VILCEK INSTITUTE OF
GRADUATE BIOMEDICAL SCIENCES

MASTER OF GENOME
HEALTH ANALYSIS

Visit us at nyulmc.org/vilcekmsgenomehealthanalysis
Take a Virtual Tour! nyulmc.org/vilcekvirtualtour
MESSAGE FROM THE CO-DIRECTORS

Hello Future Colleagues,

Thanks for your interest in our program. We bet you’re reading this because you share our passion for the potential of personalized healthcare to improve people’s health. We want to be a part of making genetic and genomic sciences real and meaningful for each person’s health, extracting maximal insight from an individual’s genome and using that information to improve their care. Maybe, like us, you want to join a thriving interdisciplinary community of healthcare professionals and be a colleague to those who challenge assumptions and standard practice, who collaborate to create change and progress.

These are the experiences our program prepares you to have. Through eclectic, authentic learning experiences and individualized coaching, we help you develop competence and identity as a specialized healthcare professional skilled in genomic data analysis and interdisciplinary care coordination. If this sounds intriguing and exciting to you - if it seems to echo your own values and goals - we invite you to reach out, ask questions, and apply to our program.

Claire Davis, EdD, MS, CGC
Co-director, Master’s Program in Genome Health Analysis
Sarah Lawrence College

Anna Cantor, MS, MA, CGC
Co-director, Master’s Program in Genome Health Analysis
NYU Grossman School of Medicine
PROGRAM ADMINISTRATION

Anna Cantor, MS, MA, CGC
Co-director, Master’s Program in Genome Health Analysis
NYU Grossman School of Medicine

Claire Davis, EdD, MS, CGC
Co-director, Master’s Program in Genome Health Analysis
Sarah Lawrence College

Aravinda Chakravarti, PhD
Director, Center for Human Genetics and Genomics
Murial G. and George W. Singer Professor of Neuroscience and Physiology
NYU Grossman School of Medicine

Kelly Ruggles, PhD
Associate Professor of Medicine
Director of Masters Education, Vilcek Institute of Graduate Biomedical
NYU Grossman School of Medicine

Kelle Steenblock, MS, CGC
Director, Institute for Genomics
Sarah Lawrence College
NYU Langone’s Vilcek Institute of Graduate Biomedical Sciences and Sarah Lawrence College co-created a master’s program in Genome Health Analysis (GHA) to train a new class of professionals to use genomic data to generate clinically actionable guidance for individuals.

Leaders at both institutions designed this cutting-edge program to meet the evolving needs of the field. Working collaboratively, they designed this innovative program to provide skills and experiences to participants not yet offered by other degrees. Participants will learn from experts at Sarah Lawrence College’s Joan H. Marks graduate program in Human Genetics and from renowned educators at NYU’s Langone’s Vilcek Institute of Graduate Biomedical Sciences. Notably, Sarah Lawrence College’s Human Genetics program is the nation’s first genetic counseling master’s degree and remains the largest program of its kind. NYU’s Vilcek Institute, which is part of the Grossman School of Medicine, a nationally-ranked medical school, offers specialized graduate programs in biomedical sciences. The unique strengths of these two institutions offer participants an unparalleled opportunity for professional training.

Our students join a vibrant community of learners and practitioners who are committed to utilizing genomic information to personalize healthcare and improve health outcomes.

Graduates of our program develop versatile expertise and experience in interdisciplinary environments that prepare them to work in many healthcare contexts, supporting genomically-informed interactions between patients, providers, direct-to-consumer genomic testing companies, payers, and point-of-care groups.

**Timeline**

The program, which culminates in a degree from NYU, is typically completed in two years and includes coursework, case-based skills labs, and a practicum for immersion in future work environments. Students will take part in courses offered by both NYU Langone’s Vilcek Institute Biomedical Sciences and Sarah Lawrence College’s Joan H. Mark Graduate Program in Human Genetics. With individualized coaching from faculty of both programs, students will acquire competencies that can be successfully adapted to a variety of careers in personalized healthcare and genomic medicine.
Students in the program will:

• obtain necessary foundational knowledge in human genetics and genomics, bioinformatics, and healthcare systems

• acquire fundamental computer science and informatics skills, in addition to computational skills for analyzing complex genomic and medical data

• build competence in translational care coordination, particularly consulting, communication, and collaboration

• develop professional identities as change agents charged with iterating on standard practice to produce improvements

Sample Curriculum

Fall I: 4 Classes
• Introduction to Programming and Biostatistics
• Human Genetics
• Healthcare Systems
• Evidence-Based Practice

Spring I: 4 Classes
• Genome Sequence Informatics
• Human Disease Genomics
• Professional Identities
• Clinical Risk Assessment

Fall II: 2 Classes + Skills Lab + Practicum
• Health Informatics
• Human Genome Variant Interpretation
• Skills Lab 1
• Practicum 1

Spring II: 2 Classes + Skills Lab + Practicum
• Emerging ‘Omics Technologies
• Translational Healthcare
• Skills Lab 2
• Practicum 2
Sample Curriculum, Continued

GHA Skills Lab 1 & 2

Students refine and integrate skills in variant curation, risk assessment, and interprofessional consultation as they interpret a series of individual genomes and convey personalized management plans to professionals providing care across a range of medical specialties.

