

VISIONARY AWARDS April 20, 2022













DAILY CHALLENGES DAILY SOLUTIONS







CONCRATE NMTC VISIONARY AWARDS HONOREES Jaclyn (Jackie) Madden & Dr. Edward Schmidt

STEM majors at Harford are creating, building, and advancing the careers of the future.

Through internships, research, outstanding faculty, and presentation opportunities, students in Harford's certificate and degree programs are prepared to excel in the STEM fields and meet the ever-growing demands of local and regional employers.

So walk through our open doors . . . and let curiosity lead you.

For more information: go.harford.edu/programs



ADDITIVE MANUFACTURING

BIOLOGY

BIOTECHNOLOGY

CHEMISTRY

COMPUTER SCIENCE

CYBERSECURITY

DATA SCIENCE

ENGINEERING

ENVIRONMENTAL SCIENCE

MATHEMATICS

PHYSICS



Agenda

WELCOME and INTRODUCTIONS

NMTC/BRAVURA SCHOLARSHIP AWARDEES

DINNER

KEYNOTE SPEAKER

Mr. Jonathan Shulgach

NMTC VISIONARY AWARDS PRESENTATION

Mr. John Casner Executive Director, NMTC

VISIONARY HONORS PRESENTATION

Mr. Larry Muzzelo Deputy to the Commanding General, CECOM, APG

2022 Visionary of the Year

Introduced by Mr. Jeff Foulk
President, SURVICE Engineering
2021 Visionary of the Year

CLOSING REMARKS

Ms. Claudine Adams, Chair, NMTC Board of Directors

ADJOURN

Award Criteria

NMTC Visionary Awards for STEM Education and Technology and Innovation Advancement

VISIONARY Award – Long-term significant contributions to community well-being displayed as a personal commitment to building the STEM-educated workforce and advancing our innovation and technology base with demonstrates qualities of enlightened leadership.

LEADER Award – Consistent contribution to building the STEM-educated workforce and advancing our innovation and technology base in a public way that inspires others to help in accomplishing shared goals. These individuals solve enterprise-wide issues, create practical solutions, and engage others.

INNOVATOR Award – Exceptional personal efforts that measurably benefit the development of the STEM-educated workforce and advance our innovation and technology base. These individuals show potential for a broad positive impact in the community to revolutionize an industry, way of life, or organization.

MENTOR Award – Consistent track record of going above and beyond to volunteer knowledge, experiences, and wisdom. These individuals inspire students and teachers greatness or guide a team's resources to implement an innovative technology-based solution with outstanding results for the sponsoring organization.

RISING STAR Award – Boldly demonstrates the potential to be a long-term contributor to building the STEM-educated workforce or have created a pioneering innovation or application for an existing technology by starting a company or establishing a breakthrough within a larger organization.

WE ARE NMTC



The Northestern Maryland Technology Council (NMTC) is the technology and innovation advocacy platform of Northeastern Maryland. We help advance technology adoption by expertly defining the rewards and risks of emerging technologies. We provide expert opinions on how these technologies might affect the revenue, talent, and pipelines of our council members and our region.

NMTC members build business connections with community leaders from industry, academia, and government, representing billions of dollars in purchasing power, influence, and connections that stretch beyond this region.

NMTC provides the leadership and unifying voice that stimulates technological change, drives innovation, and encourages technically-skilled workforce development. We facilitate collaboration on issues that influence regional economic growth and support the security of our country.

Like and follow us on Facebook: @NMTCconnect

Follow us on LinkedIn: NEMDTech

Visit us online: NMTC.org

Benefits of Membership

Our members participate in, support, sponsor, and take advantage of the many informative and networking opportunities provided through following programs and special events:

- iDisruptor Tech Talks alert you to emerging, tipping-point technologies' many risks and rewards. These in-depth panel discussions are organized, facilitated collaborations between NMTC members, technology leaders, the US Army Research Lab, and other subject matter experts. iDisruptor Tech Talks feature expert speakers updating you on how to harness game-changing, emerging technologies, the people and culture most effective to guide it, and the rewards and risks relative to your current business model. Always informative, always thought-provoking. Followed by a member-sponsored, catered happy hour. (when not virtual)
- Water Cooler Business Talks offer expert advice on ever-changing personal-use technology, complex business technologies, cybersecurity, and newly recommended business processes and techniques. Presented via Zoom the first Thursday of the month, starting at 4:00 PM
- Peer Roundtable is a masterfully facilitated business advisory group exclusive to NMTC member organizations, populated by their top decision-makers who seek to expand their growth. It is a unique combination of Group Coaching and Peer Advisory in a non-competing, confidential setting. Fellow group members, guided by our roundtable coach, help each other gain absolute clarity over vision, priorities, and action steps. It's like having your board of directors committed solely to your success! You may share your concerns and gain valuable insight from your coach and peers in non-competing companies, learn to define business and personal goals, and overcome potential obstacles by identifying their required resources. The roundtables convene every third Friday, in-person or virtually, pending the group's preferences
- Visionary Awards and Academy of Visionary Awards honor those who build our STEM-educated workforce and create or advance technology to new economic growth heights. Once celebrated, they are inducted into the Academy of Visionary Awards and invited to further share their valued experience and knowledge with the community, contributing to our STEM-based economy's growth and recommending the following year's Visionary Awards nominees. This evening event, 5:30-8:00 PM, is held in April

- GOLF4STEM Tournament is our collaborative networking event connecting
 the key influencers in our region on an informal and fun-filled day with
 always an exciting assortment of contests, foods, and beverages. The first
 Monday in June
- World of Wine. Its acronym, WOW, aptly describes the experience when hundreds in the community gather to enjoy the dozens of select wines, bourbons poured by your friend,s and selected Scotch complemented by one of the area's renowned caterers. At La Banque at the Seaplane Base, Havre de Grace.

For 2022, NMTC offers even more:

- Four STEM Scholarships: NMTC, through the generosity of Bravura Information Technology Systems, offers four \$5,000 scholarships to young women who are graduating high school seniors pursuing a four-year degree in a STEM field. Close to \$150,000 in scholarships have been awards
- Career Hour for high school and community college students unsure of their career path and the studies they need to undertake. It is a virtual conference hosted by the school and with successful job holders presenting what their job is about the exciting to the mundane, with the overall it takes to succeed in that career path. The intent is to ignite and inspire students to take charge of their future career paths by exploring future career opportunities by meeting with those working in the field of their interest. The presenters will discuss their likes/dislikes, what they like best and the most significant challenges of what they do, why they chose their occupation, understanding the job requirements, and finally, researching those occupations of personal interest. During the sessions, presenters will encourage questions and student participation.

