SUPPORT ACCESS AND SUCCESS OF AMERICAN INDIAN STUDENTS

Summary Report 2017-2018
# TABLE OF CONTENTS

## Recruitment
- AISES Pre-College Outreach 1
- Admissions Outreach 1
- Tribal School Outreach and Engagement Plan 2
- Green Chemistry Education Workshops 2

## Retention/Support
- Multicultural Pre-Orientation Program 3
- American Indian Peer Mentor Program 3
- South Dakota Jump Start Program 3
- NSF OSPEEC II Grant 4
- Engineering Projects in Community Service (EPICS) 4
- Memorandum of Agreement Tribal Project 4
- Sustaining Urban Waters through Green Infrastructure 5
- Groundwater and Surface Water Interactions Modeling 5
- Emergency Fund 5
- American Indian Science & Engineering Society (AISES) 5
- Office of Multicultural Affairs (OMA) 6
- American Indian Honoring Ceremony 6
- Research Experiences for Undergraduates (REU) 7
- NSF Tiospaye Scholar Program 7

## Scholarships
- Scholarships 8
- ACS Scholarships 8

## Other Resources
- NASA South Dakota Space Grant Consortium (SDSGC) 9
- South Dakota NASA EPSCoR Program 9
- Prosperity Initiative 9
- Apex Gallery 10
- Museum of Geology 10

## Moving Diversity and Inclusion Forward

## Contact List 13
The South Dakota School of Mines and Technology (SD Mines) has several activities and programs geared toward supporting the access and success of the American Indian student and surrounding community. Whether through pre-college orientation, summer bridge programs, research, or undergraduate and graduate education, there are many opportunities to support South Dakota's largest minority group. All programs described in this report are facilitated by someone on the SD Mines campus.

// RECRUITMENT

American Indian Science and Engineering Society (AISES) Pre-College Outreach

SD Mines’ chapter of the National American Indian Science & Engineering Society (AISES) provides science and engineering experiences for places with high concentrations of American Indian children such as the Black Hills Children’s Home. They also strive to strengthen AISES Region V, by assisting other institutions to develop associate AISES chapters. In the past, AISES members have worked with SD Mines faculty with a science-based program at Central High School as well as offered tutoring. The chapter is also invited to speak to K-12 reservation-based schools when they visit campus. The purpose of the pre-college outreach is to build a foundation among American Indian youth to pursue higher education, particularly in the STEM fields.

Contacts:
Jesse Herrera, Director Multicultural Affairs; Abena Songbird, Program Assistant II, Multicultural Affairs

Admissions Outreach

SD Mines’ Admissions Office makes concerted efforts to connect with high school students, school counselors and math and science teachers at tribal high schools and high schools with high concentrations of Native American students in South Dakota and surrounding states. The purpose of these connections is to educate Native American parents and pre-college students about the value and process of entering higher education, as well as the benefits of a science or engineering education at SD Mines. SD Mines participates in College Application Week. This program provides fee waivers for students at targeted high schools across the state, many of which are tribal schools.

Connection is accomplished in a variety of modalities including technology, media and literature, but primarily through in-person contact such as: high school visits; college fairs (Mobridge, Eagle Butte, Winner, etc.); representation at Lakota Nations Invitational basketball tournament in Rapid City; collaboration with the Jump Start Program Access Advisors and the SD Mines Jump Start Retention Advisor; presentations to middle and high schools visiting the campus; encourage and recruit current students to both reach out to their home high schools, family, and friends regarding education at SD Mines and represent the university through the Student Ambassador program.

Contact:
Molly Moore, Associate Provost for Academic Administration and Director of Admissions
**Tribal School Outreach and Engagement Plan**

The President’s Office is making a specialized effort to increase engagement with regional tribal schools through personal visits by the special projects coordinator. The initial stage of this plan targets ten high schools on or near reservations in central and western South Dakota with the hope to increase the number of schools in the coming years. The coordinator has been making presentations to freshmen and sophomore science classes to discuss college planning, the opportunities available at SD Mines, and creating a dialogue with the students. During these visits, the coordinator also provides science fair preparation coaching to teachers and discusses potential avenues for future collaboration.

