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FALL-WINTER WILLOW NEWSLETTER

The Willow Alliance for Graduate Education and the Professoriate (AGEP) is a collaboration between University of Montana in Missoula and Salish Kootenai College in Pablo, Montana. We are in our sixth year and began our partnership to develop, implement, and study a model for the professional success of Native American Faculty teaching and working in science, engineering, technology, and math (NAF-STEM).

WILLOW proposed a model similar to nature's willow. The *Salix* Genus species of trees and bushes are important to many Native American cultures. There are over four hundred species of willows, also called "sallows" or "osiers," and which contain the anti-inflammatory agent *salicin*, an ingredient of aspirin. In a number of Native American cultures, Willows symbolize inner wisdom; an open mind with the stability and strength of age and experience. Willows represent flexibility and adaptation, surviving and thriving in challenging conditions.

WILLOW follows the **6R's** culturally appropriate framework, both in implementation and in measuring success, where NAF-STEM are nurtured through three WILLOW components described below, as well as with Respect, Relevance, Responsibility, Reciprocity, Representation, and Relationship (6Rs).

The Willow Alliance represents several Native American communities. We aim to increase the success of NAF-STEM and advance knowledge about issues impacting their career progression in STEM fields with three intervention components:

- Indigenous Mentoring Program (IMP)
- Research Publication and Grant Preparation Program (RPGP)
- Institutional Support Program (ISP)

All components of Willow are supported by a mixed-methods Social Science Research (SSR) approach, using Indigenous Research Methodologies (IRM)* and an Indigenous Evaluation Framework (IEF). **

***Indigenous Research Methodologies** (IRM) are, *"The approaches and methods, rules and postulates employed by Indigenous researchaimed to ensure that indigenous research be carried out in a more respectful, ethical, correct, sympathetic, useful, and beneficial fashion."* (Pretty Paint, Feb. 2020)

****Indigenous Evaluation Framework** (IEF) includes, *"Indigenous knowledge creation in context; respect for place-based programs and connections to family and community; consideration of the whole person in assessment and recognition of their gifts, and sovereignty, which supports ownership and builds capacity."* (AIHEC 2009)

WILLOW TEAM MEMBER HIGHLIGHT

Ruth Plenty Sweetgrass She Kills

Dr. Ruth Plenty Sweetgrass-She Kills (Mandan, Hidatsa, Dakota, Assiniboine) is one of the Principal Investigators on the Willow Project. Ruth is an enrolled tribal citizen of the Three Affiliated Tribes, member of the Maxoxadi clans (Alkali Lodge), and is also descended from the Fort Peck Sioux and Assiniboine. She earned an associate's degree in Environmental Science, bachelor's degree in Elementary Education, master's degree in Organismal Biology and Ecology, and Ph.D. in Forest and Conservation Sciences.

In addition to her work on the Willow project, Ruth serves as the Food Sovereignty Director at the Nueta Hidatsa Sahnish College. Other projects she works on include digitization of her tribal college's special collections, development of a traditional seed cache, as well as a project that is focused on developing a consortium of Indigenous-led research along the Missouri River Basin. While completing her dissertation on the experiences of Native people who had pursued degrees in the field of natural resources, Ruth saw a need to better support Native faculty and the idea for the Willow project was born. Ruth has gardened and foraged traditional foods and medicines with her family her entire life. She also enjoys traditional craftwork, such as sewing, beadwork, quillwork, and basketry.

In OBSERVANCE

OF INDIGENOUS PEOPLES

Monday, October 10, 2022

From the Office of
UM President, Seth Bodmer

"This day is an important opportunity for all of us to honor Indigenous members of our community. On this day, we not only recognize the many ways Native American tribes have for centuries shaped the valley where the University of Montana sits but we also celebrate the tremendous impact Native American students, faculty and alumni continue to contribute to our present and future.

Indigenous Peoples Day calls us to continue our ongoing efforts to build an inclusive campus that is welcome to all. Part of this effort is to actively embrace opportunities for learning. I encourage everyone to participate in and learn from today's events. Please take time… to celebrate, participate and learn together."

NOVEMBER was National American Indian Heritage Month. The Library of Congress, National Endowment for the Humanities, National Gallery of Art, National Park Service, Smithsonian Institution and United States Holocaust Memorial Museum joined people, communities, and other organizations across America in paying tribute to the rich histories and traditions of Native Americans. Among those in Washington, DC, the National Archives Museum hosted the exhibit, All American: The Power of Sports, which featured a new book, **Path Lit By Lightening** about the **Life of Jim Thorpe,** a member of the Sac and Fox Nation who excelled at every sport.