NMTC Board of Directors

Current Officers

Claudine Adams, Board Chair	Bravura Information Technology Systems
Robert Andrews	Harford County OCED
Dr. Mary Way Bolt	Cecil College
Denise Carnaggio,	Harford Community College
Dr. Theresa Felder	Harford Community College
Nicole Funk	
John Karabias	Jacobs Engineering
Todd Marks	Mindgrub Technologies
Dr. Michael O'Leary	Towson University
Steve Overbay	Cecil County OED
Nicole Parr	Cecil County Public Schools
Patrice Ricciardi, Treasurer	Freedom Federal Credit Union
Melissa Kuzma, Secretary	Kuzma Technical Enterprises
Randy Rippin	RTR Technologies, Inc.
Mary Beth Stapleton	Harford County Public Schools

VISIONARY AWARDS COMMITTEE

- Denise Carnaggio, Harford Community College
- John Casner, NMTC
- Stan Childs, STEM International
- Marco Ciavolino, enktesis
- Heather Gatta, Battelle
- Nicole Parr, Cecil County Public Schools
- David Patrick, DSA, Inc.
- Mary Beth Stapleton, Harford County Public Schools



NMTC: Where members collaborate, key connections thrive, and opportunity expands!

NMTC is Maryland's fastest-growing technology council. With more than 200 members, advocates, and supporters. NMTC provides access to leaders from technology, industry, academia, and government throughout Harford, Cecil, and Baltimore Counties.

Established in 1991 and starting programs in 1992, and for 30 years, NMTC programming continues to connect companies, organizations, and members to peers and influential decision makers through organized networking events, disruptive technology talks, workforce summits, and idea-inspiring collaborative initiatives. Connections made through NMTC accelerate economic growth, build the STEM-educated workforce, and protect national security.

NMTC - Driving technology and innovation in Maryland.

NMTC Hosted Events:

- iDisruptor Tech Talks
- Water Cooler Talks
- Peer Roundtables
- GOLF4STEM Tournament
- WOW World of Wine
- Visionary Awards Gala

SPECIAL RECOGNITION: CREATIVE PARTNER

Marco Ciavolino and his wife, Susan, were award recipients in 2015. Since then, Marco has contributed many hours to NMTC events and projects, providing logistics support, equipment, photography, multi-media, and design services. He and his creative mind created the event brochures and cleverly engaging ideas. If your organization is looking for practical, well-executed solutions to your communications needs, please visit his site and contact him to discuss your requirements.

*enktêsis
* building value
developing ideas

SPECIAL RECOGNITION: MEDIA PARTNER

I95 BUSINESS began publishing in 2011 to serve the regional business community. I95 BUSINESS includes profiles of successful companies and the people who run them, insight from area business leaders, and connections to companies and professionals in the region. I95 BUSINESS engages readers with well-written, well-designed stories that connect in a meaningful and memorable way. "Words Matter™" − their tagline − is realized as words communicate ideas, educate and connect on multiple levels.

i95business.com





Visionary Award Larry Muzzelo

Larry Muzzelo has been a Visionary for Aberdeen Proving Ground and the region in building the workforce pipeline. As the Deputy to the Commanding General of the Communications-Electronics Command, Mr. Muzzelo has worked with Maryland and national higher

education institutions to introduce students to career opportunities that impact the lives of our Soldiers. He encouraged CECOM to partner with Maryland's Pathways in Technology Early College High School (P-TECH) program with Harford County Public Schools and Harford Community College. Mr. Muzzelo has led the way for CECOM and APG tenants to provide a strong volunteer mentoring experience and internship opportunities for 30-student cohorts. Several of these students come from underserved areas of Harford County. Each student has a chance to complete their 4-year high school diploma and obtain a 2-year associate degree in cyber security or information systems in four to six years at no cost to the student Mr. Muzzelo champions the APG Senior Leadership Cohort that began in 2009. He helps lead this cohort program, so civilian employees can seek the opportunity to achieve excellence for the Army, their organization, themselves, and the next generation of leaders at APG. Mr. Muzzelo has also developed an internal Human Resources group of APG tenants exchanging recruitment ideas and best practices, resulting in improved techniques. As a visionary, Mr. Muzzelo has provided innovative and strong leadership for CECOM, Aberdeen Proving Ground, and this Northeastern region. He continually works on meeting the Army's mission and protecting the Nation's warfighters.



Keynote Speaker Jonathan Shulgach

Jonathan Shulgach is a first-year PhD student at Carnegie Mellon University in Mechanical Engineering. His research supports DARPA's N3 Neurotech Research Initiative where he is developing novel wireless brain computer interfaces for

writing information to targeted brain areas. He received his bachelor's degree in Mechanical Engineering from University of Maryland Baltimore County, served as president of the UMBC Robotics club, and vice president of the Honors College Council. He also received his master's degree in Biomedical Engineering at Carnegie Mellon University. As a FIRST alumnus, he moved from a team member to mentor with Techbrick Robotics and later co-founded Baltimore City's FRC team 6326 "Baltimore Bolts" as a coach. He received an ORISE fellowship with the FDA to investigate the physiological markers of prosthetic embodiment for the DARPA HAPTIX research initiative. He holds several publications in scientific journals contributing to the fields of robotics and electrophysiology. He is also a strong proponent of STEM education and outreach with his work being featured in 7 News DC and ABC2 news. He is the founder of T.E.A.M.S., a STEM technical literacy summer training camp that provides critical technical skills to DC youth in partnership with the Marion Berry Summer Youth Employment Program.

2022 Award Recipients



Adam Bogner Leader Award

As a Division Chief, Adam Bogner has created an atmosphere that cultivates originality, innovation, scientific rigor, and technical excellence. He has done this by developing courses to teach these principles and practices, such as through an innovation course at the C5ISR Center to re-ignite creativity and create better products, systems, and capabilities for our Warfighters. One outcome of this rigor is his

division at APG leads the ESI Directorate in the number of awarded patents, published research articles, and conference presentations. Adam also created and taught an in-house leadership course to train future Army leaders, share new leadership skills, and refresh the abilities of existing leaders, presenting many new ideas and perspectives that re-instilled a sense of purpose and devotion to the work of those participating. In addition, his mentorship of junior employees has always been a priority, and hallmark, of his leadership. An example is creating and teaching an interview class to improve candidates' skills during interviews aimed at employees at the GS-12 level and below, although open to all members. Now, he is introducing a practical technical refresher course for junior engineers presenting technical information from a practical perspective. The expected outcome for this course is a heightened practical understanding for engineers to develop better systems and products for our Warfighters.



Dr. Christy Dryer Leader Award

Dr. Dryer serves as Cecil College's Vice President of academic programs and continually develops basic training skills and higher education pathways. Under her leadership, the College's Cybersecurity program achieved NSA recognition. Their Visual Communications program created a drone certificate—the Engineering program built upon its partnership with Frostburg University. The Biology department devel-

oped a Bioproduction degree with an articulation with Thomas Jefferson University. Dr. Dryer also led the development and sustained faculty use of recognized, high-impact practices, optimizing the College's impact during the pandemic by developing and expanding a variety of online course formats and tools. Dr. Dryer leads developing a consortium of Maryland Community Colleges, namely, the Maryland Education Alliance (MEA). This consortium allows students to seamlessly transfer between schools to obtain optimal professional training that might otherwise be unavailable. It continues to champion numerous innovative initiatives resulting in unique partnerships, mentoring, and learning opportunities. As a lead-by-example, an integral part of the institution, Dr. Dryer serves on many boards and committees on behalf of Cecil College.