*Contact:*
Jade Herman, Special Projects Coordinator, President and Office of the President

---

**Green Chemistry Outreach Program**

The Green Chemistry outreach program is designed to promote excitement and an appreciation for both science and higher education to middle school and high school students. The program delivers educational resources aligned with the SD Science Standards for science teachers on the Pine Ridge Reservation and Rapid City area. The program aim is to stimulate students’ interest in chemistry, to demonstrate the relevance of chemistry in everyday life, and to encourage students to consider pursuing careers in STEM. Over 200 middle and high school students participated in Green Chemistry workshops at Chemistry and Applied Biological Sciences (CABS) labs on the SD Mines campus.

The Green Chemistry Summer Camp (July 9-14, 2017) was organized by Dr. Filipova. Three American Indian students from Timber Lake High School (SD) and one from Lewis & Clark Middle School (NE) participated in the Green Chemistry summer camp.

Dr. Filipova was mentor and supervisor of Elsie Dubray, 10th grade student form Timber Lake High School, Mobridge, SD on a research project titled “Buffalo vs. Beef: Analyzing Lipid Content in Search of Potential Health Benefits”. The research was presented by Elsie Dubray at the 62nd High Plains Regional Science and Engineering Fair, March 28th 2017 (won 1st place), at the International Science & Engineering Fair (ISEF) in Los Angeles, May 14-19, 2017 (won the 3rd place and a $1000 prize in the biochemistry category), at 4th annual Native Youth in Food and Agriculture Leadership Summit, July 16-25, 2017, University of Arkansas, and at 2017 AISES National Conference, September 21-23, 2017, Denver.

*Contact:*
Dr. Tsvetanka Filipova, Senior Lecturer of Chemistry, Chemistry and Applied Biological Sciences
Multicultural Affairs Pre-Orientation

This program is geared toward incoming American Indian students including non-traditional and transfer students. At the start of the fall semester, students come to campus the week before classes begin to start the acclimation process to college life. The Office of Residential Life allows students to move in prior to official move-in day. During this time students attend sessions to get oriented to their class schedule, meet their advisors, are paired with mentors, build relationships with each other, and learn how to be successful in college. If students participate in this program, some of their textbooks are covered through the OMA Book Loan Library.

Contacts:
Jesse Herrera, Director Multicultural Affairs; Abena Songbird, Program Assistant II Multicultural Affairs

American Indian Peer Mentor Program

To ensure that no American Indian student feels isolated or unsupported, peer mentorship is offered to all students who participate in the OMA Pre-Orientation as well as those who feel they could benefit from such a relationship. Mentors provide guidance, connection and support throughout the first semester. Although the commitment for students is only for the first semester, many continue their relationship well into the future. The goal of the program is to positively impact retention rates of American Indian students. Related objectives are for minority students to have a successful and satisfactory first year, whether they are first-time freshmen, transfer, or non-traditional students. The program is also geared toward reinforcing a Native support system for students who may feel out of place. Mentors are volunteers, but OMA does its best to compensate students when funds are available.

Contacts:
Jesse Herrera, Director Multicultural Affairs; Abena Songbird, Program Assistant II Multicultural Affairs

South Dakota Jump Start Program

The South Dakota Jump Start Program is a federally funded First in the World program designed to help students succeed in college by providing them a financial and academic “jump start”. This $3.6 million federal grant is shared among all six public universities in South Dakota and includes Oglala Lakota College. Eligible individuals are Native American and low-income students who have graduated from a South Dakota high school and want to attend college for the first time.

Participating students enter a summer campus-based experience prior to their freshman year of college to earn free college credits and have an opportunity to get acclimated to the campus. During the academic year, students work with a South Dakota Jump Start advisor on campus to connect with resources, create a success plan, and participate in Jump Start events and activities. Once a student enters the Jump Start Program they will be tracked through the end of their third year in school. The goal behind this program is to give students a Jump Start on college success by providing personnel and resources to give students momentum toward graduation.

RECRUITMENT CLOSED: Program Wrap-Up September 30, 2018 (possible 1-year extension)

Contacts:
Jesse Herrera, Director Multicultural Affairs; Kaylynn Two Bulls, Jump Start Advisor Multicultural Affairs
National Science Foundation (NSF) OSSPEEC II Grant

National Science Foundation (NSF) OSSPEEC II Grant is a Pre-Engineering Education Collaborative with Oglala Lakota College, South Dakota State University, and SD Mines. The project aims to increase recruitment, retention, persistence, and completion rates in pre-engineering and engineering for Native American students. OSSPEEC II provides culturally centered and integrated project based experiential learning through pre-engineering classroom activities and co-curricular activities consisting of research on reservation needs in the areas of water quality and quantity, geology, and sustainability. The project also investigates and elucidates the impact of the OSSPEEC model which emphasizes the importance of experiential learning and incorporation of the Lakota world view as the basis for making essentially correct preconceptions in engineering. The program is designed for Native American students to complete their first two years of engineering education at Oglala Lakota College and then to complete their engineering education at South Dakota State University or SD Mines. An additional goal of the OSSPEEC II project is to improve the quality of engineering education at Oglala Lakota College through professional development of faculty and staff.

