Presenter Biographies: March 1, 2019

Jennie Ablanedo, Program Coordinator, stemCONNECT

Amanda Allen, Education Manager, stemCONNECT

Amanda Allen began her STEM Career in middle school when she joined the Technology Student Association in Osceola County at Horizon Middle School. She eventually became State Secretary, President and then continuing to serve as alumni, chapter advisor, and state officer advisor. Still devoted and understanding the impact STEM, CTE, and CTSO has on students, Amanda started as an intern from the University of Central Florida for stemCONNECT. After graduating with a BA, Amanda taught as a middle school technology teacher in Brevard County, later returning back to stemCONNECT to help as the Assistant Educational Manager. Amanda is now the Education Manager and is excited to continue to grow stemCONNECT as a key resource for educators in Florida

Thanks to the support of The Florida High Tech Corridor, the stemCONNECT team works to connect classrooms to relevant experts in industry and academia across Florida.

Terry Barchfeld, Teacher, Timber Creek High School

Lifetime high school physics teacher (27 years) and lifetime participant in summer research through programs like Research Experience for Teachers. I am always trying to find ways to incorporate a little modern physics into the traditional topics covered in class. Instead of creating modern physics chapters, the goal is to teach current physics topics in parallel with the usual material.

Mark Bonnin, Cloud Solutions Architect, Imagine Believe Realize,LLC

Mark Bonnin is an accomplished Cloud Solutions Architect at Imagine Believe Realize, LLC in Orlando Florida. Mark has spent the past 18 years involved in the full lifecycle of software and systems development for various government agencies as well as commercial entities. After graduating from Florida State University with a degree in Computer Science, he settled in Central Florida to pursue his passion for Software Engineering and later Cloud Computing and Systems Architecture. In his spare time, Mark enjoys spending time with his young family, volunteering, and always learning new things.

Lauren Bracken, Science/Project Lead the Way Instructor, Orange County Public Schools

Lauren Bracken is a Professional Educator in the state of Florida and has served Ocoee Middle School of Orange County Public Schools for the past six years. Throughout her time as an instructor, she has taught Earth/Space Science, Earth/Space Science Honors and four classes in the Project Lead the Way program, Science of Technology, Medical Detectives, Design and Modeling, and Flight and Space. Ms. Bracken earned her Master of Arts in Teaching Science Education at the University of Central Florida as a Lockheed Martin Scholar, and graduated Magna Cum Laude from Florida Atlantic University with a Bachelor of Arts degree in Psychobiology with coursework emphasis in behavioral neuroscience. As a secondary science teacher, Miss Bracken strives to enrich her teaching methods and bring her experience back to the classroom. In the summer of 2017, Ms. Bracken was selected from science and

math teachers across three counties to participate in the National Science Foundation's Research Experience for Teachers (RET) program. In addition, she is also currently working with Boys and Girls Club of Central Florida to write curriculum to inspire girls to enter STEM fields and computer science. In lending her talents to these programs, she hopes to inspire all students to find science, technology and computer science not only approachable, but creative, awe-inspiring, and fulfilling.

Dr. Anne Bubriski-McKenzie, Lecturer, University of Central Florida

Dr. Bubriski-McKenzie is a Lecturer of Women's and Gender Studies and the Coordinator for the Young Women Leaders Program (YWLP) at UCF. YWLP is a mentoring program between UCF and 7th grade girls focusing on leadership, diversity, self-confidence, and STEM. Dr. Bubriski-McKenzie's research and teaching focus on social inequalities, women and leadership, and girls' studies.

Jim Clamons, Vice President of Engineering (Retired), Harris Corporation

Mr. Clamons is a retired Vice President of Engineering at Harris Government. He was responsible for talent management and professional growth of over 3000 engineers. He joined Harris in 1977 and has held positions of increasing responsibility throughout his career in the areas of planning, organizing, managing, and directing and plays a key role in successfully achieving financial and business objectives. Jim received both bachelor and master of science degrees in mathematics and computer science, respectively, from Purdue University.

Jim is a member of the Board of Directors on the Central Florida STEM Education Council (CFSEC), Board of Directors of Brevard School Foundation, Board of Directors of Space Coast STEM Council, Florida Institute of Technology Engineering Dean's Advisory Council, Aerospace Industries Association's Rocket Contest (TARC) Industry Advisory Board and VEX Robotics Industry Advisory board. Mr. Clamons is the past Chair of the Board of Directors of the Space Coast Early Intervention Center.

