

Accolades and Awards

Foundation Board of Directors, March 15, 2018; Board of Trustees, March 16, 2018

Student Honors & Awards



Zebracorns win judge's award at regional event

Congratulations to The Zebracorns Robotics team for winning the Judge's Award at the Palmetto Regional Event. Shared the team, "Although our robot experienced some technical difficulties during the Palmetto Regional Event, we were able to take massive leaps in terms of progressing our design and functionality."

Students bring home awards in Japanese Language contest

A number of NCSSM students participated in the 16th Annual North Carolina Japanese Language Speech Contest For High School Students on Saturday, March 3. Pictured, from the right, are: Anna Yokote, Alexia Woodward, and Annabelle DiLustro. Anna Yokote won the 3rd place of the level 3, and Kelse McAdon won the 2nd place of level 1.

Students Succeed in College of Charleston Math Meet and Programming Contest

Nine NCSSM students competed in the College of Charleston Math Meet and Programming Contest last weekend--all nine scored in the top 20% of students who took the Math Level 3 Written Test. A total of 158 students took the Level 3 test, and NCSSM earned the following distinctions:

Varsity Team Elimination: 1st Place

Written Test Level 3: 1st Place (Abhijit Gupta) Written Test Level 3: 2nd Place (Aman Singh) Written Test Level 3: 3rd Place (Hahn Lheem)

Written Test Team Level 3: 1st Place

In the Programming Contest, 32 teams competed, and our two teams came in 1st and 3rd!

1st place: Alex Dastin, Daniel Carter, Hahn Lheem

3rd place: Josh Abrams, Abhijit Gupta, Pierre-Nicholas Perrin

Team takes second in State Chess championship

8 NCSSM students traveled in February to Charlotte to compete in the 2018 NC K-12 State Chess Championship. Four of these students (Jack Miklaucic, Zach Hunter, Tyler Youngberg, and Sahil Patel) were on the second place team, finishing only half a point behind the first place team.

Students wins prizes in Japanese language contest

A number of NCSSM students recently placed in the 15th Annual North Carolina Japanese Language Essay Contest. The students are:

Level 2: 2nd place... James Griesen

Level 3: 2nd place... Gayer Nam, 3rd place... Anthony Cheek

Special Award... Hope Hickman

National Merit Scholars

In the 2018 National Merit Scholars program, 84 NCSSM students were named as finalists. Finalists will compete for \$2,500 Merit Scholarships and will be notified in April, May, June, and July 2018.

Students advance to NACLO invitational round

Seven NCSSM students have advanced to the invitational round of the North American Computational Linguistics Olympiad. Out of approximately 1700 students who participated in the open round in January, 177 qualified for the next round, and 7 of those are our very own NCSSM students! The students are:

Daniel Carter, Anirudh Hari, Brandon Kaminski, Zack Lee, Alexander Lewis, Sahil Patel, and Nina Prabhu.

NCSSM team wins Blue Heron Bowl

NCSSM successfully defended its state title at the Blue Heron Bowl at UNC Wilmington on Feb. 20. The team demonstrated their extensive knowledge of all things regarding the ocean, going undefeated through 5 round-robin and 4 elimination rounds in the 10 school tournament field. Team members Kelly Wang, Michael Zhang, Vincent Xia, Shiv Patel and Vittal Bhat qualified for competition in the National Ocean Sciences Bowl in Boulder, Colorado in April. A second 5-member NCSSM team (Alex Zhuang, Jackson Dowden, Kevin Jin, Hanna Tawasha and Nithar Patel) also went undefeated in non-qualifying round-robin competition.

Eastern/Central North Carolina Art Region Scholastic Art Awards Winners

Each year, the Alliance partners with more than 100 visual arts and literary arts organizations across the country to bring the Scholastic Awards to local communities. Teens in grades 7–12 apply in 29 categories of art and writing. More than 330,000 works of art and writing were submitted to the Scholastic Awards.

Submissions are juried by luminaries in the visual and literary arts, some of whom are past award recipients. Panelists look for works that best exemplify originality, technical skill, and the emergence of a personal voice or vision.

Students receiving Gold Keys, Silver Keys, or Honorable Mentions are celebrated within their communities and all receive certificates.

