

DNA BARCODING RESEARCH

A "DNA barcode" is a unique pattern of DNA sequence that can potentially identify each living thing. DNA barcodes allow non-experts to identify species—even from small, damaged, or industrially processed material. The DNALC has developed a unique lab and computer infrastructure for DNA barcode research that supports one of the largest citizen science projects in the world. To learn more about the DNALC's DNA barcoding programs, visit:

www.dnabarcoding101.org.



SUMMER CAMPS

We offer fun and challenging week-long camps for science enthusiasts entering 6th–12th grade. Guided by experienced instructors, students use sophisticated lab and computer equipment to perform experiments several grade levels ahead of their peers. <https://summercamps.dnalc.org/>



Call now to make reservations for *Regeneron DNALC* field trips!

Regeneron Pharmaceuticals, Inc.
Sleepy Hollow Campus
1 Rockwood Road
Sleepy Hollow, NY 10591
516-367-5170

Most Popular for Grades 5–8:

DNA Extraction

Extract DNA from wheat

Mutant Organisms

Observe mutant fruit flies

The Mystery of Anastasia

Solve a century-old mystery

Glowing Genes

Engineer bacteria to glow

Most Popular for Grades 9–12:

Bacterial Transformation

Genetically engineer *E. coli*

DNA Restriction Analysis

Digest and electrophorese DNA

Human Mitochondrial Sequencing

Use student DNA to explore human ancestry

DNA Barcoding

Identify organisms using DNA barcodes

For more information on these and additional labs and making a reservation, visit:

<https://dnalc.cshl.edu>



Cold
Spring
Harbor
Laboratory

REGENERON



A collaboration of

Cold Spring Harbor Laboratory

and

REGENERON



REGENERON DNA LEARNING CENTER



COLD SPRING HARBOR LABORATORY DNA LEARNING CENTER

Since its founding in 1988, Cold Spring Harbor Laboratory's DNA Learning Center (DNALC) has provided an environment where students and the public can learn about science by asking questions and doing experiments. Each year 30,000 students do hands-on experiments with DNALC staff through academic year field trips, summer camps, and extended research experiences. Our teaching model has been emulated by 20 institutions on four continents, and DNALC experiments and computer methods are used by more than 500,000 students per year. Most recently, *Harlem DNA Lab* and *DNALC NYC* at City Tech in Brooklyn have extended our reach from Long Island to the five boroughs.



A DNALC CLOSER TO YOUR SCHOOL

The *Regeneron DNALC*, a collaboration with Regeneron Pharmaceuticals, Inc., is located in the heart of Westchester County with convenient access from Dutchess, Orange, Ulster, and Rockland counties in New York; Bergen, Essex, and Hudson counties in New Jersey; and Fairfield and New Haven counties in Connecticut.



Regeneron is a leading biotechnology company that invents life-transforming medicines for people with serious diseases. Founded and led for over 30 years by physician-scientists, their unique ability to repeatedly and consistently translate science into medicine has led to nine FDA-approved treatments and numerous product candidates in development, nearly all of which were homegrown in their laboratories. Their medicines and pipeline are designed to help patients with eye diseases, allergic and inflammatory diseases, cancer, cardiovascular and metabolic diseases, pain, hematologic diseases, infectious diseases, and rare diseases. They believe that scientists should be the world's heroes and are committed to fostering the next generation of scientific talent through STEM (Science, Technology, Engineering, Math) education efforts.

HANDS-ON SCIENCE FOR EVERYONE

The *Regeneron DNALC* occupies a 4,700-square-foot space at Regeneron's Sleepy Hollow facility. Two teaching labs with state-of-the-art equipment accommodate middle and high school field trips during the academic year, week-long summer camps, and semester- or year-long research projects. Mentor training for teachers and mobile equipment footlockers support in-school experiments. The *Regeneron DNALC* is staffed by educators and Ph.D. biologists who have been trained to deliver an exceptional learning experience to every visitor.

ACADEMIC YEAR PROGRAMS

Half- and full-day lab field trips are available for students in grades 5–12. Labs are inspired by techniques and tools used by research scientists in the fields of genetics, biotechnology, and molecular biology. The experiences embody key concepts and process skills of the New York State Science Learning Standards and Core Curriculum, and complement Intermediate Level Science, Living Environment, and Advanced Placement Biology coursework.

School memberships provide benefits such as tuition discounts and preferred reservations for lab field trips. Schools that take advantage of DNALC programs several times a year can economize by enrolling in this program.



Check our website for guidance on grade-appropriate lab selections and reservations.
<https://dnalc.cshl.edu/programs/fieldtrips/>