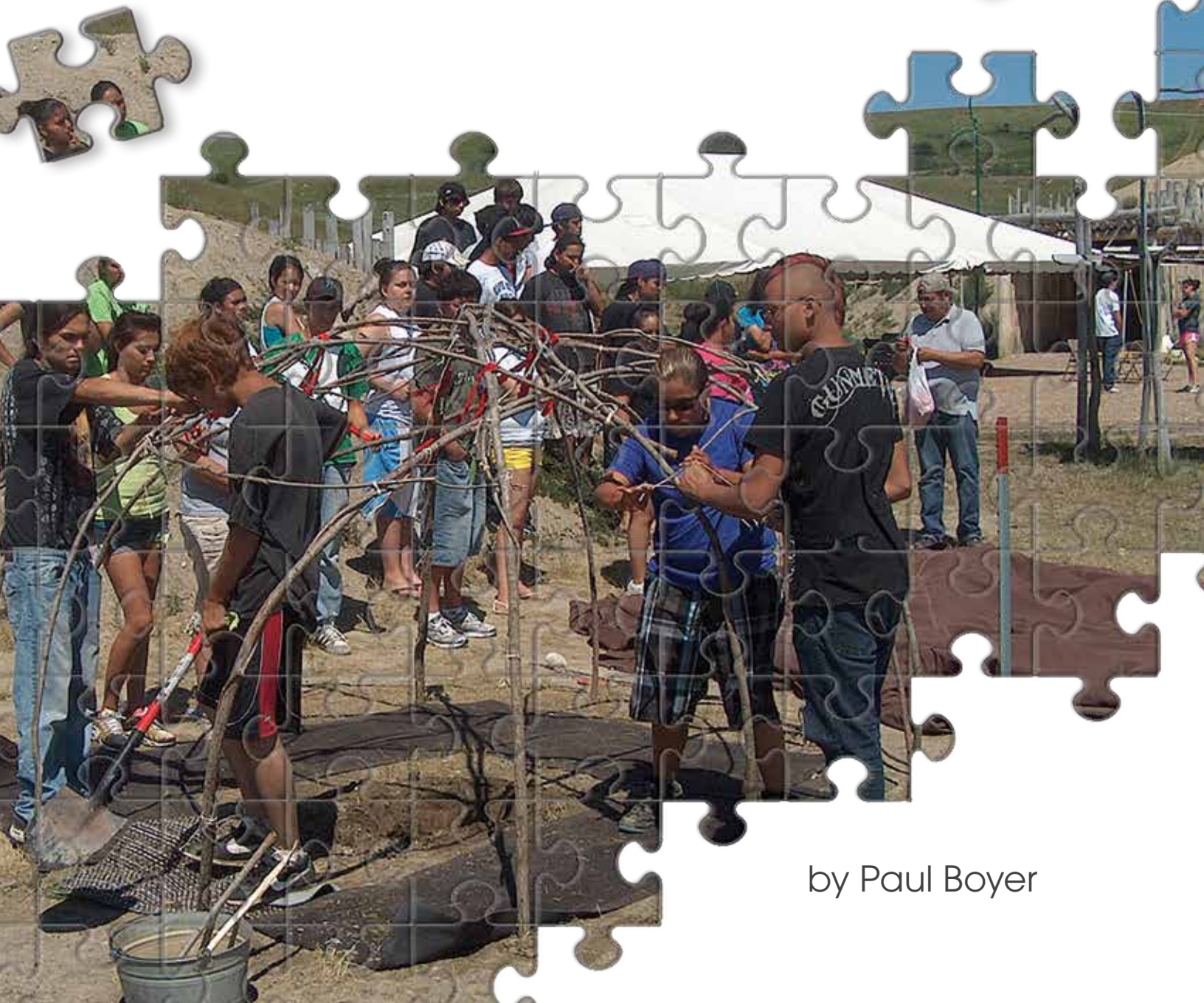



# Building Colleges that Build Nations

The role of partnerships  
in the development of tribal  
and Native-serving colleges



by Paul Boyer



The first tribally controlled colleges were founded nearly fifty years ago on some of the nation's poorest and most isolated reservations. They were created not by a federal agency or foundation, but by a cadre of young American Indians who, in most cases, had little experience in higher education administration. Working outside the educational mainstream, the colleges' founders encountered widespread skepticism. Few people believed their institutions would succeed, and many openly doubted they would survive for more than a few months.

