



# Graduation Celebration for the Clean Technologies & Sustainable Industries Early College High School *Class of 2015*

June 10, 2015  
TEC-SMART  
345 Hermes Road, Malta NY

**June 10, 2015  
8:30 AM—10:30 AM**

### ***Introduction and Welcome***

**Joseph P. Dragone, Ph.D.**, Superintendent of Schools  
*Ballston Spa Central School District*

**Andrew J. Matonak, Ed.D.**, President  
*Hudson Valley Community College*

### ***Welcome from Sponsors***

**David M. Stackrow**, Board Chairman,  
*Capital District Transportation Authority (CDTA)*

**Derek Basile**, Vice President of Finance & CFO  
*Finch Paper, LLC*

### ***Speakers***

**Hon. Carrie Woerner**, Assemblywoman  
*NYS Assembly District 113*

**Marilyn J. Smith, MPA**, Economic Development Liaison  
*Congressman Paul Tonko (NY-20)*

**Emily Reilly**, Senior Director of Human Resources  
*GLOBALFOUNDRIES*

**Johanna Duncan-Poitier**, Senior Vice Chancellor for Community Colleges  
and the Education Pipeline *State University of New York (SUNY)*

### ***JPMorgan Chase & Co. Announcement***

**David Horan**, Regional Executive, Middle Market Banking in Western and  
Eastern Upstate New York/Western New England

### ***Scholarship Presentations***

**Katie Lesko**, Senior Associate Director of Admissions  
*Siena College*

**Greg Laird**, Vice President and Principal  
**Jeffrey S. Frankel**, Vice President and Principal  
*Astria Solutions Group*

### ***Reflections***

**Tyler Schmidt**, Student Representative  
**Darrel Ackroyd**, Senior Teacher

### ***Distribution of Cords***

**Laurel Logan-King**, Assistant Superintendent for Curriculum  
**Diane Irwin**, Program Director, Clean Technologies & Sustainable Industries  
Early College High School  
**Theresa Lewis**, Junior and Senior Teacher  
*Ballston Spa Central School District*

### ***Junior & Senior Capstone Project Exhibition, Networking & Refreshments***

Atrium



## **Board of Champions**

**Mary Burke**  
*Manager of Special Projects, NYSEDA*

**Robert Callender**  
*Vice President, TRC*

**Joseph P. Dragone, Ph.D.**  
*Superintendent of Schools, Ballston Spa Central School District*

**Michael J. Hickey**  
*Executive Director and Executive in Residence  
Center for Innovation and Entrepreneurship, Siena College*

**Michael Ladd**  
*Account Executive, Cisco*

**John LaRow**  
*Vice President, Gilbane*

**Laurel Logan-King**  
*Assistant Superintendent for Curriculum, Assessment & Pupil Services  
Ballston Spa Central School District*

**Andrew J. Matonak, Ed.D.**  
*President, Hudson Valley Community College*

**Daniel T. Pickett III**  
*CEO, nrastructure*

**Mike Russo**  
*US Government Relations & Regulatory Affairs,  
GLOBALFOUNDRIES*

**F. Michael Tucker**  
*Past President, Center for Economic Growth*

**Daniel Woodside**  
*Executive Principal/Vice President, CSArch*



Tyler Woodside



*Home School: East Greenbush CSD*

**Future Plans:**  
SUNY Adirondack

**Major:**  
Geology

**Capstone Project:**  
**Graphene Gas Cap MFR. CO.:** Cone shaped device to block and disperse gasses from a large mining explosion.

Zachary Young



*Home School: East Greenbush CSD*

**Future Plans:**  
Hudson Valley Community College

**Capstone Project:**  
**Super-Man Undercoating:** Vehicle undercoating infused with graphene for a stronger coating to prevent rust.