Gold Key works are then judged nationally by an impressive panel of creative—industry experts to receive National Medals, including Gold, Silver, American Visions & Voices, Portfolio Silver with Distinction or Portfolio Gold Medals and Special Awards. National Medalist are recognized in part at the National Ceremony at Carnegie Hall in New York City.

- *NCSSM 2018 Gold Key Awardees
- -Maanasi Bulusu, Study of Edgar Degas
- -Maanasi Bulusu, Flora
- -Katie Danis, Holy Mole-y: A Highly Enthalpic Track by M.C. Delta T
- -Tova Just, Thursday (pictured above)
- *NCSSM 2018 Silver Key Awardees
- -Zoe Hatsios, Martha's Vineyard on Canvas
- -Helen Li, Spreading Fractures
- -Jason Lee, Oreo
- -Sreekar Mantena, Big Dreams, Individual SK
- *NCSSM 2018 Honorable Mention Awardees
- -Helen Li, Après La Saint Valentin
- -Sreekar Mantena, Blissful Happiness

NCSSM Wins Regional Science Bowl competition

NCSSM has won the Regional Science Bowl competition! The team--made up of Edward Feng, Albert Gong, Anirudh Hari, Hahn Lheem, and Dylan Yang--will now head to Washington, D.C., in April to compete in the National Science Bowl competition. Read more

Seven named 2018 Regeneron Science Talent Search Scholars

Seven NCSSM seniors have been recognized as Regeneron Science Talent Search Scholars. The students were recognized for research conducted while at NCSSM, garnering prizes of \$2,000 each. NCSSM is one of five schools nationwide to have the most scholars. Read more

NCSSM Students Receive High Honor in Modeling Contest

The results of the Twentieth Annual High School Mathematical Contest in Modeling (HiMCM) this year were just released, and two NCSSM teams of 4 students each received high honors. This year, a total of 938 teams, with up to 4 students each, from 256 schools, competed.

The contest culminated with only nine OUTSTANDING WINNERS representing the following schools:

Capital High School, MT, USA (8393)
Columbus North High School, IN, USA (8121)
NC School of Science and Mathematics, NC, USA (8201) (8206)
Raffles Institution, Singapore (7879)
Shenzhen College of International Education, China (8028)
Shenzhen Vanke Meisha Academy, China (8040)

St. Mark's School, MA, USA (8124) YK Pao School, Shanghai, China (7359)

The teams of students were:

Sahil Patel, Gandhar Mahadeshwar, Samuel Li, and Jack McArthur

Matthew Mims, Keshav Kumar, Zack Lee, and Sreekar Mantena

Debate Team continues season at Cavalier Tournament

NCSSM's Debate Team competed at the Cavalier Tournament at Durham Academy in January. Aman Singh won a sword, a real one, by coming in first place in Humorous Interpretation. Aman and Ishani Deliwala got second place in Duo Interpretation, and Ishani placed 3rd in Dramatic Interpretation. Aneesha Manocha, Angus Ewington, Jack Miklaucic, and Akash Karri all made it to the knockout rounds of their events. NCSSM came in 4th place overall at the tournament.

Seven students publish work on Duke Research blog

Seven NCSSM students have had their work published on the Duke University Research Blog. The students were part of NCSSM's Science Communication seminar, which worked with Karl Bates, Director of Research Communications at Duke University, to interview researchers and write articles published on the blog throughout the winter. Read more

Nina Prabhu among Bronze Medalists in National Math Contest

Nina Prabhu '18 was awarded with a Bronze Medal in the Math Prize for Girls Olympiad this year. As written on the program website, "the Advantage Testing Foundation has offered the largest math prize for girls in the world since 2009. The Math Prize for Girls rewards talented young women of all backgrounds for their mathematical skills. Every year, nearly 300 talented young mathematicians take our exceptionally challenging, 2.5-hour test of mathematical analysis, creativity, and problem solving." Only 43 students out of the 266 who participated this year qualified for the Olympiad level of the contest. Nina was among 10 of those select 43 who received the Bronze honor.

Musicians selected for NCMEA Eastern Regional Orchestra

Congratulations to the following students were recently selected for the 2018 NCMEA Eastern Regional Orchestra. The event will take place in Southern Pines, NC during Miniterm.