These first tribal colleges did not, in fact, look much like "real" institutions of higher learning. Many began with a bare-bones curriculum taught by volunteer instructors working in double-wide trailers, using broken office equipment and mimeographed textbooks. Without reliable funding, early presidents subsisted on poverty-level salaries, "and sometimes we weren't paid at all," recalled Carty Monette, the first president of Turtle Mountain Community College, located on the Turtle Mountain Reservation of North Dakota. Everything about the movement felt ad hoc and provisional.

Yet the first colleges survived, and grew, because they met a real need. Unlike distant state universities and most private colleges, tribally controlled colleges leveraged their limited resources toward one purpose: to make higher education accessible and relevant to American Indians, especially those living within isolated reservation communities. And they proved their worth as tribal members successfully earned degrees and found meaningful work.

## The Importance of Partnerships

Tribal colleges did not work in complete isolation, however. Even in the early days of the movement, a few foundations and federal agencies came to their aid, contributing funds needed to develop their early academic programs. Equally important, several mainstream universities agreed to manage many of these grants on behalf of the not-yet-accredited colleges and to accept credits earned by students. Their faith and goodwill helped the first tribal colleges take root and survive during their early, difficult years.

As the colleges grew, so did the number and variety of partnerships. Grants financed the construction of modern campuses, promoted faculty development, and supported the cost of creating new degree programs in disciplines ranging from elementary education to engineering. They equipped both art studios and science labs. They helped tribes document their threatened indigenous languages, and gave colleges opportunities to send student-built payloads into space.

The agencies and institutions providing this support are diverse. Over the years, they included large foundations (including Ford and Kellogg), relatively small foundations (such as Donner, Bush, and Lannan) and medical research centers (Howard Hughes). In the federal government, they include the Department of Education, but also NASA and the Departments of Defense and Agriculture, among others. Outside of the federal government, tribal colleges also established strong partnerships with numerous mainstream colleges and state university systems.



Intern Marty Seymour preparing to launch Chief Dull Knife College's new tethered blimp. Payload drops were being practiced this day.  
*Photo credit: Jeff Hooker*



## The National Science Foundation and the 2016 Leaders' Forum



Dr. Jody Chase, Program  
Director of the National Science  
Foundation's Tribal Colleges and  
Universities Program.

One of the most important and longstanding partners is the National Science Foundation, which currently awards approximately \$13 million annually to tribal colleges and Native-serving universities through its Tribal Colleges and Universities Program (TCUP). In support of this mission TCUP also funds periodic gatherings of awardee institutions. The 2016 “Leaders’ Forum”, held December 7–9 in Washington, D.C. under the sponsorship of Sisseton Wahpeton College, focused on the importance of partnerships in the growth and development of tribal and Native-serving colleges. Examining vital collaborations with federal agencies, foundations, and mainstream universities, participants discussed:

- The role of partnerships in the development of tribal and Native-serving colleges;
- Strategies for building effective partnerships;
- Opportunities for the development of new partnerships;
- Assuring sustainability of programs developed through partnerships;

The Leaders’ Forum was held at a critical moment in the nation’s history. More than any time in the recent past, America is engaged in a debate over its long-standing commitment to educational opportunity and the values of an inclusive

## Partnerships represented at the 2016 Leader’s Forum

### Federal Agencies and Departments

Department of Education, Office of Post Secondary  
Education (Title III)  
Department of Agriculture, National Institute of Food  
and Agriculture  
Department of Defense  
National Aeronautical and Space Administration (NASA)  
National Science Foundation

### Mainstream University Partners

South Dakota State University  
North Dakota State University

### Foundations and Research Centers

Howard Hughes Medical Institute

democratic society. Against this backdrop, the workshop highlighted the unique mission of tribal and Native-serving colleges and the vital role of partners in supporting their work.


## Partnerships Helped Build a Movement

Today, few educators openly challenge the value of tribal colleges or higher education's responsibility to serve minority populations. In the late 1960s and early 1970s, however, many people doubted that Indians were capable of running something so complex as an institution of higher learning.

