



GOVERNOR'S
STEM
SCHOLARS

NEWS

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Scholars Learn About STEM Citizenship

Assemblyman Andrew Zwicker talks to a scholar about being a STEM citizen.

The 2018 Class of Governor's STEM Scholars had its first conference of the year at Rutgers University. The conference, focused on Government and STEM, gave the scholars an introduction to public service opportunities in STEM and to the role such people play in helping their communities.

Dr. Adeana Bishop, Chair of the Research & Development Council of New Jersey, opened the conference by talking about New Jersey and the country's STEM economy. Dr. Bishop, who is also Research and Development Support Services Manager at ExxonMobil, also offered advice about making the most of the year.

Following Dr. Bishop's address,



Scholars work on a project using computer science.

the day turned to the year's theme of STEM citizenship. Speaking about the interaction between STEM and public

policy were Assemblyman Andrew Zwicker and Dr. Jennifer Senick of the Bloustein School of Public Policy at

Rutgers. A physicist and the state's sole scientist-legislator, Zwicker spoke about the importance of STEM professionals taking an active role in their communities and seeking out mentors. Dr. Senick implored the scholars to learn how to communicate science to laypersons and identified ways that STEM has impacts beyond the laboratory.

Following the discussion, STEM Scholars Director David Hodges moderated a panel with representatives from STEM careers in government, including the United States Navy, the Department of Environmental Protection (DEP), the Department of Health (DEH), and the New Jersey Cybersecurity and Communications Integration Cell (NJCCIC). Capt. Jean O'Brien of the Navy told the students about the challenges she faced in North Africa training soldiers, as well as being among the first female combat fighter pilots. Dr. Amanda Dey of DEP talked about her work dealing with climate change and preparing the state for coastal erosion. Dr. Nelson Delgado of DEH talked about his work fighting bioterrorism and other public health emergencies. Joe Russo of NJCCIC spoke about building the state's cybersecurity architecture and protecting the state from digital malefactors. Once the panel finished their discussion, students had the opportunity to speak individually with each of the professionals.

Over lunch, the STEM Scholars heard from an alum of last year's program, Sandeep Dhagat, who provided advice for them throughout the year. Dhagat spoke about how the program changed his life by giving him new opportunities and he gave the students five lessons to make the most of the program.

After his remarks, the students broke into their groups where college and graduate STEM scholars presented problems for the high school students



A panel of STEM professionals talks about their careers in government.



A group of STEM Scholars meets for the first time.

to work on. This is a research project that the students will work on throughout the year with the final conference being a venue where the teams will present their work in front of a panel of STEM judges. In past years, the winning teams came up with a drone used to target mosquitos and a new way of synthesizing anti-malarial drugs. Every year, the winning team is honored at the Edison Patent Awards, the state's premier event celebrating its inventors.

Finally, the students split into several

groups to visit the Rutgers Department of Physics and Astronomy, the Department of Biomedical Engineering, and the Keck Center for Collaborative Neuroscience. At the Physics Department, scholars saw the university's telescopes and particle colliders. At the Biomedical Engineering Department, scholars learned about building medical devices. At the Keck Center, the scholars learned from Dr. Patricia Morton about the incredible work being done by the Center to treat spinal cord injuries.



The Governor's STEM Scholars Class of 2018 poses for the class portrait.

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