

NEWS BRIEFS

Genome sequencing progress outpaces XPRIZE

XPRIZE

When the multimillionaire backers of the XPRIZE, best known for spurring technological innovation in space travel, announced in 2006 an open competition for developing rapid, accurate, and cheap genome sequencing, such a feat seemed worthy of its \$10 million prize. Flash forward to 2013 and genome sequencing is on the verge of becoming, if not routine, at least more commonplace than space travel. The technological innovations that permit accurate and relatively inexpensive sequencing have been rapid and, importantly for the sponsors, were developed independently of the prize incentive. So, for the first time in its 18-year history, the XPRIZE Foundation canceled a competition.

"Genome sequencing technology is plummeting in cost and increasing in speed independent of our competition," Peter Diamandis, chair and CEO of the XPRIZE Foundation stated in announcing the cancellation. "Today, companies can do this for less than \$5,000 per genome, in a few days or less—and are moving quickly towards the goals we set for the prize. For this reason, we have decided to cancel an XPRIZE for the first time ever."

Two groups had entered the competition: Ion Torrent, a California-based gene sequencing equipment manufacturer, and the Wyss Institute, a Harvard University-based organization that uses

nature as a model to create biologically inspired materials and devices. The contestants had not yet signed a binding contract, making it relatively simple for the group to return the \$10 million in prize money to its sponsors, a multi-millionaire philanthropist couple. The XPRIZE Foundation stated that it was searching for a noble use for the 100 human genomes donated by 100 centenarians from all over the world to be sequenced as part of the competition. Diamandis explained that, although the organization felt that its competition "helped generate significant visibility of the need for rapid, low-cost medical grade genomes," in the end, the field of genomics appears to have such robust momentum that the added incentive of a prize simply wasn't necessary.

—Karyn Hede, News Editor

Scripps Institute aims to produce genomics videos



As the chorus of calls for better physician education in genomics builds, a few organizations are taking steps to

address the need. One of the most vocal and impassioned authorities on the subject, Eric Topol, director of the Scripps Institute and chief academic officer of Scripps Health, has begun work on a series of educational videos modeled on the Khan Academy, the popular series of online video tutorials. For a physician audience, the genomics videos are expected to be part of a formal continuing medical education program, but Scripps has not yet settled on a platform. The institute began the project in 2010 with a \$300,000 grant from the Life Technologies Foundation, the philanthropic arm of the life-sciences-technology company that recently sponsored the Smithsonian Institution exhibition "Genome: Unlocking Life's Code." The original goal was to provide a credentialing program in genomics for doctors. But Topol hopes to broaden the effort to provide educational videos for the public as well.

At the National Human Genome Research Institute's fourth annual genomic medicine centers meeting in January 2013, which focused on physician education in genomics, speakers pointed out that the available genomics primers for physicians have met with varied success. There was much discussion about establishing a coordinating committee for genomic physician education, but, as Topol has discovered, there is more talk than action on the topic. His team has been able to get the ball rolling on producing some videos, but the seed grant money is gone and his group is seeking additional funding to complete the videos. For additional information, see <http://www.utsandiego.com/news/2013/aug/21/genomics-dna-sequencing-videos-scripps-topol/>. —Karyn Hede, News Editor

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- Original reports which enhance the knowledge and practice of medical genetics
- Strategies and innovative approaches to the education of medical providers at all levels in the realm of genetics

As the official journal of the American College of Medical Genetics and Genomics (ACMG), the journal will:

- Provide a forum for discussion, debate and innovation concerning the changing and expanding role of medical genetics within the broader context of medicine
- Fulfill our responsibility to the College membership through the publication of guidelines, policy statements and other information that enhances the practice and understanding of medical genetics

Finally, as genetics becomes increasingly important in the wider medical arena, we will be an accessible and authoritative resource for the dissemination of medical genetic knowledge to providers outside of the genetics community through appropriate reviews, discussions, recommendations and guidelines.