"Good God, Mr. Chairman, you don't mean to think that you Navajos can run a *college*," exclaimed a corporate CEO when Navajo Tribal Chairman Raymond Nakai announced his intention to establish Navajo Community College (now Diné College) in 1968 at a gathering of political and business leaders. Others simply didn't think Indians needed a college education. When Sinte Gleska College (now University) President Lionel Bordeaux went looking for support in Washington, one senator recommended that his tribe take up chicken farming instead.



2016 Leaders' Forum participants



In the context of this era, those who chose to support tribal colleges were not simply taking a risk on an untested idea; they were also working against deeply entrenched attitudes about the intellectual capabilities of Indians, the needs of reservations, and, more broadly, the place of Native peoples in American society. It was only because of these “renegades” (as one early president called them) that tribal colleges found the support needed to develop their institutions.

## The Impact of Partnerships

Today, partnerships encompass multiple federal agencies, dozens of mainstream colleges and universities, and numerous foundations. Several panel discussions and presentations highlighted their role in supporting and strengthening the work of tribal and Native-serving colleges.

**FIRST, PARTNERSHIPS HELP BUILD AND STRENGTHEN ACADEMIC PROGRAMS.** Grants made to tribal and Native-serving colleges have directly supported growth and diversification of the curriculum, providing funding needed to develop and launch new degree programs.

In recent years the National Science Foundation has supported development of numerous degree programs in pre-engineering, teacher education, and the environmental sciences. While all tribal colleges began as two-year institutions, funding also supported development of four-year and graduate degree programs in these and other disciplines. For example, NASA support was instrumental in the development of a four-year computer science degree at Salish Kootenai College on the Flathead Reservation of Montana. More recently, Howard Hughes Medical Institute, in partnership with the NSF, is supporting development of research-based introductory biology courses organized around the isolation and analysis of bacteriophages.

**SECOND, PARTNERSHIPS SUPPORT NATIVE STUDENT ENROLLMENT, retention, and academic success.** Many Native students face numerous obstacles in their pursuit of college degrees, including poor academic



Dr. Sylvia James (left), director of the Division of Human Resource Development at the National Science Foundation, and Dr. Diana Morris, interim president of the College of Menominee Nation

preparation, poverty, geographic isolation, and lack of familiarity with higher education. Some avoid math and the sciences, viewing them as difficult “non-Indian” disciplines.

To address these barriers, tribal colleges have supported outreach programs, such as “family science nights” in elementary schools and summer science camps for high school students, that help build interest in science and STEM careers. College of Menominee Nation, meanwhile, recently published a children’s book series, written by College of Menominee Nation students, that builds interest in engineering fields by showing how engineering can be used to solve problems in reservation communities. These and other creative outreach projects were all supported by grants from the National Science Foundation.

In addition, tribal colleges are partnering with mainstream universities to promote a seamless transition for students wishing to continue their education after earning associate or baccalaureate



Diné College Botanist Arnold Clifford identifying plants used for ceremonial purposes. The college’s administrative building, located at Tsaille, Arizona, is in the background.

## Department of Education

**PARTICULARLY IMPORTANT TO THE FOUNDING OF MANY EARLY TRIBAL COLLEGES** was support from the U.S. Office of Education (now the Department of Education). In the early 1970s, Helen Shierbeck, director of the Office of Indian Education, alerted early tribal college leaders to funding opportunities within the recently passed Higher Education Act targeting the needs of “developing institutions.” Funds awarded through this program (and administered on their behalf by supportive mainstream colleges and universities) funded their core operations for a number of years.

Today, the Department of Education’s Office of Postsecondary Education continues to provide essential support to tribal colleges. In 2015, more than \$50 million were awarded to thirty-one colleges under Title III, the Tribally Controlled Colleges and Universities Program.

Title III funds support a wide variety of needs, ranging from literacy programs to faculty development. Speaking at a Leaders’ Forum panel presentation, Steve Sniegorski of the Department of Education’s Office of Postsecondary Education noted that this program—unlike most federal grants and awards—can also support “brick and mortar” expenses, including the repair and renovation of facilities, as well as the purchase of equipment and supplies, such as library books and laboratory equipment.

The flexibility of the program has proved invaluable to small colleges attempting to build programs and maintain campuses with limited and often restricted funding.



