

# The Willow Partnership for Success

Salish Kootenai College  
Sitting Bull College  
University of Montana



*The Willow Partnership  
for Success is an  
interorganizational,  
interdisciplinary project  
that seeks to increase the  
success of Native American  
STEM faculty members, as  
well as advance the  
knowledge about issues  
impacting their career  
progression.*



# The Project Team



- Ke Wu, PhD
- Michael Patterson, PhD
- Blakely Brown, PhD
- Laurie Walker, PhD
- *Ruth Ann Swaney, PhD*
- *D'Shane Barnett, MS*
- *Katherine Swan, BS*
- Amy Kinch, MA
- Maja Pedersen, MS



The primary sponsor for the Willow Project for Success is the National Science Foundation (NSF), Directorate for Education and Human Resources (EHR), Division of Human Resource Development (HRD). This is an AGEP - T: Alliances for Graduate Education and the Professoriate – Transformation under HRD grant #1723248. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the author(s) and do not necessarily reflect the views of the National Science Foundation.



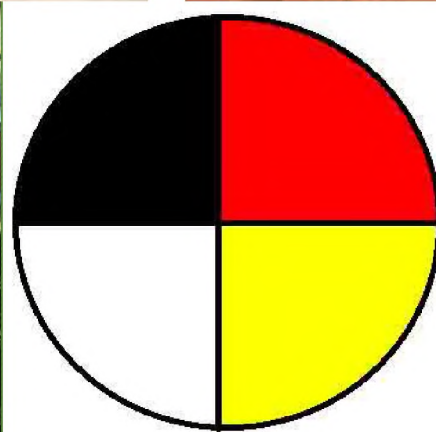
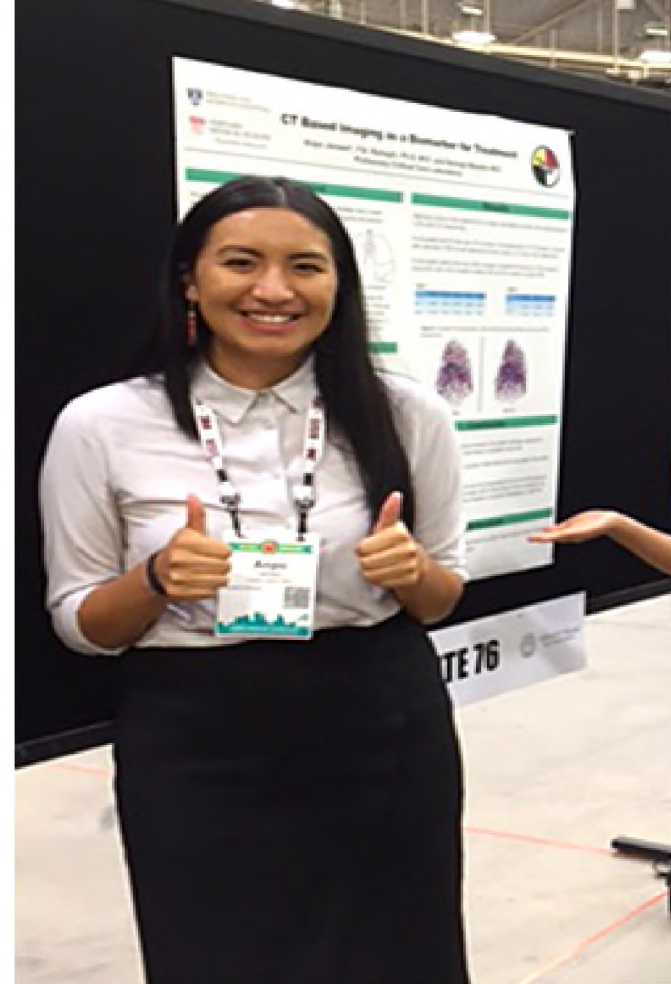
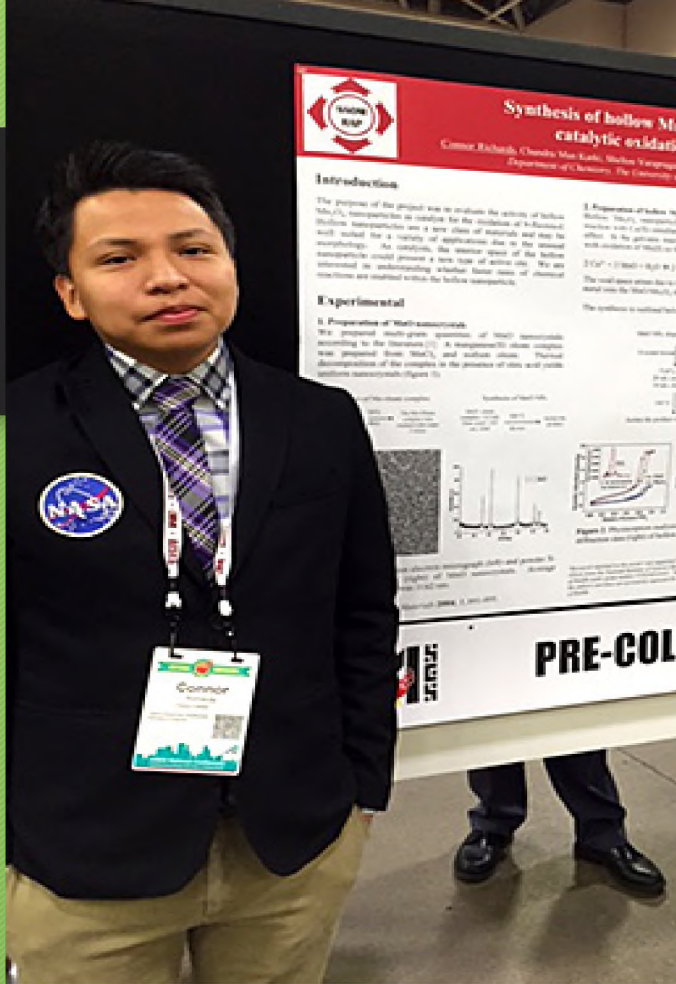
- TBD