Jaclyn Madden Leader Award

Jaclyn Madden, Associate Professor of Biology and Biotechnology at Harford Community College, has demonstrated exceptional ability to promote bioscience and STEM opportunities throughout her career. A respected scientist known for her expertise in biotechnology education, she is engaged in a national network of educators working to transform biology education. Ms. Madden believes that engaging students

in science early and often is critical to building and diversifying the STEM workforce. To that end, she has guided elementary and middle school students in science fairs and STEM days, led and facilitated educational activities for community members in STEM outreach events, and engaged high school students and their families in interactive biotechnology workshops. Ms. Madden is committed to the success of her students at Harford Community College and leads them in course-based and individual research projects that encourage them to build their skills and identities as scientists. Through a National Science Foundation grant, Ms. Madden leads other members of the BIOTECH Pathways team by collaborating with Harford County Public Schools and biotechnology industry partners to increase technical career opportunities in biotechnology for Harford County residents. These activities reflect Ms. Madden's commitment to providing servant leadership and opportunities for the growth of STEM in the region.



Mark Butkiewicz Innovator Award

SURVICE Engineering's Mark Butkiewicz, VP of Applied Engineering and Manager of their Applied Technology Operation (ATO), located at their new Drone Research Center in Churchville, MD, leads a dynamic, innovative thinking team. They support the advancement of Autonomous Systems (both ground and air platforms) that have far-reaching influence beyond our local community and transcend beyond our

county, state, and nation. Mark is a local product of Harford County and has invested himself in many ways. His efforts have offered workforce education and hiring opportunities for local students and workers in STEM, particularly in the relatively new and exciting field of drone technology. His focus on students has included teaching math at Harford Community College, hiring bright young minds as interns from Harford County schools, and supporting STEM field trips at his Applied Technology Operation. His team competes in and has won nationwide drone technology competitions due to their innovative and patent technology solutions enhancing drone development and implementation. Examples include research and development in Artificial Intelligence/Machine Learning, Deep Neural Networks, Computer Vision, High-Performance Computing, and secure command, control, and communication development for drone operations in areas under enemy or unfriendly control. Mark's efforts to lead these activities reflect credit upon himself and SURVICE, and the entire Harford County community he represents.



Dr. Eoin O'Driscoll Innovator Award

Dr. Eoin O'Driscoll led the development and advancement of innovative technologies that positively impacted the environment by improving the energy performance of buildings and enabling facilities to adjust to supply-side constraints such as utility curtailment. He created a solution that integrates data from multiple facilities and utilities control systems, advanced metering infrastructure (AMI), and other

industrial control systems using a centralized operational data warehouse. In addition, this grid-interactive solution leveraged advanced analytics to identify improvement opportunities by continuously monitoring environmental conditions, the real-time performance of each building system, and the readiness of all distributed generation assets. Saving energy at the University of Maryland was his Smart Classroom Scheduling tool that directly connected the University's classroom scheduling systems with the building automation systems that control HVAC systems in each space. Innovative because classroom schedules exist in cloud systems, separated from building automation systems. These innovations allowed the University to extend the useful life of building systems, reduce maintenance expenditures, and generate persistent energy savings. Dr. O'Driscoll is mentoring new members of his team and leading efforts to implement similar intelligent building solutions at Virginia Tech, the University of Wisconsin, the University of Cincinnati, and the Naval Facilities Command, among others. Eoin is also currently writing a book: Smart and Resilient Buildings: A Data-Driven Future. The solution - a comprehensive framework encompassing hardware, software, and advanced analytics - provides energy efficiency, load shifting, and load shedding capabilities.



Dr. Vishnu Marla Innovator Award

Vishnu Marla is a Ph.D. scientist by trade helping W. L. Gore & Associates to optimize their business using the latest data science techniques, including machine learning — a type of artificial intelligence that enables computer systems to learn and improve from experience without being explicitly programmed automatically. As part of the Core Technology Group, Dr. Marla's work enables Enterprise-wide teams to

make rapid data-driven decisions. Examples are selecting appropriate materials from thousands of Gore's materials offerings and analyzing competitive intelligence – both of which require parsing through enormous volumes of available data enabling Gore to make faster decisions. Dr. Marla believes that we are at an inflection point. The amount of information we have available and the wide range of current data science tools to rapidly process this information are unprecedented. Dr. Marla's expertise extends beyond the walls of Gore and into the community, where he demonstrates his passion and enthusiasm for STEM-related topics. He volunteers his time tutoring area children in math and science, organizing robotics Lego league programs, mentoring elementary students in Cecil County, and coordinating laptop donations for school-aged children most in need



Brandie Biddy Mentor Award

Brandie Biddy has spearheaded projects creating for Cecil College, a data science course, and a data science degree. She now leads the data science committee at Cecil as the chair, working on the content of the data science course, and hopes to soon have it as an approved program in the spring of 2022. Brandie is an inspiration to her developmental math students and students who major in mathematics or

engineering. Mentorship is more than theory to her; it's deeply rooted in her past. When told in high school that college was beyond her grasp, she overcame that direction and started her education at Cecil College in their developmental math courses. She later earned her M.S. in mathematics from Johns Hopkins University and started her career as an Assistant Professor of Mathematics at Cecil College in 2013. She is proud to be the only person in her extended family with a college degree. Brandie has been very active with student organizations on campus, mentoring the Student Math League to the Geekdom club, where students are interested in science fiction, fantasy, anime, or gaming. Brandie is always volunteering to share her knowledge, expertise, and time to inspire mathematics students at Cecil and other faculty members in the Mathematics and Engineering department and the Cecil College community. Lastly, you'll have to ask Brandie what is the Ducktorate Degree she earned at Disney University.



Dr. Edward Schmidt Mentor Award

Since retiring from the Army Research Laboratory at APG, Dr. Schmidt has been a presenter of hands-on STEM demonstrations in local schools and community venues. During the 2019-20 school year, Dr. Schmidt was coordinator again for Homestead Wakefield Elementary School activities conducted by the Senior Science Society. Additionally, he mentored for 286 contact hours at three schools plus one library. Dr.

Schmidt was the coordinator for Homestead Wakefield Elementary School activities conducted by the Senior Science Society the previous school year. He additionally mentored for 212 contact hours at four schools and one Boy Scout troop. Before that, Dr Schmidt was again coordinator for Edgewood Elementary School activities conducted by the Senior Science Society, plus added Bel Air Elementary School coordination activities. Additionally, he mentored for 335 contact hours at five schools. Since the pandemic hit 20 months ago, local schools have remained closed to visitors, but Ed has continued working to promote STEM education. Currently, he is working on the Discovery Center's "Wonders of Science Fair and Family Festival" (scheduled for June 2022), where he is recruiting middle school participants and serving as a science fair judge. As a retiree, 100% of his work fits "above and beyond" the regular work assignments category. While not a founding member of the Senior Science Society, Dr. Schmidt has been an officer of that organization for a more extended time than any other non-founding member. Currently, he is the SSS secretary.