Huang, Jenny Violin Lin, Brian Violin Su, Melanie Violin Mani, Amrita Violin

Patterson, Rachel Violin

Hari, Anirudh Viola Elder, Shelby Cello Lheem, Hahn Cello Lin, Matthew Cello Nusbaum, Lydia Bass Trickha, MadhaviBass

Hitchcock, William Bass

Raghavendra, Brinda Flute I
Zheng, Franklin Flute II
Bullard, Garrison Oboe I
Kumar, Keshav Bassoon I

Students advance to semi-finalist stage for national language scholarships

Fifteen NCSSM students have achieved semifinalist status in the National Security Language Initiatives for Youth Scholarship Program for the Study of Critical Languages (NSLI-Y). These summer and gap-year scholarships, sponsored by the U.S. Department of State, offer students intensive immersion in less commonly taught languages, including Arabic, Chinese, Korean, Turkish, Hindi, Russian, and Persian, in a variety of countries all over the world. Read more

Concerto concert soloists announced

Congratulations to the following students who were selected to perform as soloists in the Annual Orchestra Concerto Concert which will be held on May 18 at 7:00 p.m.

Shelby Elder, cello Albert Gong, violin Hahn Lheem, cello Brian Lin, violin Matthew Lin, cello

The concert will feature these outstanding soloists performing 1 movement of a classical work with the NCSSM Orchestra. These soloists were selected from 15 exceptional student musicians who auditioned for the opportunity. Selections are based on preparation and performance of their selected work in the audition. This year's concert will feature works by Saint Saens, Sibelius, and Haydn.

Students participate in NCISC

A group of NCSSM students traveled to China in December to participate in the NC International Science Challenge. Students winners were Elizabeth Farmer and Ritvik Bodducherla. Semifinalists were Michelle Gan, Kevin Jin, Sreekar Mantena, Billy Ngo, Maddie Paoletti, and Adithi Rao.

Quill writing team takes third

The team for The Quill writing competition placed third overall at State Competitions in December. Congratulations to students Sarah Jarrell, Willa Holt, Corrine Miller, and Nathan Ostrowski on this accomplishment!

Model UN team attends conference

Over Thanksgiving Break, 18 members of NCSSM's Model UN team attended the thirty-seventh annual Model UN Conference at the University of Virginia. Congratulations to Sofia Sanchez and Maanasi Bulusu for winning Best Delegates in the UNICEF committee representing the delegation of China, Michelle Bao and Ava Kincaid for receiving a verbal commendation representing Bangladesh in the UN Security Council and Brigadier General Mohammed Pakpour in the Iranian Armed Forces Council.

Student athletic awards



NCSSM Unicorns Make Waves in Winter Season, Look Ahead into Spring

The winter sports season has been a highly successful one for the North Carolina School of Science and Math Unicorns. The school joined a new conference this year, playing for the first time in the new 2A Mid-State conference, a designation that means competition against larger schools than in years past. Despite this challenge, many NCSSM teams have earned high standings in conference play, with both swim teams and the women's basketball team moving on to compete at the state level. Read more

New Swimming records

At NCSSM's Conference meet on December 14 at Carrboro, George Heidkamp broke two school records in the 50 Free and 100 Backstroke.

Other student notes:



SCUBA seminar field trip

This January, Sofia Sanchez took her fellow SCUBA Theory & Marine Studies seminar students on a field trip to the Duke Hyperbaric Chamber. After learning in the classroom about coral bleaching, ocean acidification, and other topics about the ocean and diving, they had a tour of the amazing facility at Duke. Driven by Dr.Sheck, their supportive sponsor, the seminar students all had the chance to learn about about how 'the bends' (decompression sickness - when nitrogen bubbles get trapped in your body after a dive) are treated as well as other medical conditions (such as wound healing) that can be corrected in the non-invasive procedure of simply breathing while inside a hyperbaric chamber. Stepping inside of the famous 'golf ball' chamber, they got to see the place where three men lived for 50 days who went down to a depth of 2000 feet!

Cross country team volunteers at Florence Forth race

For the fifth year in row, members of the cross country and track teams volunteered at the finish line of the Florence Forth race, which runs through the neighborhood and finishes up on 9th street. Students organized refreshments, gave out medals and cheered the runners across the finish line! Florence was the daughter of Leslie and Will McDow, close friends of NCSSM chemistry instructor Michael Bruno, who passed away at age six from autoimmune encephalitis. The Florence Forth race raises money for the Autoimmune Encephalitis Alliance. The high energy of the race would not be the same without the early morning dedication and enthusiasm of our students and Coach Charlie Payne!

