Dr. Marina Mosneaguta
2022 3rd place National AFA/Rolls-Royce Aerospace/STEM Teacher of the Year

6-8th grade math and STEM Lead Teacher

Alice Drive Middle School
Mrs. Jeannie Pressley, Principal
Sumter, SC

Sumter School District
Dr. Penelope Martin-Knox, Superintendent

Nominated by AFA’s SC Swamp Fox Chapter 298
Chapter President, Bush Hanson
Chapter VP/AE, Brandon Turney
State President and VP/AE, Franklyn Kreighbaum

Dr. Marina Mosneaguta is a 9-year teaching veteran who has taught at Alice Drive Middle School for the last seven years, first as math and global education teacher, and for the last three years as math teacher and STEM lead for the school. She is also the advisor for the Student STEM Ambassadors program for outstanding students in all disciplines and the National STEM Honors Society Chapter Advisor. Alice Drive Middle School (ADMS) is a STEM certified school which offers an array of STEM classes and programs for the students.

Dr. Mosneaguta received her Doctorate in Education, Curriculum and Instruction, from the University of South Carolina in May 11, 2019. Her dissertation was entitled, ‘The Impact of a Global Education Program on the Critical Global Awareness Level of Eighth Grade Students.’ This topic is near and dear to her heart as she has been the Head of Admissions Volunteer for Ukrainian Global University since March 2022. Additionally, she has been adjunct instructor of education at Central Carolina Technical College since 2016.

Dr. Mosneaguta is a member/leader both inside and outside her school; the most recent being:
- Annual Sumter County Thunder Over The Midlands Shaw AFB STEAM Innovation Challenge Planning Committee Member, 2021 – 2022 (Chair, 2022 – 2023)
- Sumter Cyber Innovation Council Member, 2021 – 2022
- Sumter School District Improvement Council Member, 2019 –2022
- Central Carolina Technical College STEM Advisory Board Member, 2021 – 2022
- Alice Drive Middle School STEM Advisory Board Chair, 2019 –2022
- Alice Drive Middle School STEM Ambassador Program Advisor, 2019 –2022
- National STEM Honors Society Alice Drive Middle School Chapter Advisor, 2021 – 2022
- Department Chair: Mathematics Department, 2018-2019; Related Arts Department, 2021-2022
- Sumter School District Calendar Committee Member, 2018 –2022

Leadership Activities in Staff Development and Training of Future and Peer Teachers; most recent:
- Adjunct instructor preparing future teachers, 2016 – present
- Presented at regional, state, and local conferences (University of South Carolina Faculty Seminar Series) 2022
- School-wide and district workshop leader in mathematics, blended learning, STEM and STEAM (in person, 2016-2020; virtual, 2020-2022

Awards, Certifications, and Other Recognitions for many years, but most recent:
- 2023 National Board Certification in Mathematics in progress (two components completed, the last two to be completed by December 2022)
- 2022 Student-Led Project National STEM Honor Society Champion Award
- 2020 Google Level 1 Certified Teacher

Born in Ukraine and attending school a year after Ukraine gained its independence, Dr. Mosneaguta stated her elementary school experience gave her a love for education, planted the seed of passion for teaching, and ultimately determined her choice of a career in education early on, thanks to an amazing teacher who has been her inspiration and a role model since elementary school.

At ADMS she has led a variety of STEM projects, a few of which she described below:
- Students Spaceflight Experiments Program, or SSEP, she led and coordinated in 2019-2021. This program is designed to encourage students to learn more about science and space exploration through real-life scientific research. ADMS participated the 14 SSEP mission (2019-2021).
  - During mission 14, she worked closely with three finalist teams on their proposals and scientific research, collaborated closely with other science teachers within the school, as well as the coordinator of science at the district level and the senior professor of biology at the University of South Carolina, and made regular updates to the public regarding the progress of the program, utilizing emails to the STEM Advisory Board Members and social media to keep parents and other community members informed.
  - Under her supervision, the team of four 6th-grade girls designed an experiment to test the effects of microgravity on *Artemia franciscana*’s growth rate, a part of which was conducted by U.S. astronauts at the International Space Station. This was a unique experience not only for the students involved, but for the entire Sumter community, as many closely followed the progress.
- Promotes aerospace education and creates unique opportunities for the students to meet aerospace engineers, astronauts, and other career professionals via live chats. One such chat took place when a group of students met live via NEPRIS platform with General David Thompson, a former member of the U.S. Air Force and a current member of the U.S. Space Force. He shared who and what the Space Force is and highlighted the importance of STEM to
our global future during his presentation, as well as talked to students and answered many of their questions.