Dr. Chi-Chin Wu Mentor Award

Dr. Chi-Chin Wu is a Materials Scientist at the U.S. Army Combat Capabilities Development Command, known as DEVCOM, Army Research Laboratory, and is passionate about service to students of all ages. Dr. Wu first realized her love of helping students in high school and later tutoring young students to support herself in college. She realized she could share her knowledge and experience to help instill the

love of STEM in young people. At DEVCOM ARL, Dr. Wu selflessly volunteers as a mentor for 8th-grade students from Harford County through ARL's Physics and Chemistry Explorations in STEM (PACES) program and as a Virtual and National Judge for the Army Educational Outreach Program (AEOP) cyber mission. She is also mentors summer undergraduate and graduate interns and postdocs researchers. She consistently serves as a reviewer/judge for student and postdoc poster sessions. She is always eager to hear about the presenters' work and ask questions to help guide them on their path forward. While her goal is always to teach and help others, Dr. Wu finds that she gets as much from mentoring as her students. Despite her very full schedule as an Army research scientist, she helps find time to give to others. Her mentorship also extends to the Materials Research Society (MRS), where she mentors resume writing for job spekers



Sarah Patrick Rising Star Award

Sarah Patrick is a Senior at the University of Maryland studying Information Science, Operations Management, and Business Analytics and was the 2019 Visionary Awards keynote student speaker. She is a graduate of the Science and Mathematics Academy at Aberdeen. First starting in high school, Sarah has volunteered extensively with DSA, Inc. in collaboration with TechGirlz, running hundreds of technical

workshops both online worldwide and at Boys and Girls clubs in Harford County. She is an Information Science student ambassador and an undergraduate teaching assistant at the University of Maryland. She has completed internships as a Solutions Architect with Amazon Web Services (AWS), a Junior Fellow at the Library of Congress, and a SharePoint Developer for the Smithsonian Institution. Sarah demonstrates her high level of commitment to serving as a long-term contributor supporting the advancement of technology and building a STEM-educated workforce.



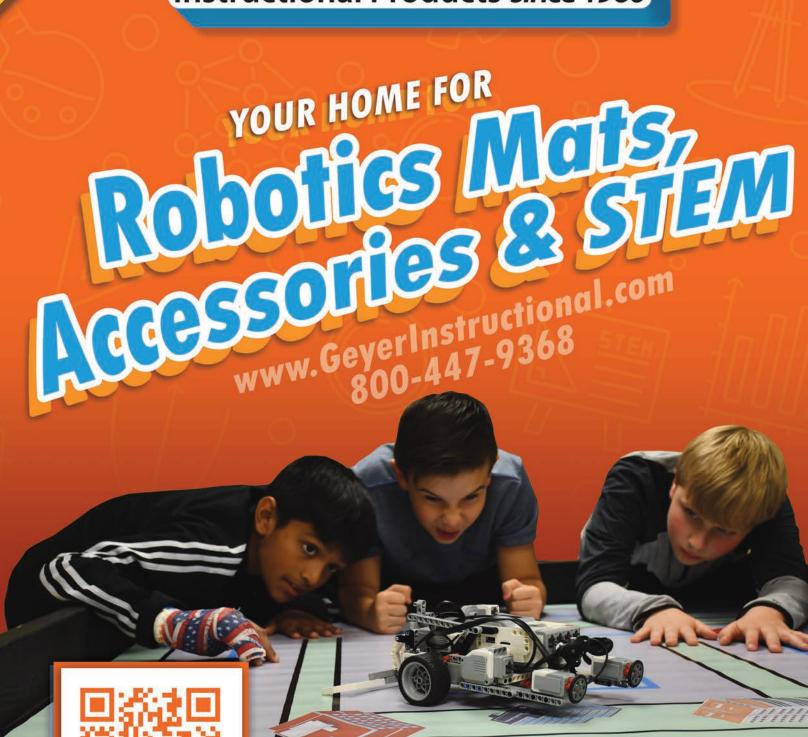
Olivia Webster Rising Star Award

Olivia Webster is a University of Maryland Class of 2017 Graduate and practicing Biomedical Engineer at the U.S. Army Public Health Center, Aberdeen Proving Ground, MD. She serves as the Blast Overpressure (BOP) Subject Matter Expert and the Exposure Environment Line of Inquiry Lead for the Congressionally-mandated FY18 National Defense Authorization Act, Section 734 study addressing the health

effects of Blast Overpressure exposure to Service members. Olivia is an active member of the Society of American Military Engineers (SAME), serves as an Oak Ridge Institute for Science and Education (ORISE) Mentor, and serves as the Army Health Hazard Assessment Program Liaison to the Army's Medical Operational Medicine Research Program. Ms. Webster's Mentoring/Outreach/Membership-related accomplishments include: Served on the Organizational Day Committee as a volunteer to help foster a sense of comradery and community among the APHC staff; served as a mentor for a Senior's Capstone Project at the Science and Mathematics Academy at Aberdeen High School titled "Assessing the need for short and long term hearing protection training", participated in outreach by volunteering at Career Days for local schools during 2017, 2018, and 2019 and attending the Black Engineer of the Year Awards STEM Conference to represent APHC in 2019; participates as a member of the Alpha Omega Epsilon Engineering Sorority which promotes ideals and objectives which further the advancement of female engineers and technical scientists; serves as a mentor $% \left(1\right) =\left(1\right) \left(1\right)$ to ORISE participants which involves approving travel and leave requests, providing leadership and guidance, assigning tasks/work, and providing feedback on deliverables. Also provides mentoring to other interns and SMART scholars within APHC through participation in on-boarding meetings and open lines of communication; and serves as the Young Member Committee Leader for the Chesapeake Post of the Society for American Military Engineers.

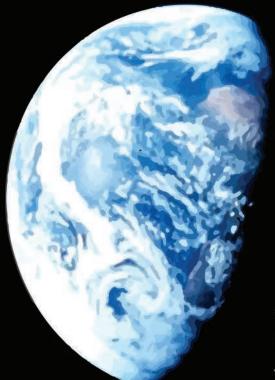
STEP OUTS







Visit us online!



A World of **Experience and Expertise in** Technology and Marketing

*enktêsis *building value developing ideas enktesis.com

*enktesis is a private consultancy, led by Marco Ciavolino, assisting clients in a wide range of web technology solutions, marketing communications, business development, and research efforts.

- Website design and development featuring JOOMLA and WordPress
- Website conversion from old platforms
- Publication design and production
- Photography
- Video production
- Graphic design
- Adwords Campaigns

FREE PUBLICATIONS

- Definitive Photo Guide For Events
- Subjects That Will Change Your Digital Life

Marco Ciavolino marco@enktesis.com Enktesis, LLC Maryland * Georgia * South Carolina 410-838-8264 http://www.enktesis.com

Baltimore, MD / Atlanta, GA / Columbia, SC

Subsidiaries of XCORP2014, LLC







Partnership



The Academy of Visionary Awards 2012 – 2022

Visionary - a community role model in building our Workforce for the Future or advancing technology & innovation

Larry Muzzelo, Deputy to the Commanding General, CECOM, APG **2021**

Jeff Foulk, SURVICE Engineering, C.E.O.

Lyle Sheldon F.A.C.H.E., University of Maryland Upper Chesapeake Health, President & CEO.

