# **KENTUCKY**



# NASA SPACE GRANT PROGRAM KENTUC NASA EPSCoR PROGRAM

### **Support for KY College Students**



Left: Tyler Nichols (UK) recognized among NASA top interns; Middle: Scientific ballooning teams are active across KY; Right: UK-designed hypersonic re-entry capsule; Below: NASA Aeromechanics intern Lauren Wagner (WKU)

## KY SPACE GRANT CONSORTIUM

#### Workforce training in partnership with NASA

- Aerospace opportunities for KY students
- Internships and NASA team competitions
- Students and faculty can work with NASA missions and research at colleges in KY



#### **Team Projects & Workforce Training**

#### **KY State University** Pre-college STEM (right)

**University of Louisville** Zero-G flight (below)

Owensboro (OCTC) Advanced Manufacturing NASA Rover Team (below middle)





Aviation Museum KY Flight education (left) **Challenger Center** Paducah / WKCTC KY teachers at NASA Marshall Spaceflight Center (below)























#### **Aerospace Research & Technology Development**

# KY NASA EPSCOR PROGRAM

#### University research in partnership with NASA

**KY: 8** All 8 KY public universities have conducted NASA-related research supported by this program

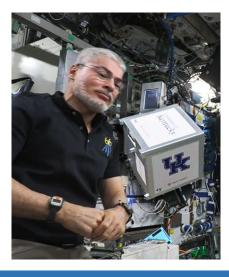
NASA: 9 KY faculty have collaborated with 9 NASA Centers including KSC, JSC, JPL

\$10:\$1

Approximate ROI for seed research grants from this program for follow-on funding with NASA, NSF, NIH, DoE, DHS, DoD, DARPA



presented her work on exoplanet observations at a national conference



#### **Primary KY Aerospace Research Areas**

- Hypersonics & Thermal Protection Systems
- Heliophysics & Space Weather
- Satellite Technologies
- Materials Science
- Remote Sensing

**April 2024:** Three KY universities (UK, UofL, WKU) each in Space for 3 separate research missions

# Program Impact

#### Success for KY Higher Education:

- Increased KY research funding
- Graduate programs in aerospace and space science in KY
- New faculty in aerospace fields
- ISS Innovation Award
- NASA Space Tech Fellowship
- NSF Graduate Fellowship
- Astronaut Scholars
- NASA Internships
- Publications
- Honors for KY researchers
- Contributions to national and state science priorities
- Contributions to NASA Artemis lunar program

**29**KY partner organizations

**6,500**KY participants annually

partners in the NASA Space Grant national network



Asa O'Neal (UK) from West Liberty, KY interned at NASA JPL