### Thank You to our Sponsors



### Ballston Spa Central School District Board of Education

Kevin Schaefer, *President*  
Susan Filburn  
Nancy Fodera  
Tony Leva

Daniel Cramer, *Vice President*  
Jeanne Obermayer  
Christine Richardson



### 2015 Graduates

Austin Antis	Sarah Meisel
Michael Bove	Robert Merrill
Alexander Brown	Jason Mertens
Anthony Carroll	Anthony Meyre
Riley Cook	Isaiah Minick
Kelshonda Crawford	Michael Mix
Alex Dantz	Christian Mulrain
Kali DeMarco	Anthony Neach
Alex Demetreus	Michael Nitchman
James Foote	John W. Oevering
Jacob Fortin	Kayla Orapello
Chris Fritch	Michael Petruccelli
David Gergich	Isabel Pottinger
August Gerrain	Adam Rasmussen
Domonic Graham	Michaela Regner
Matthew Hessney	Travis Rougie
Edwin Hicks	Dylan Schermerhorn
James Hilson	Tyler Schmidt
Taylor Hines	Stephen Smero
Caleb Hulett	Andrew Starace
William Joslyn	Kevin Terleckey
Dalton Kayser	Danielle Touponse
Ethan Kipp	Morgan Treacy
Adam Kump	Alex Turoski
Anthony Levine	Alexis VanBuren
Charles Levine	Kayla VanBuren
Noah Marek	Ben Walker
Spencer Mayo	Tyler Woodside
Noah Maziejka	Zachary Young





Austin Antis



*Home School: Fonda-Fultonville CSD*

**Future Plans:**  
Hudson Valley Community College

**Capstone Project:**  
**System Scanner Problem Solver:** Screen incorporated in your car to let you know when problems arise with your car and can advise you.

Michael Bove



*Home School: Mechanicville CSD*

**Future Plans:**  
Siena College

**Major:**  
Finance/Political Science

**Capstone Project:**  
**NanoVote:** Voting machines connected to servers that offer real time results of elections.

Alexander Brown



*Home School: Stillwater CSD*

**Future Plans:**  
Hudson Valley Community College

**Capstone Project:**  
**Nano-Military Solutions:** Lightweight shirt & suit worn by military personnel in battle to track body movement, impact, and vitals of soldiers to a command center.

Anthony Carroll



*Home School: Ballston Spa CSD*

**Future Plans:**  
SUNY Polytechnic Institute

**Major:**  
Mechanical Engineering Technology

**Capstone Project:**  
**Active Air Suspension Components:** Bicycle suspension support system for a smoother and safer ride over various terrains

*Home School: East Greenbush*

**Future Plans:**  
SUNY Oswego

**Major:**  
Business Communications and Marketing

**Capstone Project:**  
**HeadSmart:** Nanowires incorporated in a headband to measure impact of soccer players head ball and relay information wirelessly to trainer or coach for possible concussion.

*Home School: Burnt Hills-Ballston Lake CSD*

**Future Plans:**  
Western New England University

**Major:**  
Biomedical Engineering

**Capstone Project:**  
**M.y S.olution:** Multifaceted treatment to reverse the demyelination process caused by MS and protect the areas that have been regenerated.

*Home School: Burnt Hills-Ballston Lake CSD*

**Future Plans:**  
Western New England University

**Major:**  
Biomedical Engineering

**Capstone Project:**  
**Chip-Insula:** Bio-artificial pancreas-on-a-chip.

*Home School: Ballston Spa CSD*

**Future Plans:**  
University of Rochester

**Major:**  
Chemical Engineering

**Capstone Project:**  
**SmartShield:** Utilizing nanoparticle coatings on windshields in order to enhance durability, appearance, and benefit to the driver.

Alex Turoski



Alexis VanBuren



Kayla VanBuren



Ben Walker





Andrew Starace



*Home School: Saratoga CSD*

**Future Plans:**  
Keene State College

**Major:**  
Geology

**Capstone Project:**  
**SilverScavenger:** Water purification system for wells that uses nanoscavengers to eliminate bacteria.