Claudine Adams, Bravura Information Technology Systems, President and Founder

Dr. Philip Perconti, U.S. Army Research Lab, Director 2017

Dr. Mary Way Bolt, Cecil College, President

Denise Carnaggio, Harford Community College, APG Liaison

C. Warren Mullins. Battelle Eastern Technology Center. Senior Vice President

Gary Martin, U.S. Army Communications-Electronics Command, Deputy to the Commanding General APG

Dr. Diane Lane, Cecil College, Vice President Student Activities (retired)

2012

James Foulk, Chesapeake Testing and SURVICE Engineering, President.

Leader - Setting the pace for success.

Adam Bogner, Chief Signals Intelligence, ESI Directorate of the US Army CSISR Center. Dr. Christy Dryer, Vice President of Academic Programs, Cecil College

Jaclyn Madden, Professor of Biology, Harford Community College

Kyle Rickansrud, Cecil County Public Schools, Director of Technology Services and Media

Dr. James Morgan, Cecil College, Associate Professor of Computer Science Tim McNamara, Discovery Center at Water's Edge, Chairman, Facilities Committee

Laura Cianelli Preston, Harford Community College, Dean of Nursing, Allied Health Prof. (ret.) Andrew Renzulli, Harford County Public Schools, Supervisor of Science

2020

Tamalene Imbierowicz, Professor Biology & Environmental Science, Harford Comm College Mark Mortenson, Co-Founder & Chief Technology Officer, Clene Nanomedicine

Kathleen Kirk, Data Systems Analyst, Inc., Senior Vice President, Strategic Solutions Group

Susan Manning, Freedom Federal Credit Union, Community Liaison Jamie Gurganus Ph.D., U.M.B.C, Associate Director Mechanical Engineering

Timothy Dominick, Orbital/A.T.K. (now Northrup Grumman)
Jim McNeely, SURVICE Engineering (formerly with Battelle)

Al Horst, Harford Community College/Senior Science Society

Joan Michel, Profile Partners, President and Founder

Dr. Patrick McNutt, U.S. Army Medical Research Institute of Chemical Defense Dr. John Suárez, U.S. Army Communications-Electronics Research, Dev. & Eng. Center

Christine Zatalava, Cecil County Public Schools, Acting Assistant Principal

John Mayhorne, Harford Community College, Dean (now retired)

Marco Ciavolino, Techbrick Robotics.and enktesis, President and Fopunder Erica Fineman-Bertoli, U.S. Army Communications-Electronics Research, Development, Engineering Center. Louie Lopez, U.S. Army Research Development and Engineering Command.

Suzanne Milchling, U.S. Army Edgewood Chemical Biological Ce Frank Mezzanotte, Harford County Public Schools (retired).

Joseph Wienand, U.S. Army Edgewood Chemical Biological Center, Director (retired)

Kathleen Kunda, Business Ed. Partnership Advisory Council, Cecil County. (Now Board of Directors, Cecil College)
Dr. John Ferriter, ScD, SAIC - Senior VP(retired)

Innovator - Ideas that make a difference.

Mark Butkiewicz, VP Applied Eng, Applied Technology Operation, SURVICE Engineering

Dr. Vishnu Marla, Material Scientist, multiple patent holder, WL. Gore
Dr. Eoin O'Driscoll, Director Critical Infrastructure Protection: Data Systems Analysts, Inc

Kim Sheppard, Cecil College, Chair Math Department
Todd Miller, Data Systems Analysts, Inc., Product Manager

Dawn Grissom, Harford Com. College, Project Director, Comm Ed, Business. & Applied Tech. JP Lapps, NextGen Federal Systems, Senior Vice President

Mark Mears, ChristianaCare, Union Hospital, Director, Facilities Mamt. & Emergency Prep.

Jill Orsini, Project Lead the Way instructor, Bel Air Middle School

Cyrus Etemad-Moghadam, Founder & President, RPM Tech

Martha Barwick Ed. D. Harford County Public Schools, Coordinator of Instructional Technology. Charles Nietubicz, U.S. Army Research Lab (Ret.), Director Supercomputing Resource Center

Catherine (Katie) Hall, U.S. Army Research Lab Alena Calm, U.S. Army Edgewood Chemical Biological Center

Dr. Veronica Dougherty, Cecil College Scott English, U.S. Army, Directorate of Public Works at APG

Marlene Lieb, Harford Community College (retired)

Sarah Ashlev, Science & Math Academy, Harford County Public Schools

Susan Kipp, Youths Benefit Elementary, Harford County Public Schools

Andy Borzok, Cecil County Public Schools. Kimberly Nikitas, Battelle Eastern Technology Center

Joseph A. Domanico, U.S. Army Edgewood Chemical Biological Center

Dr. Pamela Lottero-Perdue. Towson University

leannine Finton, Harford County Public Library. (now American Soc. Chemical Engineers)

Mary Doak, U.S. Army Edgewood Chemical Biological Center (retired) Dr. Nina Lamba, CCL Biomedical (Initiator of NMTC.'s Science Café).

Marty Healy, W.L. Gore. (retired)

Deborah Wrobel, Harford Community College, Dean (retired)

Frank Cardo, Cecil County Public Schools

Mentor - Role models for future generations.

Brandie Riddy Assistant Professor Of Mathematics : Cecil College

Dr. Edward Schmidt, Senior Science Society, US Army Research Laboratory (Ret.)

Dr. Chi-Chin Wu, Materials Scientist, US Army Research Laborator

Sarah Wheat, Army Research Lab, Chief of the Employee Development & Engagement Branch Erin Poole, Data Systems Analysts, Inc., Customer Service Rep. and SharePoint Developer

Amy Fares, Data Systems Analysts, Inc., Project Manager

Cathy Perkins, Technical Project Manager / Site Lead, U.S. Army Aberdeen Test Center

Davlyn Williams, Technical Project Manager, Data Systems Analysts, Inc Dr. Timothy Kluchinsky, Chief, Health Hazard Assessment Div., U.S. Army Public Health

Dr. Richard Becker, Research Engineer, U.S. Army Research Lab

Tracey Schreiner, Data Systems Analysts, Inc., Training Lead

Frank Mayer, Harford Community College, Adjunct Faculty Cybersecurity Wilbert Moultrie, U.S. Army Public Health Center, S.T.E.M. Coordinator

Carrie Kauffman, Battelle, Principal Research Scientist

Matthew Kiefert, U.S. Army Research Laboratory, Outreach Office Coordinator

William (Bill) Chambers, NASA Goddard Stan Childs, STEM International

Dr. Michael Simini, U.S. Army Edgewood Chemical Biological Center Virginia (Ginny) To, Parsons Corp, contract support to U.S. Army Research Lab

Dr. Drew Wilkerson, York College/U.S.Army Research Lab (ret.)