NCSSM visits Cav-a-Gears robotics team

Kevin Baxter, Director of Western Campus Planning and Project Management, shared this great picture taken during a visit last week to East Burke High School to meet with their robotics team, the Cav-a-Gears. The all-female team is preparing for regional and state competitions next month. NCSSM's robotics team has been mentoring the newly formed Cav-a-Gears robotics team, and it was great to see their progress! The team showed off their robot and shared their enthusiasm with Chancellor Todd Roberts, Vice Chancellor Katie O'Connor, Dean of Engineering and Computer Science Joe LoBuglio, and Baxter. "Todd, Katie, Joe, and I were there from NCSSM, along with Larry Putnam (BCPS Superintendent), Shane Mace (EBHS Principal), Cheryl Shuffler (BCPS PIO), and Kim Aiello (EBHS Robotics Coach and Project Lead the Way teacher)," writes Baxter. The students from their robotics team are: Brianna Martin, Jaden Ramsey, Summer Kindley, Savannah Watson, Chelsea Walters, Bethany Mace, and Heather Setzer.

Students compete in AMC-12 Math Contest

On Wednesday morning, 99 students competed in the <u>AMC-12</u> national math contest. The AMC-12 is sponsored by the Mathematical Association of America and leads to opportunities for additional competitions, including the AIME and USAMO. In North Carolina, top scorers also compete in the State Math Contest Finals. Normally, the entire NCSSM student body participates in the contest; however, this year, participation was optional. Thank you to members of the math department for proctoring the contest and to Philip Rash for coordinating and leading it!

Students speak with Canadian Minister of Science

NCSSM welcomed Canada's Minister of Science, Kirsty Duncan, to campus for a visit in late January, where she had a chance to speak with students; hear more about them, their research, and sustainability projects at NCSSM; and answered their questions about her work as a scientist, an educator, and now, in politics. See more photos on NCSSM's <u>Facebook</u> page.

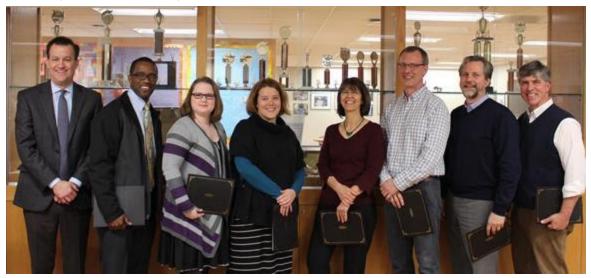
Students see Meeting at Duke's new performing arts center

Liz Peeples took seven students to the inaugural performance at Duke's new Rubenstein Center for the Performing Arts to see *Meeting*, a modern dance performance featuring two modern dancers, Antony Hamilton & Alisdair Mcindoe, and 64 robotic boxes programmed to make beats with tapping pencils. The students were invited to stay after the amazing performance to talk with Hamilton and Mcindoe about how they built and programmed the robots and choreographed the pieces. Liz and her students absolutely loved the performance!

NCSSM TIGER Robotics Team Wins THOR Competition

This summer NCSSM and the Zebracorns hosted a one week hands on workshop for three developing rookie teams. The all girl Cav-a-Gears team from East Burke High School are off to an amazing start. Not only did the take the top trophy at the THOR competition, they designed a robot to carry in one of the members of the homecoming court during the school's homecoming pep rally.

Faculty/Staff Spotlight



Seven instructors win UNC BOG teaching awards

The seven recipients of this year's UNC Board of Governors Teaching Awards, pictured with Chancellor Roberts (far left), are (I-r): Jamie Lathan, Candice Chambers, Kim Monahan, Amy Sheck, John Woodmansee, Phillip Riggs, and Scott Laird. Dean of Science and Instructor of Biology Amy Sheck is this year's winner of the Excellence in Teaching award.

Karen Glumm authors chapter in book

Congratulations to Karen Glumm, who authored a chapter in a book just published -- Negotiating the Emotional Challenges of Conducting Deeply Personal Research in Health, edited by Alexandra "San" C.H. Nowakowski and J.E. Sumerau, published by Routedge: New York, a division of Taylor and Francis Group. Glumm writes, "My chapter was 'Finding My Place in Sociology: Questioning Societal Standards.' My chapter describes my experience working at a private psychiatric hospital where our goal was to only fill beds with those that had private health insurance .. and to keep those patients until insurance was exhausted ... I could not handle doing that as a counselor so quit the job .. and then started research on those hospitals which became my dissertation."