Contacts:
Dr. Foster Sawyer, Associate Professor Geology and Geological Engineering;
Dr. Jennifer Benning, Associate Professor Civil and Environmental Engineering

Engineering Projects in Community Service (EPICS)

Engineering Projects in Community Service (EPICS) program launched in the fall of 2016. Of the 23 EPICS universities worldwide, Mines is the first to partner with a tribal college, Oglala Lakota College (OLC), and strives to have at least 50 percent of the community design projects addressing critical needs on the Pine Ridge Reservation. The EPICS program offers technical training and professional development in collaboration, communication, project management, diversity awareness, and understanding social and cultural implications of engineering designs. The EPICS program features project teams that are multi-disciplinary, vertically-integrated, and student-led. Courses offered are: GE/IS 283/483 Community Design I and GE/IS 483/484 Community Design II; currently, 6 OLC students are participating in these design courses. Projects addressing the needs of Pine Ridge include:

- Designing a greenhouse and education center with the He Sapa OLC campus in Rapid City
- Emergency management and community facilities planning for the Pine Ridge Reservation in collaboration with Louis Berger, Inc.
- The design of bee hives for honey production on Pine Ridge Reservation with the Lakota Food Sovereignty Coalition
- The design of seed starter kits for home gardening in collaboration with Kyle Serenity Gardens and SDSU Extension’s iGrow
- Safety and environmental impacts of dams on Pine Ridge Reservation in collaboration with the Oglala Sioux Tribe Environmental Protection Program and the Bureau of Indian Affairs

Contacts:
Dr. Jennifer Benning, Associate Professor Civil and Environmental Engineering; Dr. Andrea Surovek, Research Scientist Mechanical Engineering; Dr. Stuart Kellogg, Professor Industrial Engineering; Dr. Daniel Dolan, Professor Mechanical Engineering; Dr. Scott Kenner, Professor Civil and Environmental Engineering

Memorandum of Agreement: Oglala Sioux Tribe, Oglala Sioux Lakota Housing, Louis Berger, Inc.; South Dakota School of Mines & Technology, and U.S. Department of Agriculture

The MOA establishes a formal partnership between the institutions for the development of projects and service learning opportunities for students that address the needs of the OST and OSLH.

Contacts:
Dr. Jennifer Benning, Associate Professor Civil and Environmental Engineering; Dr. Scott Kenner, Professor Civil and Environmental Engineering; Dr. Demitris Kouris, Provost
Sustaining Urban Waters through Green Infrastructure

Sustaining Urban Waters through Green Infrastructure, through a U.S. EPA Urban Waters Small Grant project, Rapid City’s urban growth impact on the water quality of the Box Elder Creek drainage, a tributary to the Cheyenne River, was addressed. The project developed collaborations with a proposed large development project to implement innovative stormwater/greenway planning and design and demonstrated methods to protect urban waters before they become impaired. By partnering with the Rural American Initiatives (RAI) agency, the project directly engages the Native American community, supporting stakeholder involvement and education (K-12 through adult), and included a full-day educational event with approximately 80 Lakota middle and high school students with RAI.

Contacts:
Jason Phillips, Ph.D. student Civil and Environmental Engineering; Dr. Jennifer Benning, Associate Professor Civil and Environmental Engineering; Dr. Scott Kenner, Professor Civil and Environmental Engineering

Groundwater and surface water interactions modeling along the White River near Oglala, South Dakota

Radionuclide contamination in water has been found in areas near the White Clay fault in South Dakota, where streamflow losses along the White River are observed as well. The potentially contaminated water could migrate into the Arikaree aquifer through the fault and threaten the safety of drinking water in the Pine Ridge Indian Reservation. This work presents a collaboration between OLC and SD Mines for developing a coupled surface-water-groundwater interactions model at the streamflow loss zone along the White River, near Oglala. The model developed in this work can be used to scientifically manage the water resources for the region. A graduate student from SD Mines and an undergraduate student from OLC will be supported by this project.