Anne Marie Baumann, Cecil County Public Schools

John Nierwinski, U.S. Army Materiel Systems Analysis Activity Dr. Ebony Roper, Cecil College

Dick Schwanke, Senior Science Society at Harford Community College

Dr. Rose Pesce-Rodriguez, U.S. Army Research Laboratory

Greg Fox, Northrup Grumman (ret)
Kelly Mangum, Harford County Public Schools

Omar Savory, U.S. Army Communications-Electronics Research, Dev. and Engineering Center

Dr. Bruce Burns, Harford Community College, Senior Science Society

Deidre DeRoia, U.S. Natural Resources Branch, Aberdeen Proving Ground Dr. John McDonough, U.S. Army Medical Research Institute of Chemical Defens

Susan Ciavolino, Harford County Boys & Girls Club Rick Moore, U.S. Army Edgewood Chemical Biological Ctr. Rapid Tech & Inspection Branch Brad Ruprecht, U.S. Army Edgewood Chemical Biological Ctr. Rapid Tech & Inspection Branch Lester Hitch, U.S. Army Edge wood Chemical Biological Ctr. Rapid Tech & Insp

Suzanne Procell, U.S. Army Edgewood Chemical Biological Center

Anne Shade, Leidos. (moved)
Dr. Robert Lieb, U.S. Army Research Lab (now retired)

Dr. William Prins, A.T.K. Missile Products Division. (now retired)

Dr. Dave Brown, MITRE and Johns Hopkins University. (Pentagon)
Dr. Sandra Young, U.S. Army Research Lab, Harford Community College Ted Welsh, SURVICE Engineering

Tim Jahnigen, SAIC (now T2S Solutions)

Dennis Hiebert, Senior Science Society at Harford Community College Ken Collins, U.S. Army Edgewood Chemical Biological Center

Dr. Douglas Cerasoli, U.S. Army Medical Research Institute of Chemical Defense.

Shawn Bowen, U.S. Army Edgewood Chemical Biological Center Rising Star - People to watch.

Sarah Patrick, Information Science Student at University of Maryland

Olivia Webster, Biomedical Engineer, US Army Public Health Center, APG 2021

Kayla Ross, Cecil College, Science, and Engineering Lab Coordinator Jeremy Ruroede, S.E.R.R.I Technologies, Founder & CEO

2020

Brian Leftridge, S.T.E.M. Program Specialist, U.S. Army Combat Capabilities Dev Command Mikale Brutus, S.T.E.M. Outreach Specialist, U.S. Army Combat Capabilities Dev Com, C5ISR Caitlyn Byrne, MITRE Corp. Lead Information Systems Engineer

Gina Fugate, MD School for the Blind, Lead Technology Teache

Kim McCarthy, U.S. Army Contracting Command David Patrick, D.S.A., Inc.

Barbara Morton, Cecil College Jack Underwood, System Source Learning Centers

2017

Alison Baranowski, Harford County Public Schools Jerry Crabb, U.S. Army Research Development and Engineering Command Jacqueline Wilson, Cecil College

Kim Bowers, U.S. Army Communications-Electronics Command.

Nicole McKew, U.S. Army Edgewood Chemical Biological Center Jan Stewart, Hickory Elementary School, Harford County Public Schools

Christina Bryant, U.S. Army Test, and Evaluation Command

Katie McHenry, Youths Benefit Elementary School S.T.E.M. Club. Breanne Sutton, A.T.K. Missile Products Division. (now Northrup Grumman) 2014

Carmen Kifer, U.S. Army Chemical Materials Agency

Ann Bizzano, DPT, American Physical Therapy Association of Maryland.

imberly Williams, Cecil County Public Schools Jason Parks, Youths Benefit Elementary School, Harford County Public Schools.

Congratulations to Larry Muzzelo

Deputy to the Commanding General, CECOM

Visionary Award Recipient

We appreciate all of your hard work on behalf of Aberdeen Proving Ground, Harford County's #1 employer.

Thank you to all of the 2022
Visionary Awards Honorees
for your contributions to our
community.







BILLYBONIFACE.COM
or Text BILLY to 42828

safety.







Cell phones

gateway to They are no

of everyone

PRANSPORTATION





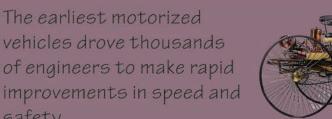


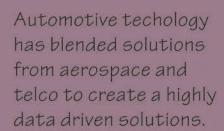


The earliest motorized

vehicles drove thousands

Early electro mechnical telcom devices rapidly grew into global networks





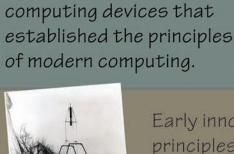


Early innovators led the

Early modern medicine relied on large machines, invasive surgery and limited medicines.



We have advanced to quantum computing with capabilties that will drive future innovation.



way with mechanical

Early innovators developed the principles and math that lead to a rapid development of propulsion sytems.



We now see launches of are deliverin space-base





create an unparalleled the world of information. w an indispensable part 's life









Integrated electronics have become part of every aspect of life. How will implants drive our interactions with information?

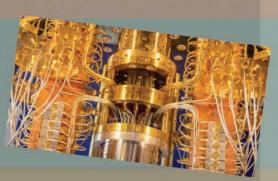


Advances in medical technology have increased at a rapid pace with automated surgeries and

diagnostics.



Neuralink and others are pushing a growth in micro and personal medical devices that can significantly increase our quality of life.



frequent and reliable massive rockets that g an astounding array of d techologies.



More Al-based systems

transporation vehicles.

will provide a wide range of personal

A wide range of techology integrations and Al technologies will change the world of computing.





We will see travel within our solar system and the establishment of colonies on other planets.

NOW BECOME NXT



- iDisruptor Tech Talks alert you to emerging, tipping-point technologies' many risks and rewards. These in-depth panel discussions are organized, facilitated collaborations between NMTC members, technology leaders, the US Army Research Lab, and other subject matter experts. iDisruptor Tech Talks feature expert speakers updating you on how to harness game-changing, emerging technologies, the people and culture most effective to guide it, and the rewards and risks relative to your current business model. Always informative, always thought-provoking. Followed by a member-sponsored, catered happy hour. (when not virtual)
- Water Cooler Business Talks offer expert advice on ever-changing personal-use technology, complex business technologies, cybersecurity, and newly recommended business processes and techniques. Presented via Zoom the first Thursday of the month, starting at 4:00 PM
- Peer Roundtable is a masterfully facilitated business advisory group exclusive to NMTC member organizations, populated by their top decision-makers who seek to expand their growth. It is a unique combination of Group Coaching and Peer Advisory in a non-competing, confidential setting. Fellow group members, guided by our roundtable coach, help each other gain absolute clarity over vision, priorities, and action steps. It's like having your board of directors committed solely to your success! You may share your concerns and gain valuable insight from your coach and peers in non-competing companies, learn to define business and personal goals, and overcome potential obstacles by identifying their required resources. The roundtables convene every third Friday, in-person or virtually, pending the group's preferences
- Visionary Awards and Academy of Visionary Awards honor those who build our STEM-educated workforce and create or advance technology to new economic growth heights. Once celebrated, they are inducted into the Academy of Visionary Awards and invited to further share their valued experience and knowledge with the community, contributing to our STEM-based economy's growth and recommending the following year's Visionary Awards nominees. This evening event, 5:30-8:00 PM, is held in April
- GOLF4STEM Tournament is our collaborative networking event connecting the key influencers in our region on an informal and fun-filled day with always an exciting assortment of contests, foods, and beverages. The first Monday in June
- World of Wine. Its acronym, WOW, aptly describes the experience when hundreds in the community gather to enjoy the dozens of select wines, bourbons poured by your friends and selected Scotch complemented by one of the area's renowned caterers. At La Banque at the Seaplane Base, Havre de Grace.