• Lead and assist with many STEM activities that encourage students’ exploration of aerospace careers. A few examples include facilitating Mars Rover activities and Mars simulations, assisting with a local sheriff’s office’s visit, during which students interacted with different types of drones and learned about every day jobs of commercial pilots and law enforcement pilots; leading a cross-curricular project, as a result of which more than 100 students were able to send postcards to space on the Blue Origin rocket; and serving on various STEM advisory boards, and planning committees, including the Sumter Cyber Innovation Council and The Annual Sumter County Shaw AFB STEAM Innovation Challenge Planning Committee, which she will lead next year.

Dr. Mosneaguta’s dedication to promoting STEM programs at ADMS is evident in many of her initiatives. She has proven to be a strong leader and an outstanding advocate for the importance of STEM education and its long-term effects on students’ career choices. She is passionate about exposing students at ADMS to diverse opportunities in STEM, as she oversees many STEM programs and works closely with teachers on topics such as STEM curriculum, integration, and expansion.

Dr. Mosneaguta strongly believes that global experiences should be an important part of the educational system. “These experiences teach students to examine critical issues and make meaningful personal connections. Simply graduating from high school is no longer enough for our students. According to the Profile of a South Carolina Graduate, they must be ready to compete in a 21st century global society. Having a global perspective has increasingly become one of the main components of students' success. I am focused on helping schools build STEM programs that expose students to global connections and show them global opportunities within their communities. Providing students with global education opportunities allows them to compete for jobs both nationally and internationally. As a result, students develop global competence and STEM knowledge needed to understand and participate in a globally connected world.”
Virtual chats with astronauts, scientists, and other STEM experts from around the country have ensured ADMS students continue to be motivated and inspired to reach higher and achieve more.

Facilitated a VR Mars Exploration adventure with Lockheed Martin:

Students looked at brine shrimp muscles in a 3-D presentation by Dr. Kiernan, the first scientist in the world to name all brine shrimp muscles.
**Notable Quotes from her nomination package:**

“I have worked with Dr. Mosneaguta on the Sumter Cyber Innovations Council team where different organizations and schools are working to get students interested in a cyber future. Her efforts with the Students Spaceflight Experiments Program (SSEP) have encouraged students to get involved with space exploration and real life scientific research. She is directly making a difference in motivating students in STEM activities. She is the National STEM Honors Society Chapter Advisor for her school and they just won one of four Champions of Excellence Awards presented by the National STEM Honor Society annually to member chapters. ADMS won the award for their honor society's 2022 Student-Led Project award. She simply is doing it all.”

~David Hanson, Swamp Fox AFA Chapter President

“As others have stated, Dr. Marina Mosneaguta is simply ‘doing it all.’ Her incorporation of outside STEM leaders to showcase STEM careers is helping keep her student’s interest in STEM. For instance, a live chat with Gen Thompson, Vice Commander of the Space Command and bringing local police to showcase their drone capabilities has given the students leaders both inside and outside their community to share their expertise; inspiring the students to seek to learn more.”

~Franklyn Kreighbaum, SC State AFA President

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~Dr. Penelope Martin-Knox, Superintendent Sumter School District

“Dr. Mosneaguta sees the teaching profession as one in which we are constantly learning and growing. Perhaps her greatest asset is her eagerness for learning and growing as a professional (e.g. trying out new best practices in her classroom) and helping her colleagues, as well. She embraces peer observation and welcomes constructive feedback. Dr. Mosneaguta is an advocate for all students. Her philosophy of education places great emphasis on cultivating teacher leadership, and she is deserving of my highest endorsement for consideration of this award.”

~Dr. Trevor T. Ivey, Liberty STEAM Charter School President