A challenge of "genomical" proportions

When we think of things bigger than we are — way bigger — we tend to think of astronomy or distances separating us from Pluto or from galaxies at the edge of the universe. Fair enough, say Astrophysicist Professor X and colleagues, in a paper just published in PLoS Biology, but be prepared to change your frame of reference!

In the years just ahead, it may well be computerized bits and bytes encroaching on our personal space, said Schatz. "My colleagues and I are suggesting we may need to start calling really immense things 'genomical' from now on."

A faculty member of CBII's School then talked about the quantity of genome data being produced daily is doubling every 7 months. In a decade, perhaps 1 trillion human genomes will have been sequenced, analyzed, and encoded in databases. We will need to store and mobilize up to 400 exabytes of data per year. An exabyte is 10 to the 18th power.

Tunstall opened this address, and we were curious to see what he was going to talk about... But the short of it is that several RetT-like symptoms were ameliorated in female mice after a course of the experimental drug, and the life expectancy of very young mice was significantly extended compared with untreated siblings.

Positive results in mouse tests of a drug to treat RetT syndrome

Professor Nick Tnka, Research Associate Navagosa Krishnan, and colleagues have tested a drug known as a KRAS inhibitor in experimental mice models of RetT syndrome, and, they have just reported in Journal of Clinical Investigation, the results are promising. Tunstall, a developmental biologist that is among the autism spectrum disorders, affects 1 in 500 to 1,500 children in the US. Boys often suffer from infancy, so most survival depends on any drug that can begin to show symptoms way by age 2. Drugs developed by Tnka that inhibit an enzyme called PTPR are known to be effective. The challenge is to design a drug that can help patients with the disorder.

Environiatrics, launched by 2 CSBL alumni, gets funding

Accelerate Long Island and the Long Island Emerging Technologies Fund (LIEF) have announced an investment of $100,000 in Environiatrics, Inc., a bioinformatics startup based on technology developed at CSBL. The company's proprietary algorithms dramatically reduce the complexity of big biological datasets and quickly identify potential drug targets. The co-founders are CSBL alumni: CEO Bev Lario Lueders (Watson School PhD) and Chief Technology Officer Dr. Bernhard Pommen (postdoctoral fellow). "Environiatrics is a great example of the spirit of our students and of how best research at CSBL, can be used to accelerate the development of new therapies," commented Teri Wiley, VP of Business Development and Technology Transfer.

Gladowski Breast Cancer Foundation's generous gift

Following the 15th Annual Gala, Play for the Cure,68,000 dollars was raised at the Cold Spring Harbor Country Club on June 20th, to benefit the Gladowski Breast Cancer Foundation.79,000 dollars was raised at the Gladowski Breast Cancer Foundation. The $50,000 donation brings the family foundation's total gifts in support of CSBL breast cancer research to nearly $400,000. Everyone at the LA event extended heartfelt thanks.

Nicholls Bondi, briefly

Rome was not built in a day, neither was Nicholls Bondi's Hall of Fame. This very cool team comprises the long process into mere seconds.

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In the News

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Newswise

Rett syndrome hope nature

The boom in next generation, brains

Experimental treatment reverses behavioral and brain abnormalities in mice

Newswise

Tech startup Environiatrics receives $100,000 in funding

Experimental therapy may reverse autism-like symptoms in mice

ScienceNews

Large quantities may soon be collected "genomical"!

POPULAR SCIENCE

Data and time are now easier to get

The Scientist

Big data problem nature

Gregory researchers raise alarm

CP175727

Space gene in mice could data could sustain "genomical" lives

Up To Eats past scientifi

Reprogramming the genome creates hope for those who can't wait

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In quotes

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July 20, 2015 - Research Assistant Professor Michael Rosencwaig at SPARTh.org

Upcoming Events

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Sunday, September 20:

12th Anniversary Events

Lecture, Concerts, Come Celebrate

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Save the Date

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14th Annual Women's Partnership for Science

Sunday, September 20:

Double Hat Masquerade Dinner

Monday, November 9

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Stay Connected

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Cold Spring Harbor Laboratory (CSHL) is a not-for-profit research and educational organization dedicated to the study of the causes, mechanisms, and treatments of human disease. The Laboratory works to advance scientific education and community service. For more information, go to www.cshl.org.