2025 NYSCF Summer Internship
Data Science Track

The New York Stem Cell Foundation (NYSCF) Research Institute is a rapidly growing and highly successful nonprofit whose mission is to accelerate cures through stem cell research. Since our founding in 2005, we have advanced cutting-edge stem cell research in our own laboratory and through support for talented scientists at other institutions.

NYSCF is seeking applications for talented Data Science Interns to spend 10 weeks onsite at the NYSCF Research Institute engaged in a research project building custom pipelines to analyze and interpret biological data generated by teams within the NYSCF Research Institute. You are a skilled data scientist who has knowledge and experience in working with machine learning, images, and have advanced Python knowledge. This position will work closely with an interdisciplinary team of biologists, automation specialists, and engineers.

Prospective interns are matched with mentors based on available projects, relevant experience, and common interests. Please indicate any field(s) of interest in your essay questions.

For more information and application requirements, please visit:
https://nyscf.org/summer-internship

Applications will be reviewed on a rolling basis, starting January 8, until the 2025 cohort is fully selected.

PROGRAM DETAILS

The NYSCF Summer Internship Program will run 10 weeks; June 2, 2025 – August 8, 2025, 5 days per week 9:30am – 5:30pm Eastern (excluding holidays). **For Summer 2025, Data Science interns are invited to join us onsite at The NYSCF Research Institute in New York City**. **Candidates interested in hybrid opportunities will be given consideration, but must be able to commit to onsite work at least 4 days per week, with Thursday as a mandatory onsite day.**

All interns will participate in a comprehensive curriculum designed to broadly expose interns to all functions of the organization and the field of stem cell research.

Candidates must be able to attend the full program.

This is a paid position, with the following structure:

- Undergraduates - $18/hour
- Recent graduates (of an undergraduate program) - $19/hour
- Graduate students - $20/hour

WHAT YOU'LL DO

- Perform pre-processing, post-processing, segmentation and related tasks to imaging datasets
- Use Deep learning to implement models for multiple image-related applications like segmentation, classification, object detection
- Use Deep learning methods to interpret complex biological datasets
- Develop and implement pipelines for end-to-end processing of large imaging datasets

DIVERSITY, EQUITY, INCLUSION, AND BELONGING

NYSCF is committed to fostering diversity, equity, inclusion, and belonging (DEIB) in STEM. Overcoming the impact of systematic racism, sexism, and other discrimination that has systematically marginalized certain groups from STEM research is critical for a productive, innovative scientific community. NYSCF strongly encourages applications from applicants of all ethnicities, cultures, religions, nationalities, abilities and disabilities, sexes, gender identities, sexual orientations, geographic locations, and socioeconomic statuses.

We invite all applicants to voluntarily self-identify their race and gender. Submission of the information on this form is strictly voluntary and any responses (or non-responses) to this section will not affect the review of your application.

ELIGIBILITY CRITERIA

To be eligible, candidates must:

- Be currently enrolled as a full-time undergraduate or graduate student at an accredited institution, and also have completed at least one year as a matriculating undergraduate student at the time of internship. Recent college graduates and graduate students are also welcome to apply.
- Be a United States Citizen or Permanent Resident Alien at the time of applying or a foreign applicant with appropriate visa documentation, as required by U.S. Immigration, valid for the course of the Internship.
- Be 18 years or older at the time the internship begins (June 2, 2025).
- Demonstrate proficiency and experience with programming in Python.
- Have an interest in stem cell research and a basic knowledge of molecular biology and genetics.
- Have high proficiency in both Mac and PC computer, Microsoft Word, Excel, PowerPoint.

NYSCF prefers candidates also:

- Maintain an undergraduate cumulative minimum Grade Point Average (GPA) of 3.0 on a 4.0 scale for all completed courses as a matriculating student.
- Have experience with image process libraries (such as CV2, skimage, or PIL) or machine learning libraries (such as pytorch, tensor flow, or Keras).

The student does not need to be enrolled in a formal data science program, but must be comfortable with programming. Students who are currently biological majors but proficient with programming are encouraged to apply.

APPLICATION DETAILS

The application components include:

- Contact and other relevant administrative details.
- Complete resume/CV, cover letter, and unofficial transcript.
- Answers to the Data Science track essay questions:
    - How would this position help your larger career goals?
    - Which are your three strongest software development skills and which are your three weakest software development skills that you want to improve?
    - Are you able to describe a time when you combined computational skills and innovative thinking to overcome a technical problem relating to large datasets?
    - If you have worked on computer vision real world project in the past, please describe the approach you used.
- Reference details