August 8, 2024

Aspirnaut research interns reach for the stars

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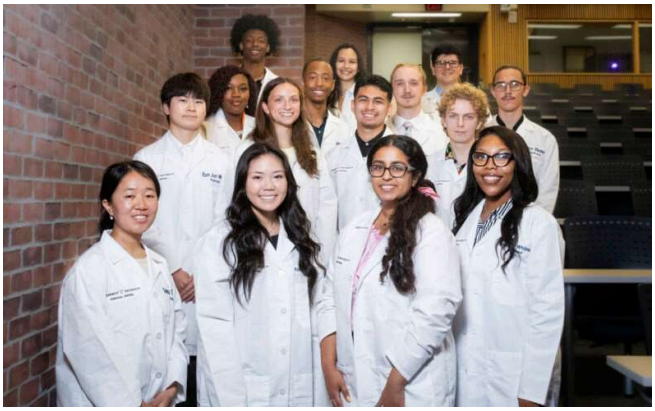

The 2024 Aspirnaut Undergraduate Summer Research Interns. Front row, from left, Dolma Choenzom, Kimberly Hoang, Martina Gergis, and Marquala Whitmon. Second row, from left, Eun Jun Wang, Anna Ruth Madera, Adrian Castañeda, and Shawn Jamison. Third row, from left, Freddiemae Thompson, Jalen L. Smith, Colton Miller, and John Bister. Fourth row, from left, Ryan Anderson, Emma Meihofer, and Kyle Vallone. (photo by Susan Urmy)

By: Bill Snyder

Fifteen college students, each wearing a personalized white laboratory coat, recently gave oral presentations of their research in a lecture hall at Vanderbilt University Medical Center.

The next day, the students, interns in the 16th summer research session of the Aspirnaut STEM pipeline program for diversity, were bound for the University of Virginia in Charlottesville.

There they would repeat their presentations at a symposium sponsored by the Division of Kidney, Urologic and Hematologic Diseases of the National Institute of Diabetes and Digestive and Kidney Diseases, part of the National Institutes of Health.

“Nine weeks ago, we told you we were going to take you on a journey into the future,” Aspirnaut program co-founder Billy Hudson, PhD, told the interns at the beginning of their presentations at VUMC.

“Learning how to do experiments, how to write them up. Talking to distinguished scientists. Getting information on how to write. How to talk. This exercise today is a high point of those experiences,” Hudson said. “You’re on your way, reaching for the stars.”

Hudson, the Elliott V. Newman Professor of Medicine, co-founded the program in 2007 with his wife, Julie Hudson, MD, VUMC Vice President for Medical Center Relations, and the Aspirnaut program’s executive director.

Billy Hudson, an internationally known scientist who helped discover the molecular underpinnings of autoimmune and hereditary kidney diseases, had a hard beginning. He was raised in rural Arkansas in a farmhouse that, for most of his childhood, lacked electricity and running water.

With the help of his brother, Johnny Hudson, and his sister, Ann Kincl, he and his wife envisioned the Aspirnaut program as a way for rural and diverse high school and college students to experience, and be inspired by, a life in science.

Since 2009, 362 students from 34 states have participated in the program, which is funded largely by donations and grants.

More than 230 program alumni have earned college degrees (84 are still in college), 54 have graduated from medical school, 30 have earned a PhD, and eight

have dual MD/PhD degrees. Another 89 students have completed master's degrees or have entered the STEM (science, technology, engineering, or mathematics) workforce.

This summer's research interns hail from small towns and cities in eight states (one is from India). Six attend Kentucky's Berea College, which provides work-study opportunities for students with limited resources.

Earlier in July, 20 high school students from 10 states who participated in the 2024 Aspirnaut Summer Research Program gave oral presentations of their projects.

This fall, VUMC and the Aspirnaut program are collaborating with teachers, students and local officials to install a chemical biology research lab "fit for an academic medical center" at Wynne High School in rural Wynne, Arkansas.

The project, which was announced a year ago, was delayed by a tornado that devastated the town in March 2023. That hasn't dissuaded Hudson, who has overcome many challenges in his life. "Because of teachers and professors," he said in 2003, "I can come here and pay it forward."