Big Genomics Center to Launch in Big Apple

By Matt Jones

NEW YORK (GenomeWeb News) – A team of research institutes, hospitals, and life sciences businesses today unveiled a plan to create a genomics center in New York City that they said will become one of the largest in North America.

The New York Genome Center (NYGC) is comprised of 11 collaborators, mostly hailing from New York City but also including Cold Spring Harbor Laboratory and The Jackson Laboratory, and it plans to use an initial $125 million investment to build the 120,000 square-foot center once it settles on a location in Manhattan.

NYGC will focus on sequencing, bioinformatics, and genomic medicine, and will be outfitted with technology from Illumina, one of its founding members, the non-profit center's executives said at a launch today in Manhattan.

Through the unique collaboration, researchers and doctors will share clinical and genomic data on a large scale in studies aimed at identifying and validating biomarkers, understanding the molecular basis of diseases, and speeding up the development of new diagnostic and therapeutic technologies.

NYGC plans to begin operations as early as the spring of 2012, and it has an architect to design the center, which likely will be built in a pre-existing building, NYGC Founding Executive Director Nancy Kelley told *GenomeWeb Daily News* yesterday.
"We believe that this will revolutionize both science and medical delivery in the city and it will impact new discoveries, drugs, and diagnostics for cancer, brain disorders, metabolic disease, and other kinds of chronic diseases," Kelley said.

"The launch of the New York Genome Center represents an exceptional step forward in gaining a deeper understanding of the clinical relevance of genetics and ultimately improving human health," Illumina CEO Jay Flatley said in a statement. "Illumina and NYGC have a shared vision, and we're confident Illumina's innovative technologies will play a major role in enabling the facility's success in achieving its goals."

Roche has joined Illumina as a corporate member. The other founding members include Cold Spring Harbor Laboratory; Columbia University; Cornell University/Weill Cornell Medical College; Memorial Sloan-Kettering Cancer Center; Mount Sinai Medical Center; New York-

Presbyterian Hospital; New York University/NYU School of Medicine; North Shore-LIJ Health System; The Jackson Laboratory; The Rockefeller University; and Stony Brook University. The Hospital for Special Surgery is an associate founding member.

Taken together, these partner institutions serve more than five million patients and offer scientists a broad and diverse palette of genetic variation that would be difficult to find in any other single region, NYGC said.

The center's core components will be its sequencing capabilities and its bioinformatics labs, but it also will be home to a CLIA-certified lab for clinical research, an innovation center for developing new genomic technologies, educational and training programs in genomics, and a philanthropic unit.

Those involved in the project see a big opportunity to help New York catch up to other bioscience hubs in the country while taking advantage of the many benefits the city can offer through its institutions and patient population.

"The idea was that in many respects, although New York is one of the global centers for healthcare, medical delivery, and bioscience research, it has really lagged behind in genomics research in particular," Kelley told *GWDN*. "In order to regain its competitive edge and really take global leadership in this area it was important to establish a collaborative entity that would provide the operational foundation through sequencing, bioinformatics, innovation, testing new innovative technologies, and translational research."
Although Kelley and her partners found that NYC had gotten behind some other regions in the life sciences, particularly Boston and Southern California, they felt that there were compelling reasons why the city offered a natural habitat for a big genomics center.

"It's the largest concentration of medical and academic research of anywhere in the world. So if you can mobilize that strength it would be unbelievable," she said. "Also, the diversity of the patient populations here is really important. It really provides a place where new products and tests can be developed for a variety of ethnic groups and different age groups for which different drugs and approaches might be appropriate. There's nowhere else in the world like New York where that can happen.

"Finally, you've got an unbelievably strong financial community here that I believe is ready and willing to finance new companies," Kelley added. "So creating the space for [spinoff companies] to grow and develop will be the key."

NYGC said that it has already gathered "a substantial portion" of the $125 million required to launch the center, with the funds coming from the institutional founding members; the Simons Foundation; Bloomberg Philanthropies; Russell Carson; the New York City Economic Development Corporation and the New York City Investment Fund; Anthony Evnin; WilmerHale, as well as other private foundations and philanthropists, and pharmaceutical and technology collaborators.

NYGC also has applied for funding from a New York City program called Applied Sciences NYC, which is offering the use of city-owned land and up to $100 million from the city for an institution, university, or consortium to develop and operate a research campus.

The center estimates that its economic impact in New York will amount to $1.1 billion in 10 years and $2.9 billion by 2025, and that it will create 500 jobs over the next five years.