

Scholars Connect Program shares outstanding results

By Kelly Lenox

Scholars, mentors, family, and friends celebrated the third year of the NIEHS Scholars Connect Program (NSCP) April 17 with a symposium featuring research presentations by each scholar. For the first time, one student was named the program's Outstanding Scholar.

"NSCP is a concerted effort to connect with surrounding colleges and universities and take further steps toward increasing the number of students from underrepresented groups in the sciences," said Ericka Reid, Ph.D., director of the NIEHS Office of Scientific Education and Diversity (OSD).

Linked Video

[Watch NCSP students at work and hear what the program offers. \(3:23\)](#)

From classroom to laboratory and back

The six students in this year's cohort hail from St. Augustine's University (SAU), North Carolina Central University (NCCU), and North Carolina State University (NCSU). Organizers began the program with a boot camp in laboratory techniques, so that the students, who have a range of laboratory and academic experience, would start with the necessary skills (see [story](#)).

The scholars worked full time in their laboratories through the summer, continuing part time when classes resumed in the fall. Their training was enhanced with opportunities to attend scientific seminars, give informal presentations of their projects, and attend information sessions on topics such as ethics and resume writing.

The program is proving its reach beyond the students directly involved. "[My experience] has carried over to my lab at school, and it helped me learn how to mentor others," said Carri Murphy, a senior at NCCU.

Outstanding Scholar Award

Organizers added an award to this year's program, recognizing one scholar for outstanding work, based on performance evaluations by mentors and the scholars themselves, as well as ratings of professional demeanor, communication skills, and enthusiasm.

Murphy was chosen as Outstanding Scholar. "Thank you very much for being part of this program and for doing your absolute best at all times," Reid said, presenting the award.

Poise and presentation

The students showed poise and expertise in their presentations. The diversity of research topics reflected their interests and backgrounds, as well as the range of scientific endeavors within NIEHS and the National Toxicology Program (NTP) (see [text box](#)).

The strengths of the NIEHS scientific community were also celebrated. Several scholars spoke of the high standards set by their mentors. "[My mentor] did not settle for anything less than excellence. If it was good, she would say it was good, but not good enough," said DeAsia Lewis of her mentor, Natalie Ren, Ph.D. "I've been able to carry that to school with me — in writing assignments, I can always hear her in the background saying it can be better."

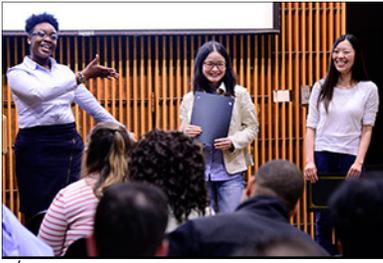
Several students underscored the value of the extended practical experience. "I discovered that I am still not a scientist in spite of being in a bachelor's of science program for three and a half years," laughed Aaron Manning. Besides scientific insights and shared humor, a few tears also marked the afternoon, reflecting the collegiality and connections formed among the students, and between students and the scientists they worked with so closely.



"I've learned this is what I want to do, and I learned a lot about myself," said Outstanding Scholar Carri Murphy, center, with her mentors from left, Resnick, Thuy-Ai Nguyen, Ph.D., Menendez Rendon, and Snipes. (Photo courtesy of Steve McCaw)



"Today is an opportunity for you to hear more about the research these scholars have been involved with since joining us last June," Reid said. (Photo courtesy of Steve McCaw)



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From left, DeAsia Lewis thanked Xiaoling Li, Ph.D. and Natalie Ren, Ph.D. "I had the best experience here as a scholar," Lewis said. Speaking of Ren's high standards, she added, "and she learned that from Dr. Li." (Photo courtesy of Steve McCaw)



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Angela King-Herbert, D.V.M., leader of the NTP Laboratory Animal Medicine Group, continued her strong tradition of mentoring by serving as the session chair for the third year of the NSCP. (Photo courtesy of Steve McCaw)



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"I would like to give a personal thanks to my mentor Geoffrey Mueller, who has been very patient with me," said Manning, a senior at SAU. "Coming from a public health background, [Mueller] put in the time to give me the extra push I needed." (Photo courtesy of Steve McCaw)



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Brianda Elzey, a student at SAU, echoed the appreciation other scholars expressed for the hard work and patience of their mentors. (Photo courtesy of Steve McCaw)



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"I would really like to thank [my mentors] for letting me come into their lab. I learned a lot," said Nichole Flynn. (Photo courtesy of Steve McCaw)



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"Coming from a chemistry background ... it was a big transition, but [they] really worked with me on my project. Thank you so much," said Nicole Sciortino of her mentors. (Photo courtesy of Steve McCaw)



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Erica Rogers, Ph.D., of OSED, is the coordinator of the NIEHS Scholars Connect Program. (Photo courtesy of Steve McCaw)

Scholar research presentations

- **Brianda Elzey** (SAU) — “Immunohistochemical Characterization of Pulmonary Alveolar/Bronchiolar Carcinomas in Mice and Rats.” Mentored by Ron Herbert, D.V.M., Ph.D., head of the NTP [Pathology Support Group](#), and biologist Natasha Clayton, Elzey explored ways to determine the cell of origin for mice and rat carcinomas of the lung.
- **Nichole Flynn** (NCSU) — “Improved Immunofluorescence of PARP-1 for DNA Repair Studies.” Working with Sam Wilson, M.D., head of the [DNA Repair and Nucleic Acid Enzymology Group](#), postdoctoral fellow Natalie Gassman, Ph.D., and staff scientist Julie Horton, Flynn explored techniques to improve immunofluorescence of the abundant nuclear protein PARP1, to support research for correction of single-base lesion repairs.
- **DeAsia Lewis** (SAU) — “The Role of SIRT 1 in Tumorigenesis.” Xiaoling Li, Ph.D., head of the [Metabolism, Genes, and Environment Group](#), and postdoctoral fellow Shunxiang (Natalie) Ren, Ph.D., mentored Lewis in her analysis of the role of the SIRT1 protein in cancer, where it can act to both suppress and promote tumors.
- **Aaron Manning** (SAU) — “NSCP Final Presentation.” Mentored by Geoff Mueller, Ph.D., staff scientist in the [Nuclear Magnetic Resonance Group](#), Manning researched antibodies to allergens from the German cockroach and two species of dust mites, comparing populations in the U.S. and Columbia.
- **Carri Murphy** (NCCU) — “Synthetic Lethality of p53 Deficient and Mutant Cells.” Working in the [Chromosome Stability Group](#), mentored by group leader Mike Resnick, Ph.D., staff scientist Daniel Menendez Rendon, Ph.D., and biologist Joyce Snipe, Murphy worked to establish a cell model that would shed light on synthetic lethality in cells deficient in the tumor suppressor p53.
- **Nicole Sciortino** (SAU) — “The Effects of Bisphenol S (BPS) on Cell Proliferation and Estrogen Receptor Alpha 36 Signaling in Human Uterine Leiomyoma Cells.” Working with mentors Darlene Dixon, D.V.M., Ph.D., head of the NTP [Molecular Pathogenesis Group](#), and biologist Linda Yu, Sciortino studied how exposure to BPS affects proliferation of cells and cell signaling in uterine fibroids.

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