



WILLOW NEWSLETTER - HAPPY FALL!

ISSUE 5 - NOVEMBER 2021

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, to develop, implement, and study a Model for the professional success of faculty and instructional staff in science, engineering, technology, and mathematics (STEM), who are enrolled in, and/or descendants of, Native American tribes. The WILLOW Alliance project is funded by the National Science Foundation (NSF) and aims to increase success of Native American STEM faculty (NAF-STEM) and advance knowledge about issues impacting their career progression in STEM fields. The project has three intervention components: 1. Indigenous Mentoring Program (IMP), 2. Grant Preparation and Management Training program (RPGP) and, 3. Institutional Support Program. All components of the project are supported by a mixed-methods Social Science Research (SSR) approach, using **Indigenous Research Methodologies*** and an **Indigenous Evaluation Framework****.

WILLOW TEAM MEMBER PROFILE: DR. MICHAEL PATTERSON

Dr. Michael Patterson is a Professor in the UM W.A. Franke College of Forestry & Conservation. He joined the faculty in August 1997. His research emphases include human experiences with nature; how these experiences shape meanings and values; and how these meanings and values influence the way people interpret and respond to natural resource issues. His interests also include philosophy of science and the evaluation and integration of knowledge across scientific, managerial, and legal institutions. His teaching emphasized theories from social and environmental

psychology relevant to understanding human experiences and interactions with nature, philosophy of science and social science research methods, and natural resource policy and biopolitics. From 2007-2011 Dr. Patterson served as Department Chair of Society and Conservation. From 2012-2021, he served as Associate Dean of the College. In Fall of 2021, he returned his pre-administrative life and faculty role. He looks forward to the increased space that provides to engage in the Willow Project. Currently, Mike is leading Willow's Institutional Support Program's

development of an interview guide for discussions with administrators exploring institutional policies to support Native faculty. He has also joined Jennifer Harrington as co-lead on one of the papers stemming from the Willow Talking Circles exploring Native faculty experiences at Institutions of Higher Education.



***Indigenous Research Methodologies (IRM)** are, "The approaches and methods, rules and postulates employed by Indigenous research aimed 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'S RECENT DISSEMINATION EFFORTS

The Willow article, *A Research Publication and Grant Preparation Program for Native American Faculty in STEM: Implementation of the Six Rs Indigenous Research Guiding Principles*, has been peer-reviewed and accepted by the **Frontiers in Psychology** journal for a special edition, "Diversifying the STEM Fields: From Individual to Structural Approach." The Research Publication and Grant Preparation (RPGP) manuscript, which the Willow team is restructuring to a Curriculum, Instruction, and Pedagogy (CIP) article type, focuses on creating programs using the inclusive approach of the 6Rs: respect, relationship, representation, relevance, responsibility, and reciprocity.

Willow's collaborative Writing Project (CWP) manuscript, led by Willow Fellows, *Lived Experiences of Native American STEM Faculty in Academia: Navigating Respect, Relationship, Reciprocity, & Responsibility*, has been peer-reviewed and was rejected by the Journal of Higher Education. The authors' compiled data from Native American faculty responses to questions about their professional satisfaction and success, ranging from their inspiration for joining the professoriate to their unique challenges and transitions, their research and teaching approaches, and advice or strategies they use to sustain themselves or thrive in their positions within academia. A new journal has been selected for the article submission.

Willow's Qualitative Data Analysis (QDA) team has resumed work on a manuscript addressing several research aims using the Hermeneutics approach in their analyses of the qualitative data. This manuscript intends to share the stories told in the Willow Talking Circles using participants' lived experiences on what can be done to improve representation of Native American Faculty in Science, Technology, Engineering, and Math (NAF-STEM).

Our paper "*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*," was accepted for publication on November 2, 2021 in the Journal of Diversity in Higher Education. This paper is based on the interviews conducted to develop Willow's Indigenous Mentoring Program (IMP) for Native American faculty in STEM and is the first of two papers stemming from this component of the project. The article will be made available as an online first publication ahead of print.

The 6Rs subgroup of coauthors continues to meet biweekly on the Willow paper: *6Rs Guiding Principles for Indigenous Research in Examining Experiences of Native American Faculty in Science, Technology, Engineering and Mathematics*. As the authors continue to refine content, they are including Challenges, Supports and Successes to the paper's discussion section and hope to submit the paper before the end of the year.

ADDITIONAL ACTIVITIES AND WILLOW FALL GATHERING AT UM

Willow's **Institutional Support Program** has been working on development of an interview guide for discussions with administrators at Tribal Colleges and Universities (TCUs) and non-Native institutions. The guide explores institutional policies and recommendations to support Native American Faculty in STEM.

Willow received results from their **National Climate Survey**, focused on 5 constructs to understand institutional climates: Equity, Cultural Congruity, Research value & support, Professional Growth and Development, and the General University Environment.

