research.
4. Cultivate equitable collaborations with community and tribal stakeholders regionally and nationally in order to translate and co-disseminate transdisciplinary research evidence into practice and policy.

With the ability to leverage the success of our NM CARES Health Disparities Center/former P20, the TREE Center is uniquely situated to have a national impact on the development of new knowledge through the testing of theories, novel approaches, and the use of cultural knowledge and community engagement in intervention design, implementation, and dissemination. Our equity-focused dissemination; advocacy and policy work will be targeted at the local, tribal, regional, and national levels. Our transdisciplinary-cultural centered and community engaged approaches seek to reduce the devastation from behavioral health inequities in New Mexico, as well as be a model for the nation.

