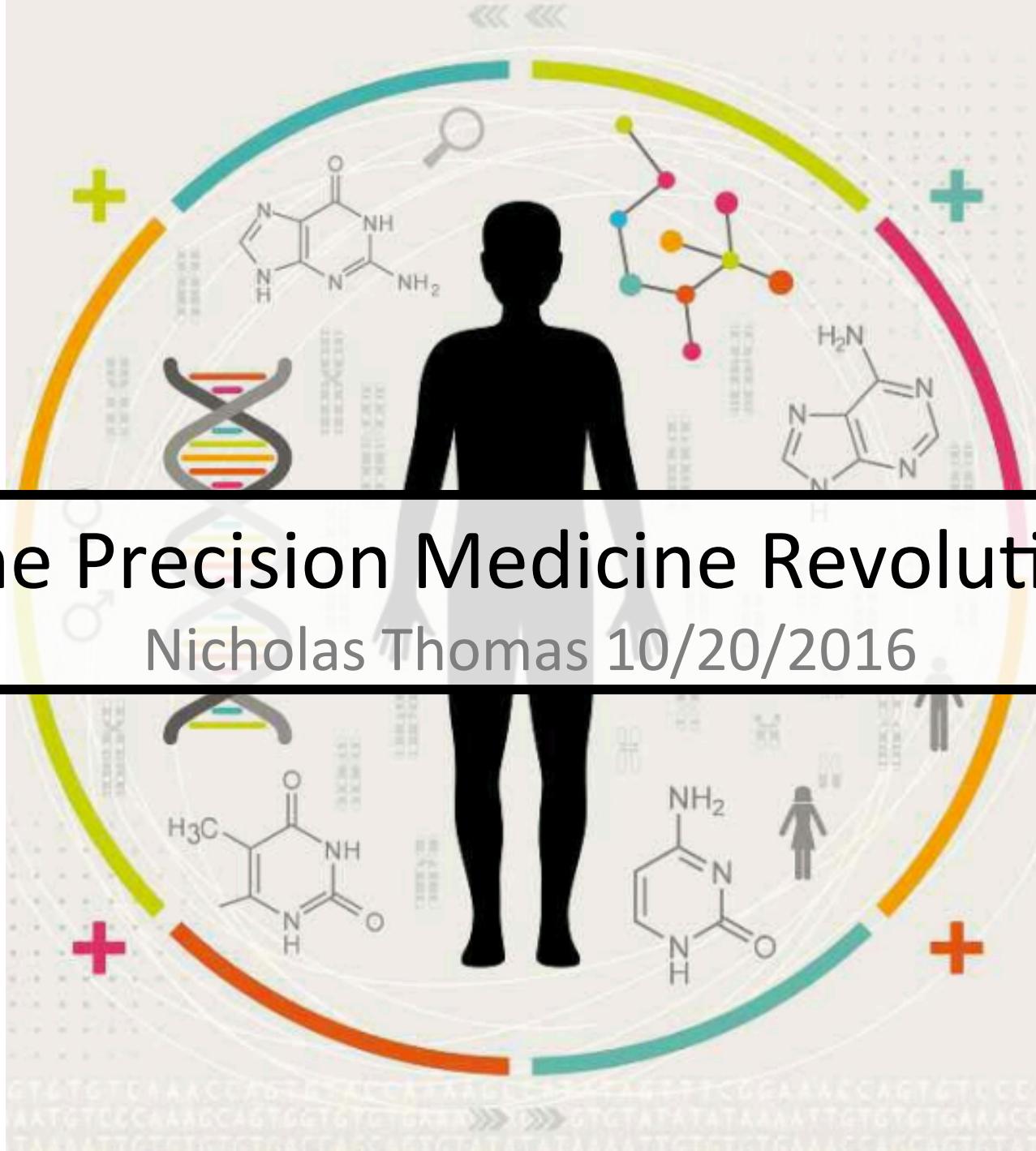


The Precision Medicine Revolution

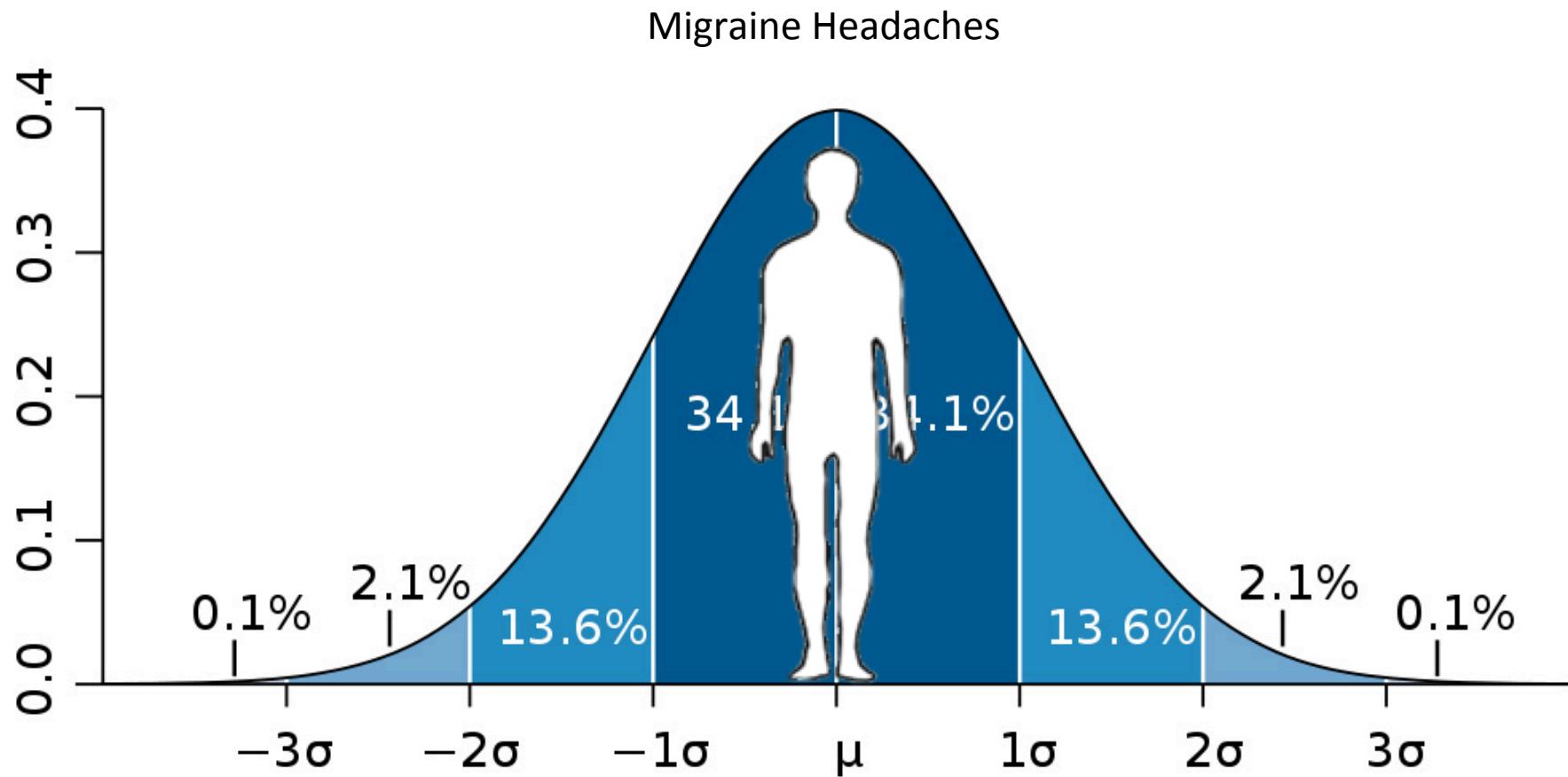
Nicholas Thomas 10/20/2016



What is it?

Precision medicine is a groundbreaking approach to disease prevention and treatment based on people's individual differences in environment, *genes*, and lifestyle

One-size fits all approach to medicine



WHY NOW?

The **time is right** because:

We have a greater understanding
of human genes



We have the tools to track health
information and use large
databases



People are more engaged in
healthcare and research



Research technologies have
improved



Falling fast

In the first few years after the end of the Human Genome Project, the cost of genome sequencing roughly followed Moore's law, which predicts exponential declines in computing costs. After 2007, sequencing costs dropped precipitously.