This October saw the launch of the ***Native FEWS Alliance to increase Native American participation in STEM careers to address Food, Energy, and Water challenges in Indigenous communities.*** Members of Willow-AGEP have joined the Native FEWS Alliance with the shared vision to build a highly skilled Native American Science, Technology, Engineering, and Mathematics (STEM) workforce in the areas of Food, Energy, and Water and to address the insufficient access to food, energy, and water (FEW) in Indigenous communities. The Native FEWS Alliance strives to become a transformative force in education, bringing into being innovative pathways to STEM careers that engage local communities and are based on Indigenous ways of living and learning.

To reach their goals, the Native FEWS Alliance, bolstered by a \$10 million National Science Foundation INCLUDES grant, will leverage the strength and potential of each partnering program and expand the Alliance's collective capacity with a tight network of exchanges and collaborations.

As a partner in this Alliance, Willow-AGEP will expand and disseminate their successful initiatives through workshops on: 1) Training on how to implement faculty Indigenous mentoring and 2) Training on grant preparation, manuscript preparation and management for junior faculty across the Alliance; 3) Mentors of the Willow mentoring team will also serve as mentors to Native FEWS Alliance junior faculty.

“Our Willow team looks forward to sharing the wise practices we have developed over the past five years of research exploring Native American Faculty in STEM’s (NAF-STEM) lived experiences to provide professional development and encourage an environment that fosters NAF-STEM’s professional satisfaction and support. We are also excited about being a part of the Native FEWS Alliance to work collaboratively towards the goal of greater Native representation in the STEM fields at multiple scales,” said Dr. Ruth Plenty Sweetgrass-She Kills, University of Montana and Willow-AGEP senior personnel.

Among the partners in the Native FEWS Alliance are the University of California Berkeley as the lead, the University of Arizona as a collaborating lead, and the American Indian Higher Education Consortium (AIHEC) will operate as the backbone of the Alliance. Other Alliance partners that provide critical pathways to success include Tribal colleges and universities (TCUs), community college and undergraduate, graduate, faculty career, postdoctoral, FEWS career, community partnerships and indigenous knowledge, pre-college programs, and indigenous data sovereignty.

“The goal of the Alliance is to work within our own systems . . . and very important, the broader research and education communities to make sure that our sovereign nations have the workforce, entrepreneurs, and innovators we will need to sustain our lands, water, food, and place for generations to come,” said Carrie Billy, AIHEC President and Native FEWS Alliance co-principal investigator.

The FEWS Alliance will develop curricula, offer workshops, develop mentoring guides, adapt, and adopt best practices and share results through its open platform to allow small institutions and non-profit organizations across the country easy access to Native FEWS teaching, learning, and mentoring materials. These curricula and interventions will be designed to recruit, retain, and graduate Indigenous students in higher education and careers in FEWS and related STEM fields, as well as educate non-Natives in how to build ethical partnerships with tribes. With the interventions described, the Alliance hopes to achieve at least a 20% increase average Alliance-wide in the number of Native American students who graduate from our institutions of higher education at all levels during the grant period.

WILLOW FALL GATHERING



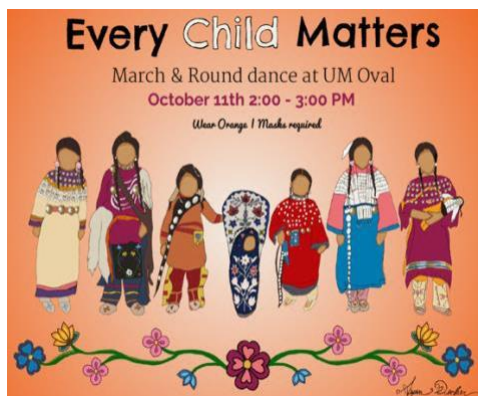
The Payne Family Native American Center and Fall colors in full display on the University of MT campus. *Top photo credit UM PFNAC homepage. Bottom photo credit Mathematics Professor Ke Wu.*

Willow-AGEP Alliance met last month on the UM campus in the Payne Family Native American Center (PFNAC) for the annual **Willow Fall Gathering**. PFNAC is the first building in the nation to house a Native American Studies Department and includes American Indian Student Services. The LEED (Leadership in Energy and Environmental Design) Platinum-certified building was intentionally designed to minimize impact to the site. It sits on lands of an historical Salish encampment where the community gathered for annual digging of Bitterroot, an important and traditional Native food staple.

The Elouise Cobell Land and Culture Institute occupies the PFNAC's lower garden level, with advanced distance learning options. It features a circular, multiscreen theatre room for Indigenous storytelling and teaching interactive astronomy and advanced GIS courses.