Dr. Clifton Poodry, senior science education fellow at the Howard Hughes Medical Institute

degrees. Articulation and other institutional agreements help tribal and Native-serving colleges coordinate their degree programs with mainstream institutions and reassure students that credits earned at the tribal college will apply toward the desired degree at a mainstream institution. For example, both North Dakota and South Dakota State Universities are helping Sisseton Wahpeton College develop a new human services degree by providing advice on curriculum development and locating graduate student instructors. Various mainstream universities have also created summer bridge programs for transferring tribal college students, which builds familiarity and helps strengthen academic preparation.

**THIRD, PARTNERSHIPS HELP TRIBAL AND NATIVE-SERVING COLLEGES** develop research capacity. Until recently, Native peoples had little opportunity to conduct research, even within their own communities. Instead, noted Cecilia Arnoux of Salish Kootenai College's Indigenous Research Center, they were more commonly the subject of research conducted by outsiders. In response, numerous federal agencies and foundations are helping build research capacity within tribal and Native-serving colleges, and supporting research relevant to the needs of the local community. Of equal importance, Native-led research can honor native traditions and cultural values.

## National Institute of Food and Agriculture

**SINCE 2000, THE DEPARTMENT OF AGRICULTURE'S NATIONAL INSTITUTE OF FOOD AND AGRICULTURE** has awarded more than \$20 million through the Tribal College Research Grant Program.

Intended to support capacity building within 34 tribal colleges and universities that are part of the nation's system of land grant universities, the Research Grants Program helps the colleges "address the questions that matter to these communities," according to NIFA. "Projects may help a tribe improve bison herd productivity, discover whether traditional plants can play a role in managing diabetes or control invasive species."

Recently funded projects, all conducted in collaboration with a mainstream university partner, include research examining causes of declining clam populations in the Pacific Northwest and a graduate student exchange between Salish Kootenai College and the State University of New York-College of Environmental Science and Forestry.

NIFA also makes awards through its Tribal Equity Grants Program, which has been used to "help build laboratories, conduct remedial courses, create new degree programs in forestry and provide students stipends so they can complete their education," according to the NIFA website.



Partnerships with various federal agencies and mainstream universities are supporting research at nearly every tribal college. In the STEM fields, faculty and students are studying groundwater resources, the environmental impact of oil and gas drilling, and the health and habitats of animals ranging from clams to coyotes. They are looking at the efficacy of traditional medicines and documenting endangered languages. This work is being supported by many agencies, including the National Science Foundation and the National Institute of Food and Agriculture within the USDA. It is also frequently completed in collaboration with faculty from mainstream universities.

FINALLY, AGENCIES AND INSTITUTIONS that partner with tribal colleges benefit as well. With nearly a half-century of experience, tribal colleges have a deep understanding of indigenous communities and have devised innovative approaches to instruction. Mainstream universities that partner with these Native-serving colleges gain access to a cadre of educators who understand the needs of students, the priorities of their communities, and instructional strategies that work.

## Building and Maintaining Strong Relationships

Partnerships imply more than the act of awarding a grant. Effective partnerships require funding agencies to understand the history, mission, and needs of the institutions they are supporting. It requires flexibility and, at times, a willingness to work through problems and misunderstandings. Institutions represented at the 2016 Leaders' Forum shared experiences and recommendations based on decades of work with tribal colleges and other Native-serving institutions.

“Lots of partnerships work,” observed Tim Grosser of the National Institute of Food and Agriculture, “but some don’t and that’s where I spend a lot of my time.” Problems emerge, he said, when “relationships are forced.” Some programs supporting research under NIFA, for example, require tribal colleges to partner with mainstream land



Chief Dull Knife College math instructor Gary Ramsey



Diné College student Colin Lee at the 2016 Society for Advancement of Chicanos/Hispanics and Native Americans in Science conference in Long Beach, California where he presented research completed while participating in the college's NSF-funded Summer Internship Program. Lee graduated in 2017 with an A.S. degree in mathematics.

grant universities. While this can lead to stronger projects, it also produces relationships of convenience that are not always built on trust or a shared vision.

Grosser said problems often can be avoided or resolved when administrators work together and, especially, when presidents and deans from mainstream universities signal to their own staff and faculty that cooperation with tribal colleges is an institutional priority. Additionally, he found that the most successful research projects were based at tribal colleges and focused on the needs of tribal communities. Research related to bison and environmental monitoring are areas “ripe” for funding, he proposed.