- *Renae Schmitt, MS, ABD*

*Anonymous Willow Participants*

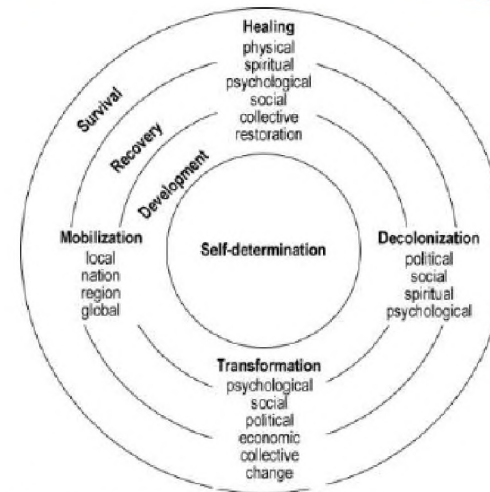
# Our Approach



# Our Guiding Principles

- **Indigenous Research Methodology** (Tuhiwai Smith, 2008)
- **Community-Based Participatory Research** (Sohng, 1996; Strand, Marullo, Cutforth, Stoeker, & Donohue, 2003)
- **Communities of Practice** (Wenger, 2011)
- **Feminist Treaty for Allied Collaboration** (Beltrán & Mehrorta, 2015)

## The Indigenous Research Agenda



- \* “Self-determination in a research agenda becomes something more than a political goal. It becomes a goal of social justice which is expressed through and across a wide range of psychological, social, cultural and economic terrains.”  
*Decolonizing Methodologies*, p. 116.