Contact:
Dr. Liangping Li, Assistant Professor, Geology and Geological Engineering

Emergency Fund

The Emergency Fund is intended for students with a dire financial need. The purpose is to assist students with unexpected expenses which may put them at risk for dropping out of school. Funds may be used to pay for vehicle repairs, utility bills, textbooks, counseling, and other support. This fund has also helped many students who have encountered acute financial need due to illness or injury, or loss of employment. Funds are accumulated from private donations. The Emergency Fund is open to all students including American Indian students.

Contact:
Dr. Pat Mahon, Vice President for Student Development and Dean of Students Student Development

American Indian Science & Engineering Society (AISES)

SD Mines has an award-winning AISES chapter that promotes excellence, leadership, and opportunities in education and professional development of students. AISES participates in national and regional conferences, scholarships, job placement assistance, internships and co-op opportunities, networking and social support, community service and campus involvement.

Contacts:
Jesse Herrera, Director Multicultural Affairs; Abena Songbird, Program Assistant II Multicultural Affairs
Office of Multicultural Affairs (OMA)

The Office of Multicultural Affairs (OMA) provides direct student support services for all underrepresented students, especially American Indian students. Support services include, but are not limited to, scholarship alerts, internship/co-op information, as well as providing opportunities for leadership and professional development. The OMA also provides leadership and helps to facilitate the coordination of programs to underrepresented groups, especially those related to American Indian students. The office reaches out to all underrepresented populations; holds free student lunches for networking and social support each semester; and coordinates the Honoring Ceremony for American Indian graduates. The OMA also collaborates with several departments across campus to promote diversity and inclusion initiatives for students, staff and faculty.

Contacts:
Jesse Herrera, Director Multicultural Affairs; Abena Songbird, Program Assistant II Multicultural Affairs

American Indian Honoring Ceremony

The OMA coordinates and sponsors the American Indian Honoring Ceremony established in December 2008. This is a special ceremony held in the spring the day before campus commencement. It celebrates and honors SD Mines Native graduates by providing a traditional meal for graduates, family, and invited community. Speakers are drawn from faculty, staff, alumni, and tribal communities. The Honoring Ceremony includes an invocation, prayers, songs, a traditional meal and presents to the graduates from their families.

Contact:
Abena Songbird, Program Assistant II Multicultural Affairs
Research Experiences for Undergraduates (REU)

SD Mines is host to two NSF REU programs, the NSF REU “Back to the Future” Site and the NSF REU “Security Printing and Anti-Counterfeiting Technologies (SPACT)” Site. These programs provide research opportunities for underrepresented students (particularly Native American students). The REU sites engage students in a funded 10-week summer undergraduate research experience. The sites are open to students from all backgrounds that are interested in science and engineering.

The theme of the “Back to the Future” site is Metallurgical/Materials engineering research, with many of the projects having historical, cultural, or artistic significance. Supplementary activities include many hands-on workshops involving art, history, and metallurgy some of which are led by local Lakota artists. The program website is located at: http://met.sdsmt.edu/reu/.

The REU SPACT site focuses on research to combat counterfeiting. Several of the past projects engaged students in the authentication of Native American artifacts. Recently, the SPACT research team and students have teamed with area museums such as the Heritage Center at Red Cloud Indian School to address issues with counterfeiting of Native American art. The program website is located at: http://spact-center.org/reu/.

As part of the site activities, undergraduate students are also involved in outreach activities which support ongoing programs that support Native American high school students such as the Army Educational Outreach REAP and UNITE program. Recent highlights include student presentations at the national American Indian Science and Engineering (AISES) conference and student mentoring of local Native American high school students. The sites have had an average participation of nearly 20% Native American students.