Andy Cummings, Senior Vice President, Connelly & Wicker Inc.

Andy Cummings, P.E. is a Senior Vice President at Connelly & Wicker in charge of the company's Transportation and Municipal business unit in both the Orlando and Jacksonville offices.

Andy graduated from the State University of New York at Buffalo in 1985 with a B.S. in Civil Engineering. He received a M.S. Degree in Civil Engineering from Carnegie Mellon University in 1987.

Andy has worked in Florida for 32 years starting in 1987 with Parsons Transportation Group (PTG). In 1997, Andy joined Connelly & Wicker as Principal.

He is a member of the American Society of Civil Engineers (ASCE) and the Florida Engineering Society (FES). He was the American Society of Civil Engineers Florida Section President in 2001-2002.
He was the American Council of Engineering Companies - Florida (ACEC-FL) President in 2010-11. He is the current Chair of the Florida Engineering Foundation (FEF).

He has been married 32 years to his wife Yvette. He has two children, Erin (27) and Nicholas (23).

Dr. Marjorie Miles Dozier, High School Science Coach, Polk County Public Schools

I practiced community medicine in Venezuela before coming to the US. In the states, I have taught sciences from elementary to college. With 14+ years of experience in education, I have facilitated trainings and coached teachers on research-based strategies that maximize student learning. I believe in today's education we must use real world situations to engage students' interest to further their understanding of science concepts. Incorporating real world problems, along with evidence-based science, will increase students' readiness for future careers. Currently I have incorporated case studies, such as Ebola and Zika, water conservation and cancer challenging students to analyze the current situation and brainstorm possible solutions.

Deb Drexler, Manager of Corporate Citizenship, Northrop Grumman Corporation

Deb Drexler is an educator and leadership development expert with 20 years of experience in a variety of industries, including aerospace and defense, education, and healthcare. Throughout her career she has demonstrated her ability to partner inclusively to design and implement innovative solutions to develop people and programs that are successful and sustainable.

Deb is the Manager of Corporate Citizenship for Northrop Grumman Corporation, a leader in global security.

She is responsible for developing and executing strategy for Corporate Citizenship that enables employees and teams to connect their passions and talents to build partnerships that transform communities. She leads teams that focus locally in the areas we live and work to create charitable giving plans and community engagement. These programs align with four key areas of focus, including STEM programs and initiatives that excite, engage and educate middle school students, military and veteran focus that supports our troops and veterans and their families, health and human services to assist communities with critical and local needs, and identifying local environmental efforts and education that contribute to greenhouse gas reduction, waste reduction and water conservation.

Deb joined the company in 2010 and has held a variety of positions in human resources, training and development and now in Global Corporate Responsibility.

Prior to coming to Northrop Grumman she has worked on satellites at NASA, taught mathematics in middle and high schools, trained doctors and nurses in hospitals and developed learning management systems. She earned a bachelor's degree in mathematics from the University of Miami and a certification from Boston College in Global Corporate Responsibility.

Dr. Susan Garrett, Program Director, St. Petersburg College - Workforce Institute

Dr. Garrett is currently the Program Director for Industry Certifications in the Workforce Institute at St. Petersburg College. In this role she works to insure that SPC has a robust inventory of certificate and certification programs valuable to students and to the industry sectors served by the College.

Katherine Grady, Doctoral Student, University of Central Florida

Katherine Grady was born in Puerto Rico and raised in Virginia Beach, Va. She received her K-12 education in Virginia and moved to Orlando Florida in 1995. Katherine is a doctoral student within the School of Teacher Education in the
College of Community Innovation and Education from the University of Central Florida.

A recent RET scholar, earning her PhD in Science Education under the direction and guidance of Dr. Malcolm Butler. Katherine is currently teaching undergraduate pre-service teachers science content (SCE 3053) at the University of Central Florida. An educator who invested 14 years with Orange County Public Schools with a certificate in General Science Grade 5 - 9. A first generation college graduate, her focus is to increase interest in STEM careers amongst diverse student populations with the implementation of open faced, single board microprocessors.