For 2022, NMTC offers even more:

- Four STEM Scholarships: NMTC, through the generosity of Bravura Information Technology Systems, offers four \$5,000 scholarships to young women who are graduating high school seniors pursuing a four-year degree in a STEM field. Close to \$150,000 in scholarships have been awards
- Career Hour for high school and community college students unsure of their career path and the studies they need to undertake. It is a virtual conference hosted by the school and with successful job holders presenting what their job is about the exciting to the mundane, with the overall it takes to succeed in that career path. The intent is to ignite and inspire students to take charge of their future career paths by exploring future career opportunities by meeting with those working in the field of their interest. The presenters will discuss their likesand-dislikes, what they like best and the most significant challenges of what they do, why they chose their occupation, understanding the job requirements, and finally, researching those occupations of personal interest. During the sessions, presenters will encourage questions and student participation.



Congratulations 2022 NMTC Visionary Awards Honorees

We're for **û**.

apgfcu.com/Join

Serving Harford County, Cecil County, Baltimore County & Baltimore City









Water's Edge Events Center

STEPS FROM THE WATER... MILES FROM ORDINARY

Weddings, Conferences, Social Gatherings, Catering, and More...





DSA has been a long and proud supporter of advancing STEM education for our future workforce and leaders. DSA congratulates NMTC Innovator Awardee Eoin O'Driscoll and Rising Star Sarah Patrick for being honored as part of the NMTC 2022 Visionary Awards!



Dr. Eoin O'Driscoll led the development and advancement of innovative technologies that positively impact the environment by lowering the energy use footprint. He implemented technologies with an integrated data-driven demand management solution for the University of Maryland that enables buildings to dynamically adjust to demand-side needs and supply-side constraints. This comprehensive framework encompasses hardware, software, and advanced analytics to deliver energy efficiency, load shifting and load shedding capabilities. Dr. O'Driscoll is leading efforts to implement the same energy savings solutions at Virginia Tech, the University of Vermont, and the Naval Facilities Command.



Sarah Patrick is a Senior at the University of Maryland studying Information Science, Operations Management, and Business Analytics, and she serves as an Information Science student ambassador and an undergraduate teaching assistant. She is a graduate of the Science and Mathematics Academy at Aberdeen. In high school, Sarah volunteered extensively with DSA, Inc. in collaboration with TechGirlz, running hundreds of technical workshops both online worldwide and at Boys and Girls clubs in Harford County. She has completed internships as a Solutions Architect with Amazon Web Services (AWS), as Junior Fellow at the Library of Congress, and as a SharePoint Developer for the Smithsonian Institution. Sarah continues to demonstrate her high level of commitment to serve as a long-term contributor supporting the advancement of technology and to building a STEM educated workforce.

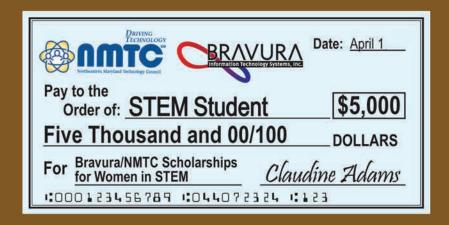
215-245-4800 | www.dsainc.com

PENNSYLVANIA | HAWAII | ILLINOIS | MARYLAND | NEW JERSEY | TEXAS | VIRGINIA | WASHINGTON DC

Since 1963, DSA has provided secure, innovative technology and information management solutions that enable our defense and federal civil government customers to serve the public and safeguard our Nation.



NMTC/ Bravura Awards \$30,000 in Scholarships for Women In STEM



The Northeastern Maryland Technology Council (NMTC), through the generosity and commitment of Bravura Information Technology Systems, and their founder Claudine Adams, increased the planned initially four scholarships to six, seeing the extraordinary accomplishments of the many candidates. The "NMTC/Bravura Women in STEM Scholarships" for 2022 is now in its fifth year, awarding \$150,000 in scholarships. This unique annual program, offering four \$5000 scholarships to women graduating from Harford and Cecil Counties Maryland public and home schools, pursuing a four-year degree in the fields of Science, Technology, Engineering, or Mathematics (STEM), was later expanded to six scholarships.

We are pleased to announce these six scholarship awardees will each receive a \$5,000 scholarship:

Elizabeth Pennington / Elkton / Biomedical Engineering Sean Luk / C. Milton Wright / Biomedical Engineering Eliana Peyton / Aberdeen High School Science & Math Academy / Neurosurgery Micaela Venyo / Harford Tech / Mechanical Engineering Lydia Kendzierski / C. Milton Wright / Aerospace Engineering Ava Darling / Havre De Grace / Materials Engineering



Bravuralnc.com 210 Research Blvd Suite 300 Aberdeen Maryland | 443-360-9500



Congratulations to this years' NMTC Visionary Award Winners!

From your friends at the Computer Museum!



Please visit our website to schedule a personal tour. Vist the museum at https://museum.syssrc.com

You may preview the museum at http://museum.syssrc.com/tour

We also offer comprehensive learning through our System Source Learning Center

On-site and Virtual!

Contact Jack Underwood at junderwo@SYSSRC.com





CONGRATULATIONS TO SURVICE ENGINEERING'S VP, MARK BUTKIEWICZ, FOR BEING AWARDED THE 2022 NMTC INNOVATOR AWARD!

Mark manages the SURVICE Applied Technology Operation, located at their new Drone Research Center next to the Harford County Airport, and leads a team that supports the innovation and advancement of autonomous systems (ground and air

drones). Currently, SURVICE (with our partner Malloy Aeronautics) is developing a family of eVTOL octo-rotor drones designed to achieve assured autonomous resupply of soldiers and marines on the battlefield. The far reach of Mark's efforts can be seen as his team competes in nationwide Military Drone Challenge competitions, where they have won multiple times. He is a local product of Harford County and has invested himself there in many

His efforts have offered workforce education and hiring opportunities for local students and workers in STEM. His focus on STEM has also included teaching math at Harford Community College, leading the way at SURVICE by hiring young, promising minds as interns and supporting STEM field trips at their facility.

Mark's efforts to lead these STEM activities reflects credit upon himself as well as SURVICE and the entire Harford County community.



info@survice.com www.survice.com 410-273-7722









ways.



A SPECIAL CONGRATULATIONS TO GORE ASSOCIATE AND HIS TEAM, DR. VISHNU MARLA, INNOVATOR AWARD HONOREE

Making a meaningful difference in the world and in our community.

To learn more, visit gore.com

GORE, Together, improving life and designs are trademarks of W. L. Gore & Associates. ©2022 W. L. Gore & Associates, Inc.



Let's Shout, School's Out 202

MAGIC "SCIENCE FAIR AND FAMILY FESTIVAL

LEIDOS FIELD AT RIPKEN STADIUM ABERDEEN, MD.