Denise Barnes, representing NSF-EPSCoR (Experimental Program to Stimulate Competitive Research), made a similar point. EPSCoR funds research in twenty-five states, including several with tribal colleges, under grants that are typically managed by state universities. These regional initiatives, in turn, have supported a variety of partnerships between tribal colleges and mainstream universities. In her experience, these “partnerships flourish when they reflect mutual respect” and address real needs. They are more likely to fail when a partner—usually a tribal college—is recruited only to “check a box” required for funding.

Even under the best circumstances the work of maintaining partnerships requires time and patience, said Gary Goreham, a professor of sociology at North Dakota State University. A memorandum of understanding must be approved, for example, and research projects might require review and approval at both institutions. In these and other ways, the needs and values of two distinct institutions need to “fit together somehow.” This is more than overcoming bureaucratic hurdles; it also requires reconciling different cultures.

## Department of Defense

THE DEPARTMENT OF DEFENSE HAS MAINTAINED A LONGSTANDING RELATIONSHIP with tribal colleges by supporting research and program development at several institutions. For example, the DoD's Instrumentation Program for Tribal Colleges and Universities funds the purchase of equipment needed for laboratory and classroom use “as well as sophisticated instruments and computers (including software) for advanced studies and research important to the DoD,” according to DoD publications.

Speaking at the Leaders' Forum, Virginia Pasour of the U.S. Army Research Office said that four tribal colleges are currently receiving department funding.

All agreed, however, that mainstream universities are now far more willing to see tribal colleges as equals, not as “junior partners.” In the past, tribal colleges were too often asked by mainstream institutions to participate in grants, not because their expertise was valued, but because their participation made proposals more attractive to funders. In some cases tribal colleges were identified as partners on grants without their knowledge, noted Cynthia Lindquist, president of Cankdeska Cikana College.

Another sign of progress is that tribal colleges are now being asked to serve as *lead* institutions on collaborative projects with mainstream institutions. The National Science Foundation has led the way by making tribal colleges the awardee institution on collaborative projects, including the Rural Systemic Initiative and the Pre-Engineering Education Collaboratives (see sidebar for more about these programs).



Summer Research Enhancement Program (SREP) students are participating in the Red Eagle Challenge Ropes Course in Shiprock, NM at the Diné College Campus. Students participate in a full day ropes course where cultural and public health concepts are taught through team building exercises, such as trust falls. Funding for this program is provided, in part, by the National Institutes of Health (NIH).



## The National Science Foundation

THE NATIONAL SCIENCE FOUNDATION is one of the tribal college movement's oldest and most important partners. Its earliest grants to tribal colleges, made in the mid 1970s, helped at least two colleges—Turtle Mountain Community College and Diné College (formally Navajo Community College)—develop their first science courses.

Engagement with tribal colleges expanded in the 1990s when the NSF developed the Rural Systemic Initiative. This decade-long project focused on strengthening STEM education at the K-12 level in regions of “persistent rural poverty,” which included large portions of Indian Country. To lead education reform efforts in and around Indian reservations, the NSF turned to tribal colleges, which were funded to create and oversee teacher in-service training and academic enrichment programs for schools serving Native American students.

The Rural Systemic Initiative ended in 2005, but the NSF's relationship with tribal and Native-serving colleges continued through the Tribal Colleges and Universities Program (TCUP). Started in 2001, it now awards approximately \$13 million annually to tribal colleges and other eligible Native-serving institutions, including the University of Hawaii and the University of Alaska. It is the only agency to consistently maintain an office specifically dedicated to the support of tribal and Native-serving colleges. The Tribal Colleges and Universities Program also leverages its own resources by partnering with other NSF programs. For example:

- **The Pre-Engineering Education Collaboratives**, developed with the Directorate of Engineering, supports development of two-year pre-engineering degree programs at sixteen colleges and universities, in collaboration with six mainstream university partners, including North Dakota State University, South Dakota State University, the South Dakota School of Mines and Technology, the University of Hawaii, and the University of Wisconsin.
- **The Partnerships for Documentary Linguistics Education (PADLE)**, in partnership with the NSF's Documenting Endangered Languages program, provides support for collaborations that will, according to the NSF web site, “improve TCUP institutions’ instructional capacity in documentary linguistics,” including “descriptive linguistics, computational methodology, archiving and preservation.”
- **The Partnerships for Geoscience Education (PAGE)** strand provides support for collaborations that will improve TCUP institutions’ instructional capacity in geosciences.
- Finally, TCUP has partnered with the **Howard Hughes Medical Institute** to support the participation of tribal colleges in the development of innovative research-based introductory level biology courses, following a curriculum developed by HHMI. TCUP support helps underwrite costs not covered by HHMI, such as the purchase of laboratory equipment.