Mary Lynn Hess, K-5 STEM Resource Teacher, Goldsboro Elementary Magnet School

Mary Lynn Hess is a K-5 STEM Resource Teacher at Goldsboro Elementary Magnet School. She has spearheaded programs that include 750 square foot garden on the school campus and raised over $15,000 in grants to enhance the programs she organizes. Her accomplishments include being a featured speaker at the state and international levels, presenter at EPCOT's Flower and Garden Festival, a book reviewer for National Science Teachers Association, and being a featured teacher on PBS for "How Kids Learn in the Modern World."

Rachel Knight, Teacher, Orlando Science Elementary School

Rachel Knight teaches 3rd grade at Orlando Science Elementary School. This is her 18th year teaching, with 12 of them being at a science school. Rachel has also taught 2nd and 4th, along with being an Instructional Coach and Peer Mentor. She graduated from the University of Tennessee with degrees in Human Learning and Public Relations and also has a Master's degree in Educational Leadership. My favorite activities in the classroom include Fear Factor FSA math review, solar oven smores and human anatomy lessons.

Dr. Hanna Kruczek, STEM Coordinator, Orlando/Winter Park Branch – AAUWPr

Hanna Kruczek, PhD has worked in the information technology industry and taught at several public and private colleges. In addition, she has taught both math and computer science in traditional as well as distance-learning classes.

She specialized in making mathematics approachable and easier to understand. At Le Cordon Bleu College she implemented the Math 360 method of teaching in which Students practice new concepts on boards around room. The instructor sees all students practice and gives immediate feedback. The Ultimate goal is to promote understanding while creating a feeling of success among students. At Valencia College she was a member of the "Comp House" Committee, which developed a program to increase Algebra retention and improve passing percentages on the state Algebra exam. She also worked with the Prep Math Institute program which was designed to decrease dropout rates in pre-college math courses.

Dr Kruczek has a PhD in Computer Science and a Master's Degree in Mathematics from the University of Illinois in Urbana. Her doctoral research specialized in Computer Aided Instruction and new ways of using computers to enhance the learning process. Since then she has developed on-line courses to teach such diverse subjects as using an infusion pump, reading an airplane instrument panel and learning the Ojibwah Indian language.

She also owned a travel agency where the on-going training needed by her employees helped her understands the importance of getting training in an efficient fashion.

Dr Kruczek is on the Board of AAUW (American Association of University Women) where she is the Director of Online Communication and STEM Coordinator.

Emily Beth Langley, Education Specialist: Curriculum and Instruction, Orlando Science Center

Emily Beth Langley is an Education Specialist at the Orlando Science Center. In this role, she oversees educational programming for the Catalyst Youth Volunteer Program as well as special events such as Girls' Hackathons and other workshops.

Dr. Leslie Sue Lieberman, Professor Emerita, University of Central Florida

Leslie Sue Lieberman, Ph.D., currently a Professor Emerita, was the founding Director of the UCF Women's Research Center (2001-2011). With support from Lockheed Martin and the High Tech Corridor the WRC developed research projects on engineering resulting in a website for girls and women in engineering, a slide show presented at a number of meetings, a nationally-distributed a video shot at UCF and in Orlando for National Women's Engineering Day, and an article in Women in Engineering. The WRC hosted an annual meeting of the Grace Hooper Celebration of Women in Computing. Dr. Lieberman, a biomedical anthropologist, has a Ph.D. in Behavior Genetics and a post-doc in human physiology and human biology. She was a Professor of Anthropology and Affiliated Faculty in the College of Medicine at the UCF. Previously she was at UF in the Department of Anthropology and Pediatrics and Executive Director of the UF Center for Research on Women's Health. In 2010-14 she was a European Union Visiting Scholar. She is the former President of the National Association of Academies of Science, the Society for the Anthropology of Food and Nutrition and the Biological Anthropology Section of the American Anthropological Association, and the Florida Academy of Science, among others. She is a Fellow in the American Association for the Advancement of Science (AAAS) and has received many academic and leadership awards. Her research and scientific activities have been supported by the National Institutes of Health, National Science Foundation, Susan G. Komen Breast Cancer Foundation, Florida Department of Health, Florida Hospital, Winter Park Health Foundation, among others. She has co-authored or edited 11 books and published nearly 90 journal articles and book chapters and more than 200 other works: reports, reviews, and editorials.

