



Minority Serving Institutions Partnership Program

Learning & Career Management

September 2018

Minority Serving Institution Partnership Program (MSIPP)

- The MSIPP is designed to build a sustainable pipeline between DOE's sites/labs and MSIs in STEM disciplines, and bring a heightened awareness of NNSA plants and laboratories to MSIs with a common interest in STEM research fields.
- Currently the MSIPP supports six consortium-based teams consisting of participants from select MSIs as well as NNSA production facilities and laboratories. These teams bring together MSIs that share interests in STEM research areas and who can utilize the facilities and technology available at DOE/NNSA's plants and laboratories.

Minority Serving Institution Partnership Program (MSIPP)

Each consortium under MSIPP is primarily focused on the following elements:

- **Capacity Building:** Increasing the STEM/Research capacity and infrastructure at the university level (e.g., research equipment/labs, graduate/Ph.D. level academic program offerings)
- **Student Enrichment and Development:** Ensuring that MSIPP students are exposed to academic and professional experiences/activities that will ensure their academic success (graduating with STEM degree) and ability to make a smooth transition into the STEM workforce (e.g., internships, workshops and sabbaticals at the national labs).
- **Collaborative Research/Tech Transfer:** Providing MSIPP students with access to world-class resources and research opportunities housed at DOE/NNSA national laboratories. This includes creating opportunities for lab SMEs to teach courses virtually or on campus at the partner MSIs and conduct research activities at the university level.

Consortia Partners

Consortium Enabling
Cybersecurity Opportunities
and Research (CECOR)

Consortium on Advanced
Manufacturing (CAM)

Consortium for Research on
the Science and
Engineering of Signatures
(ROSES)

Consortium for Materials
and Energy Security
(CMaES)

Consortium for Integrating
Energy Systems in
Engineering and Science
Education (CIESESE)

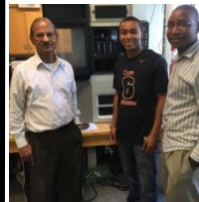
Advanced Manufacturing
Network (AMFN)

Title:

Consortium Enabling Cybersecurity Opportunities and Research (CECOR)

Participants:

Norfolk State University, Allen University, Benedict College, Bowie State University, Claflin University, Clark Atlanta University, Denmark Technical College, Morris College, North Carolina A&T State University, South Carolina State University, University of the Virgin Islands, Voorhees College, Lawrence Livermore National Laboratory, Sandia National Laboratory

**Main Goal:**

To produce well-qualified cybersecurity professionals in significant numbers to address the pressing cybersecurity workforce shortage. CECOR efforts include building student and faculty capacity through the installation of new infrastructure, the development of cybersecurity courses for students and faculty, hosted summer camps and internships and collaborated research opportunities that include faculty and students.

Budget

Total: \$24,304,072.07

Year 1 - 4,660,297.54
Year 2 – 4,907,499.93
Year 3 – 4,892,900.11
Year 4 - 4,923,075.41
Year 5 - 4,920,299,08

Project Period: 10/01/2014 - 09/30/2019

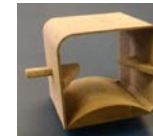
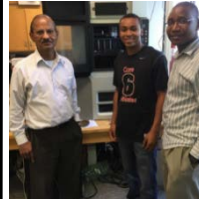
Research Topic Area: Cybersecurity

Title:

Consortium on Advanced Manufacturing (CAM)

Participants:

North Carolina A&T State University, Clark Atlanta University, Hampton University, Howard University, Lincoln University, Southern University of New Orleans, University of the District of Columbia, Y-12 National Security Complex, Oak Ridge National Laboratory, Kansas City Plant – National Security Complex



Main Goal:

- Building and maintaining a skilled STEM pipeline of students that will be capable of meeting future NNSA needs
- Establishing collaborative relationships between the HBCUs and the plants/labs to enhance the education and training of individuals in advanced manufacturing and technology development

Budget

Total: \$6,804,717

Year 1 - \$1,337,054

Year 2 - \$1,704,627

Year 3 - \$1,709,424

Year 4 - \$2,053,612

Project Period: 10/01/2014 - 09/30/2019

Research Topic Area: Advanced Manufacturing

Title:

Consortium for Materials and Energy Security (CMaES)

Participants:

Florida A&M University, Prairie View A&M, Tuskegee University, Tennessee State University, Southern University, Benedict College, Morehouse College, Allen University, Los Alamos National Laboratory, Lawrence Livermore National Laboratory



Main Goal:

Develop structures for a functional and sustainable consortium that is engaged in materials and energy research in a University environment in order to enhance national security in materials and energy and to prepare the next generation of the STEM workforce.

