

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



HANDS-ON SCIENCE FOR EVERYONE

The DNALC NYC at City Tech occupies a completely renovated 17,500 square-foot space. The new center has six teaching labs with state-of-the-art equipment, two bioinformatics labs, and a planned exhibition. Programs include high school and middle school field trips during the academic year, summer camps, extended research projects, and presentations for the public. Mentor training for teachers and mobile equipment footlockers support in-school experiments. DNALC NYC at City Tech is staffed by educators and Ph.D. biologists who have been trained to deliver an exceptional learning experience to every visitor.

Call now to make reservations for
DNALC NYC at City Tech field trips!

62 Tillary Street
(Corner of Tillary and Adams Streets)
Brooklyn, New York 11201
(718) 285-0389

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



A collaboration of



Cold
Spring
Harbor
Laboratory

&



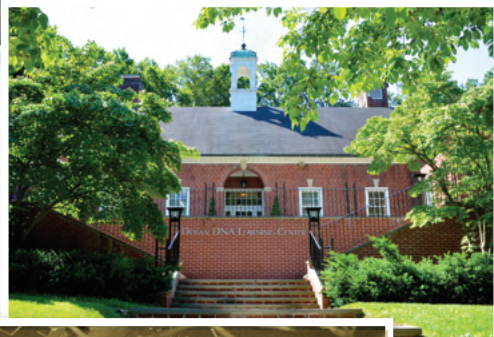
DNA LEARNING CENTER
NYC
AT CITY TECH



<https://dnalc.cshl.edu/about/dnalc-nyc/>

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 five continents and DNALC experiments and computer methods are used by more than 500,000 students per year. *Harlem DNA Lab*, opened in 2008, extended our reach from Long Island into the five boroughs.



DNA LEARNING CENTER COMMITTEE

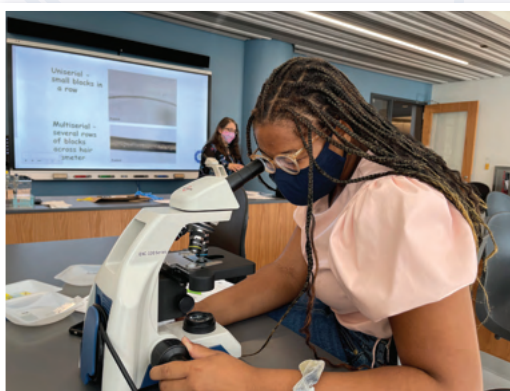
Jeanne Moutoussamy-Ashe
Charles I. Cogut
MaryAnne Gilmartin
Laurie J. Landeau, V.M.D.
Yolanda C. Lyle
Howard L. Morgan, Ph.D.
Douglas Schloss
Marilyn H. Simons, Ph.D.

A NEW DNALC CLOSER TO YOUR SCHOOL

A new DNALC at the New York City College of Technology (City Tech) in downtown Brooklyn is now open! *DNALC NYC* is located on the City Tech campus at the corner of Tillary and Adams Streets, with convenient access to Brooklyn, Queens, lower Manhattan, and central New Jersey. Ten subway lines stop within several blocks and there is ample room for bus drop-off.



The DNALC is proud to have found a new home at City Tech, a unique two- and four-year institution. City Tech is one of 25 campuses of City University of New York (CUNY), the largest urban university system in the U.S. Boasting world-class academics and award-winning faculty, today's CUNY attracts exceptional students. Founded in April 1946, the City Tech campus enrolls over 17,000 students in schools of Professional Studies, Technology and Design, and Arts and Sciences.



SUMMER CAMPS

Fun and challenging weeklong camps for science enthusiasts entering grades 6–12 are offered each summer—in person and virtually. Guided by experienced instructors, students use sophisticated lab and computer equipment to perform experiments several grade levels ahead of their peers. Registration opens in winter; or sign up for On-Demand virtual camps all year. Scholarships are available. To learn more, go to:

<https://summercamps.dnalc.org/dnalc-nyc/>



ACADEMIC YEAR PROGRAMS

Half- and full-day lab field trips for students in grades 5–12 employ 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. Scholarships are available for Title I schools. **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/>