Lindsay Liszewski, Senior Director of Globarl Strategy, Universal Parks and Resorts

Determined, insightful, and curious are just a few of the words colleagues use to describe Lindsay Liszewski. As the Senior Director of Global Strategy with Universal Parks and Resorts, Lindsay uses her keen analytical skills to successfully deliver long-term strategic marketing and sales guidance across the park's portfolio.

An opportunity to intern at Disney put Lindsay on the path to her career in data science. Over the past 15 years, Lindsay has had a variety of advanced analytical roles, not only harnessing her technical abilities but also demonstrating her talent to lead and influence others. She has worked for big brands such as Marriott, Macy's, and Disney, and has had multiple functions in the fields of strategy, omni-channel analytics, data science, product personalization, customer knowledge, pricing and promotions, and consumer insights. Her skills have earned her accolades throughout her career, including the Marriott 2015 Vision Award for Performance and the Macy's MVP Award in 2010.

A native of Annapolis, Maryland, Lindsay pays it forward by supporting the March of Dimes and strives to help young women discover STEM careers. She received her bachelor's degree in business with a concentration in statistics from the University of Florida, and her master's in statistical computing from the University of Central Florida. She is happily married with two young sons, and enjoys bicycling, boating, and going to the beach.

Jennifer MacDonald, Magnet Coordinator, Hamilton Elementary School of Engineering and Technology

Jennifer MacDonald is currently the Magnet Coordinator at Hamilton Elementary School of Engineering and Technology. She is in her twenty-fourth year as an educator and recently earned her Master's Degree in Educational Leadership. Her background is in instructional coaching, curriculum writing, and providing professional development in grades K-12. She was also the former co-director of the National Writing Project at the University of Central Florida, where she empowered teachers to be leaders through developing presentations of their best practices in teaching writing.

Nilsa Hernandez Maldonado, Regional Science Academic Coach, Polk County School Board

Ms. Nilsa Hernandez has served as an educator for 22 years. She holds Bachelors in Science with a major in Biology and a minor in Education from the University of Puerto Rico, and obtained her Masters in Educational Leadership. Ms. Nilsa Hernandez started her career as a Secondary Level Science Teacher in Puerto Rico then transition to a Science Resource and STEAM Teacher for elementary in Florida. For the last 5 years, she has served as a Regional Science Academic Coach for Polk County. Ms. Hernandez has participated in different projects: the most recent was the Math and Science Partnership Grant, a joint project of Polk, Hillsborough Counties in conjunction with the University of South Florida. She was as writer and presenter. She has also been actively collaborating with the ESOL Program in the county as an academic resource teaching and training teachers and school administrators in different strategies to improve science instruction and strategic languages for educators. Her current emphasis is revising the science curriculum and working one-on-one with classroom educators and school administrators, promoting and implementing STEM education as well as 5E instructional model in the elementary and middle school levels classrooms.

Amy Monahan, STEM Specialist, Volusia County Schools

Ms. Amy M. Monahan, is the STEM Specialist for K-12 Curriculum at Volusia County School District. As the STEM Coordinator, Ms. Monahan drives STEM curriculum in Volusia County Schools that is modeled in other districts. She is a certified teacher in the state of Florida for Middle School Science and Biology. She is unique in this position because she represents 65% of STEM teachers that have come to teaching through industry. Her understanding in STEM is widespread from being involved in various national

STEM Educational entities to improve STEM Education in K-16. These include working with the NGSS national STEM standards along with STEM literacy standards. Volusia County's STEM program, under Ms. Monahan's direction, includes a strong cadre of teachers K-12 that help shape what STEM education looks like in Volusia. Amy Monahan has embarked in a district-wide STEM Certification program where schools certify as VolusiaSTEM certified schools which leads to national certification in STEM.

Jeff Oswald, Media Specialist, Orange County Public Schools

Jeff Oswald has worked in the field of education for the past 29 years. He's been a media specialist for the past 17 or those years and has been hosting a MakerSpace for the past 10. He's learned most of what he knows about technology by taking stuff apart, hacking, experimenting, and attending "Youtube University"- which is to say "looking stuff up online". He's built his own 3D printer, several lightsabers, a sonic screwdriver or two, and at one point had a life size "fully functional" Dalek (the blaster didn't really vaporize anyone) in his garage. So, to summarize, he's somewhere between nerd and geek.