Contacts:
Dr. Michael West, Department Head and Associate Professor Department of Materials and Metallurgical Engineering; Dr. Grant Crawford, Associate Professor Department of Materials and Metallurgical Engineering

NSF Tiospaye Scholar Program

NSF Tiospaye Scholar Program has received three NSF S-STEM awards in excess of $1.8M of which 85% goes for scholarships for American Indian students in engineering, science, and mathematics. Applicants must be academically talented and financially needy. The program provides support in five areas: financial, academic, professional, cultural, and social. The students are provided weekly mentoring sessions, monthly mentoring with the director, weekly tutoring in key gateway classes including trigonometry, calculus, differential equations, chemistry, physics, computer programming, statics, and dynamics. Bi-weekly professional lunch meetings feature programming in the five areas of support. During the Spring 2018 semester, the program is supporting 12 scholars. Since the first scholarships were awarded in 2009, the program has graduated 36 scholars, including ten women, in the following STEM majors: Chemistry, Civil Engineering, Geological Engineering, Geology, Industrial Engineering & Engineering Management, Mechanical Engineering, Mining Engineering, and Physics. Currently, engineering students may receive up to $8K per year in scholarships. We are exploring options to continue to fund the program as current funding is likely to end in 2019. The Tiospaye Program moved into larger quarters in the summer of 2016.

Contact:
Dr. Carter Kerk, Professor of Industrial Engineering, Director NSF Tiospaye Scholar Program
SD Mines is a member of the NSF All Nations Louis Stokes Alliance for Minority Participation headquartered at Salish Kootenai College. The program provides merit-based scholarships for up to $1050 per semester, as well as travel funds for students to attend professional conferences. Since 2009, 50 SD Mines students have received over $78K in stipends.

Scholarships

In addition to the above programs, SD Mines has sought out and awarded through our Foundation over $49,000 in scholarships. These figures do not include the Tiospaye Scholarship, departmental scholarships, or other outside scholarships.

<table>
<thead>
<tr>
<th>Scholarship Fund</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>AISES SCHOLARSHIP FUND</td>
<td>200.00</td>
</tr>
<tr>
<td>CRAZY HORSE - CHARLES MORSS</td>
<td>237.00</td>
</tr>
<tr>
<td>CRAZY HORSE - LT COMM HERRINGTON</td>
<td>475.00</td>
</tr>
<tr>
<td>CRAZY HORSE - PAUL MUEHL</td>
<td>475.00</td>
</tr>
<tr>
<td>CRAZY HORSE - SEE</td>
<td>238.00</td>
</tr>
<tr>
<td>CRAZY HORSE - WALTER PAILING</td>
<td>475.00</td>
</tr>
<tr>
<td>DALKE, WAYNE NATIVE AMERICAN</td>
<td>1,100.00</td>
</tr>
<tr>
<td>HALFRED, BARRY</td>
<td>1,000.00</td>
</tr>
<tr>
<td>HANSEN, WALTER &amp; MARILYN JACKSON NATIVE AMERICAN</td>
<td>3,500.00</td>
</tr>
<tr>
<td>HINS, ALLAN NATIVE AMERICAN</td>
<td>3,000.00</td>
</tr>
<tr>
<td>JOBE, LOWELL A.</td>
<td>900.00</td>
</tr>
<tr>
<td>LIEN, PETE &amp; SONS</td>
<td>1,000.00</td>
</tr>
<tr>
<td>NATIVE AMERICAN</td>
<td>312.00</td>
</tr>
<tr>
<td>SHEDD, JACK (JOHN) &amp; WINNIE</td>
<td>2,400.00</td>
</tr>
<tr>
<td>SMITH, PAUL DIRKSEN</td>
<td>4,000.00</td>
</tr>
<tr>
<td>VUCUREVICH, JOHN T. (MINORITY)*</td>
<td>30,000.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$49,312.00</strong></td>
</tr>
</tbody>
</table>

*This scholarship will no longer be available after the 2017-2018 academic year.

Scholarships for African American, Hispanic, and American Indian students in the chemical sciences

The American Chemical Society (ACS) awards renewable scholarships to underrepresented minority students who want to enter the fields of chemistry or chemistry-related fields. Awards of up to $5,000 are given to qualified students. African American, Hispanic, or American Indian high school seniors or college freshman, sophomores, or juniors pursuing a college degree in the chemical sciences or chemical technology are eligible to apply.