## Sustainability

Tribal colleges have grown and matured significantly over the years, due in large part to the support provided by foundations, federal agencies, and mainstream universities. Indeed, some tribal colleges now have facilities and programs that match or exceed what is found at more established colleges in their regions.

However, most colleges remain very small institutions, reflecting their rural locations, and funding remains tight. Because of inadequate federal support for base funding, tribal colleges continue to operate with fewer dollars per student than mainstream colleges and universities. Facilities are often limited and staff wear many hats. Geographic isolation, low pay, and lack of tenure make it difficult for tribal colleges to attract and retain faculty. For most, building capacity to develop, manage, and sustain grant-funded programs is an ongoing challenge. Several discussions focused on responding to this challenge.



Second graders participating in Super Science Day, an academic outreach program hosted by Nueta Hidatsa Sahnish College on the Ft. Berthold Reservation of North Dakota.

Addressing the problem of faculty recruitment and retention, Diana Morris, acting president of College of Menominee Nation in Wisconsin, suggested that “a lot of it is about patience,” noting that it took her college—which is not particularly isolated relative to its peers—three years to find a qualified PhD physicist for one of its degree programs. While searching, the college found that hiring graduate student instructors and adjuncts from nearby mainstrems was a satisfactory short-term solution. More deeply, she reminded her fellow administrators that faculty are “people of the mind,” and should be given time to be “as creative as possible.” Building labs, stocking libraries, and providing opportunities to attend conferences can nurture a collegial environment that can win over candidates, and keep them from leaving.

No less challenging for administrators is the task of maintaining core funding for programs initially started with soft money. The temptation is to hope that funding will continue or to put the burden on faculty to keep finding the grants needed to maintain their own positions. But funding agencies look askance at this strategy and tribal college administrators attending the Leaders’ Forum agreed that it does not promote institutional stability.

Diana Morris said her institution gradually absorbs the cost of newly created degree programs and Cankdeska Cikana College President Cynthia Lindquist noted that her institution also maintains all established degree programs with base funding. Discussion among participants focused on the need to maintain prudent growth, lower costs (by, for example, developing online programs in collaboration with other colleges), and develop programs that can draw a sufficient number of students.



Kristen Bearchum working in Chief Dull Knife College’s West Nile Virus lab. *Photo credit: Jeff Hooker*

## NASA

**THE VENERABLE SPACE AGENCY HAS LONG MAINTAINED AN EDUCATIONAL MISSION**, reflecting a conviction that to remain strong as an agency, it must help nurture the next generation of engineers and scientists.

Grants to tribal colleges total about \$2.5 million annually. Speaking at the Leader’ Forum, NASA representative Torry Johnson said the agency supports curriculum development at the K-12 level, and programs that build tribal college STEM capacity. She highlighted projects that investigate energy and climate, and internship opportunities for undergraduate students.



# 2016 Leaders' Forum Participants

## Tribal and Native-Serving Colleges and Universities

### Alaska

Linda Nicholas-Figueroa  
Illsagvik College

Erin Hollingsworth  
Illsagvik College

Leilani Luhrs  
Illsagvik College

### Arizona

Oleksandr Makeyev  
Diné College

Donald Robinson Jr  
Diné College

### Hawaii

Ardis Eschenberg  
Windward Community College

Charles Sasaki  
Windward Community College

Esther Widiasih  
University of Hawaii at West 'Oahu

Kelly Ching  
University of Hawaii

Joshua Kaakua  
University of Hawaii

John Rand  
University of Hawaii

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Leech Lake Tribal College

### Montana

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Salish Kootenai College

Cecilia Arnoux  
Salish Kootenai College

Steve Dupuis  
Salish Kootenai College

Dan Kinsey  
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Gary Ramsey  
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### New Mexico

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Wesley K. Thomas  
Navajo Technical University

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### North Dakota

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Nueta Hidatsa Sahnish College

Cynthia Lindquist  
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College

Sharon Marcotte  
Standing Rock College

Terry Martin Parisien  
Turtle Mountain Community College

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Turtle Mountain Community College

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