Kevin Terleckey



*Home School: Broadalbin-Perth CSD*

**Future Plans:**  
Utica College

**Major:**  
History

**Capstone Project:**  
**FaceSaver:** Slow release brake system for Longboards that help eliminate speed wobbles, crashes, and injuries.

Danielle Touponse



*Home School: Catskill CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Environmental Science

**Capstone Project:**  
**Synthetic Insulin Receptor:** Device for humans with type II diabetes.

Morgan Treacy



*Home School: Ballston Spa CSD*

**Future Plans:**  
SUNY Oswego

**Major:**  
Zoology

**Capstone Project:**  
**ReinventStem:** Buckyballs with engineered DNA to use to retrieve stem cells for medical research & testing.

*Home School: Fonda-Fultonville CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Mechanical Engineering Technology

**Capstone Project:**  
**Nano Carbon Parts:** Carbon nanotube infused R/C parts for increased strength and durability.

*Home School: Ballston Spa CSD*

**Future Plans:**  
Hudson Valley Community College

**Capstone Project:**  
**TechnoSafe:** Car monitoring system to provide information about the vehicle & its passengers and in the event of an accident it will provide increased data to emergency personnel.

*Home School: Stillwater CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Network Engineering

**Capstone Project:**  
**Hydroelekrphobic:** Hydrophobic electronic computer parts from laser etching patterns similar to the petal of the lotus plant.

*Home School: Mechanicville CSD*

**Future Plans:**  
Green Mountain College

**Major:**  
Renewable Energies & Ecological Design

**Capstone Project:**  
**N.P.B.:** Graphene infused particle board for building.

Riley Cook



Kelshonda Crawford



Alex Dantz



Kali DeMarco





Alex Demetreus



*Home School: Ballston Spa CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Architecture Technologies

**Capstone Project:**  
**Nano free:** Water purifier that uses nano bubbles.

James Foote



*Home School: Fort Ann CSD*

**Future Plans:**  
SUNY Adirondack

**Major:**  
Medical Engineering Technologies

**Capstone Project:**  
**G-Suit:** Motorcycle suit that incorporates nanoparticles of graphene to protect riders.

Jacob Fortin



*Home School: Saratoga CSD*

**Future Plans:**  
Lyndon State College

**Major:**  
Broadcast/Meteorology

**Capstone Project:**  
**SmartCollarK9:** Pet collar incorporating GPS, medical history, contact information, nearest vet offices, remote electric fence, and LED stress display level for the most beloved family pets.

Chris Fritch



*Home School: Schuylerville CSD*

**Future Plans:**  
St. John Fisher College

**Major:**  
Accounting/Finance

**Capstone Project:**  
**Duraspin Golf:** Nano-material coating for golf wedges to prolong the life & effectiveness of wedge face grooves.

*Home School: Ballston Spa CSD*

**Future Plans:**  
Motlow Community College

**Major:**  
Physical Science

**Capstone Project:**  
**EverGlass:** Nanoinfused glass that has self-healing qualities for electronic devices.

*Home School: South Glens Falls CSD*

**Future Plans:**  
Clarkson University

**Major:**  
Mechanical Engineering

**Capstone Project:**  
**Nexhaust:** CO2 scrubber for car exhaust systems that attaches to any tailpipe and turns CO2 into less harmful sodium carbonate.

*Home School: Ballston Spa CSD*

**Future Plans:**  
The College of Saint Rose

**Major:**  
Music Industry

**Capstone Project:**  
**Patches 2.0:** Medicine patch coated with a dry medicine or vaccine that will reduce both the pain of shots and price.

*Home School: Saratoga CSD*

**Future Plans:**  
University of South Carolina

**Major:**  
Computer Engineering

**Capstone Project:**  
**BotaBandage:** Nanoparticles embedded into bandages to reduce the amount of healing time.

Travis Rougie



Dylan Schermerhorn



Tyler Schmidt



Stephen Smero



Michael Petrucci



*Home School: Catskill CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Electrical Construction and Maintenance

**Capstone Project:**  
**Eco system saving blade:** Frequency turbine blade to save lives.

Isabel Pottinger



*Home School: Albany CSD*

**Future Plans:**  
Cornell

**Capstone Project:**  
**Juhend NanoInjection:** The buckyballs will be injected into the patient and allowed to travel to the target cell. The magnet will cause the buckyballs to decompose and will be benign in the patient's system.