Cheryl Gann Interviewed By District Administration Magazine

District Administration Magazine recently interviewed Cheryl Gann about math modeling in our Summer Bridge Program and quoted her in their feature article "*Real-world 'rithmetic education*" on February 16th. Read the full article here: https://www.districtadministration.com/article/real-world-rithmetic-education

Bullard co-authors math textbook

We have another author in the Math Department! Floyd Bullard is a co-author of Stats: Modeling the World.

TCM Conference Brings Educators Together at NCSSM

Over 180 educators came together at our math department's annual Teaching Contemporary Mathematics Conference last Friday and Saturday. Teachers from New York, Massachusetts, Georgia, Toronto, North Carolina and elsewhere met to connect and attend sessions presented by NCSSM faculty and several invited speakers from industry, universities and other high schools on innovative approaches to teaching, mathematical modeling and more!

You know how mathematicians love numbers! So, here's a numerical recap:

The NCSSM Mathematics Department hosted over 180 mathematics educators (a record number!).

- We offered 40 sessions over 1.5 days equating to 33.5 hours of content delivered.
- There were representatives from 21 states and Canada, including 53 from North Carolina.
- Eleven NCSSM math faculty members and 9 invited speakers gave presentations -- this included 3 alumni (Floyd Bullard '87, Rachel Levy '85, and Helen Moore '84).
- A school from NY brought 8 department members (80% of there mathematics faculty).
- We had 2 wonderful NCSSM student helpers, 1 junior and 1 senior.
- Countless hours of preparation on the part of all members of the NCSSM Mathematics Department were spent to make the conference a success!

The fascinating plenary session was given by Dr. Helen Moore, NCSSM class of '84, on "How to Use Mathematics to Predict Whether a Cancer Patient is Responding to Immunotherapy". A recording of her talk will be posted on our TCM Conference website in the coming days.

Keeper of the Dream Awards

During this year's MLK Day assembly, Chancellor Roberts announced this year's Keeper of the Dream Award winners—Micca Pace and Dr. Michael Brandon. This award is given to employees or friends of the school who, during their service to the institution and school community, has facilitated positive race relations; exhibited leadership in advancing mutual respect, understanding, and appreciation for cultural and ethnic diversity; encouraged and engaged in off-campus outreach activities; and exemplified compassion, goodwill, courage, or leadership. Congratulations, Ms. Pace and Dr. Brandon, and thank you for all you have done to "keep the dream"!

New BOG members, Spellings visit NCSSM

NCSSM welcomed the new members of the UNC System's Board of Governors, along with UNC System President Margaret Spellings, to campus in late January for a listening and learning tour of the institution. Members had the opportunity to meet with and hear from NCSSM students, staff, and alumni, parents, and leadership, tour campus, and stop in to places like the Distance Education studios, chemistry and biology labs, the FabLab, and the Art Studio. View more photos on Facebook

Charlotte Dungan joins the faculty as an Instructor of Computer Science

We excited to welcome Charlotte Dungan to NCSSM as our new Instructor of Computer Science. Charlotte was a computer programmer for ten years, primarily working with data, reporting, payment systems, and web development. She received an education degree with concentrations in K-12 English and History alongside her programming work and began teaching in a variety of contexts, including alternative schools, twice exceptional children, creating and running a Tinkering Camp in Apex, and working for the Museum of Life and Science.

Additionally, she has been running a successful educational consulting company with STEM classes as a primary focus, including the creation of a multi-site educational nonprofit that served students from pre-k-12 in a wide variety of school subjects along with parent education classes. She has a Master's Degree in Education from Harvard University where she conducted research with computer science educators and worked closely with Scratch Education to develop teacher support materials. She currently volunteers with Kidzu Children's Museum on their inspirational "Dream Team."