June 11, 2022 11am-4pm

Middle School Science Fair and Free Family Festival!

Science Fair starts at 9 am Magic of Science Festival begins at 11 am

Degin FESTIVAL O MDS PLAYZONE

MIDDLE SCHOOL SCIENCE FAIR (DAM-APM)

INTERACTIVE STEM ACTIVITIES O TECH TALKS

ROBOTS · MAGIC SHOW · CAR SHOW



Scan the QR code or visit

Discovery Center Md.org/magicofscience/
for the very latest information!



CECIL COLLEGE

Educating STEM leaders of the future ...







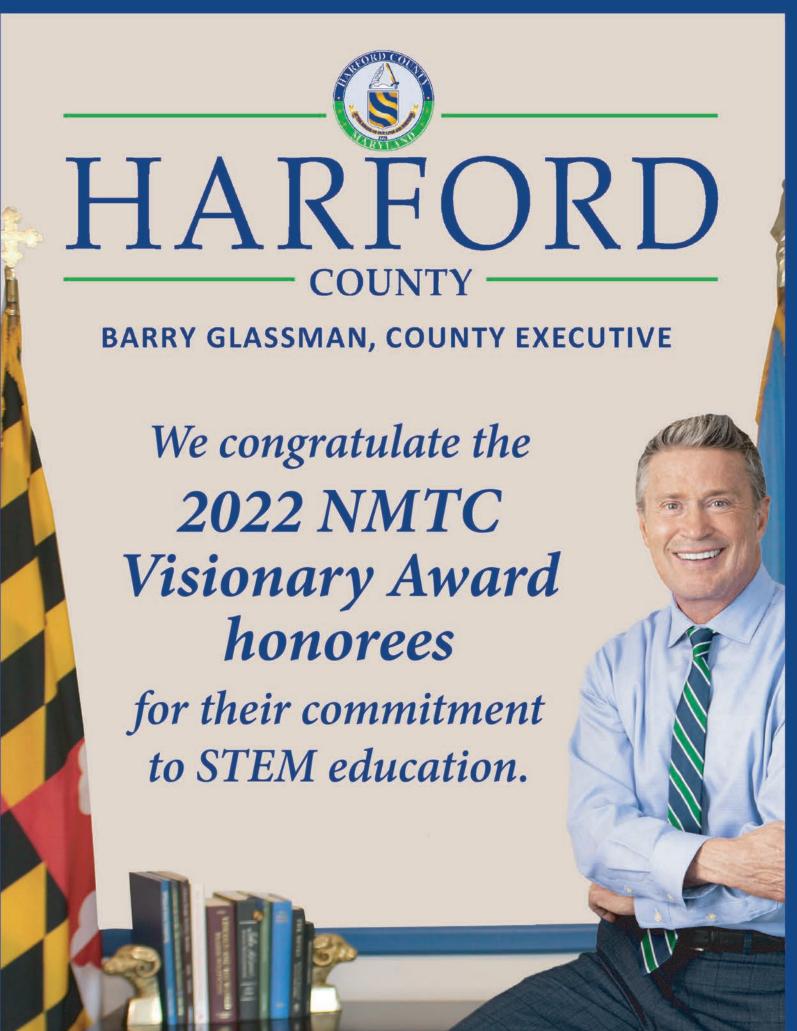
Congratulations to this year's award winners.

Dr. Christy Dryer, Vice President Academic Programs • Visionary Leader Award Brandie Biddy, Assistant Professor • Visionary Mentor Award









SCALE & EQUIPMENT CO., Inc.

We have every type of equipment.

Analytical Balances Bench Scales Calibration Weights **Checkweighing Scales** Counting Scales Crane Scales **Digital Weight Indicators** Floor Scales **Heavy Capacity Balances** Microbalances Moisture Analysis Balances **NTEP Legal for Trade Balances NTEP Legal for Trade Scales Portable Balances Postal Scales Precision Balances** Semi-Micro Balances **Shipping Scales** Weights - Calibration





Your Solution for the Purchase, Calibration, Maintenance, and Installation of Commercial Scales and Weighing Equipment.

American Scale has been serving the Mid-Atlantic area since 1975. With the largest and most experienced group of technicians in the area, we offer peace of mind with 24/7 emergency service for sales, calibration, and repairs. As an Independent Dealer, we offer calibration services on high precision equipment manufactured by A and D, Adam Equipment, Mettler-Toledo, Ohaus, Sartorius, Shimatzu, and others. On the industrial side, we calibrate and repair equipment – from bench scales to truck scales – manufactured by Adam Equipment, Avery Weigh-Tronix, B-Tek Scales, Cambridge Scale Works, Cardinal Scale, CAS, Dillon, Duran, Emory-Winslow, Fairbanks, Hardy Instruments, Intercomp, Mettler-Toledo, Pennsylvania, Rice Lake, Thurman, and others.

Services include assistance with industrial automation, data collection, PLC integration, and weighing system design.

https://amscale.com











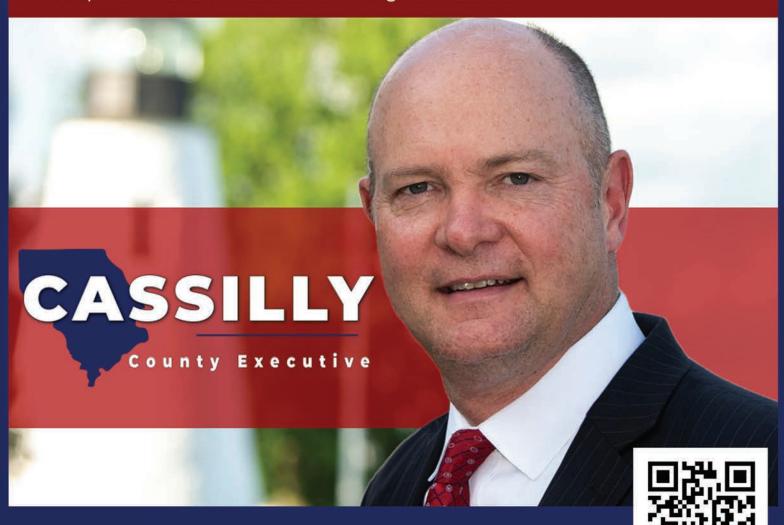
American Scale & Equipment Co., Inc. 8839-D Kelso Drive Baltimore, MD 21221 410-682-2800 https://amscale.com

Integrity. Leadership. Experience.

Harford County stands at an intersection of dynamic change and Bob Cassilly has the leadership and integrity to bridge our traditional values and our progress for the future.

Qualified to Serve

Former Infantry and JAG officer, U.S. Army; Awarded the Bronze Star for Service in Iraq; Awarded the U.S. State Department Superior Honor Award; Graduated from Johns Hopkins University with honors; Maryland State Senator; Small Business Owner; Lifelong Harford County resident; Married for 40 years with five children and six grandchildren.



https://bobcassilly.org

NMTC VISIONARY AWARDS

Celebrating our neighbors, colleagues, family, and friends

for their volunteer efforts to build the Workforce for the Future and advance Technology & Innovation.





Bravuralnc.com