**The Indigenous Research Agenda**  
Linda Tuhiwai Smith, 1999

# Project Activities

- **Indigenous Mentoring Program**
  - Individual interviews to identify strategies most likely to benefit Native American STEM faculty
  - Mentor support at all three member institutions
- **Grant Proposal Writing Workshop Series**
  - 8-class series: 1) Finding Funding; 2) Starting the Grant Writing Process; 3) Designing Your Project; 4) Assembling Your Proposal Team; 5) Your Proposal Narrative; 6) The Submission Process and Next Steps; 7) Navigating the Award Process; 8) Award Reporting and Management
- **Institutional Support Program**
  - Interviews with administrators at member institutions
  - Institutional climate study
  - Recommendations for potential policy proposals and revisions



# Social Science Research Project

Laurie Walker, PhD

Ruth Ann Swaney, PhD

D'Shane Barnett, MS

# Aims

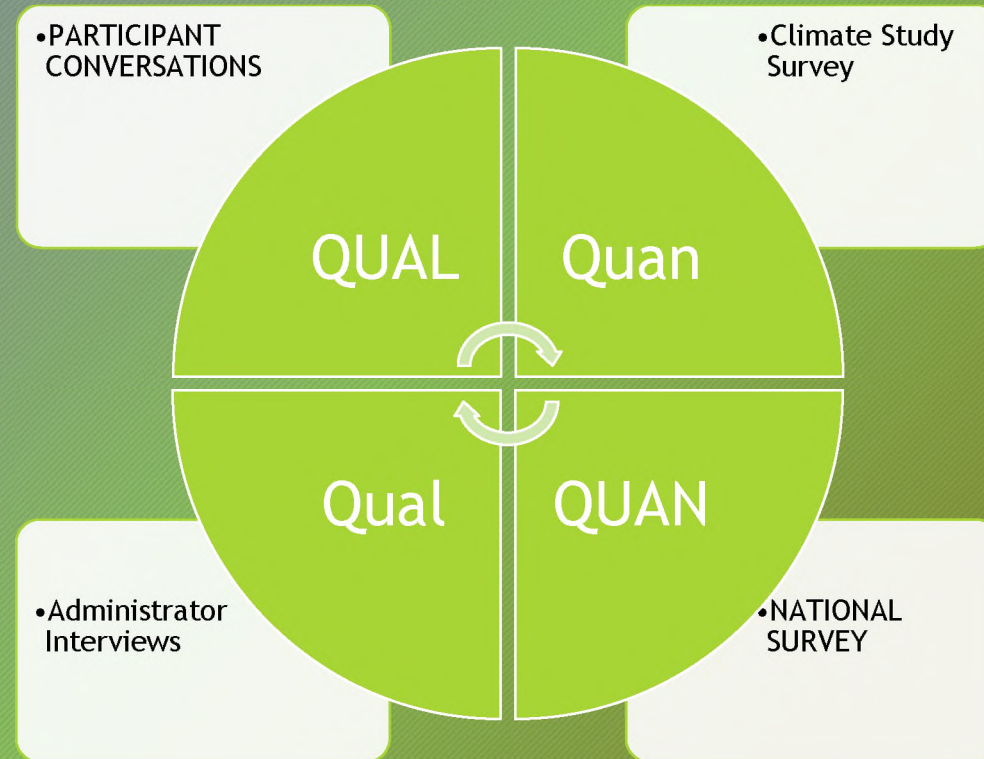
1) Examine the personal, relational, and collective experiences of Native American STEM faculty that enhance or inhibit their professional development and career advancement.

2) Examine the underlying institutional issues having an impact on the promotion and advancement of Native American STEM faculty.

3) Examine the approaches that Native American STEM faculty use to increase their promotion and advancement in academia.

4) Examine the environmental differences in how support is provided to Native American STEM faculty between Tribal Colleges and non-Tribal Colleges and universities.

# Our Methodology



Sequential transformative emancipatory design (Creswell, 2012)

# Willow Participant Conversations



Institutional issues that have an impact on the promotion and advancement of Native American STEM faculty.

