Historically Black Colleges and Universities

TECHNOLOGY INFUSION

ROAD TOUR

and Minority-Serving Institutions

www.nasa.gov

Prairie View A & M University
AERIAL VIEW OF CAMPUS
- A member of the Texas A&M University System

- Second oldest public university in Texas (1876)

- Land-grant university (1890)

- Offers 50 baccalaureate, 37 master’s and 4 doctoral degree programs through eight colleges and schools

**Colleges and Schools**

**College of Agriculture and Human Sciences**
- Agriculture, Nutrition, & Human Ecology
- Cooperative Extension Program
- Cooperative Agricultural Research Center
- Dietetics Internship Program
- Master of Human Science

**College of Arts and Sciences**
- Biology
- Chemistry
- Social Work, Behavioral & Political Science
- Languages and Communications
- Mathematics
- Department of Music and Theatre
- Physics
- ROTC – Army
- ROTC – Navy
- Solar Observatory

**College of Juvenile Justice and Psychology – Ph.D**
- Criminal Justice
- Criminal Justice/Specialization in Juvenile Justice Psychology
- Juvenile Justice
- Juvenile Justice Forensic Psychology
- Juvenile Justice
- Clinical Adolescent Psychology

**College of Business**
- Accounting, Finance, and MIS
- Management and Marketing
- Master of Business Administration
- Master of Science and Accounting

**College of Engineering**
- Chemical Engineering
- Civil & Environmental Engineering
- Computer Science
- Electrical and Computer Engineering - Ph.D.
- Engineering Technology
- Mechanical Engineering

**College of Education - E.D.**
- Alternative Teacher Certification
- Curriculum and Instruction
- Educational Leadership and Counseling
- Health and Human Performance

**College of Nursing - Ph.D.**
- B.S. in Nursing (BSN)
- Basic Program
- LVN-BSN Program
- RN-BSN Program
- M.S. in Nursing (MSN)

**School of Architecture**
- Bachelor of Science in Architecture
- Bachelor of Science in Construction Science
- Master of Architecture
- Master of Science in Community Development
PVAMU RESEARCH CENTERS/INSTITUTES

- Cooperative Agricultural Research Center (CARC)
- Center of Excellence in Research and Education for Big Military Data Intelligence (CREDIT)
- "International Goat Research Center"
- "Community for Urban and Rural Enhancement Services (CURES)"
- "Texas Institute for the Preservation of History and Culture (TIPHC)"
- Prairie View Solar Observatory (PVSO)
- Radiation Institute for Science and Engineering (RaISE)
- Small Business Development Center (SBDC)

- Center for International Business Education (CIBE)
- Center for Applied Radiation Research (CARR)
- "The Center for Radiation Engineering and Science for Space Exploration (CRESSE)"
- "The Center for Digital Battlefield Communications (CEBCOM)"
- "The Center for Energy and Environmental Sustainability (CEES)"
- "The Center of Excellence for Communication Systems Technology Research (CECSTR)"
## NASA Grants and Contracts

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NASA Center for Radiation Engineering and Science for Space Exploration (CRESSE)

- Funded by the National Aeronautics and Space Administration (NASA)

Director: Dr. Richard Wilkins
rtwilkins@pvamu.edu
Dr. Wilkins shows his support for NASA.

Grad student Janet Ruedas works with the UR-1 RAMs

The UR-1 payload must fit into a 10 cm x 10 cm x 25 cm aluminum box. This picture shows the payload cell tube in the box and the two NASA/PVAMU Radiation Area Monitors (RAMs). This was a “fit-check” performed at the offices of NanoRacks, the company that will integrate the payload onto the SpaceX capsule.
Thermal Science Research Center (TSRC)

- Funded by Department of Energy, Nuclear Regulatory Commission, Sandia National Laboratory
- Studies mechanisms and quantitative factors controlling high heat flux removal in engineering components
- Modeling and Simulations
- U.S. Patent (N0. 6,824,305)
- Director: Dr. Ronald Boyd
  rdboyd@pvamu.edu
Prairie View Solar Observatory

- NASA/Marshall Space Flight Center, Nuclear Regulatory Commission
- Monitors Solar Flares
- Fusion Plasma Research Project
- First Ground-based Solar Research Facility in the State of Texas
- Director: Dr. P. Saganti
Radiation Institute for Science and Engineering (RaISE)

First Prairie View A&M University Payload
Launched into Deeper Space on December 3, 2014

Director: Dr. Premkumar Saganti
pbsaganti@pvamu.edu
Center of Excellence for Communication Systems Technology Research (CECSTR)

- Tellabs/Hewlett-Packard Communication Laboratory
- TI Mixed Signals Comm. Systems
- TI DSP Solutions Comm. Systems
- Sprint High Speed Comm. Systems
- Hybrid Vehicle Modeling & Simulation Lab
- Optical Comm. Systems
- Wireless Comm Systems

C. M. AKUJUOBI
Project Monitoring Team at JSC Houston with Columbia in Space

- Real-time DSP Solutions performance in space.
- The concept of great-distance distributed signal analysis verified.
- Providing answers instead of raw data from space.
Center of Excellence for Battlefield Communications Research

Funded by the DoD

- To develop a novel battlefield communications network architecture that supports multi-service applications (voice, data, and video) using seamless IP
- Ad hoc wireless networking

Director: Dr. Lijun Qian
liqian@pvamu.edu
ICE Program/facility

• Innovation
• Commercialization
• Entrepreneurship

• SPECIFIC BENEFITS OF COLLABORATIVE INDUSTRY PARTNERSHIPS
  – Reinforce
  – Niche market
  – Research opportunities
University Contacts

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Office of Technology Commercialization
http://otc.tamu.edu