



## 2020 NYSCF Summer Internship - Engineering Track

The New York Stem Cell Foundation (NYSCF) is a rapidly growing and highly successful nonprofit whose mission is to accelerate cures through stem cell research. We are a vibrant, growing organization that advances cutting-edge stem cell research in our own laboratory and through support for talented scientists at other institutions.

NYSCF is seeking applications for talented Engineering Interns to support the development of the Global Stem Cell Array, a robotic system that automates both iPSC derivation and downstream differentiations and assays. The Engineering Interns are responsible for developing custom software solutions to automate and optimize existing processes, and organize and analyze laboratory data.

This position will report to the lead Software Automation Engineer, with additional supervision by other members of the NYSCF Engineering Team. In addition, the role will involve close collaboration with the Array team, including biologists, project management, IT specialists and operations.

### Lab Automation:

- Through hands on training and supervision from the automation engineers, improve knowledge to develop and optimize a wide range software solutions, including desktop and web applications, SQL stored procedures, macros and scripts
- Develop integrated system for acquiring, organizing and analyzing QC data using VB.NET, SQL and database design
- Design custom data analyses using database queries and commercial analysis packages, and communicate those results in a team environment
- Work with Array staff to implement improvements to laboratory processes and provide software development support

### Organization:

- Work closely with the engineering team to ensure common approaches to software development are used
- Author accurate software documentation and troubleshoot issues independently

### Undertakes Special Projects:

- As assigned by supervisor(s) and/or Array Management

### Applicant Requirements:

- Must be currently enrolled as a full time undergraduate student at an accredited institution, in the field of computer science, engineering or the basic sciences, with at least 2 semesters or equivalent experience in computer programming. Recent college graduates and graduate students are also welcome to apply.
- Must 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.
- Preferred undergraduate cumulative minimum Grade Point Average (GPA) of 3.0 on a 4.0 scale for all completed courses as a matriculating student.
- Applicant must be 18 years or older at beginning of the internship.
- Demonstrated proficiency and experience with programming in languages like VB.NET, C# or C++ is strongly desired. Experience with SQL, database integration and maintenance, and basic computer networking is a plus.
- The applicant should have an interest in stem cell research and have the ability to work and communicate effectively in a fast paced, multi-disciplinary team.
- A high proficiency in both Mac and PC computer, Microsoft Word, Excel, PowerPoint is required.
- The NYSCF Summer Internship program will run 10 weeks; June 1, 2020 – August 7, 2020, 5 days per week 9:30am – 5:30pm (excluding holidays) in Manhattan. Candidates must be able to attend the full program.

### For more information and application requirements please visit:

<https://nyscf.org/summer-internship>