Contact:
Dr. Justin Meyer, Senior Lecturer Chemistry and Applied Biological Sciences
NASA South Dakota Space Grant Consortium (SDSGC)

SD Mines is the lead institution of the SDSGC and seeks to expand opportunities for Native Americans in particular through education, research, and public services in the fields of aerospace, earth science, and supporting STEM disciplines. The goal of the SDSGC Fellowship/Scholarship program is “To administer a Fellowship/Scholarship program that offers educational and research opportunities to students from diverse backgrounds who are pursuing degrees in fields of STEM that align with NASA’s mission and those of SDSGC members and affiliates.” SDSGC’s Diversity goal is “To model diversity in all Consortium programs and activities, with an emphasis on Native Americans, which make up the state’s largest minority group.” SDSGC provided $2,068,800 in scholarships and fellowships to 675 students at nine South Dakota public, private, and tribal colleges/universities from FY2005-2017 and annually meets its objective of providing at least 15% of its awards to minority students; most of whom are Native American. Several Native American students at SD Mines have conducted 10-week summer and 16-week semester research internships at NASA Centers. The first Native American to graduate from SD Mines with a Ph.D. was largely supported by NASA funding.

Contact:
Thomas Durkin, Deputy Director of South Dakota Space Grant Consortium

South Dakota NASA EPSCoR Program

Under a Tribal College Collaboration Grant, SD NASA EPSCoR is funding a project at SDSMT titled “Groundwater and Surface Water Interactions Modeling along the White River near Oglala, South Dakota.” The principal investigator is Dr. Liangping Li in the Department of Geology and Geological Engineering (GGE). Dr. Li will collaborate with Dr. Foster Sawyer, also in GGE, and with Charles Jason Tinant of Oglala Lakota College (OLC). The one-year grant provides $15,000 for the project, which includes support one student from OLC. The project will use NASA remote sensing data to investigate possible streamflow losses along the White Clay fault and the impact on water resources for the Pine Ridge Indian Reservation.

Contacts:
Dr. Edward Duke, South Dakota Space Grant Consortium; Dr. Liangping Li, Principal Investigator for the Tribal College Collaboration Grant and Assistant Professor of Geology and Geological Engineering

Prosperity Initiative

The John T. Vucurevich Foundation seeks to invest in community programs and partners that align collaborative approaches to move people who aspire to break the cycle of poverty through a continuum of success from cradle to career. The vision of this program is a poverty informed community working from a common framework to help people achieve prosperity. This program serves the broad identities within our community, which could include the families of current or prospective American Indian students.

Contacts:
Nancy Sprynczynatyk, Counselor, Counseling and ADA Services; Tracy Palecek, Education Coordinator, Catholic Social Services, Family Services Department
**Apex Gallery**

The Apex Gallery has a tradition of exhibiting Native American artists and has shown the work of local, regional, and national tribal members.

**Contact:**
Allison Gilmore, Department Head and Professor Social Sciences and Department Head Humanities

---

**Museum of Geology**

Sally Shelton, Associate Director of the Museum, is helping to teach an ongoing paleontology monitoring class at Cheyenne River, which may include a session at the Museum’s Paleontology Research Laboratory (PRL). This is intended to serve as a laboratory for any of our Lakota colleagues who need a place for fossil preparation and curation. In addition, the Museum offers tours to groups and schools from around the region, which includes Pine Ridge Schools.

We continue to manage fossils from South Dakota reservation lands, notably Pine Ridge, Rosebud, Cheyenne River, and Crow Creek, working with Tribal Historic Preservation Officers (THPO) and other tribal government representatives to determine the best way to store and care for these respectfully.

Our hope is to provide program resources in order to encourage all Native American students seeking certification for paleontology monitoring and mitigation jobs under the new Paleontology Resources Preservation Act. Paleontology resource management issues are extremely important on most of the tribal lands in the state.

**Contact:**
Dr. Laurie Anderson, Department Head/Professor Geology and Geological Engineering, Director of the Museum of Geology
The following is the mission statement for the Office of Multicultural Affairs (OMA) at SD Mines:
“The Office of Multicultural Affairs cultivates an inclusive campus climate that supports underrepresented populations, fosters respect for those with diverse backgrounds, and promotes cultural proficiency among faculty, staff and students.”

The SD Mines Inclusion Statement:
“South Dakota School of Mines & Technology is committed to cultivating an inclusive learning environment where faculty, staff, and students can grow and succeed. We value the diversity of unique backgrounds, experiences, perspectives, and talents within our community. It is our goal to promote a culture of respect, honor, understanding, integrity, and collaboration. It is through this diversity and inclusion that we find our strength.”

The South Dakota Board of Regents Factbook for the fiscal year of 2017 shows that American Indian students comprise of 3.31% (92 AI students) of the total student body (2,778) in the fall 2017 at SD Mines. In comparison to the previous year, there was a slight increase from 3.11% (89 AI students) in fall 2016. Also, in fall 2017, there were eight American Indian students pursuing graduate degrees and three pursuing doctorates.

