High School Science Teachers Named Airborne Astronomy Ambassadors – Will Fly on NASA's SOFIA Aircraft



February 26, 2019, Mountain View, CA -- The SETI Institute has partnered with 14 school districts in eight states for the 2019 NASA Airborne Astronomy Ambassadors (AAA) program. The AAA program is a professional development opportunity for high school science teachers designed to improve science teaching & learning and increase student STEM engagement. The SETI Institute has managed the AAA program since its inception in 2011.

AAA participant teachers receive training in astrophysics and planetary science, content and pedagogy. Their training includes a week-long immersion experience at NASA's Armstrong Flight Research Center Hangar 703 in Palmdale, California with participation in research flights onboard NASA's Stratospheric Observatory for Infrared Astronomy (SOFIA). The program culminates in classroom delivery of a SOFIA science-oriented curriculum module. Impact on student STEM learning & engagement will be measured by WestEd education evaluators.

SOFIA is a highly modified Boeing 747SP airliner fitted with a 2.7-meter (106-inch) telescope and using a suite of seven cameras & spectrographs to study celestial objects at infrared wavelengths. SOFIA operates during 10-hour overnight science missions at altitudes between 39,000 and 45,000 feet (12-14 kilometers), above more than 99 percent of the water vapor in Earth's atmosphere that blocks infrared light from reaching ground-based observatories.



# **PRESS RELEASE**

#### DATE

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#### CONTACT

Rebecca McDonald Director of Communications SETI Institute rmcdonald@SETI.org 650-960-4526

Dana Backman AAA Principal Investigator SETI Institute dbackman@seti.org\_ "NASA's SOFIA observatory provides a fantastic opportunity for teachers to better understand and appreciate the research process by interacting with scientists and mission crew members," said Dr. Dana Backman, AAA program Principal Investigator. "The teachers can then take what they learn back to their classrooms, schools, and school districts, conveying the value of scientific research and adding real-world content to high school learning environments. The AAA's first-hand experiences also can illuminate the wide variety of STEM career paths available to students."

The school districts participating in the 2019 Airborne Astronomy Ambassadors program are:

Anaheim Union High School District, California Clark County School District, Nevada Cobb County Schools, Georgia School District Five of Lexington and Richland Counties, South Carolina Fayette County Public Schools, Kentucky Harmony Public Schools, Texas William S. Hart Union High School District, California Manteca Unified School District, California Muscogee County School District, Georgia Norman Public School District, Oklahoma Northside Independent School District (San Antonio), Texas Santa Ana Unified School District, Nevada

The 28 teachers selected from partner districts as 2019 Airborne Astronomy Ambassadors are listed and pictured below:

Berkil Alexander, Kennesaw Mountain High School, Kennesaw, Georgia Heidi Anderson, Locust Trace AgriScience Center, Lexington, Kentucky Kathryn Baugher, Norman North High School, Norman, Oklahoma Nikki Bisesi, Hillgrove High School, Powder Springs, Georgia Stephanie Brady, Norman High School, Norman, Oklahoma Daniel Burleson, Rancho High School, Las Vegas, Nevada Melissa Conway, Spring Hill High School, Chapin, South Carolina Clay Elliott, Oxford Academy, Anaheim, California Anna Estep, Chapin High School, Chapin, South Carolina Joshua Gagnier, Santa Ana High School, Santa Ana, California Sandra Hightower, Century High School, Santa Ana, California Lauren Malik, William Howard Taft High School, San Antonio, Texas Terrence Martin, William Howard Taft High School, San Antonio, Texas Philip Matthews, Kennesaw Mountain High School, Kennesaw, Georgia Dawn Minnick-Trujillo, Las Vegas Academy of the Arts, Las Vegas, Nevada Kim Nguyen, Oxford Academy, Anaheim, California Melissa Pagonis, John Paul Stevens High School, San Antonio, Texas Luther Richardson, Columbus High School, Columbus, Georgia Ashley Rosen, STEAM Academy, Lexington, Kentucky Anne Schnabel, Tom C. Clark High School, San Antonio, Texas

Aaron Shoolroy, Reno High School, Reno, Nevada Kathryn Smith, William S. Hart High School, Santa Clarita, California Megan Smith, Lathrop High School, Manteca, California Mickey Smith, Earl Wooster High School, Reno, Nevada Laura Solomons, Columbus High School, Columbus, Georgia Season Stalcup, Wheeler High School, Marietta, Georgia Tyler Thompson, West Career and Technical Academy, Las Vegas, Nevada Kevin Warren, Norman North High School, Norman, Oklahoma







Daniel **Burleson** 



Kevin Warren



Melissa Conway







Anna

Estep

Dawn Minnick-Trujillo

Kim

Nguyen

Melissa

Pagonis

Season

Stalcup



Ashley Rosen



Joshua Gagnier





Kate Baugher



Lauren Malik



Nikki **Bisesi** 



Luther **Richardson** 



Philip Matthews



Terrence Martin Thompson





Clay

Elliott

Megan Smith





Kathryn Smith

Heidi

Anderson

Laura

Solomons

Brady

Mickey Smith

SETI Institute - 189 Bernardo Ave., Suite 200 - Mountain View, CA - 650-961-6633

Tyler



(Figure 1) NASA's Stratospheric Observatory for Infrared Astronomy, SOFIA, during a day-time test flight over the Sierra Nevada with the telescope door open (aft of the wing). (NASA)



(Figure 2) A group of Airborne Astronomy Ambassadors plus their flight facilitator at the educators' console onboard SOFIA. (NASA)

## About the SETI Institute

Founded in 1984, the SETI Institute is a non-profit, multi-disciplinary research and education organization whose mission is to explore, understand, and explain the origin and nature of life in the universe and the evolution of intelligence. Our research encompasses the physical and biological sciences and leverages expertise in data analytics, machine learning and advanced signal detection technologies. The SETI Institute is a distinguished research partner for industry, academia and government agencies, including NASA and NSF.

### About the Airborne Astronomy Ambassador Program

The SETI Institute's NASA Airborne Astronomy Ambassador Program was one of the 27 organizations from across the United States selected by NASA for cooperative agreement awards to implement a new strategic approach to more effectively engage learners of all ages on NASA science education programs and activities. Selections were made by the agency's Science Mission Directorate (SMD) in Washington, DC, through the Science Education Cooperative Agreement Notice. Selectee activities will support Earth science, astrophysics, planetary science and heliophysics. AAA is funded by NASA SMD NNX16AC51A