



**Maryland State Department of Education
Division of Career and College Readiness**

**2017
Career and
Technology Education
(CTE)
Awards of Excellence**

**Holiday Inn Inner Harbor
Baltimore, Maryland
April 25, 2017**





Karen B. Salmon, Ph.D.
State Superintendent of Schools

Andrew R. Smarick
President, Maryland State Board of Education

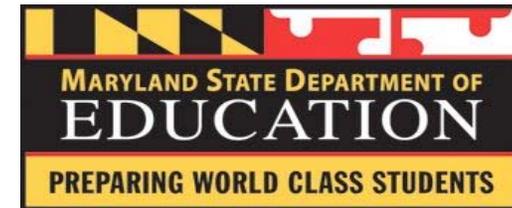
Larry Hogan
Governor

For more information, please visit:

www.MarylandPublicSchools.org

www.MDCTEPrograms.org

www.MDCTEData.org



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410 767-0100 410 333-6442 TTY/TDD
marylandpublicschools.org

Special Thanks to our Emcee

Dr. Anne Spence

Professor of the Practice, Mechanical Engineering
Director of Engineering and Computing Education

UMBC
AN HONORS UNIVERSITY IN MARYLAND



Dr. Anne M. Spence is a leader in engineering education in the state of Maryland and across the country. An active member of both the American Society for Engineering Education (ASEE) and the American Society of Mechanical Engineers (ASME), she is the chair of the ASME K-12 Committee working to connect both students and teachers to content and careers in Mechanical Engineering. She also serves as the Director for the Project Lead the Way Pre-engineering program for the state of Maryland.

SPECIAL THANKS

2017 MSDE/CTE AWARDS COMMITTEE

Patricia Mikos, Awards Committee Chair, CTE Student and Assessment Services Branch

Miranda Hill, Office of the Assistant State Superintendent

Mary O'Connor, CTE Systems Branch

Jennifer Griffin, CTE Instructional Branch

The following persons also contributed to this event:

Michael Beck, Diana Hegmann, Teresa Shank, and Charles Wallace

CTSO Student Officer Escorts:

MD FFA — **Ellie Grossnickle**, President
Kelcey Trewin, Vice President

MD FBLA — **Sophie Sun**, Past President
Tiffany Jackson, President

MD DECA — **Todd Del Tufo**, President

SkillsUSA Maryland — **Laila Mirza**, President

Flowers provided by:

Linganore High School Horticulture Students

Frederick County Public Schools

Photographer:

Richard Lippenholz Photography

rlipp99@comcast.net

WELCOME TO
**THE MARYLAND STATE DEPARTMENT OF EDUCATION
DIVISION OF CAREER AND COLLEGE READINESS
CAREER AND TECHNOLOGY EDUCATION (CTE)
AWARDS OF EXCELLENCE**

April 25, 2017 from 4:30 p.m. to 6:30 p.m.

The Holiday Inn Inner Harbor Hotel

AGENDA

4:30 p.m. **Registration and Reception**

5:30 p.m. **Awards Ceremony**

Welcoming Remarks

Dr. Karen B. Salmon
State Superintendent of Schools
Maryland State Department of Education

Dr. Lynne M. Gilli
Assistant State Superintendent
Division of Career and College Readiness

Presentation of Awards of Excellence:

Dr. Anne Spence
Professor of the Practice, Mechanical Engineering
University of Maryland—Baltimore County (UMBC)

Concluding Remarks:

Dr. Lynne M. Gilli
Assistant State Superintendent
Division of Career and College Readiness



OUTSTANDING CTE MARKETING
CAMPAIGN - POSTSECONDARY

CYBERSECURITY PROGRAM

Frederick Community College

Congratulations to Maryland Retirees in 2017



Maggie Caples

51 Years of Service

Baltimore County

Public Schools



Rebecca Walker

16 Years of Service

Cecil College

The FCC Cybersecurity program prepares graduates for a career in cybersecurity, such as information security analyst, information technology auditor, network security engineer, and information assurance engineer. This program covers technologies, techniques, and tools required to identify and respond to threats and vulnerabilities in cyber systems. This program also prepares graduates for professional industry certifications, including A+, Net+, Security+, Certified Ethical Hacker (CEH), Certified Information Systems Security Professional (CISSP), and Certified Information Security Auditor (CISA).