Alumni Spotlight



Two alumni named to 2018 Forbes 30 Under 30

Two NCSSM alumni have been named to the Forbes30 Under 30 List for 2018--Giffin Daughtridge '07 in the Healthcare category, and Michael Schoenfeld '06 in the category of Social Entrepreneurs. The list presents "600 of the brightest young entrepreneurs, leaders, and stars" each year, according to the website. Read more

Alumnus creates Angel Network to support NCSSM entrepreneurs

Lawton Ives '17 launched the UNICORN Angel Network in the fall of 2017. Inspired by an entrepreneurship course with fellow alumnus Carl Ryden '89, Ives wanted to create a resource to cultivate community among NCSSM-related entrepreneurs while connecting them to sources of advice and capital. Read more

NCSSM alumni speak on entrepreneur panel

A group of alumni entrepreneurs returned to campus in February for a panel discussion. The panel featured Erik Troan '91, Jud Bowman '99, Jon Hayes '03, and Jenny Wang '15. The panel was facilitated by Steve Nelson, co-founder of Carbon, Inc. and former Chairperson of the NCSSM Foundation Board. Bios of each of the participants can be found here. The panelists discussed their experiences at NCSSM and the paths they have taken since graduation that have led them to success as entrepreneurs.

NCSSM Mentorship, Duke University Hospital, NCSU Veterinary Hospital Unite

Class of 2017 Alumna and Mentorship Program student Rachel Ruderman co-authored an article in the February 2nd issue of the <u>American Journal of Bioethics</u>. The article highlights the design of the first ever veterinary clinical ethics committee and translating the model of a 'human' hospital clinical ethics committees to a veterinary specialty hospital. These committees assist clinicians with ethical challenges associated with the care, protection, and guardianship of their patients, which now can be a horse, Husky, or human.

When Rachel approached the Chair of the Duke Hospital Clinical Ethics Program and Pediatric Oncologist, Dr. Phillip Rosoff, to be her mentor, she was expecting potential projects in his expertise in healthcare rationing or drug shortages. Instead, when Dr. Rosoff first met with Rachel in Bryan Lobby, he asked her if she liked dogs and cats. What she did not know was a few years earlier Jeannine Moga, a social worker (and co-author) at the NC State Veterinary Hospital contacted Dr. Rosoff about the potential need for a veterinary ethics committee.

Rachel's unique experience was between Dr. Rosoff, the lead author of the article, and numerous co-authors at the NC State University Veterinary Hospital to develop a first of its kind model for a Clinical Ethics Committee (CEC) for a Veterinary Specialty Hospital. While Clinical Ethics Committees are typical in 'human' hospitals, the authors note the CEC at NC State Veterinary Hospital, now in existence for over six months, is "novel and experimental," and no other model was found in the world.

Translating clinical ethics for human to veterinary medicine is challenging, and these differences were a focus of Rachel's mentorship project. As noted in the article, a key difference of pets and livestock are "first and foremost, they are sentient beings that are also legally property." Additionally, "one of the most significant distinctions between the practice of veterinary and human medicine is the regular use of euthanasia in the former and its extreme rarity in the latter." Rachel had worked with Sarah Shoemaker and Chris Thomas during the mentor search, and with Chris Thomas as her instructor during Senior Mentorship.

Alumni rivalry

NCSSM alumnae Chloe Deets ('17) and Olivia Kachenchai ('17), roommates at NCSSM, are now rivals! Both Cadet Deets (USMA) and Midshipman Kachenchai (USNA) enjoyed a reunion at this past weekend during the Army-Navy game, held in Philadelphia. Army tweaked out a nail-biter, 14-13, on a missed Navy field goal in the last seconds of the game.

Other news highlights



NCSSM wins Confucius Classroom of the Year Award

NCSSM is one of five institutions worldwide to win the prestigious Confucius Classroom of the Year award, presented in late December at the 12th Global Confucius Institute Conference in Xi'an, China. NCSSM's Confucius Classroom was established in 2015 under the guidance of Go Global NC, which manages a network of 40 Confucius Classrooms across NC. NCSSM and Go Global NC are both part of the University of North Carolina system. Read more

Senator Carol Moseley Braun delivers keynote during MLK Day of Service

NCSSM celebrated the legacy of Dr. Martin Luther King Jr. with a day of service activities, sessions centered on diversity and inclusion, and community-building conversations. The day culminated in a campus-wide MLK Day Celebration, featuring a keynote address by former U.S. Senator and Ambassador Carol Moseley Braun and the presentation of this year's Keeper of the Dream Awards to Micca Pace and Dr. Michael Brandon. Read more

Read more: ncssm.edu/news