Robert Reedy, Instructor, University of Central Florida

Bob Reedy is Program Director for Grid Integration in the Utility and Energy Services Department of UCF Facilities and Associate Instructor (Visiting) in the Department of Electrical and Computer Engineering. Mr. Reedy has been with UCF since early 2007.
Prior to joining UCF, he spent four years with Georgia Transmission Corp. as Research Manager and as Manager of Transmission Line Design. He also served as VP and Chief Operating Officer of the North American subsidiary of Turbec AB, a Swedish manufacturer of microturbine combined heat and power systems. Other experience includes Marketing Manager of The Energy Authority, Inc. and most of his 23 years with the Lakeland Department of Electric and Water Utilities as Director of the Engineering and Operations Group. This earlier work has given him extensive experience in the utility industry and in the field of distributed power systems, with a specialty in energy marketing, financing and business planning. He is a Licensed Professional Engineer in Florida.
At the systems level, Mr. Reedy is now heavily involved with control and protection of grid-interactive PV and Vehicle-to-Grid inverters, with a particular research focus on enhancement of the interconnected grid stability and reliability through utility control of distributed advanced inverters. His prime interests in cell and module development involve optimization of optical and thermal designs, and thermoelectric-PV hybrids.

Samuel Reisner, Cypress Creek High School

Humberto Rodriguez, Science Coach, Polk County School District

Humberto Rodriguez was born in San German, Puerto Rico. He received a B.S in Molecular Biology and Environmental science from the InterAmerican University of Puerto Rico and received 24 graduate credits in Plant Science from the University of Puerto Rico. He worked for the USDA Forest Service in the capacity of plant taxonomist doing forest inventory. In 2003, he moved to the United States to pursue a career as Educator. Since 2004, he has been a secondary educator teaching courses in Life, Physical and Earth/Space science. In 2008 he completed a master's degree in education and in 2017 he completed a

Master's Degree in Psychology. In addition, he has more than 6 years of experience as Adjunct faculty professor of Biology and psychology. Currently he works as a School based science coach for Polk county. He lives with his wife, 11 year old daughter and 18 year old son in Davenport, Florida.

Ron Sandrin-Litt, Teacher, Spruce Creek High School

Ron Sandrin-Litt is a retired architect and urban planner who has worked on international development projects most of his life in Canada, Europe, the Middle East and the United States. Presently, he is teaching Environmental Science and Chemistry at Spruce Creek High School in Port Orange. He has taught all the high school sciences at one time or another over his 5-year high school career. Having worked closely with engineering and architectural students over the years, he is aware of the gap in knowledge that can occur between professional practice and academia. Consequently, he is always looking for ideas that bring students into the real world of engineering with tangible examples of engineering practice for the students to experience.

He is a co-sponsor of the Science Club at Spruce Creek and a participant in the Science Olympiads. He also is the designer of the 'Ecopoly' classroom game, which is intended to show students the relationship of Environmental Ecology to the ascendant, overriding world of Human Ecology.

Laura Schendel, Outdoor Educator, Ecological Classroom Outdoors

Laura Schendel is a certified Biology teacher and currently an outdoor environmental educator. She has 13 years of teaching experience and taught middle school Earth and Life Science as well as high school Biology. She is a graduate of Rollins College and a native Floridian. She is passionate about protecting Florida's waters and the ecosystems surrounding them.

Laura established ECO, Ecological Classroom Outdoors, in order to bring upper elementary, middle and high school students out of the classroom and into the "field" to participate in hands-on science investigations. These experiences connect scientific processes and critical thinking skills to real world situations, with the goal of evoking environmental stewardship in the next generation of decision makers. As part of that commitment, ECO Rangers participate in monthly community service events where students have the opportunity to protect and restore the environment. One of our on-going projects is restoring the Nature Connect Trail at Bill Frederick Park.

This past summer, Laura had the opportunity to participate in Plant Camp sponsored by IFAS and University of Florida. She encourages all teachers to apply for a weeklong experience packed with hands-on activities and lesson plans. She enjoys sharing this knowledge with students on her field trips.