SD Mines operates through Strategic Priorities, each with implications for American Indian support and access.

**Goal One Student Success:**
*Prepare more undergraduate students for leadership in engineering and science*

The American Indian population is among the highest minority population on campus. Within the state, SD Mines has the third highest percentage of American Indian students. Through the programs listed above American Indian students will continue to be supported and be successful.

**Goal Two Research:**
*Increase research to prepare science and engineering experts, advance knowledge, and catalyze economic development*

It is common in research proposals to include a section on how the research will impact the broader community. There are several service learning projects mentioned above involving American Indian students taking place on tribal reservations. Current and future graduate programs are designed to address and solve problems faced by tribal reservations. Many of these issues are specifically addressed through graduate and research programs in the Civil and Environmental, and Geological Engineering departments. Many of these research projects are pertinent to tribal communities.

**Goal Three Facilities:**
*Redevelop and expand needed living, learning, and research spaces*

An integral part of all strategic planning has been the development of a campus master plan for facilities expansion and improvement. Included in the ongoing discussion of this master plan is the proposal for a Multicultural Center. The purpose of this center would be to create a space where all underrepresented groups, including American Indian students might find comfort and community amidst the dominant culture on campus and within the Rapid City community.
Goal Four People:  
*Recruit, develop, and retain excellent faculty and staff*

It is important to continue recruiting and retaining diverse faculty and staff. Diverse employees help to bring new ideas and methods to our rapidly changing country. Furthermore, such hiring could affect retention as students like to see faculty and staff that mirror their own community. This also means recognizing and rewarding employees for implementing the university’s strategic priorities. Employees who can incorporate aspects of multiculturalism into their classrooms or department are actively helping to promote a welcoming campus climate. The OMA is committed to increasing cultural proficiency on campus by inviting speakers to conduct sessions and workshops based on multiculturalism. The Intercultural Development Inventory (IDI) is an instrument used to assess, address, and develop a plan to better promote campus cultural proficiency.

Goal Five Administration:  
*Responsibly steward financial and physical resources*

With the help of SD Mines Foundation, resources for American Indian initiatives are continually sought for and secured from a wide range of entities on and off campus. In addition to the scholarship amounts mentioned earlier, in the 2017-2018 academic year, the Office of Multicultural Affairs secured $32,500 in external funds for American Indian student support (not including scholarship funds):

- $5,000 from Shakopee Mdewakanton Sioux Community for American Indian initiatives
- $7,500 from Marilyn Jackson for student support initiatives
- $20,000 from GEAR UP for the OMA Book Loan Library

Goal Six Development:  
*Establish a robust culture of philanthropy to enable the university to sustain excellence*

Through the many initiatives noted above, SD Mines is intentionally creating programs to promote inclusion among students, faculty and staff. Through the Mines Advantage program and the Global Perspective Inventory (GPI), students are encouraged to expand their global and cultural understanding. For employees, the IDI assessment is meant to address the areas of need regarding campus cultural proficiency. Through these initiatives there is an underlying message of service to the community and giving back to the university. Engaging students in this way fosters loyalty, now and long after they have graduated. By engaging alums, especially those of color, current students may be inspired to come back someday themselves.
# CONTACT LIST