Adam Rasmussen



*Home School: Broadalbin-Perth CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Civil Engineering

**Capstone Project:**  
**TEG30-CREATOR:** Small generator that produces up to 30 volts of electricity for electronics while camping.

Michaela Regner



*Home School: South Glens Falls CSD*

**Future Plans:**  
SUNY Adirondack

**Major:**  
Forest Tech

**Capstone Project:**  
**Moop Hoop:** Magnetic therapy hula hoop for natural healing.

*Home School: Schalmont CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Civil Engineering

**Capstone Project:**  
**CNTcrete:** Carbon nanotube infused concrete to improve strength and flexibility.

*Home School: Coxsackie-Athens CSD*

**Future Plans:**  
SUNY Plattsburgh

**Capstone Project:**  
**Augmentor 3.0:** Athletic performance shirt that tracks muscle movement and contractions to obtain maximum performance and reduce injury.

*Home School: Ballston Spa CSD*

**Future Plans:**  
US Army National Guard

**Capstone Project:**  
**Projection 3.0:** Holographic phone

*Home School: East Greenbush CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Individual Studies

**Capstone Project:**  
**The Panacea System:** Surgical system incorporating nanobots and swarm robotics to precisely manipulate the atomic bonds in the body to repair, remove and alter various body ailments.



David Gergich



August Gerrain



Domonic Graham



Matthew Hessney



Edwin Hicks



*Home School: Burnt Hills-Ballston Lake CSD*

**Future Plans:**  
Binghamton

**Capstone Project:**  
**Ecoskyn:** Conductive paint for trains to produce and sustain energy for transportation.

James Hilson



*Home School: Ballston Spa CSD*

**Future Plans:**  
US Army National Guard

**Capstone Project:**  
**NanoBall:** Airless soccer ball

Taylor Hines



*Home School: Mechanicville CSD*

**Future Plans:**  
SUNY Polytechnic Institute

**Major:**  
Electrical Engineering Technology

**Capstone Project:**  
**MightyWire:** Graphene coated braces that will increase strength and reduce the size of braces.

Caleb Hulett



*Home School: Ballston Spa CSD*

**Future Plans:**  
Monroe Community College

**Major:**  
Nursing

**Capstone Project:**  
**Relay:** Sensory system to recognize possible "panic" levels that could be used to recognize PTSD or other panic disorders.

*Home School: Scotia Glenville CSD*

**Future Plans:**  
United States Army

**Capstone Project:**  
**Nano beats by Neach:** Nano tech speakers increasing sound quality.

*Home School: Ballston Spa CSD*

**Future Plans:**  
SUNY Adirondack & Paul Smiths College

**Major:**  
Wildlife Management

**Capstone Project:**  
**NanoLine:** Biodegradable fishing line reinforced with carbon nanotubes.

*Home School: Fonda-Fultonville CSD*

**Future Plans:**  
Utica College

**Major:**  
Cyber Security

**Capstone Project:**  
**Hydra Fire:** Fire-fighting Smart helmet to increase safety of the fireman, efficiency of fighting fires and to reduce line of duty deaths.

*Home School: Broadalbin-Perth CSD*

**Future Plans:**  
University at Albany

**Major:**  
Prelaw

**Capstone Project:**  
**NanOven:** Oven with nanosensors and cantilevers that accurately sense & control heat remotely. It is self-cleaning with a super hydrophobic spray which can be controlled by Bluetooth which can cool to fridge temperature.

