The New York Genome Center announced Thursday that it has received a $125 million gift—the single largest since its start in 2011—from the Simons Foundation and the Carson Family Charitable Trust. The center plans to use the money to support its research in cancer as well as neurodegenerative and neuropsychiatric diseases, said Cheryl Moore, president and chief operating officer.

The gift will be awarded over five years, beginning in 2020.

The Genome Center Cancer Group—led by Nobel Laureate Dr. Harold Varmus of Weill Cornell Medicine and Dr. Charles Sawyers of Memorial Sloan Kettering Cancer Center—is working on the Polyethnic-1000 collaborative cancer research initiative. The project, launched recently, looks at New York City’s ethnically diverse populations to uncover the genomic underpinnings of cancer, Moore said. "This is a huge project that we hope we can expand over the years," she said.
The $125 million, she said, will help.

The center also has established the ALS Consortium, a global research group of more than 30 members in five countries.

The consortium's sharing of ALS genomic data recently led to a study that uncovered a gene associated with the progressive neurodegenerative disease, the center said. Additional work by the consortium has included using technologies to better understand Alzheimer's, dementia and Parkinson's and other neurodegenerative diseases.

In the past four years, the center's division for common disease genomics has received more than $40 million in funding from the Genome Research Institute, part of the National Institutes of Health, to support research into the underlying causes of autism and other complex diseases. The center is working on extending studies into other neuropsychiatric diseases, including schizophrenia and bipolar diseases, for which common genetic risks have been identified.

The Simons Foundation, chaired by Jim Simons, who serves on the genome center's board, is contributing $100 million of the gift. The foundation and the Carson Family Charitable Trust have supported the center's establishment and subsequent growth.

"A gift to the NYGC is an investment in the future of scientific discovery," Simons, the founder of hedge fund Renaissance Technologies, said in a statement. "The center fosters the collaborative work essential to making discoveries that will strengthen research capabilities and propel genomic science forward."

Russell L. Carson, co-chair of the genome center and chairman of the trust, added in a statement that the center "plays a critical role as a collaborative hub, tapping into and harnessing the multidisciplinary, multi-institutional expertise of researchers from New York and across the country." He said he hoped the gift "will inspire others to contribute to the center and invest in its work."

Not including the new funds, the center to date has raised $484 million through philanthropy and state, city and federal grants. —Jennifer Henderson