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anderson, Laurie</td>
<td>Department Head and Professor, Geology and Geological Engineering; Director, Museum of Geology</td>
<td>Museum of Geology</td>
</tr>
<tr>
<td>Benning, Jennifer</td>
<td>Associate Professor, Civil and Environmental Engineering</td>
<td>NSF PEEC, EPICS, MOA Tribal Project, Sustaining Urban Waters</td>
</tr>
<tr>
<td>Crawford, Grant</td>
<td>Associate Professor, Materials and Metallurgical Engineering</td>
<td>Summer REUs</td>
</tr>
<tr>
<td>Dolan, Dan</td>
<td>Director, Center of Excellence for Advanced Manufacturing and Production; Senior Lecturer, Mechanical Engineering</td>
<td>EPICS</td>
</tr>
<tr>
<td>Duke, Edward</td>
<td>Manager of Analytical Services, Engineering and Mining Experiment Station; Professor, Geology and Geological Engineering</td>
<td>South Dakota NASA EPSCoR Program, South Dakota Space Grant Consortium</td>
</tr>
<tr>
<td>Durkin, Thomas</td>
<td>Deputy Director of South Dakota Space Grant Consortium</td>
<td>South Dakota Space Grant Consortium</td>
</tr>
<tr>
<td>Filipova, Tsvetanka</td>
<td>Senior Lecturer, Chemistry and Applied Biological Sciences</td>
<td>Green Chemistry Outreach Program</td>
</tr>
<tr>
<td>Gilmore, Allison</td>
<td>Department Head and Professor Social Sciences; Department Head Humanities</td>
<td>APEX Gallery</td>
</tr>
<tr>
<td>Herman, Jade</td>
<td>Special Projects Coordinator, President and Office of the President</td>
<td>Tribal School Outreach and Engagement Plan</td>
</tr>
<tr>
<td>Herrera, Jesse</td>
<td>Director, Multicultural Affairs</td>
<td>OMA, AISES, Jump Start, Pre-Orientation Program</td>
</tr>
<tr>
<td>Johnson, Brad</td>
<td>Vice President for Development</td>
<td>Foundation</td>
</tr>
<tr>
<td>Kellogg, Stuart</td>
<td>Professor, Industrial Engineering</td>
<td>EPICS</td>
</tr>
<tr>
<td>Kenner, Scott</td>
<td>Department Head and Professor, Civil and Environmental Engineering</td>
<td>EPICS, Sustaining Urban Waters, MOA Tribal Project</td>
</tr>
<tr>
<td>Kerk, Carter</td>
<td>Professor, Industrial Engineering; Director NSF Tiospaye Scholars Program</td>
<td>Tiospaye, ANLSAM</td>
</tr>
<tr>
<td>Kouris, Demitris</td>
<td>Provost and Vice President for Academic Affairs</td>
<td>MOA for Tribal Project</td>
</tr>
<tr>
<td>Li, Liangping</td>
<td>Assistant Professor, Geology and Geological Engineering</td>
<td>Groundwater and Surface Water Interactions Modeling</td>
</tr>
<tr>
<td>Mahon, Pat</td>
<td>Vice President, Student Development; Dean of Students, Student Development</td>
<td>Emergency Fund</td>
</tr>
<tr>
<td>Meyer, Justin</td>
<td>Senior Lecturer, Chemistry and Applied Biological Sciences</td>
<td>ACS Scholarships</td>
</tr>
<tr>
<td>Mitchell, Deborah</td>
<td>Associate Professor, Humanities; Director, APEX Gallery</td>
<td>APEX Gallery</td>
</tr>
<tr>
<td>Moore, Molly</td>
<td>Associate Provost for Academic Administration; Director of Admissions</td>
<td>Admission Outreach</td>
</tr>
</tbody>
</table>

CONTACT LIST CONTINUED >
<table>
<thead>
<tr>
<th>Name</th>
<th>Position/Department</th>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Palecek, Tracy</td>
<td>Education Coordinator, Catholic Social Services, Family Services Department</td>
<td>Prosperity Initiative</td>
</tr>
<tr>
<td>Rankin, Jim</td>
<td>President</td>
<td>SD Mines</td>
</tr>
<tr>
<td>Sawyer, Foster</td>
<td>Associate Professor, Geology and Geological Engineering</td>
<td>NSF OSSPEEC II</td>
</tr>
<tr>
<td>Shelton, Sally</td>
<td>Associate Professor, Museum of Geology; Instructor, Geology and Geological Engineering</td>
<td>Museum of Geology</td>
</tr>
<tr>
<td>Songbird, Abena</td>
<td>Program Assistant II, Office of Multicultural Affairs</td>
<td>OMA, AISES, AI Honoring Ceremony, Pre-Orientation Program</td>
</tr>
<tr>
<td>Sprynczynatyk, Nancy</td>
<td>Counselor, Counseling and ADA Services</td>
<td>Prosperity Initiative</td>
</tr>
<tr>
<td>Surovek, Andrea</td>
<td>Research Scientist IV, Mechanical Engineering; Senior Lecturer, Civil and Environmental Engineering</td>
<td>EPICS</td>
</tr>
<tr>
<td>Two Bulls, Kaylynn</td>
<td>Jump Start Retention Advisor</td>
<td>SD Jump Start Program</td>
</tr>
<tr>
<td>West, Mike</td>
<td>Department Head and Associate Professor, Materials and Metallurgical Engineering</td>
<td>Summer REUs</td>
</tr>
</tbody>
</table>