The Cybersecurity program marketing campaign uses an integrated communications approach to highlight the regional workforce need for cybersecurity professionals. Through a mix of print, video, and social media, the public is made aware of the range of positions within the field of Cybersecurity. The campaign connects national news about the problem of cybersecurity data breaches with a local solution that strengthens the community and its workforce. Advertising circulated across multiple platforms targeting behavior, interest and demographics. This included high profile advertisements on the hacker-themed television show *Mr.Robot*, insertion into the military publications on Ft. Detrick, and digital advertising of videos, banners, keywords, and search terms.

In less than two years, Cybersecurity enrollment has increased more than 300%, with each semester eclipsing the previous. Students show excitement for learning and pride in their chosen field of study. Current students in the Cybersecurity program include representation of young adults, adult students, minority students, and student veterans. The Cybersecurity program invites diverse students who share a common passion for information technology and cybersecurity, and it extends the IT field to be inclusive of all learners.



OUTSTANDING CTE
MARKETING CAMPAIGN -
SECONDARY

Dr. James A. Forrest
Career and Technology Center
St Mary's County Public Schools

The Dr. James A Forrest Career and Technology Center (CTC) currently enrolls 1,017 students in grades 9-12. Recruitment and support for these students is supported by one counselor, Ms. Diana Kraft. Diana has launched several recruitment initiatives and produced marketing materials to highlight CTE programs. As a result, enrollment at the Forrest CTC has increase over the last two school years. Diana's work with marketing has also supported an increase in students access to value-added opportunities through industry certifications and articulated college credit.

The Dr. James A. Forrest Career and Technology Center uses a variety of initiatives to market CTE. The first of which is the annual Forrest Center Tech Expo. The Expo provides students and parents an opportunity to meet the staff and to learn about the 24 CTE programs. Forrest Center students are also on-hand to perform demonstrations and to answer questions. Secondly, the Forrest Center Staff conducts video tours at each of the county high schools. All 9th and 10th grade students attended presentations, and staff review the application and selection process for CTE programs. The Forrest Center Video was created by students in the Video Productions Program. As a part of the presentation, staff also discuss the benefits of CTE programs including: industry certification, early college credits, and work-based learning opportunities.

The goal of any Career and Technology Center is to prepare students to be college and career ready upon graduation. The Forrest Center invites representatives from the local community college along with a variety of other 2 and 4 year post-secondary schools to present to our students their options upon graduation. As a result of the CTE program, these graduates have a clear path to additional training and experience in their chosen career field.

NATIONAL CANCER INSTITUTE'S
WERNER H. KIRSTEN
STUDENT INTERN PROGRAM

Partnership with Frederick County Public Schools (FCPS)



NATIONAL CANCER INSTITUTE
NCI at Frederick

For more than 27 years, the National Cancer Institute (NCI) has partnered with FCPS to provide internships and other learning experiences for students. This partnership has provided opportunities for over 1,000 students to work alongside nationally known scientists on cutting edge diagnostic tests and treatments. Currently, students enrolled in Biotechnology, Cisco IT Networking, and the Academy of Health Professions participate in STEM related experiences from laboratory research to administrative management in a health care environment.

Through the partnership with NCI, students have a range of opportunities, including an annual National Educational Symposium for Biomedical Sciences, a summer program for mathematics and science (GEMS), and technology internships for CISCO IT Networking students. Student interns also present their work twice yearly to scientists and guests. NCI also invites students to a monthly Lecture Series on Exploring Careers in Health and Science where local scientists discuss their career paths and recent research. Scientists are frequent guest speakers in many CTE classrooms and several NCI employees serve on the FCC/FCPS Advisory Council.

In addition to the human resource benefits of the partnership, NCI also provides instructional materials to support keeping programs current. NCI is generous in donating lab materials and computers for student use. The internship experience has propelled students to win national awards, scholarships and admission to prestigious universities such as MIT, Stanford, Cal Tech and Harvard. In the past 10 years, CTE interns won awards at the FCPS Science and Engineering Fair and many have gone on to compete in the Intel International Science and Engineering Fair.

OUTSTANDING BUSINESS PARTNERSHIPS
POSTSECONDARY

MARYLAND STATE POLICE

Partnership with Frederick Community
College



Frederick Community College (FCC) has a long history of collaboration with local law enforcement agencies to enhance educational opportunities for officers. The Criminal Justice program and the Maryland State Police Academy have worked over the years to expand training and degree options for officers. The Associate of Applied Science (A.A.S.) degree in Police Science offered in conjunction with the Maryland State Police (MSP) Academy is a result of that effort.