Factors that enhance or inhibit their professional development and career advancement.

Approaches that Native American STEM faculty use to increase their promotion and advancement in academia.

## Your Feedback:

- On Methods:
  - Focus Group,
  - Story Circle, or
  - Talking Circle with Protocol
- On draft questions

Questions? Want to get involved?

**YOU'RE INVITED!**

DiverseU

Keynote Speaker:

LaDonna Brave Bull Allard (Oglala Lakota,  
Standing Rock Sioux)

*“Healing the Next Generation”*

November 2, 2017 7-9pm

University Center South Ballroom

More information available soon

at: <http://www.umt.edu/diverseu/>

# Contact

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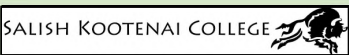
Laurie Walker, Co-PI, Social Science Research Project

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# The Willow AGEP Alliance: Developing an Indigenous Mentoring Program for Native American Faculty in STEM

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Author Information: 1. University of Montana; 2. Montana State University; 3. Mandan, Hidatsa and Arikara Nation; 4. Salish Kootenai College



## Background

The Willow AGEP Alliance: A Model to Advance Native American Faculty in STEM (NAF-STEM) project is a collaborative effort to increase the success of NAF-STEM, while also advancing knowledge about the issues impacting their career progression. Alliance institutions include University of Montana, Salish Kootenai College, and Sitting Bull College. The Willow project will implement a model with three interconnected components focusing on recruitment, retention, and support for NAF-STEM: (1) an Indigenous mentoring program (IMP); (2) a grant preparation and management program; and (3) an institutional support program. This poster will report on developing the IMP.

## Methods

### Interview Guide Development

- Alliance investigators collaboratively developed a semi-structured interview guide.
  - Step 1: Indigenous Research Methodology literature review to align guiding principles in selection of topics, methods, forms of analysis, and ways of presentation
  - Step 2: Review of existing literature and programs on mentoring for Native American and under-represented minority faculty
  - Step 3: Initial interview questions were developed, piloted, and approved through the Alliance project team and Advisory Board members
- The final interview guide includes nine open-ended questions

### Innovative verbal consent

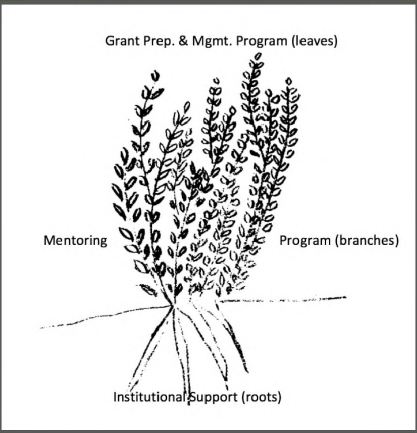
- The Informed Consent was developed to reflect Indigenous research and participatory values; this consent offers ways for participants to access aggregate, de-identified interview data, and opportunities for the interviewees to become further involved in the project.

### Data Analysis

- Directed content analysis has been initiated with interview data; two researchers (MP, BB) independently reviewed all transcripts, then met in-person to develop a provisional list of codes through discussion and consensus. This initial list of codes is presented in the “results” section of this poster.
- Next, we will apply the coding labels using Nvivo 9 to organize data and identify themes and subthemes.

Funding: National Science Foundation (NSF), Directorate for Education and Human Resources (EHR), Division of Human Resource Development (HRD). AGEP - T: Alliances for Graduate Education and the Professoriate – Transformation under HRD grants # 1723248 (University of Montana), #1723006 (Salish Kootenai College), and #1723196 (Sitting Bull College)

## The Willow Alliance: Program Components



## Selected interview guide questions

### Activities/Values

- Please describe a positive mentoring relationship you've had in your life (this can be formal or informal).
- What activities have you been involved with at your institution that help you feel supported by, and connected to your professional community?
- What activities have you been involved with at your institution that help you feel supported by, and connected to your campus community?
- How do Indigenous values play a role in your professional/academic life?
- How do you balance your values and the expectations of academia?
- How can mentoring activities support the balance of your values and the expectations or requirements of your profession?