Budget

Total: \$7,173,800

Year 1	\$1,500,000
Year 2	\$1,500,000
Year 3	\$1,900,000
Year 4	\$2,273,800

Project Period: 10/01/2014 – 09/30/2018

Research Topic Area: Materials and Energy

Program: MSIPP

Title:

Consortium for Research on the Science and Engineering of Signatures(ROSES)

Participants:

Alabama A&M University, Alabama State University, Alcorn University, Delaware State University, Fisk University, Florida A&M University, Morehouse College, Prairie View A&M University, Southern University, Baton Rouge, Southern University, New Orleans, Los Alamos National Laboratory, Y-12 National Security Complex, Pacific Northwest National Laboratory

**Main Goal:**

To develop structures for a functional and sustainable consortium that is engaged in materials and energy research in a University environment in order to enhance national security in materials and energy and to prepare the next generation of the STEM workforce.

Budget

Total: \$6,963,374

Year 1 - \$1,654,458

Year 2 - \$1,654,458

Year 3 - \$1,654,458

Year 4 - \$2,000,000

Project Period: 10/01/2014 - 09/30/2018

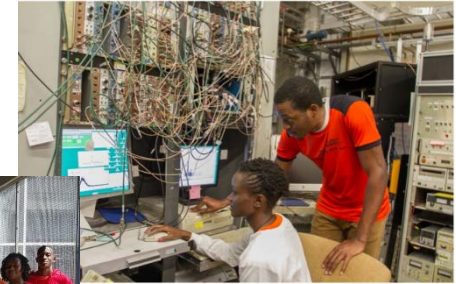
Research Topic Area: Rad Chem

Title:

Consortium for Integrating Energy Systems in Engineering and Science Education (CIESESE)

Participants:

Universidad Del Turabo, University of New Mexico, Miami Dade College, University of Texas at El Paso, University of Puerto Rico – Mayaguez, Sandia National Laboratory, National Energy Technology Laboratory.

**Main Goal:**

Prepare a diverse workforce, trained in various aspects of energy systems, ready for employment, as scientists or engineers, with DOE/NNSA laboratories and other companies in the energy sector.

Budget**Total: \$5,720,205**

Year 1	\$1,850,516
Year 2	\$1,916,877
Year 3	\$1,952,812

Project Period: 10/01/2016 – 09/30/2019**Research Topic Area:** Energy Systems

Title:

Advanced Manufacturing Network (AMFN)

Participants:

American Indian Higher Education Consortium,
Navajo Technical University, Salish Kootenai
College, Turtle Mountain Community College, Bay
Mills Community College, Cankdeska Cikana
Community College, Sandia National Laboratory

**Main Goal:**

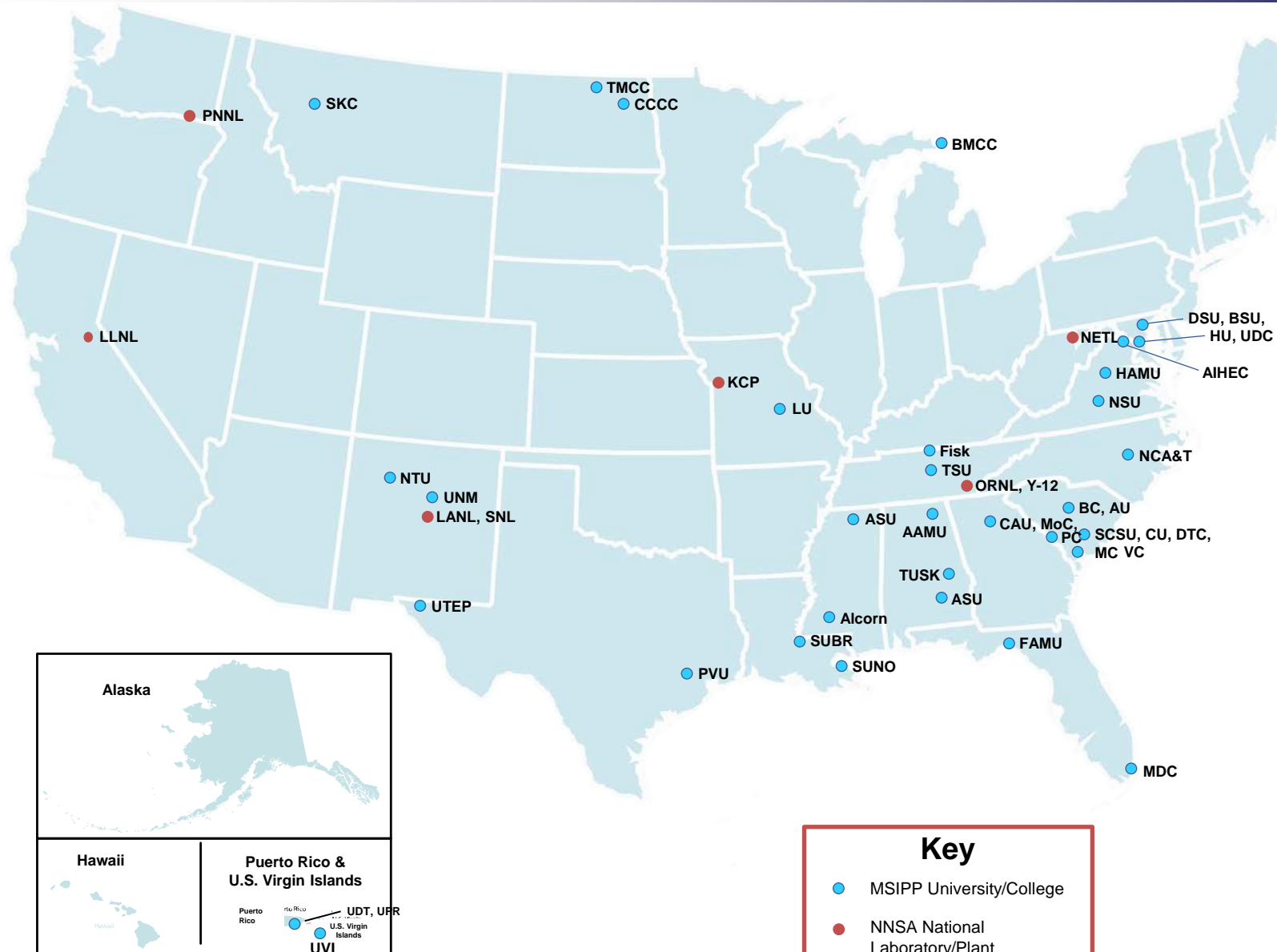
Establish a network of Tribal Colleges and Universities with the essential advanced manufacturing facilities, associated training and education programs, and private sector and federal agency partnerships to both prepare an American Indian advanced manufacturing workforce and create economic and employment opportunities within Tribal communities through design, manufacture and marketing of high quality products.