Anthony Neach



Michael Nitchman



John W. Oevering



Kayla Orapello



Anthony Meyre



*Home School: Ballston Spa CSD*

**Future Plans:**  
Hudson Valley Community College

**Capstone Project:**  
**Nano Pack:** Hiking backpack that incorporates carbon nanotubes in the shell to increase durability while decreasing weight.

Isaiah Minick



*Home School: Stillwater CSD*

**Future Plans:**  
SUNY Delhi  
**Major:**  
Business and Technological Management

**Capstone Project:**  
**Bye Rot:** Coating for car tires to help fight oxidation and dry rot.

Michael Mix



*Home School: Ballston Spa CSD*

**Future Plans:**  
Employment

**Capstone Project:**  
**Nano processor:** Faster processor for computers.

Christian Mulrain



*Home School: Ballston Spa CSD*

**Future Plans:**  
Hudson Valley Community College  
**Major:**  
Computer Information Systems

**Capstone Project:**  
**Quantum Leap Computing:** Computer that uses liquid helium in a refrigeration unit to cool the computer and allow faster processing.

*Home School: Saratoga CSD*

**Future Plans:**  
SUNY Adirondack

**Capstone Project:**  
**Lincoln Nano Candles:** Nano capsule infused candles.

*Home School: Ballston Spa CSD*

**Future Plans:**  
Hudson Valley Community College  
**Major:**  
Mechanical Engineering

**Capstone Project:**  
**STS Stronger Than Steel:** Graphene infused vehicle chassis for increased safety of occupants of the vehicle.

*Home School: Stillwater CSD*

**Future Plans:**  
Utica College  
**Major:**  
Communication

**Capstone Project:**  
**Khonsu Security:** Air traffic control sensor system and remote control to improve safer travel of airplanes and the safety of passengers in the air.

*Home School: Ballston Spa CSD*

**Future Plans:**  
SUNY Adirondack  
**Major:**  
Marketing

**Capstone Project:**  
**Paint Removing Gel:** Professional paint remover for canvas and other surfaces to remove layers of paint.

William Joslyn



Dalton Kayser



Ethan Kipp



Adam Kump





Anthony Levine



*Home School: Broadalbin-Perth CSD*

**Future Plans:**  
Clarkson University

**Major:**  
Aeronautical Engineering

**Capstone Project:**  
**A Faster Tomorrow:** Aerogel that is applied to airplanes to reduce drag and stress on the plane.

Charles Levine



*Home School: Schuylerville CSD*

**Future Plans:**  
College of Saint Rose

**Major:**  
Finance/Business Administration

**Capstone Project:**  
**NaNo Smell:** Machine that applies nanoparticles to help smellproof and waterproof shoes.

Noah Marek



*Home School: Ballston Spa CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:** Business Administration

**Capstone Project:**  
**NanoConserve:** Construction material that incorporates nanoparticles.

Spencer Mayo



*Home School: Stillwater CSD*

**Future Plans:**  
Utica College

**Major:**  
Communication Broadcast/  
National Guard

**Capstone Project:**  
**OTH Radio:** Radio wave transmitter using nanotechnology to increase coverage.

*Home School: Waterford-Halfmoon UFSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Radiology

**Capstone Project:**  
**Carbon Shox:** Basketball shoe introducing new materials that help reduce ankle injuries.

*Home School: Mechanicville CSD*

**Future Plans:**  
Cedarville University

**Major:**  
Mechanical Engineering/  
Biomedical Engineering

**Capstone Project:**  
**C3 Prosthetics:** A home therapy program that helps amputees with prosthetics.

*Home School: East Greenbush CSD*

**Future Plans:**  
Siena College

**Major:**  
Computer Science

**Capstone Project:**  
**TECHNOsole:** Nanosilver infused shoe insert to absorb sweat and kill odor particles.

*Home School: Ballston Spa CSD*

**Future Plans:**  
Hudson Valley Community College

**Major:**  
Computer Science

**Capstone Project:**  
**Central Nano Processing Unit:** Computer chip with graphene transistors.

Noah Maziejka



Sarah Meisel



Robert Merrill



Jason Mertens