Willow Professional Development Workshop on Indigenous Mentoring Featuring Willow researcher, Jennifer Harrington and Marilyn Zimmerman

Jennifer Harrington, Native American Natural Resource Program Director, W.A. Franke College of Forestry and Conservation, and Marilyn Zimmerman, Senior Director of Policy and Programs, National Native Children's Trauma Center, led this PD workshop in mid-October at UM for faculty, graduate students, administrators and staff who currently mentor, or who are interested in mentoring, American Indian/Alaska Native students. Attendees engaged in facilitated sessions with a number of presenters who shared knowledge about cultural humility, establishing and sustaining healthy mentor-mentee relationships, and campus and community-wide services and programs available for AI/AN students. The PD also focused on Indigenous research methodologies, best practices for disseminating research in Native communities, and Indigenous mentoring practices. A second session was held in late October.

https://identify.plantnet.org/the-plant-list/species/Salix%20atrocinerea%20Brot./data

https://commons.wikimedia.org/wiki/File:Salix_planifolia_-_diamondleaf_willow_-_Flickr_-_Matt_Lavin.jpg

Above Photo: San Juan, Puerto Rico hosted the 2022 SACNAS National Diversity in STEM Conference. The Society for the Advancement of Chicanos/Hispanics and Native Americans in Science conference is the largest multicultural and multidisciplinary STEM diversity gathering of students, professionals and leaders in the nation. Willow's PI's Ke Wu and Ruth Plenty Sweetgrass-She Kills, social science research specialist, Jennifer Harrington and Willow fellow, Dean Nicolai all attended the event. (Ke Wu photo credit)

WILLOW DISSEMINATION

Willow submitted an abstract for the Rural Sociology journal titled, **Native American Conversations about the Cultures of Higher Education - Identifying Supports and Barriers for Native American Faculty in STEM.**

In part, one of the goals of this project is for Willow to gain understanding of how institutions of higher education (IHEs) can become better environments for facilitating success of Native American faculty.

As part of that effort and using a mixed-epistemology approach for this research, Willow asked Native American scholars to engage in in-depth conversations reflecting on their experiences in higher education.

Data collection was designed using principles of Indigenous Research Methodologies (IRM) with the use of Talking Circles. Our analysis shares insights that emerged from those conversations.

Each conversation unfolded naturally and was guided by Talking Circle members. Talking Circles are used by some North American tribal and First Nation peoples, often in conjunction with peace-making and/or healing (Baskin, 2005; Chilisa, 2012; Kovach, 2009, Mehl-Madrona and Mainguy 2014; Obie, 2016; Walker 2004).

The role of the researchers was limited to prompting participants using initiating questions when the conversation ebbed.

The **RESEARCH PUBLICATION AND GRANT PREPARATION PROGRAM** (RPGP) will serve as the basis for a new website to share information about this component of the project. Willow implemented the RPGP to support Native American faculty in STEM (NAF-STEM) over the course of the past few years.

The site will expand upon data from the RPGP and include insights on the project's implementation of a Six R's Indigenous Framework. The Six R's focus on respect, relevance, relationship, representation, responsibility, and reciprocity toward culturally responsive and effective professional development programming.

INDIGENOUS MENTORING

Following the publication of Brown et al. first paper (2022), *Exploring personal, relational, and collective experiences and mentorship connections that enhance or inhibit professional development and career advancement of Native American faculty in STEM fields: A qualitative study* in the Journal of Diversity in Higher Education this past year, a second paper stemming from Willow's Indigenous Mentoring Program (IMP) is in the works by this group of Alliance coauthors.

This paper is being developed to describe initial interviews that were conducted to develop the IMP, implementation of the IMP for Native American faculty in STEM (NAF-STEM), as well as the post-evaluation data.

Other projects the Willow-AGEP Alliance is focusing on and engaged in this fall include papers and dissemination products for their INCLUSIVE AUTHORSHIP PROTOCOL, the definitions of Native American FACULTY SUCCESS, a WILLOW PODCAST series featuring Native American faculty teaching in STEM disciplines and Willow team members sharing their experiences in higher education. The podcast is facilitated by UM's graduate school.