Budget**Total: \$3,726,624**

Year 1	\$1,206,850
Year 2	\$1,245,570
Year 3	\$1,274,204

Project Period: 10/01/2016 – 09/30/2019**Research Topic Area:** Advanced/Additive Manufacturing

Minority Serving Institution Partnership Program (MSIPP) Locations



Abbreviation	Full Name	Location
AAMU	Alabama A&M University	Huntsville, AL
AIHEC	American Indian Higher Education Consortium	Alexandria, VA
Alcorn	Alcorn State University	Lorman, MS
ASU	Alabama State University	Montgomery, AL
AU	Allen University	Columbia, SC
BC	Benedict College	Columbia, SC
BMCC	Bay Mills Community College	Brimley, MI
BSU	Bowie State University	Bowie, MD
CAU	Clark Atlanta University	Atlanta, GA
CCCC	Cankdeska Cikana Community College	Fort Totten, ND
CU	Claflin University	Orangeburg, SC
DSU	Delaware State University	Dover, DE
DTC	Denmark Technical College	Denmark, SC
FAMU	Florida A&M University	Tallahassee, FL
Fisk	Fisk University	Nashville, TN
HAMU	Hampton University	Hampton, VA
HU	Howard University	Washington, DC
LU	Lincoln University	Jefferson City, MO
MC	Morris College	Sumter, SC
MDC	Miami Dade Collge	Miami, FL
MoC	Morehouse College	Atlanta, GA
NCA&T	North Carolina A&T State University	Greensboro, NC
NSU	Norfolk State University	Norfolk, VA
NTU	Navajo Technical University	Crownpoint, NM
PC	Paine College	Augusta, GA
PVU	Prairie View A&M University	Prairie View, TX
SCSU	South Carolina State University	Orangeburg, SC
SKC	Salish Kootenai College	Pablo, MT
SUBR	Southern University of Baton Rouge	Baton Rouge, LA
SUNO	Southern University of New Orleans	New Orleans, LA
TMCC	Turtle Mountain Community College	Belcourt, ND
TSU	Tennessee State University	Nashville, TN
TUSK	Tuskegee University	Tuskegee, AL
UDC	University of the District of Columbia	Washington, DC
UDT	Universidad del Turabo	Gurabo, PR
UNM	University of New Mexico	Albuquerque, NM
UPR	University of Puerto Rico - Mayaguez	Mayaguez, PR
UTEP	University of Texas at El Paso	El Paso, TX
UVI	University of the Virgin Islands	U.S. Virgin Islands
VC	Voorhees College	Denmark, SC

MSIPP National Laboratory/Plant Partners

Abbreviation	Full Name	Location
KCP	Kansas City Plant - National Security Complex	Kansas City, MO
LANL	Los Alamos National Laboratory	Los Alamos, NM
LLNL	Lawrence Livermore National Laboratory	Livermore, CA
NETL	National Energy Technology Laboratory	Morgantown, WV
ORNL	Oakridge National Laboratory	Oakridge, TN
PNNL	Pacific Northwest National Laboratory	Richland, WA
SNL	Sandia National Laboratory	Albuquerque, NM
Y-12	Y-12 National Security Complex	Oakridge, TN

CORY JACKSON

PROGRAM MANAGER

**NNSA Minority Serving Institutions Partnership
Program**

**Leadership & Workforce Development Division
Learning and Career Management**

Email: Jonathan.Jackson@NNSA.doe.gov

Office: 202-586-6019