"Circle of Life" planting rings outside of the building represent Montana's Native Nations and their diverse eco-regions. Each ring is strategically positioned to respond to different microclimates, from sunshine to shade, influencing the plant and shrub species, and grasses native to the Rocky Mountain West.

WILLOW QUOTE OF THE MONTH - "EVERY CHILD MATTERS"



This flyer is from the Indigenous Storytelling Club at UM and was designed by Aspen Decker. Aspen is the Native community & Museum Education Coordinator in the Montana Museum of Art & Culture, UM College of Arts & Media. She is a graduate of UM's Linguistics program and is part of a small group of fluent Salish speakers. Aspen graduated in 2018 with a B.A. in Tribal Historic Preservation from Salish Kootenai College (SKC). She is one of the founding members of the Indigenous Storytelling Club. She saw the need to increase Indigenous representation and advocate for Indigenous methodologies in research.

The Mission of the Indigenous Storytelling Club is *to create a greater representation of Indigenous ways of knowing at the University of Montana that aims to support Indigenous student voice*. The club is a way for Native students to connect and build a sense of community, empowering Indigenous peoples through a shared vision to address social injustices such as Murdered and Missing Indigenous Women (MMIW), Every Child Matters, language revitalization, and climate change.

For their first event, they marched on the UM Oval and conducted a round dance on the last day of September for Every Child Matters to bring awareness to the Indigenous children that lost their lives while attending boarding schools. The group gathered to bring healing to the community by coming together for Indigenous prayer, song, and dance. September 30 was set aside in 2013 to remember the Canadian Indian Residential school system and has since been changed to a National Truth and Reconciliation Day in 2021. Also known as Orange Shirt Day, it recognizes EVERY CHILD MATTERS.

Indigenous People's Day was celebrated at UM on Monday, October 11. Since 1993, Congress has authorized **November as National American Indian Heritage Month**. National Native American Heritage Day is the Friday after Thanksgiving. Elouise Cobell Day is celebrated annually on her birthday, November 5.

WILLOW FELLOW HIGHLIGHT & ADDITIONAL RESOURCES

Dr. Annie Belcourt, Otter Woman, is an American Indian Professor in the College of Health at the University of Montana's Pharmacy Practice and School of Public and Community Health Sciences Departments. Dr. Belcourt is an enrolled tribal member of the Three Affiliated Tribes, Mandan, Hidatsa, Blackfeet, and is Chippewa descent. She completed her clinical training and doctoral studies in clinical psychology with advanced postdoctoral science training completed at the Centers for American Indian and Alaska Native Health. She has worked clinically with diverse populations, including combat veterans, Native Americans, and low-income populations specializing in posttraumatic stress reactions and multiple psychiatric conditions. Her research and clinical priorities include mental health disparities, posttraumatic stress reactions, risk, resiliency, psychiatric disorder, and environmental public health within the cultural context of American Indian communities.

The Society for Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS) recently checked in with Dr. Belcourt to discuss resiliency in digital storytelling, and how to manage stress and find balance in a virtual world. Please click this SACNAS [Natives Initiatives](#) link to Dr. Belcourt's wellness check-in, as well as these other links to learn more about her.

<https://www.umt.edu/grad/telling-our-story/stories-folder/annie-belcourt-otter-woman.php>

<https://indiancountrytoday.com/author/annie-belcourt-phd>

Dr. Belcourt also collaborated on the 16-minute *Dogwood* short film supported in-part by Willow with her daughter, [Maya Rose Ditloff](#), Many Pipes Woman. Maya served as an Ambassador to the American Indian College Fund. *Dogwood* has garnered several awards from the Dakota Independent Film Festival, including Best Short Film and Best Director. Maya's [Going to the Sun](#) feature documentary, which is still in development, explores the Murdered and Missing Indigenous Women (MMIW) epidemic, with its surrounding grief and trauma.

[Dogwood](#) will premiere the first weekend in November at the prestigious 15th Annual LA SKINS FEST. The Los Angeles-based film festival celebrates Native American and Indigenous film and filmmakers in a week-long series of events throughout Hollywood, CA, including presenting the 10th Annual Native Media awards and 10th Writers Pitch Fest. Hosting Indigenous filmmakers from around the world, the [LA SKINS FEST](#) offers a "new voice" for upcoming filmmakers, showcasing talent from Indian Country.

Indigenous Mathematicians website Mission and Vision "seeks to put together all the known information about Indigenous Mathematicians...recognizing that Native Peoples have been doing mathematics for millennia." The site honors Indigenous Mathematicians formerly trained in Mathematics in Western academic systems, as well as those practicing mathematics as a profession. In celebration of Native American Heritage Month, click the following link to see the first recipient's story, Rebecca Garcia, who is paving the way for Pacific Islander students. Link to: [Indigenous Mathematicians](#).