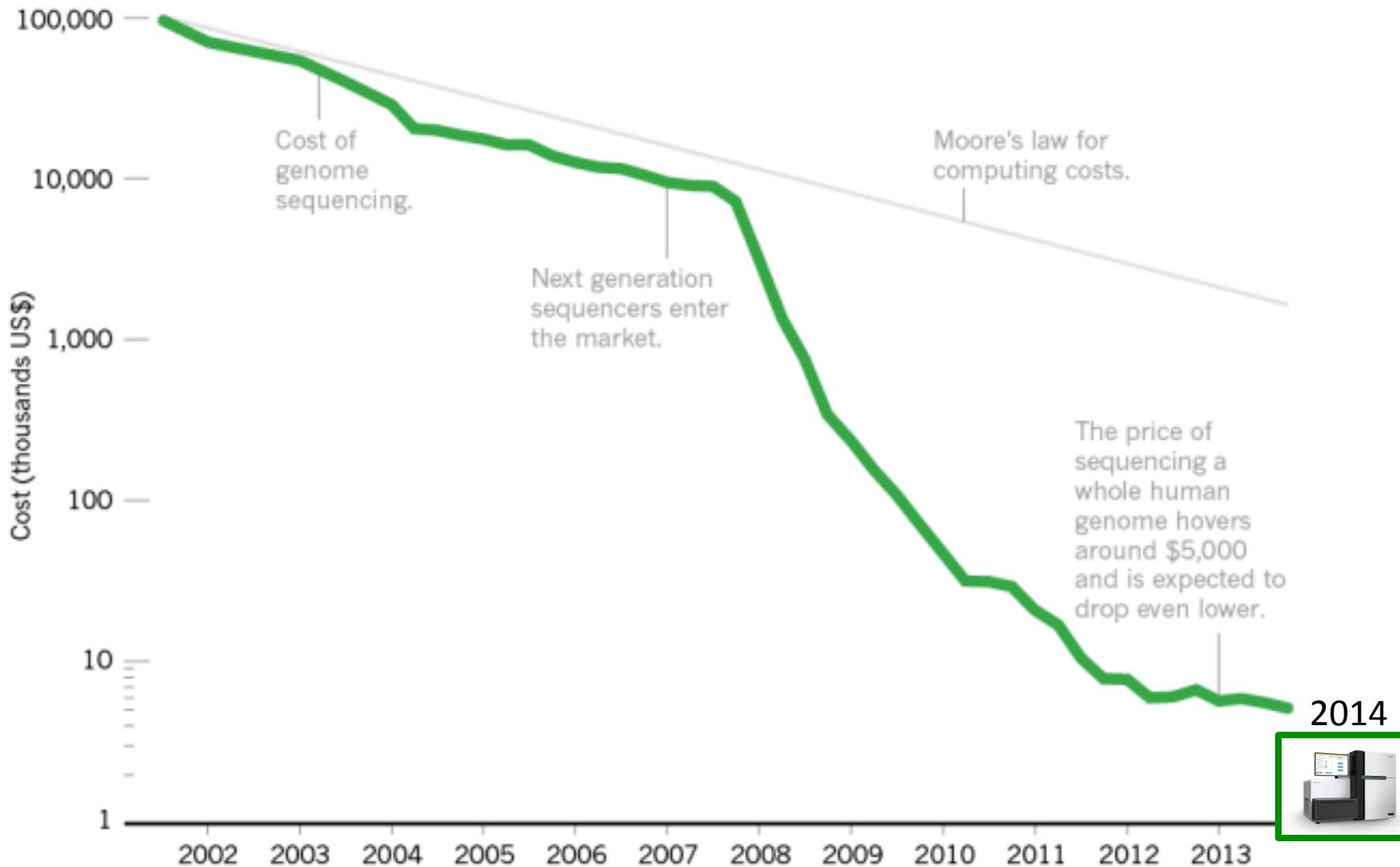




Table 1: HiSeq X System Sequencing Capacity

	HiSeq X Ten System	HiSeq X Five System
Minimum Number of Instruments	10	5
Annual Genome Capacity	> 18,000	> 9000
Price per 30x Genome	< \$1000	< \$1500

When operating at scale, HiSeq X Ten and HiSeq X Five Systems generate a staggering level of throughput, sequencing thousands of genomes per year.

Cost Breakdown

- Price of consumables for 16 genomes:\$12,750 (about \$800 per genome)
- Sample prep and labor: \$65 per genome
- Depreciation cost over four years/Number of genomes that can be sequenced in that time: \$135
- Total cost: \$1,000

Which institutions?

- Garvan Institute of Medical Research
- Broad Institute
- Macrogen



“Doctors have always recognized that every patient is unique, and doctors have always tried to tailor their treatments as best they can to individuals. You can match a blood transfusion to a blood type — that was an important discovery. What if matching a cancer cure to our genetic code was just as easy, just as standard? What if figuring out the right dose of medicine was as simple as taking our temperature?”

- President Obama, January 30, 2015





1 million participants



Veritas Genetics

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TOP CONTRIBUTORS

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Overview

[UPDATE](#)

Total Equity Funding

\$42M in 2 Rounds from 3 Investors

Most Recent Funding

\$30M Series B on October 17, 2016

Headquarters:

Danvers, Massachusetts

Description:

Vertias Genetics' purpose is to make actionable genetic information accessible to all.

Categories:

Genetic Testing, Biotechnology, Personal Health

Website:

<https://www.veritasgenetics.com>

Social:



Company Details

[UPDATE](#)

Founded: 2014

Employees: 11 - 50 | **None found in Crunchbase**

Our purpose is to make actionable genetic information accessible to all.

What's Next?



References

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