

Seniors Make Progress in DNA Autism Study

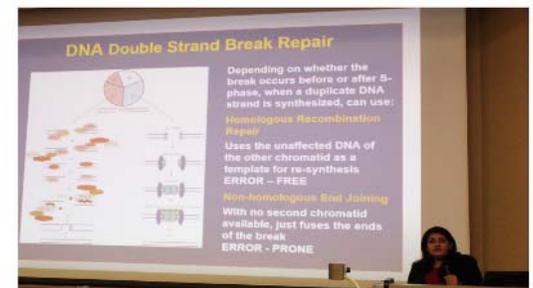
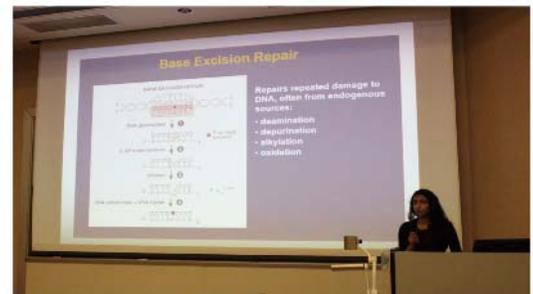
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By Scott Fishman Contact Reporter

NSU University School seniors, Nisha Chaudhari and Neha Narang received firsthand research experience inside a lab at the college while delving into an important topic.

The two teens worked on a study focusing on DNA and its relation to autism. They were tasked with finding out if there were fewer DNA repair pathways in autistic children based on the age of their fathers.

The students used data from a different study and analyzed it in order to compare autistic and controlled parents. During the year-and-half project, Chaudhari and Narang were mentored by Dr. Stephen Grant from NSU's College of Osteopathic Medicine, and also had the opportunity to observe graduate students in their element. Research began with the Nucleotide excision repair (NER) pathway and continued with four other pathways. The subject matter was informative for Narang, who is planning on majoring in biomedical engineering.



"This is something that doesn't just affect autistic patients, but it affects cancer patients and different things we learned from the DNA and repair pathways," she said. "I think if we didn't have each other, it wouldn't have been as easy to understand or even finish the project. We liked working together and having Dr. Grant there and the other students. Chaudhari, who is still deciding whether to pursue medicine or engineering, agreed. She found they were driven to finish what they started, knowing Grant had potential plans to combine the findings publishing them in a paper.

"It was a great learning experience," she said. "We got to do a little bit of work with the graduate students and also learned how to research things. We also learned a lot about autism and statistics as well...The study was very important in finding different ways that autism is caused by itself and not by your genes or your parents."

Chaudhari was able to parlay the project into an entry in the [Broward County](#) Regional Science & Engineering Fair. She nabbed a first-place finish in the senior division and was a state finalist. Chaudhari and Narang also presented their research team's work to faculty and students during the Health Professions Division (HPD) Research Day, showing through evidence that different forms of autism have a genetic component. They were the only high school students who made a presentation. Grant said he couldn't have been more proud of their effort and the way the duo carried themselves. They gave him so much material he wrote a glowing recommendation for each as they continue their academic careers.

"These two students were unusual in that not only did they get the initial project done, but they came back for more," he said. "They ended up doing four times more work than they committed to doing. I thought they did very well...This was a largely a numbers project...These students, unlike many that I have had, were able to understand that this big column of numbers represented a person and half of them were autistic children and those numbers represented something that can tell us something about them and maybe we can do something about it."