

Tufts University Biomedical Engineering Research Scholars Program:

The Tufts University Biomedical Engineering Research Scholars (TUBERS) Program is dedicated to providing unique and rewarding research experiences at Tufts for dedicated, academically-talented high school students. Students will be involved in cutting-edge biomedical research, investigating biomedical questions and developing new methods to study cells, tissues and organs. Students will work for 6-10 weeks over the summer in the Biomedical Engineering labs at Tufts, learning about general research techniques utilized in all of the labs in the department and then spending the last two weeks learning a particular field of study in depth, all while learning experimental protocols, making predictions, and testing hypotheses. Students are encouraged to use their projects to participate in local and national science competitions, where they may win honors and college scholarship money. **Please note that per Tufts University Safety Regulations, students must be 16 years of age at the start of the program on July 5th in order to participate.**

Students will:

- Learn about a broad array of biomedical engineering research techniques
- Study a particular field of science in depth for 2 weeks
- Carry out all steps of the scientific method in their project
- Present their findings to others in the program, parents, and teachers
- Observe first-hand the work of professional researchers
- Learn to think critically and independently
- Gain academic guidance from undergraduates and graduate students involved with the program and their research mentors

Students will be expected to find their own transportation to the Tufts campus to do their work. Internships are unpaid and students will receive all necessary safety and research training to work in the labs. Students are encouraged to present their work in science competitions such as the Massachusetts State Science and Engineering Fair (in the spring), the Siemens Competition in Math, Science, and Technology (in the fall), and the Intel Science Talent Search (in the fall). All students must present their work in a poster presentation at an end of the year get together for the program participants.

Application overview:

Following submission of the application, students will be notified via email that their application was received. Acceptances will be sent out via email by May 20th and the program will start. The program will start with several orientation sessions on research in general. Students are expected to be present for all program activities during the week (generally 9 am – 4pm, daily). All accepted students will be expected to attend weekly TUBERS group meetings, and an end-of-session lunch and presentation session at the end of the summer, where students will give poster presentations on their work over the summer. The application is designed to show the candidate's interest and aptitude in science, mathematics, and engineering. Please answer the questions about yourself here:

<https://forms.gle/yHT8LikkGbYdjrRQ8>

The application also requires a school transcript and a reference letter from a science teacher detailing your interest/ aptitude for science with particular attention to any lab work you may have completed. You (and a parent) must also read and sign the second page of this document and send in as well. These additional application materials can be scanned and submitted via email to the program at tufstubers@gmail.com. They can also be mailed to the following address:

TUBERS Program – Lauren Black
c/o Department of Biomedical Engineering
4 Colby Street
Medford, MA 02155

Applications are due by April 29th and notification of acceptance will be made by May 20th.

I, _____ (your name here), affirm that all of the information in this application is accurate, and that if accepted to the Tufts University Biomedical Engineering Research Scholars Program, I will commit to the program requirements described above. I understand that if I fail to fulfill the program requirements, I may be removed from the program. Furthermore, I understand that I will be trained in safety as required by the specific laboratory I work in and will not hold Tufts University, the Biomedical Engineering Department, my faculty mentor and other students in my lab responsible for any injury caused by my failure to follow the proper safety guidelines.

Student Signature Date

Parent/Guardian Signature Date