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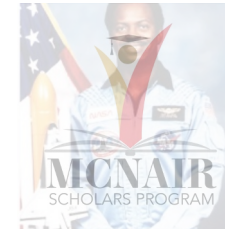
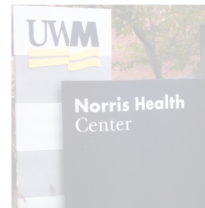
Assistant Professor

University of  
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NASEM Workshop:  
9/19/22

“I went into the woods”:  
*Integrating Indigenous  
Public Health within  
Nature*

# My Journey



2000  2022



“I went into the woods...”



# American Indian/Alaska Native Mortality Rates

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- Ratio to all U.S. races:
  - Life expectancy (73.0 vs. 78.5)
  - Alcohol-induced (6.6)
  - Chronic liver disease & cirrhosis (4.6)
  - Diabetes mellitus (3.2)
  - Intentional self-harm/suicide (1.7)
  - Heart disease (1.1)

Source: Indian Health Services, 2019



# Cultural Practices & Human Interconnection within Nature



# Environmental Dispossession as a Determinant of Health



Settler  
Colonialism

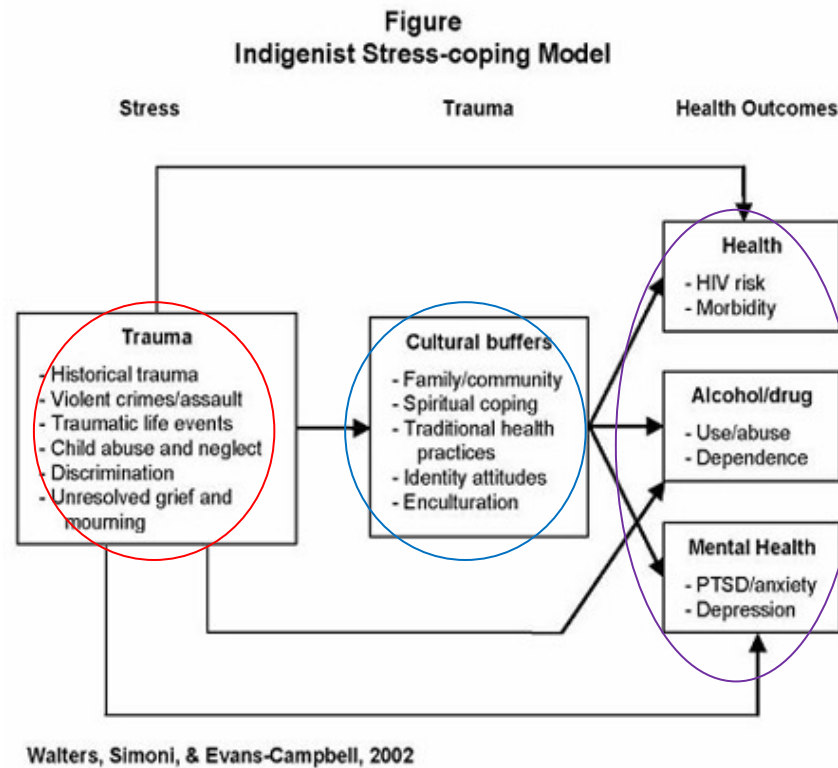


Historical  
Trauma



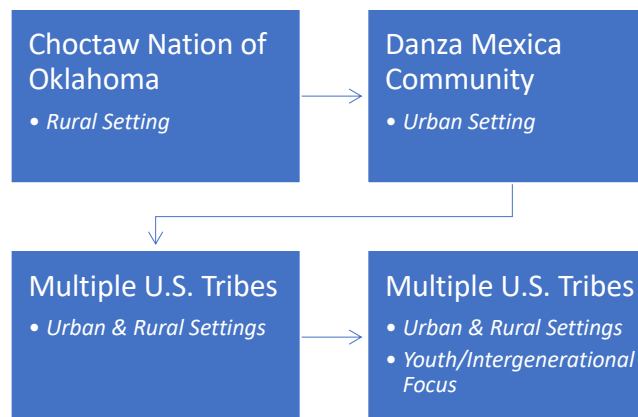
Ongoing

# Theoretical Framework

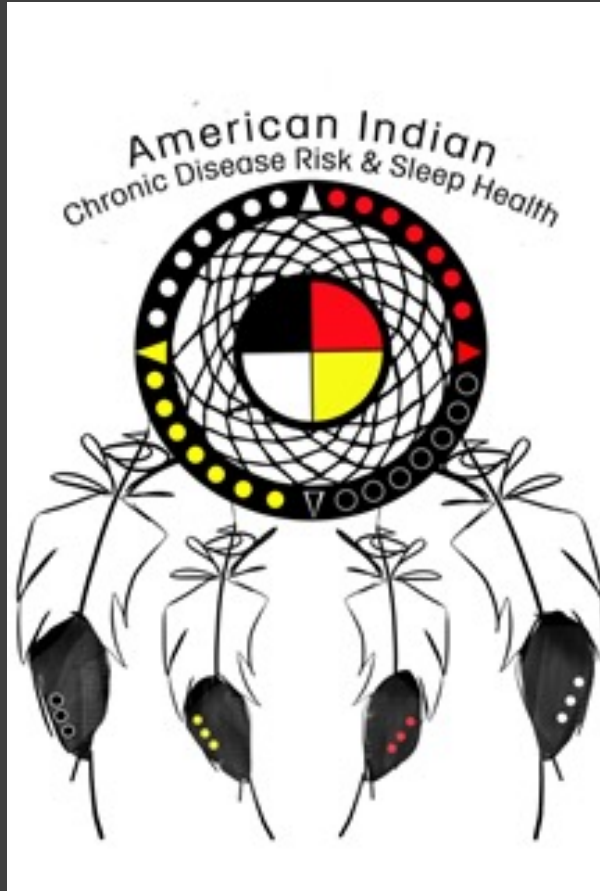


# Research Projects

Improve health outcomes for Indigenous peoples using culturally-centered, place-based interventions to reduce prevalence and mitigate effects of chronic and co-occurring diseases.




Connectedness to Place  
*Place-based, Cultural Practice Interventions*



# PARENT STUDY

National Institute on Minority Health and Health Disparities (R01 MD014035: PI Lonnie Nelson)



How much does participation in cultural practices connected with Nature improve the quality of your sleep and mental or emotional well-being?

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- Spiritual
- Eating/drinking
- Work
- Recreation
- Protecting
- Dreams



How much does each of the following Indigenous cultural practices help you get good sleep or feel mentally or emotionally well?

#### Sleep Well-Being

How often does each of the following Indigenous cultural practices help you get good sleep?					
	Not at all	A little	Somewhat	Quite a bit	A great deal
1. <b>Spiritual</b> practices with Nature (e.g., prayer, sweats, smudging, and other use of traditional medicines from plants or animals etc.)					
