Dickson winner nabs Nobel

“As a physicist, I marvel at how we managed to bend space and time to get three eminent scientists here on the same day,” said University of Pittsburgh Chancellor Patrick Gallagher on July 19 at the University Club during his welcoming remarks on Dickson Prize Day.

Less than three months later, one of those scientists would win the Nobel Prize in Chemistry.

Carolyn Bertozzi, the winner of this year’s Dickson Prize in Medicine, which is Pitt Med’s highest honor, learned in early October that she would share a Nobel Prize with Morten Meldal, professor at the University of Copenhagen, and K. Barry Sharpless, W.M. Keck Professor of Chemistry at Scripps Research, “for the development of click chemistry and bioorthogonal chemistry.”

Bertozzi is the 16th Dickson Prize winner to become a Nobelist. Recognized for her foundational work in bioorthogonal chemistry, Bertozzi is the Anne T. and Robert M. Bass Professor at Stanford University. Her research on how sugar molecules on cell surfaces can be modified by chemical reactions within a living system led her to identify new approaches to treating cancer, inflammation and bacterial infections.

Two other esteemed biomedical researchers also came to campus in July to receive the Dickson Prize. The pandemic delayed presenting the honor to the 2020 and 2021 winners until this summer.

Cynthia Kenyon, the 2021 winner, vice president of aging research at Calico Life Sciences and an emeritus professor of biochemistry and biophysics at the University of California, San Francisco, overturned the longstanding notion that aging does not have a genetic basis but is simply a result of progressive decline.

The 2020 winner, James Collins, who is the Termeer Professor of Medical Engineering and Science at the Massachusetts Institute of Technology, has engineered artificial living systems for combatting rare metabolic and inflammatory diseases and cancer. His team has also built systems that can rapidly detect infectious threats—like masks incorporating COVID-19 diagnostics.

Several Pitt scientists also shared their work with the guests, giving talks on topics related to the keynotes, like synthetic biology for next-generation medical robotics by Warren Ruder, an associate professor of bioengineering, and weight loss and disease in aging by Aditi Gurkar, an assistant professor of medicine.

Gurkar posted on Twitter, “I got to spend the day with some amazing scientists, and I feel so inspired! This is why I love science.” —Asher Jones and Anastasia Gorelova