

NYGC's Innovation Center Selects Ion Proton as First Platform; In Talks with Oxford Nanopore



By [Julia Karow](#)

The New York Genome Center has launched its Innovation Center, which will test new and emerging sequencing technologies and is about to install its first platform, Life Technologies' Ion Proton.

Besides providing the center's institutional founding members with access to new technologies, the Innovation Center will also foster collaborations between members and technology developers.

Last week, the NYGC said the Innovation Center will receive four Ion Protons under early access prior to the platform's commercial release later this year. The sequencers will be housed at Memorial Sloan-Kettering Cancer Center and NYGC founding members will share the technology validation data generated on the instruments.

Nancy Kelley, executive director of the NYGC, told *In Sequence* this week that the four instruments will arrive "any day now."

She said that the Innovation Center will initially have several locations, until the NYGC moves into its permanent facility on 6th Avenue in downtown Manhattan by the middle of next year ([IS 7/24/2012](#)).

The pilot laboratory that the NYGC opened at Rockefeller University last month will also house the Ion Torrent platform, either an additional machine or one of the four placed at Memorial Sloan-Kettering, she said.

The center also intends to place other new technologies at the pilot lab. "We are talking to Oxford Nanopore, for example, about becoming an early-access center for their technology," Kelley said.

Oxford Nanopore Technologies said in February that it plans to commercially launch two nanopore-based sequencing platforms by the end of this year. The company said at the time that it planned to announce a dozen or so early-access customers for the technology but has not done so yet ([IS 2/21/2012](#)).

The NYGC said it has allocated "capital and operational budgets" to the Innovation Center to purchase new sequencing technologies. Kelley said this is a "substantial amount of investment"

that will vary from year to year. "It starts off at about \$1 million and it grows over time," she said.

In terms of production sequencing, the pilot lab is currently equipped with two Illumina HiSeq 2000s, which will be upgraded to 2500s when that instrument becomes available. Kelley said the number of HiSeqs will increase as demand for the pilot lab's sequencing services increases over the next year, and there will be several more instruments installed in the permanent facility.

She declined to reveal how many HiSeqs the NYGC will eventually have but said that the fleet will be "of a similar size" to that of other large genome centers. The Wellcome Trust Sanger Institute, for example, maintains 27 HiSeqs and two GAIIX machines in addition to other platforms ([IS 7/31/2012](#)).

The NYGC is currently searching for a scientific director and hopes to fill that position "as soon as possible," Kelley said. It has already hired 30 staffers, among them 17 scientists in a "variety of positions," and plans to announce these hirings shortly. Among them is senior vice president of sequencing operations Kevin Shianna, formerly director of the Duke Genome Analysis facility at the Duke University School of Medicine.

So far, the center has raised between \$110 million and \$115 million, about a third from its 11 institutional founding members; a third from philanthropies, including the Simons Foundation, its founding partner, the Alfred P. Sloan Foundation, and Bloomberg Philanthropies; and a third from other sources, such as the New York City Investment fund, the New York City Economic Development Corporation, and equipment financing.

Besides the 11 institutional founding members — most of them from the New York area — the center has one associate founding member, the Hospital for Special Surgery.

In addition, the center has corporate industry partners that contribute capital and expertise to research collaborations. Last year, when the center was founded, the NYGC announced Illumina and Roche as partners, but the relationship with Roche appears to have changed.

"We are talking to several companies, including Roche, about moving forward," Kelley said. "Roche was a corporate partner, but they had some corporate changes, so we are talking about how those changes might influence our partnership," she added, but did not elaborate.