Willow will be publishing data from their NATIONAL CLIMATE SURVEY, concentrated on five constructs to understand both Native and non-Native institutional climates. The five constructs are, *equity, cultural congruity, research value and support, professional growth and development,* and the general *university environment*.

Willow's INSTITUTIONAL SUPPORT PROGRAM (ISP) - Willow's ISP has developed an interview guide for discussions with administrators at Tribal Colleges and Universities (TCUs) and non-Native institutions, including Willow-AGEP Alliance institutions, the University of Montana (UM) and Salish Kootenai College (SKC). The guide explores institutional policies and recommendations for supporting Native American Faculty in STEM. Interviews are currently in the process of being conducted at UM and SKC, with more to follow next spring.

Willow had a fall gathering in Missoula to continue working on adaptation of the Willow Model, based on self-study, external evaluation and advisory board feedback. The evolving Model illustrates the iterative process of Willow's multiple and multifaceted components. Willow is continuing to build relationships and share best practices with the Native FEWS Alliance (Food, Energy and Water Systems) with University of Arizona and UC Berkley. Willow is also planning a Digital Story Telling Workshop for next spring, in May 2023.

Quote of the Month_____

"In Indigenous methodology, stories emphasize our relationships with our environment, our communities, and with each other. To stay on course, we are guided by the stars in the sky, with each star a project principle: deliver holistically, learn from one another, work together, share strengths, value collaboration, deepen the learning, engage respectfully, and learn to work in discomfort. As we look ahead, we do not forget our past…"

~ From "Pulling Together: A Guide for Front Line Staff, Student Services, and Advisors; A guide for Indigenization of post-secondary institutions, professional learning series, by Cull, Hancock, McKeown, Pidgeon and Vedan, 2018, BC campus. EBOOK ISBN: 978-1-77420-046-9.

IN OTHER WILLOW NEWS

- Dr. Michael Patterson retired from the University of Montana's (UM) W.A. Franke College of Forestry & Conservation. He joined the College faculty in 1996. From 2007-2011, Dr. Patterson served as Department Chair of Society and Conservation and from 2012-2021, he served as Associate Dean of the W.A.F College of Forestry. Dr. Patterson co-leads one of the Willow-AGEP project's dissemination pieces, which stemmed from the Willow Talking Circles and explores Native faculty experiences in academia. Willow-AGEP highlighted Dr. Patterson in the fifth issue of our newsletter.

- This past October, the National Science Foundation (NSF) announced a Program Officer change in the Alliance for Graduate Education and the Professoriate (AGEP). NSF welcomed Dr. Keri Ann Sather-Wagstaff at the AGEP 2022 National Research Conference in Corpus Christi, TX. Dr. Sather-Wagstaff is a rotating Program Director from her current home institution, Clemson University in Clemson, SC. She is a Professor in the School of Mathematical and Statistical Sciences and just finished a term as Associate Director for Graduate Studies. Dr. Sather-Wagstaff has significant experience mentoring undergraduate students, graduate students, postdoctoral research scholars, and faculty members. She has worked extensively on diversity, equity and inclusion issues around gender, sexuality and race for the last decade.

- Willow P.I. and UM Mathematics professor, Dr. Ke Wu, and Willow Fellow and UM Chemistry Professor, Dr. Aaron Thomas, collaborated to help UM earn a significant $2.5 million grant this past November from the Howard Hughes Medical Institute to increase the percentage of Indigenous, Black, and other underrepresented students of color entering Science, Technology, Engineering and Mathematics (STEM) fields. UM was the only school in Montana and was one of six universities nationally to receive the prestigious award. Dr. Thomas, a member of the Diné Nation leads the Indigenous Research and STEM Education (IRSE) program at UM. The award will assist UM in integrating Indigenous knowledge and histories into the institution's programming and curriculum.

- In October, NSF awarded $10 million to a six-state collaborative aimed at increasing representation of Alaska Native and American Indian (AI/AN) students in STEM disciplines and the work force. Dr. Aaron Thomas led the effort for UM and partners included research universities and institutions in Montana, Idaho, New Mexico, North Dakota, South Dakota, and Wyoming. NSF's CIRCLES Alliance launched in 2020, with support from NSF's Established Program to Stimulate Competitive Research (EPSCoR) and Inclusion across the Nation of Communities of Learners of Underrepresented Discoverers in Engineering and Science (INCLUDES) program. The funding will serve teachers and students from kindergarten through undergraduate level, across the Rocky Mountain West.

