DNA Barcoding Research

Just as the unique pattern of bars in a universal product code (UPC) identifies each consumer product, a “DNA barcode” is a unique DNA sequence that can potentially identify any living thing. 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. DNALC NYC at City Tech will be a hub for the popular Urban Barcode Project and Urban Barcode Research Program. To learn more about these DNA barcoding programs, go to www.dnabarcoding101.org.

Looking to the Future

In 2020, the DNALC NYC at City Tech will move into a completely renovated 17,500 square-foot space. The new center will have six teaching labs with state-of-the-art equipment, two bioinformatics labs, and an interactive exhibit. Programs will include high school and middle school field trips during the academic year, summer camps, and extended research projects. Mentor training for teachers and mobile equipment footlockers will support in-school experiments. DNALC NYC at City Tech will be staffed by educators and Ph.D. biologists who have been trained to deliver an exceptional learning experience to every visitor.
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. Harlem DNA Lab, opened in 2008, extended our reach from Long Island to the five boroughs.

**A NEW DNALC CLOSER TO YOUR SCHOOL**

This year we’ve expanded further—a new DNALC site is now open at the New York City College of Technology (City Tech) in downtown Brooklyn. This 32-student lab classroom is located at 300 Jay Street within the City Tech campus, 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 week-long camps draw over 1,200 science enthusiasts annually. Guided by experienced instructors, campers in grades 6–12 use sophisticated lab and computer equipment to perform experiments several grade levels ahead of their peers. DNALC NYC at City Tech camps begin this summer. To register, go to: http://summercamps.dnalc.org/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. Plan ahead for the upcoming school year. Reservations open on June 6, 2019 and spaces will fill quickly.

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

Check the Lab Matrix on our website for guidance on grade-appropriate lab selections: www.dnalc.org/programs/fieldtrips/matrix.html.