The Maryland State Police (MSP) guided the development of a program that meets regulations governing both the Maryland Police Training Commission (MPTC) and the Maryland Higher Education Commission (MHEC). Students meet the objectives for the Training Commission Curriculum Guide and the Core Learning Outcomes from the courses in the Criminal Justice program. The result was an A.A.S. degree embedded in an expanded and enhanced police academy.

The AAS degree in Police Science promotes a highly professional police force by integrating general education coursework with the major components of the criminal justice process learned while attending the Police Academy. Since the inception of FCC's Police Science Degree program, more than 250 Troopers have graduated with an A.A.S. degree.

The partnership with the MSP advances the college's efforts to prepare students to meet the challenges of a diverse, global society. The ever-growing population of our state requires increasing numbers of law enforcement officers to be skilled at problem-solving, conflict resolution, and diversity awareness. This degree provides a bridge for law enforcement personnel wishing to continue their higher education for professional advancement, prepares agency-based recruits for positions as Troopers, and provides opportunities for transfers to a Baccalaureate program.

OUTSTANDING CTSO

SkillsUSA—

Worcester Technical High School



Worcester Technical High School (WTHS) SkillsUSA is a school-wide chapter. All CTE programs are included in chapter competitions, leadership development, and community service activities.

Led by the officer team, student sub-committees accomplish the SkillsUSA Plan of Work for the year, including community service activities. Recent community service projects include direct service and fundraising to support numerous groups, such as *Adopt a Family* during the holidays, *Warm Hearts & Hands* project for needy families, *Student-2-Student* mentoring, *Adopt a Highway*, and fundraising for the *United Way*. One member of this chapter was recognized by the school district with the Jefferson Award. Eric Rimel, a SkillsUSA nursing program student, who is also a Type 1 diabetic, raised over \$40,000 for Camp Possibilities, a camp in Maryland for children with diabetes.

Each year, SkillsUSA officers and members also help with school Expos and tours. These students also serve as ambassadors for Worcester Tech at their home schools and in the community. In the past few years, this has expanded to include weekend open houses and competitions so more families could learn about the range of CTE programs in the school. As a result, membership has increased 54% from 129 members in 2013-2014 to 280 student members in 2016-2017. This year, 132 students competed in 38 contests with 32 community and industry partners serving as judges.

This chapter has also increased student success at the SkillsUSA Maryland State Championships. In 2016, 92 students competed in 43 contests. Worcester Tech had 53 students win medals (58%). This was the most medals and the most first place winners of any county in Maryland. Students success at the National Championships has improved as well. Last year there were two national second place winners with 15 of the 28 students that competed in Louisville placing in the top 10. Over the past three years since this chapter has won 8 national medals.



OUTSTANDING CHANGE AGENT -
POSTSECONDARY

MR. KARL BINNS JR.

University of Maryland—Eastern Shore
(UMES)

Mr. Karl Binns Jr. is the Coordinator of Recruitment, Retention and Experiential Learning in the School of Agriculture and Natural Sciences at UMES. In addition to organizing career fairs, campus visits, and other activities to engage students, Mr. Binns serves as an advisor for Minorities in Agriculture Natural Resources and Related Sciences (MANRRS). Mr. Binns also established 8 Junior MANRRS chapters across the state.

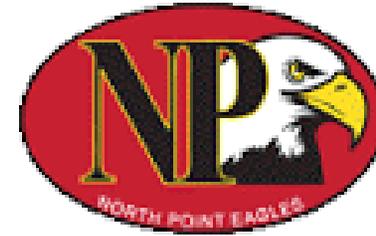
Mr. Karl Binns, Jr. promotes careers in agriculture, natural resources and science as the recruitment coordinator and MANRRS advisor for UMES. In addition, he serves on numerous boards, including the Maryland Council on Ag Education, the Baltimore City Extension Advisory Board, and the Prince George's County Ag and Environmental Science Advisory Board.

Through partnerships with business and government, such as Perdue Farms, John Deere, Merck Animal Health, USDA, and the Department of Natural Resources, students are provided a wide range of internships and scholarships. Karl has worked to rebuild the many agricultural education components at the UMES and is working to build Jr. MANRRS programs in underserved areas. Just a few of his recent awards include: MANRRS Chapter of the Year, National Advisor of the Year, and the Maryland Out of School Time (MOST) Network- Champion of Change Hero Award.