Laura has presented for FEEC and FAST in the past and enjoys sharing her passion for teaching science in a hands-on way with teachers.

Lara Sharp, Program Director, St. Petersburg College

Lara Sharp holds degrees in Chemical and Industrial Engineering, a MBA, and a Florida Professional Teaching License in Chemistry and Technical Education. She is currently the Program Director of Engineering, Manufacturing, and Building Arts at St. Petersburg College in Clearwater, Florida. Prior to this position, Ms. Sharp was a process engineer, technical salesperson, and a high school science and

engineering teacher. She has also coached several Florida Science Olympiad teams and developed robotics and biomedical engineering summer camps.

Abdul Siddiqui, Lead Systems Engineer, United States Army

Abdul M. Siddiqui started working for the US Army as a Systems Engineer in 1991. He was the Software Engineering Manager for the Bradley Fighting Vehicle System, TACOM from 1998 to 2004. He is currently the resident subject matter expert in software architecture development for systems and product lines at US Army Program Executive Office for Simulation, Training and Instrumentation (PEO STRI). He is the Lead Engineer for Network Development and the Information Assurance Security Officer for Program Manager Synthetic Training Environment (STE). He is the Engineering Mentor and STEM Coordinator for the US Army for Central Florida. Mr. Siddiqui received his Master of Science in Software Engineering from the Naval Postgraduate School, CA in December 2000. He is married and has three boys.

Beth Smith, Educational Technology Consultant, Texas Instruments

Beth Smith is an Educational Technology Consultant (ETC) with Texas Instruments. Beth works with teachers, schools, districts and states to improve teaching and learning. She strives to empower teachers and inspire students to succeed in mathematics, science and STEM. Prior to joining Texas Instruments as an ETC, Beth taught middle and high school mathematics for 25 years in Jacksonville, Florida. During this time, she served as Mathematics Chair and Coordinator of Instructional Technology. Additionally, Beth has served as a MathForward Coach and T^3 (Teachers teaching with Technology) Instructor for Texas Instruments. She received an Ed.S. in Curriculum and Instruction from the University of Florida.

Angela Tiffany, Robotics Teacher, Hamilton Elementary School of Engineering and Technology

Angela Tiffany is currently the full time Robotic/STEM instructor at Hamilton Elementary School of Engineering and Technology. An 18 year veteran teacher who provides hands on engineering and technology curriculum to enhance students understanding of classroom learning standards. Angela also is the mentor coach for Hamilton's First Lego League competition team.

Erika Trnka, Teacher, St. Cloud High School

Erika Trnka has taught various subjects within science for the past 8 years. Working with middle and high school students, she works hard to engage disconnected students within the science curriculum. She is a graduate of the University of Florida, with a Master of Arts in Biology Education from Western Governor's University. Having previously published lesson plans to CPALMS and lead professional development workshops, her current projects include disseminating her research and lesson plans from the RET Program at the University of Central Florida.

Amy Trujillo, Instructional Coach, Orlando Science Schools

Amy Trujillo is the Instructional Coach of a STEM K-6 school and Florida Association of Science Teachers (FAST) President-Elect. During her teaching experience, she has taught at the college level and online for adults and has been a grade level classroom teacher, a teacher of the gifted, an ELL teacher, curriculum coordinator, and instructional coach. She has organized and presented at conferences, written articles, and is recognized as a Google Certified Educator Level Two, BrainPOP Certified Educator, and PBS Learning Media Digital Innovator. She has worked in education for almost 20 years to ensure that the needs of diverse learners are being met and all students have an equitable educational experience.

Heather Vickers, Math Coach, Hamilton Elementary School of Engineering and Technology

Heather Vickers is currently the Intermediate Math Coach at Hamilton Elementary School of Engineering and Technology. She is in her eighteenth year as an educator with Seminole County Schools. She is currently working on her Master's in Education through the Lockheed Martin/UCF Academy K-8 Mathematics and Science Education program. Ms. Vickers has spent extensive time attending National STEM and NCTM conferences to strengthen the quality of her teaching and learning in mathematics and science education. She has also been a part of Hamilton's curriculum writing team for integrated units incorporating Engineering and Technology into the ELA and Math classrooms.

Don Worcester, Mathematics Department Chair, Trinity Preparatory School