

NOYCE NEWS

UCF - OCPS - CITY YEAR



From L to R: Shane Wiggan, Kelly Penny, Dr. Juli Dixon, Dr. Melissa Boston, Dr. Sarah B. Bush, Yeidi Diaz Reyes, and Julia Keith at the NCTM Annual Meeting & Exposition in Washington, DC.

#NCTMDC2023

In October, fellows **Shane Wiggan**, **Yeidi Diaz Reyes**, **Kelly Penny**, and **Julia Keith** traveled to Washington, DC, to attend meetings at our nation's leading mathematics organizations.

These conferences provided opportunities for the fellows to meet other leaders in the field of mathematics education, attend informative sessions to empower their classroom teaching practices, and spark ideas for future conference proposals.

FELLOWS PRESENTING



Shane Wiggan partnered with UCF Professors **Dr. David Boote** and **Dr. Brian Moore** at the NCTM Research Conference to present *Motivations to Teach Mathematics: Why so few Black Men?* Great job Shane!



Julia Keith and **Kelly Penny** paired together for the third time to present *Navigating Math Anxiety to Guide Students Back On Task* during a Burst Session at NCTM. This is their second NCTM conference presentation.

[HTTPS://CCIE.UCF.EDU/NOYCE-MATHEMATICS-EDUCATION/](https://ccie.ucf.edu/noyce-mathematics-education/)

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NCTM AMBASSADOR PROGRAM

Yeidi Diaz Reyes and **Shane Wiggan** were selected as ambassadors for a new initiative through NCTM aimed at increasing the diversity of speakers at conferences and hearing new perspectives. Only 5 people were selected from around the country for this wonderful program. While in DC, **Shane** and **Yeidi** were able to meet with NCTM President Kevin Dykema during the #NCTMDC2023 conference as part of the opportunity. Congratulations to **Shane** and **Yeidi**!

#NCSMDC2023

Fellows **Abi Ruiz** and **Nisha Phillip Malahoo** traveled to Washington, DC, for the *55th National Council of Supervisors of Mathematics (NCSM) Annual Conference*. Abi and Nisha were highlighted on the NCSM Twitter page as *Spotlight Speakers* for the event. Their presentation, *You are a Math Person: Celebrating and Incorporating Student's Experiences in the Classroom*, highlighted their voices as true assets to the NOYCE Program and OCPS!



NCSM IRIS CARL TRAVEL GRANT



Congratulations to **Nisha Phillip Malahoo** for being awarded the Iris Carl Travel Grant to attend the *National Council of Supervisors of Mathematics (NCSM)* in Washington, DC.!

NCSM UNCOVERING STORIES

Fellow **Abi Ruiz** participated in the *Uncovering Stories: Stories of Bold Math Leadership* speaking series at NCSM, hosted by Dr. Kristopher J. Childs.

Abi shared her childhood experiences with mathematics in her powerful presentation ¡Si Se Puede!



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Gateway to Understanding

by Dr. Brian E. Moore, Department of Mathematics, UCF

On June 10, 1963, the governor of Florida signed a bill to establish the university that has become known as the University of Central Florida (UCF). At the time, the space race was making regular appearances in the morning newspaper. Less than a month earlier, Gordon Cooper orbited Earth 22 times, and became the first person to spend more than an entire day in space. A primary reason for the establishment of a new university in Central Florida was to give NASA a bit of a boost with higher education in close proximity. So, the new institution adopted the motto, "Reach for the Stars."

As UCF has grown, and its reach stretches far beyond space exploration, its motto, "Reach for the Stars," still remains. The words are a metaphor, which inspire innovation and hard work, but they also provide some understanding about the university's fundamental purpose, to broach the boundaries of human knowledge in every realm and to develop the minds of the future to continue the work. This purpose is inherently vast, but the motto, though simple and open to interpretation, somehow generates understanding.

A key reason we use metaphors is to bring understanding to matters otherwise perplexing or unknown.

Katherine G. Johnson is a person who reached for the stars, and her work was all about understanding an unknown and perplexing notion. She is one of the key characters in the movie "Hidden Figures," and she was one of the first African-American women to work as a scientist at NASA. It was her work, as a mathematician, that enabled an astronaut to orbit the earth for more than a day in 1963, and she wrote the mathematics which gave us the Moon a few years later.

Indeed, Johnson's work was an essential key that granted humanity access to things that are actually out of this world. The problems NASA was working to solve in the 1960's were elusive and confounding. Yet, mathematics was the metaphor that Johnson used to help the scientists, engineers, and astronauts understand topics that were too difficult to understand otherwise. One might even say that mathematics brings understanding to matters otherwise perplexing or unknown.

This is a primary reason that mathematics is so powerful and useful for so many problems in our world. Mathematics gives us clear and concise ways to say something in terms of something else, which, in turn, helps us understand at a deeper level. The mathematics that Johnson did said things about trajectories of space craft in terms of symbols and equations that could be more easily understood by her colleagues. It was a magnificent achievement.

Altogether, this seems an appropriate way to symbolize the Noyce program at UCF. As the Noyce Fellows reach for the stars, and balance the needs of their families and students with the demands of completing a doctoral degree, and lead reforms in mathematics education, and engage students in unique ways that increase their knowledge about the world and overcome limiting beliefs, they are playing a part in developing our future Katherine Johnson's and in building a world with more understanding.

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