

Summer Internship on Engineering Biology @ NC State University



Who should apply?

Current high school freshman through seniors (including those matriculating to college Fall 2021).	Current undergraduate students (including seniors graduating Spring 2021).	Adult community organizers, High school and college educators, Community volunteers.
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- Participants should be local to the Raleigh-Durham area.
- This program and its sponsor strongly encourages applications from groups that are underrepresented in the STEM and Bioengineering Disciplines as defined by the NSF (African-Americans, LatinX, Native Americans, Alaskan Natives, Native Hawaiians, and other Pacific Islanders; Women and girls; Veterans enrolled in post-secondary education; and Persons with disabilities).
- Stipends provided (\$2800 for high school, \$4000 undergraduates, \$6000 teachers-educators-community organizers-community volunteers-veterans).

What is it?

- 6 week summer internship experience at NC State University.
- Participate in an outreach activity the following school year.
- Learn how engineering DNA, cells and organisms can treat diseases, develop stem-cell therapies, and produce useful everyday things like fragrances and fuels.
- Hands-on experiments mentored by leading NCSU Bioengineering researchers.
- Field trips/virtual visits to bioengineering facilities and/or companies in the area.
- Team-based learning with those with diverse experience levels.
- For adult community member participants, an opportunity to learn about new themes or activities for classroom or outreach activities.
- Present what you learned during the internship at the National Science Foundation in Washington, DC to a national community in Spring 2022. Travel costs provided.

When is it?

- June 20 – July 31, 2021 (TENTATIVE, depending on NCSU housing and programming restrictions. Thanks for your patience as things are dynamic given the current pandemic situation.)
- Currently, it is not known if an in-person internship @ NC State University, Raleigh, NC will be possible due to the pandemic. The internship is currently being planned as a virtual internship where hands-on kits will be mailed to participants, and activities will be mentored through Zoom. If circumstances improve and on campus summer programs are allowed by the University and State and local governments, the internship will be transitioned to an on campus internship.
- Selection and interviews will necessarily occur well in advance of knowing whether the internship can be done in person @ NC State University.
- Applicants are expected to commit to fully participating for the entire duration of the program whether the internship is virtual or on campus.
- If on campus internships are permitted, adult community participants and high school participants will not board on campus; undergraduate students will board on campus and lodging will be provided.

We will start evaluating applications March 1, 2021.

(Final deadline March 15, 2021).

- High School Students apply at:
<https://forms.gle/pWjYhdnok61PaeNMA>
- Undergraduate students (already matriculated) apply at:
<https://forms.gle/HmKqK331252xHjAq7>
- Adult educators/community organizers/community volunteers/veterans apply at:
<https://forms.gle/91zLB89t4swFWbU59>

Links can also be found here:

<https://keunglab.wordpress.ncsu.edu/engineering-biology-ncsu-summer-research-experience>
Questions? EngineeringBiologyNCSU@gmail.com

Note on a Potential Parallel Program

We have funds and physical space to support stipends and, if safe to do so, on-campus activities for only a limited number of participants. However, we may be able to hold parallel fully virtual internships during the same time period in the summer. There is a question at the end of the application forms asking if you would like to be considered for one of these slots if not selected for the internship. No stipend would be provided, and it would be fully virtual no matter the

safety status of our campus, but supplies for the hands-on activities would be provided. Indicating interest in this will not affect the evaluation of your application for a full internship.

FAQ:

- If a campus internship is allowed by university, state, and local authorities, on campus housing will be provided to undergraduates 18 years of age and older. Meals will be provided for undergraduates staying on campus.
- Due to lack of the required overnight staff to supervise minors, high school students will not be staying on campus and will need transportation to and from home. Funds for transportation may be available with a statement of financial need from parents/guardians.
- Lunch on campus will be provided for high school students and educators/community organizers/volunteers.
- We ask participants to commit to the full program period (excluding weekends).
- GPAs are recommended to be included on resumes. Transcripts are not required.
- The typical day will be 9a-5p, with a mix of hands-on experimentation, laboratory demonstrations, small group lectures, and seminars on presentation skills, ethics, and careers.
- Short interviews will be conducted before the end of March, with final decisions made the first week of April.