



GENOME UNLOCKING LIFE'S CODE



Smithsonian
National Museum of Natural History



National Human
Genome Research
Institute



Opened June 14, 2013 at the Smithsonian's National Museum of Natural History in Washington, D.C.; tour begins September, 2014



DNA literally is the 'stuff of life'—it is the set of instructions for making everything from you to zebras, strawberries, and even yeast. Understanding what the language of DNA means will revolutionize your understanding of yourself, your health, and your connections to life on Earth. *GENOME: Unlocking Life's Code* will take visitors deep inside their own bodies to explore the mysteries of the human genome. They will learn what genomic science tells us about human disease, where we fit into the natural world, and how humans populated the world. Through physical and computer interactives, media experiences, specimens and artifacts, replicas, *GENOME: Unlocking Life's Code* will reveal the thrilling nature of genomic science and what it means to us as humans.



"Genome: Unlocking Life's Code" goes beyond the traditional museum experience to give visitors a new way of looking at themselves as individuals, as members of a family, and as part of the diversity of life on our planet. From the moment visitors enter the hall, they will find themselves in a high-tech, high-intensity environment that communicates the compelling world of genome science. I am gratified by the partnership between the Smithsonian Institution and the National Institutes of Health that so engages and educates the public with this fascinating exhibition."

Attribution: Francis S. Collins., M.D., Ph.D., Director, National Institutes of Health

Developed and produced by the Smithsonian's National Museum of Natural History and the National Institutes of Health's National Human Genome Research Institute in association with Science North.

The Genome Within Us

An introductory, animated video will greet you from either end of the exhibition, introducing the genome, showing you what scientists have started to unlock its complex code. View a 3D model of a genome and find out where it is and how small it really is. Learn how researchers sequence a genome and find meaning in the avalanche of data it provides. Test your own DNA sequencing skills with an interactive puzzle. Through short video segments, meet the preeminent scientists involved in the Human Genome Project and get their views about the future of genomics.

Your Genome, Your Health

Discover the benefits of genome science for healthcare and medicine. Find out what a DNA sequence can reveal about health and risk for disease, and learn how lifestyle impacts the way your genes function. You are a superorganism with trillions of invisible microorganisms—called the microbiome—living among your own cells that are vital to your health. Sequencing technology unlocks these secrets, providing knowledge that is leading to better understanding and treatments for disease.

What Would You Do?

Did you ever wonder whether to have your own genome sequenced? Would you have a family member's genome sequenced? Your unborn child's? Who controls this information? Make vital decisions as the head of your family in the *Genomics and Family: What Would You Do?* interactive and encounter scenarios that will help you investigate these questions.

Next-Gen Medicine

Watch emotional videos showcasing real-life stories of patients and clinicians involved in solving medical mysteries and complex diseases through genomics. Take a closer look at recent research and targeted therapies for a range of diseases, including rare genetic conditions, contagious disease, and cancer. Learn more about drug treatments based on genomics, and challenge yourself with a puzzle to decide if a patient can safely take a commonly-prescribed drug.

What Do You Think?

Provide your feedback in this computer interactive that presents a range of social legal and ethical issues and big genomic science questions. Find out how your views compare with other visitors'. Results will be tallied during the course of the exhibition and shown in the kiosk and on the exhibition website. An updated LED ticker will show the latest genomic news headlines throughout the exhibition's tour.



Exploring a World of Genomes

Sequencing genomes provides an entirely new way of understanding life's diversity. Read sequences to identify the bird that brought down an airliner, and compare bird songs to find out more about genes linked to talking...and bird tweets. Examine the genomes of 5 different species and see what comparing their genomes reveals. Explore the Tree of Life in a media interactive to uncover what secrets genomics tells us about primates, honey bees, and more. Explore the genomic stories of primates and a tropical reef community, and uncover genomic surprises that tell us more about the natural world and ourselves.

Our Genomic Journey

Discover how our ancestry—as humans and as individuals—is written in our DNA. In a media interactive, follow a diverse group of people tracking where in the world their genomes have been. Find out what genomics shows about our species' ancient journey out of Africa and liaisons with early human species they encountered along the way. Learn why humans still share virtually all their DNA, and how adaptation to different environments led to many of the small ways we differ today.



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Size

3,000 sq ft (300 sq m)
Minimum ceiling height of
10 ft (3.04 m)

Cost

\$26,000 USD plus in-bound shipping,
available for the first 8 leases
\$29,750 for leases 9 onward
Three month (12 week) rental period

Availability

Fall 2019
Summer 2020

Additional Materials

Educational Manual created by the
Smithsonian's National Museum of Natural History
Marketing Manual
Operations Manual