- AISES: Willow social science research specialist, Jennifer Harrington, attended the 2022 National American Indian Science & Engineering Society conference in California. Focusing on 45 years of advancing Indigenous peoples in STEM, AISES also hosts the largest college and career fair in the US. This year's keynote presentation featured Bird Runningwater, a film and television producer from New Mexico's Mescalero Apache.

OPPORTUNITIES

POSTDOCTORAL OPPORTUNITY - in the Department of Curriculum and Instruction at the University of Idaho (UI). UI is looking to recruit a wonderful new colleague to contribute to Indigenous education, research, and tribal-university collaboratives in Idaho. This position will help to integrate and root current and new programs in Indigenous research and education - IKEEP (US Dept of Ed), Cultivating Relationships (NSF-DRK-12), and Cultivating Indigenous Research and Leadership in STEM and Education (CIRCLES, NSF-INCLUDES).

The postdoctoral fellow would work with scholars in Education, American Indian Studies, Natural Resources. For Application Materials, see: Indigenous Research and Education Postdoc position at University of Idaho. https://uidaho.peopleadmin.com/postings/38589

University of Idaho **Land Acknowledgement Statement** – *Moscow Campus: UI Moscow is located on the homelands of the Nimiipu (Nez Perce), Palus (Palouse) and Schitsu'umsh (Coeur d'Alene) tribes. We extend gratitude to the indigenous people that call this place home, since time immemorial. UI recognizes that it is our academic responsibility to build relationships with the indigenous people to ensure integrity of tribal voices*

(https://www.uidaho.edu/president/direct-reports/tribal-relations)

Check out the new **Native FEWS Alliance** website, Willow-AGEP Alliance partner. Focused on access to food, energy, and water systems (FEWS) in Indigenous communities, the Native FEWS Alliance and their backbone organization, the American Indian Higher Education Consortium (AIHEC) hopes to significantly broaden participation of Native Americans in FEWS education and careers.
The "Alliance of Alliances" collaborates virtually and in person to serve Native American students across several pathways to further their success. From Pre-College training to Graduate and Certificate Programs in Tribal Colleges and Universities, toward increased Post-Doctoral opportunities, Community Partnerships and University Faculty Development, FEWS is working to address a crisis in Native American communities across the country.

WILLOW FELLOW HIGHLIGHT – DR. ROSALYN R. LA PIER

Willow Fellow, Rosalyn Lapier, is an award-winning Indigenous writer, ethnobotanist and environmental activist. She works to revitalize Indigenous & traditional ecological knowledge (TEK), to address environmental justice and the climate crisis within Indigenous communities, and to strengthen public policy for Indigenous languages.

Dr. LaPier is an enrolled member of the Blackfeet Tribe of Montana and Métis. After ten years at University of Montana (UM) Environmental Studies Program (EVST), Rosalyn accepted a position at the University of Illinois at Urbana-Champaign (UIUC) Department of History as a Professor of Environmental and Indigenous History.

Rosalyn will spend Fall 2022 researching and writing. In Spring 2023, she will be teaching a Native American History course with a focus on the environment and a course on Environmental Issues in Native American Communities. The UIUC department will be a change from UM because it is much larger. UIUC has nearly 40 faculty, 400 undergraduate majors, and 76 Doctoral and Masters students.

Rosalyn will continue to be involved in national Science, Technology, Engineering and Mathematics (STEM) organizations such as Society Advancing Chicanos/Hispanics and Native Americans in Science (SACNAS) and environmental issues, ethnobotany, Native plant restoration, and impacts of the growing climate crisis on Indigenous lands.

Rosalyn says, *"I truly loved my time at UM and the EVST program, including focusing on STEM education and developing a new focus and certificate on "Indigenous Knowledge & Environmental Sustainability," and creating several new classes that will continue on into the future, such as the "Traditional Ecological Knowledge of Indigenous Peoples" course. And collaborating with UM botanist Marilyn Marler to create the "Native Plant Stewardship & Ethnobotany" internship. We worked & trained some great students over the years."* Rosalyn enjoyed working with both undergraduate and graduate students from all across the nation. She says she will take great memories with her as she transitions to a new academic home…way to go, Dr. La Pier!

The primary sponsor for the Willow Alliance for Graduate Education and the Professoriate (AGEP): A Model to Advance Native American Faculty in Science, Technology, Engineering, and Math (NAF-STEM) 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 these HRD grant numbers: #1723248 - University of Montana (UM), #1723006 and Salish Kootenai College (SKC). 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.