

ABOUT THE REGENERON GENETICS CENTER (RGC)



The objective of the RGC is to apply high-throughput genomic approaches to speed drug discovery and development, through identifying new drug targets and validating existing programs, ultimately helping patients in need. The RGC is a comprehensive, fully integrated genomics program that builds on Regeneron's well-established expertise in genetics and related technologies. The RGC is a wholly-owned subsidiary of Regeneron Pharmaceuticals, Inc.

WHAT THE RGC DOES

- > The RGC uses state-of-the-art automation and cloud-based informatics to enable sequencing and genotyping across hundreds of thousands of samples.
- > By pairing the sequence data with de-identified real-world electronic health records and other clinical datasets, the RGC can make associations between certain genes and diseases in order to:



Identify Genetic Variants Associated with Disease



Identify Novel Targets for Drug Development and Validate Targets From Existing R&D



De-risk Drug Targets By Studying Genetic Safety Profiles

- > As part of Regeneron's integrated discovery-to-commercialization process, the RGC's findings can be used to initiate and validate clinical explorations and inform the ongoing translational medicine approaches of many therapeutic and clinical groups at the company. In this way, the RGC allows Regeneron to potentially speed and optimize the drug development process.

HOW THE RGC IS UNIQUE

- > Among the largest genetic centers in the world in terms of scale and scope – sequenced the DNA from over 100,000 people and currently sequencing at a rate of more than 100,000 samples per year
- > Can evaluate a range of different diseases and traits
- > Broad and field-leading group of more than 25 collaborators offers access to diverse sets of large-population, founder-population and family-based DNA samples from well-characterized patients
- > One of the only genomic initiatives fully integrated into a successful R&D process at a proven biopharmaceutical company
- > State-of-the-art proprietary technology, as well as partner capabilities including Illumina sequencers, Amazon Web Service cloud computing and DNAnexus data management framework

The New York Times

Aiming to Push Genomics Forward in New Study

"Scientifically and medically, it's pretty exciting. As far as I'm aware, it's the largest clinical sequencing undertaking in this country so far by a long shot."

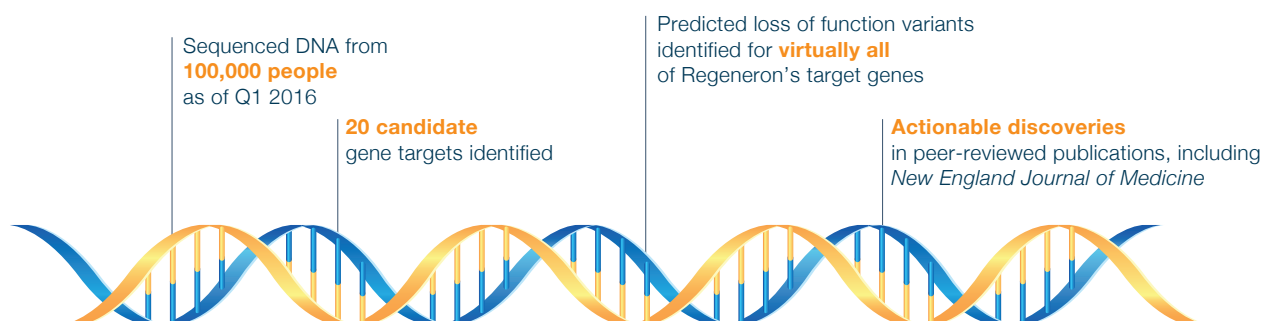
DR. LESLIE G. BIESECKER, chief of the Genetic Research Branch at the National Human Genome Research Institute