As a result of his efforts, enrollment in the UMES Department has tripled in the last few years. More students are taking advantage of the amazing opportunities in the field of agriculture and natural resources. We are pleased to honor him tonight as the 2017 CTE Change Agent - Postsecondary.

OUTSTANDING CTE PROGRAM - SECONDARY
GRAPHIC COMMUNICATIONS (PrintED)

Charles County Public Schools



The Graphic Communications (PrintED) program at North Point High School (NPHS) is a highly competitive and rigorous program. Students gain an overall understanding of the industry and develop the practices that will enable them to advance in the career and/or successfully pursue further studies at a college or university. Students earn industry certification in several areas, including Graphic Communications, Digital File Prep/ Output, Digital Print Production and Graphic Design. This program is currently one of the most sought after programs in Charles County – ranking 3rd in applications out of the 21 programs at NPHS.

The Graphic Communications program recently went through an extensive evaluation processes to attain recertification with PrintED. The instructor leading the process and demonstrating the high standards of the program is Chris Gilbert. Mr. Gilbert also works with the program advisory group to ensure standards are met. His strong connection to industry partners assists students in not only the content but in workforce placement and post-secondary education. Graphic Communications students have 100% graduation, completion and placement rate. All students in the past three years have attended a 2 or 4-year University. Many of the program graduates are now successfully employed in the industry.

In Southern Maryland, Graphic Communications is the 2nd fastest area of growth in specialty and wide format printing. To align to industry standards, the program added a new printer and screen printing press. This program exemplifies the school system goal to "*Increase student achievement and close achievement gaps by utilizing the integration of best practices in technology and instruction.*" The Graphic Communications (PrintED) program is a leader in engaging students and expanding opportunities for CTE graduates.



OUTSTANDING CTE PROGRAM -
POSTSECONDARY

**ARCHITECTURE AND
INTERIOR DESIGN**

Anne Arundel Community College

Anne Arundel Community College's (AACC) Architecture and Interior Design program is one of the first and oldest two year architecture program in the country, and will celebrate its 50th anniversary in 2018. It is a unique, award winning program among community colleges. The program meets the needs of the entry-level design professional while also serving as a transfer program for its 326 students.

Aligned to industry expectations, the Architecture and Interior Design program integrates comprehensive exit portfolios for all students to showcase their skills. The department has a variety of student assessment strategies to insure mastery of both academic and technical skills, including a range of design contests. These contests are judged by out of state professionals and mirror the same learning outcomes for design graphic communications that are utilized in the classroom. Since 2009, AACC students have won a total of 81 awards; 7 national, 36 State, and 38 Regional awards.

The department also partners with the Anne Arundel County Public Schools to offer students early college credit options. The articulated credit program, has been in existence since 2002 and since that time, 68 students have been awarded a total of 327 articulated college credits.

The program combines unique studio-based interactive assessment models along with service learning providing students real-life community service projects. By having a department made up of active licensed, practicing professionals, students learn from those who know best-those who "do" and practice the profession every day. Approximately 75% of the college students completing the program successfully transfer with remaining 25% entering the workforce. The vast majority of the students do both: starting their required internship and transferring to complete their studies.



OUTSTANDING CHANGE AGENT -
SECONDARY

MR. JOE SHOWACRE

COLLISION REPAIR PROGRAM

Parkside Career Technology Center

The Collision Repair program at Parkside CTE prepares students to excel in the collision repair industry. At the core of the program is a strong focus on students meeting industry standards, using current technology and materials, and working in a full service collision repair facility.

Under the direction of Joe Showacre, the program is an EPA certified Green Shop, ASE certified, and NATEF approved. As such, students are provided the opportunity to earn several industry certifications to advance in their career pathway. As a full service collision repair facility, students also gain real-world experience.

Mr. Showacre uses national standards (ICAR curriculum) and pushes students to achieve industry certification. He works each year to keep current on new instructional modules and he shares his expertise with other instructors across the country. During the summer, Mr. Showacre supports MSDE professional development with specific sessions on topics such as the use of 3M materials in the repair and refinishing of plastic bumpers and panels and the use of pulse welders to repair aluminum on modern vehicles.

As a result of Mr. Showacre's leadership and collaboration with industry partners, a new down-draft paint booth and paint mix room for waterborne paints was installed. He partnered with DuPont and Pro-Finishes to replace all paints and pigments with waterborne paints, he secured a virtual paint finishing system, and has purchased several pulse and multisport welding machines.