2. <b>Eating or drinking</b> practices with Nature (e.g., traditional foods, medicines, teas etc.)					
3. <b>Work</b> practices with Nature (e.g., hunting, gathering, gardening, ranching etc.)					
4. <b>Recreation</b> with Nature (e.g., walking, hiking, camping, dancing etc.)					
5. <b>Protecting</b> Nature (e.g., meetings, events, marches, protests to protect land, water, plants, animals etc.)					
6. <b>Dreams</b> with Nature (e.g., seeing, touching, tasting, smelling, feeling land, water, plants, animals etc.)					

#### Mental/Emotional Well-Being

How much does each of the following Indigenous cultural practices help you feel mentally or emotionally well?					
	Not at all	A little	Somewhat	Quite a bit	A great deal
1. <b>Spiritual</b> practices with Nature (e.g., prayer, sweats, smudging, and other use of traditional medicines from plants or animals etc.)					
2. <b>Eating or drinking</b> practices with Nature (e.g., traditional foods, medicines, teas etc.)					
3. <b>Work</b> practices with Nature (e.g., hunting, gathering, gardening, ranching etc.)					
4. <b>Recreation</b> with Nature (e.g., walking, hiking, camping, dancing etc.)					
5. <b>Protecting</b> Nature (e.g., meetings, events, marches, protests to protect land, water, plants, animals etc.)					
6. <b>Dreams</b> with Nature (e.g., seeing, touching, tasting, smelling, feeling land, water, plants, animals etc.)					



## DIVERSITY SUPPLEMENT

Measurement of  
Nature Contact: The  
Influence of Cultural  
Practices on Sleep  
Health and Chronic  
Disease among Rural  
and Urban American  
Indians

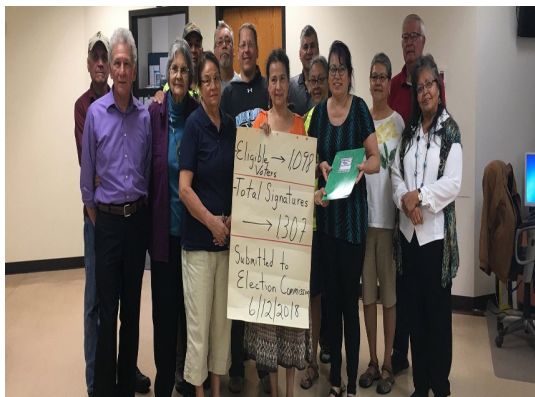
### • Specific Aims

- To characterize the rurality and urbanicity of the sample by creating a rural-urban commuting area (RUCA) variable for each ALCHERISH participant based on zip code.
- To evaluate interactions by RUCA code and associations of sleep problems and chronic disease outcomes.
- To develop a measure of cultural practices involving nature contact, examine associations between the RUCA variable and sleep problems, and test for interactions with cultural practices relying on nature contact.

# Next Steps

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WĀĒWĀĒNEN NETĀĒNAWEMĀKANAK!