GHA Practicum Lab 1 & 2

Practicum embeds students in various work environments and promotes critical analysis of how the Genome Health Analyst will enhance provision of personalized healthcare. Students engage in cross-context comparison of future work roles and strategize how best to integrate the Genome Health Analyst into existing healthcare structures and services.

TUITION (2024–2025)

Tuition is charged according to the scale of the NYU Graduate School of Arts and Science (GSAS). GSAS charges tuition on a credit basis. Students must obtain a minimum of 48 credits for the master’s degree. A full-time course load is typically 12 credits per semester for master’s programs.

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Finance Charge

A finance charge will be imposed on unpaid student accounts from the first day of classes until the outstanding balance is paid in full. The amount of the finance charge is determined by applying a periodic rate of 1% per month to the “average daily balance” of your account. The corresponding annual percentage rate is 12%.

The Office of the Bursar, the central billing and collection point for NYU, manages the university billing, collecting, refunding, and cashiering functions.
CAREER DEVELOPMENT

The Vilcek Institute partners with the NYU Wasserman Center for Career Development to host workshops and seminars to help your career path. We have a dedicated team for our graduate students. Examples of offerings include Networking 101, Virtual Career Fairs, Industry Job Search, CV preparation, and 1:1 advising.

Mentors

A team of nationally and internationally recognized NYU Grossman School of Medicine and Sarah Lawrence College Human Genetics faculty members teaches MS in Genome Health Analysis courses at the Vilcek Institute of Graduate Biomedical Sciences. Our faculty also act as mentors to students.

David Beck, MD, PhD
Assistant Professor, Departments of Medicine and Biochemistry and Molecular Pharmacology

Michelle Bina, MS, CGC
Genetic Counseling Education Fellow
Sarah Lawrence College

Anna Cantor, MS, MA, CGC
Co-director, Master’s Program in Genome Health Analysis

Aravinda Chakravarti, PhD
Professor, Departments of Medicine and Institute for Systems Genetics
The Muriel G. and George W. Singer Professor of Neuroscience and Physiology, Department of Neuroscience and Physiology
Director, Center for Human Genetics and Genomics

Claire Davis, EdD, MS, CGC
Co-Director, Genome Health Analysis, Sarah Lawrence College
Director, Curriculum at the Institute for Genomics Education
Faculty, The Joan H. Marks Graduate Program in Human Genetics

Lindsey Alico Ecker, MS, CGC
Director, Genetic Counseling, University of Buffalo
Guest Faculty, Sarah Lawrence College
Mentors, Continued

Gilad Evrony, MD, PhD
Assistant Professor, Departments of Pediatrics and Neuroscience and Physiology

Hakhamanesh Mostafavi, PhD
Interim Member of the Faculty, Department of Population Health

Emily Qian, MS, CGC
Cancer Genetic Counselor
Guest Faculty, Sarah Lawrence College

Erika Renkes, MS, CGC
Cancer Genetic Counselor
Guest Faculty, Sarah Lawrence College
LIVING IN NEW YORK CITY

Housing
For students starting in the summer, it is possible to apply for summer housing (www.nyu.edu/summer/housing/rates.html) until long-term living arrangements are made. NYU Housing is quite limited, so we suggest students look for other housing options upon their decision to matriculate. Find New York City housing options information at www.nyu.edu/life/living-at-nyu/off-campus-living.html.

Dining and Entertainment
There are countless ways to enjoy New York City on a budget. In fact, some of the best things to do in NYC are free. For example, you can visit Central or Prospect Park; rent a bicycle through NYU’s inexpensive bike share program and ride down the West Side Highway; or stroll down the boardwalk in Coney Island.

Affordable Dining
Dining in New York City offers an array of options at every price point. Check out “Time Out’s Cheap Eats” (www.timeout.com/newyork/restaurants/cheap-eats), ny.com or citysearch.com for the best bites that fill you up without emptying your wallet.

Broadway Shows and Concerts
NYU Ticket Central sells student discounted tickets to concerts, comedy shows, movies, and more. Also, visit one of the TKTS Discount Booths for Broadway and off-Broadway show tickets at 25%–50% off (www.tdf.org/nyc/7/TKTS-ticket-booths). Even the Metropolitan Opera has a student discount program—visit the website to learn more (www.metopera.org/season/tickets/student-tickets/). Don’t forget to check out the Time Out New York website for a list of free events by day.

Museums
Most museums offer student rates and even free entry days. Current NYU students also have free access to many New York museums through the NYU Museum Gateway program (www.nyu.edu/life/arts-culture-and-entertainment/free-museum-access.html).
OUR MISSION

We are dedicated to the mission of training future scientists and critical thinkers by fostering an inclusive and collegial environment supportive of scientific discovery and professional growth.

We achieve this by:

• developing and managing high-quality academic programs for our student scholars, including opportunities to engage in cutting-edge research at a world-renowned academic medical center.

• providing an environment in which students integrate with our research community to not only gain expertise and excel at original research in their fields, but also to develop skills spanning any career, i.e., critical thinking, problem solving, ethical training, and oral and written communication.

• working to advance the diversity of graduate education through recruitment, retention, and support of underrepresented groups.

• continually evaluating our academic programs and establishing initiatives to best fit the needs of our community in a changing research landscape.

Application opens January 31, 2024
https://apply.vilcek.med.nyu.edu/apply/