BARRON'S

Regeneron: The Best Bet in Biotech Stocks

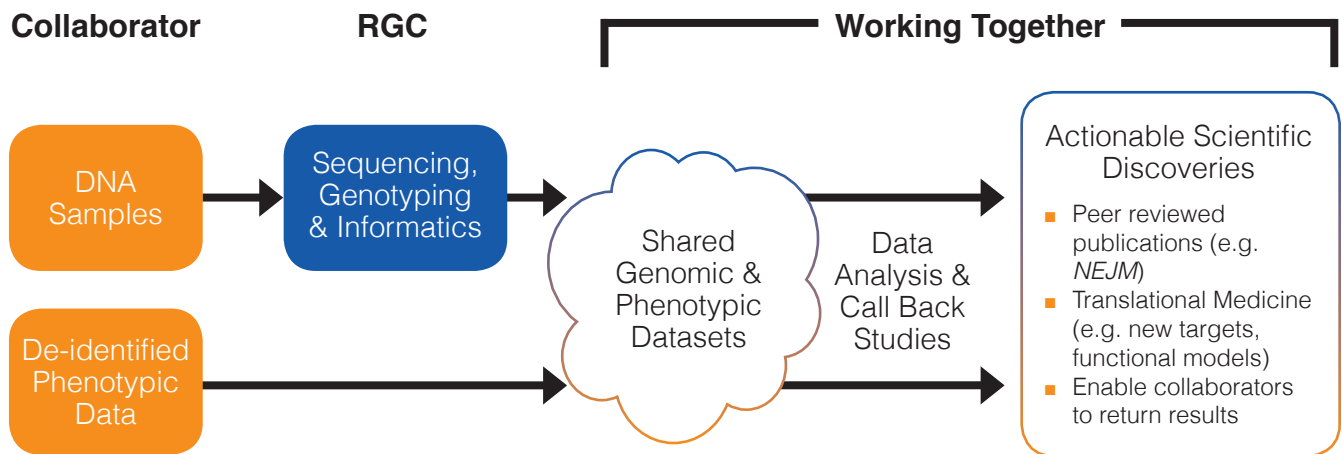
"There are sequencing efforts underway elsewhere, of course, but none matches Regeneron's for its combination of size, speed, diversity of samples, and detail of their accompanying health records."

OUTCOMES TO DATE



OUR COLLABORATION MODEL

The RGC is collaborating with an outstanding group of leading academic institutions, government organizations and integrated medical systems. Our collaborative model is focused on working closely together to gather and analyze data, exchange expert perspectives and ultimately make discoveries that will lead to improved patient care.



“The relationship with Geisinger is a cornerstone of the effort the Regeneron Genetics Center is building, which we believe can advance the goals of human genetics research and personalized medicine.”

GEORGE D. YANCOPOULOS, M.D., PH.D.,
Chief Scientific Officer, Regeneron Pharmaceuticals and President,
Regeneron Laboratories

“For Geisinger, this relationship is about the potential to improve individualized patient care...we expect that many of our patients and their family members will directly benefit from their participation in this research.”

DAVID H. LEDBETTER, PH.D.,
Executive Scientific Officer and Chief Scientific Officer,
Geisinger Health System

RGC COLLABORATORS INCLUDE:

GENERAL POPULATION

Geisinger



LABioMed

FAMILY-BASED STUDIES

BCM
Baylor College of Medicine

COLUMBIA UNIVERSITY
MEDICAL CENTER

SickKids® | Inflammatory Bowel
Disease Centre

FOUNDER POPULATIONS

Clinic for
Special Children

UNIVERSITY of MARYLAND
SCHOOL OF MEDICINE

ecogene21

DISEASE AREA FOCUS

Penn Medicine

UNIVERSITY OF UTAH
HEALTH SCIENCES

DUKE MOLECULAR
PHYSIOLOGY INSTITUTE

UCONN
HEALTH

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Vice President and Co-Head of the RGC

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Senior Director, Sequencing and Lab Operations

Jeffrey Reid, Ph.D.,

Executive Director, Genome Informatics

RGC FOUNDERS

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Andrew Murphy, Ph.D.,

Senior Vice President, Research

Robert Phillips, Ph.D.,

Senior Director, Predictive Medicine

Neil Stahl, Ph.D.,

Executive Vice President, Research and Development

“Regeneron’s science-driven culture and track record of solving key R&D challenges uniquely positions the RGC to rapidly translate genetic discoveries into medical innovations and therapies that can truly help patients.”

RICHARD LIFTON, M.D., PH.D.

Scientific Advisory Board Chair; President of the Rockefeller University and an investigator at the Howard Hughes Medical Institute

SCIENTIFIC ADVISORY BOARD

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Scientific Advisory Board Chair; President of the Rockefeller University and an investigator at the Howard Hughes Medical Institute

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