### Mentorship

- Who are your mentors?
- Describe an ideal Indigenous Mentoring Program that enhances your career and professional goals.

### Other

- What else do we need to know as we move forward on developing this program?

## Results

On average, interviews lasted 62 minutes and were audio recorded and transcribed. Participants include 12 female and 4 male Native American faculty in STEM. The average age is 39.5 years, with a range from 28-54 years. Participants represent the Northwest, Southwest, and Southeast regions of the United States, including seven 4-year PhD granting institutions, one medical campus, and two tribal colleges. Average amount of time as a STEM faculty person is 6 years, and 4 participants have tenure.

## Initial list of coding labels

| MENTORING                                                                                                                                                                                                                                                                                                                 | SUPPORT/CONNECT with:                                                                                          |                                                                                                      |                                                                                                                              | VALUES & BALANCE                                                                                                                                                                                                                                                                                                                                                                                                                                                | MENTORING PROGRAM COMPONENTS                                                                                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                           | Professional Field & Career                                                                                    | Campus Community                                                                                     | Other Native Faculty                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Types</b><br>Peer-to-peer<br>Senior/tenured faculty-to-junior faculty<br>Internal and external to institution<br>Cultural/community/elders                                                                                                                                                                             | Attend national conferences<br><br>Institutional support (funding)<br>-Travel to conferences<br>-Course buyout | Committees that support Native student success<br><br>Informal interactions<br>-dinners<br>-families | Campus groups/committees for Native faculty<br><br>Sloan Indigenous Graduate Partnership - local chapter                     | Work relevant to Native communities<br><br>Tension between Western STEM practices and Traditional Ecological Knowledge<br><br>Family/Relationships<br><br>Responsibility, Reciprocity<br><br>Giving back - students' committee<br><br>Tension of tenure process vs community work<br><br>Pass on guidance about "balance" to students<br><br>Difficult to balance values and academic expectations well<br><br>Participation in traditional activities/ceremony | <b>Configurations:</b><br>Multi-generational (include elders)<br><br>Place-based; National<br><br>Food - lunches, dinners<br><br>Monthly/Annually<br><br><b>Topics:</b><br>Navigating the "isms"<br>-racism<br>-sexism<br><br>Competitiveness of the academic system<br><br>Two-worlds translating science<br><br>Leadership<br><br>Career direction/advancement<br><br>Feedback on tangibles<br><br>Tenure Process<br><br>Native identity |
| <b>How it Starts</b><br>Pre-doctoral relationships in school<br>Mentor initiated<br>Hired at same time (peer)<br>Formal assignment of mentor (departmental level)<br>Social media                                                                                                                                         | Professional development<br>-grant writing<br>-writing articles<br>-other brown bags                           | Campus-wide groups, like faculty senate or search committees<br><br>Student mentoring programs       | Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)<br><br>State or Regional networks |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>How it Continues</b><br>Social media<br>Lunch/coffee at conferences & on campus<br>Open door policy<br>Career guidance<br>Research collaborations<br>Annual review                                                                                                                                                     | Time to write and publish                                                                                      |                                                                                                      |                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Good Mentoring</b><br>Giving advice<br>Respect, encouragement, integrity<br>Authentic caring<br>Consistency in relationship                                                                                                                                                                                            |                                                                                                                |                                                                                                      |                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>GENERAL BARRIERS TO NAF-STEM SUCCESS</b><br>Administrative "roadblocks"<br>Over-extended with service<br>Extra service of mentoring not formally recognized (e.g., unit standards, "counts" in promotion and tenure)<br>Academic "currency" of oral tradition (e.g. conference presentations) vs. papers and/or grants |                                                                                                                |                                                                                                      |                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                            |

