

# NATIONAL INSTITUTE OF BIOMEDICAL IMAGING AND BIOENGINEERING



## Biomedical Engineering Summer Internship Program

National Institutes of Health



National Institute of  
Biomedical Imaging  
and Bioengineering

### What is BESIP?

The NIBIB sponsored Biomedical Engineering Summer Internship (BESIP) is for undergraduate biomedical engineering students who have completed their junior year of college. The ten-week program, under the guidance of Dr. Robert Lutz, BESIP Program Director, is scheduled from June 1, 2020 to August 7, 2020. The internship allows rising senior bioengineering students to participate in cutting-edge biomedical research projects under the mentorship of world-class scientists in NIH laboratories in Bethesda, MD.

Selected by a nationwide competition, the interns will have the opportunity to indicate preferences from a list of available NIH projects that involve areas of engineering or physical science expertise. The interns participate in many activities that are provided by the Summer Internship Program (SIP). They submit posters to the NIH Poster Day where summer interns from all disciplines present their projects. The 16 interns present the results of their summer research projects at a closing BESIP Seminar which is attended by students, mentors, and many guests from NIH. Interns submit a short written report at the end of the program that summarizes their research for the summer.



Former BESIP intern, Michelle Mellenthin, works to optimize fluorescence labeling reactions for microchip electrophoresis

### Who Can Apply?

Below are the requirements for BESIP:

- Applicant must have completed at least three years (6 semesters or 9 quarters) of undergraduate study in a biomedical engineering or bioengineering degree program by the start of the 2020 summer
- Applicant must plan to be returning to undergraduate school for at least one term following the summer BESIP program
- Applicant must be a United States citizen or permanent resident attending college in the U.S.
- Because of the structure of the program, the orientation procedures and the planned group activities, the student must be present on the Bethesda campus to participate in the entire ten-week program between June 1 and August 7, 2020

### How to Apply?

The BESIP application site can be found at <https://www2.training.nih.gov/transfer/SIPApp>. BESIP is a Subprogram of SIP and uses the same application forms. The SIP site will go live by early to mid-November 2019. The on-line application form requires the following four items, which will be used to select interns:

1. A resume containing:
  - Addresses and phone numbers for both school and permanent residence
  - E-mail address
  - A statement affirming the U.S. citizen or permanent resident status of the applicant
  - Information about the student's education, recent work experience, and activities and awards
2. An unofficial transcript or listing of courses and grades (copy and paste into the online application)  
NOTE: an official transcript may be requested before starting the program
3. An essay briefly discussing items such as:
  - Career goals
  - Technical and research interests
  - Reasons for applying to BESIP
  - A statement describing the potential benefits that will come about as a result of the student's participation in BESIP

The information listed in item 3 above constitutes the "Cover Letter" mentioned in Section 6 of the online application form. The Essay and the Cover Letter are one in the same.

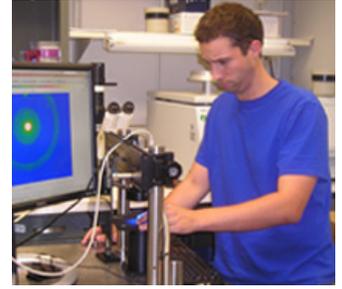
4. Two letters of recommendation: Letters should come from individuals who are familiar with the student's academic or work performance, such as faculty or a supervisor, and who can comment on his/her suitability for the program. Requests for recommendation letters will be sent automatically from the online web application system via e-mail to the two recommenders listed in the application. The recommenders will be given instructions for submitting their letters to the online system.

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The intern selection process will be performed by a panel of NIH scientists using a scoring system based on the information submitted in the four items listed above. The BESIP deadlines are different from the NIH-wide Summer Internship Program (SIP), which are stated on the SIP website. It is the applicants' responsibility to be sure that all application materials, including letters of recommendation, are submitted on time for BESIP.

## BESIP Deadlines

- The deadline for submitting the online application is February 03, 2020
- The deadline for Reference Letters is February 10, 2020
- Notification of selected interns will be on or about February 24, 2020
- Intern must accept or decline by March 09, 2020



Former BESIP intern, Paul Guillod, studies the development of a 3D cell culture model of glial scar formation with the goal of finding new methods to repair spinal cord injury.

## Stipend and Benefits

The BESIP summer stipend is approximately \$5600 for the 10 week program. The amount is based on the NIH Policy Manual for Intramural Research and Training Awards (IRTA) stipends for the Summer Internship Program (SIP) as a rising senior. A small stipend supplement is often available to STEM interns to cover the high cost of living in the DC area. Stipend will be dispensed in arrears as a prorated amount at the end of the months of June, July and August for the ten-week duration of the program. BESIP interns frequently elect to share local housing to reduce the housing costs. Information about housing can be found from the Office of Intramural Education and Training (OITE) web site [https://www.training.nih.gov/assets/Moving\\_Guide.pdf](https://www.training.nih.gov/assets/Moving_Guide.pdf). The intern must pay any travel expenses to and from NIH from the summer stipend.

## Other NIH Summer Programs



Former BESIP intern, Steven Lee, learned intubation techniques at the National Naval Medical Center during his internship.

Applicants who are not selected for the BESIP program will automatically have their BESIP applications released for viewing by the general NIH staff so that the applicant may become eligible for hiring into the regular summer internship program. Any inquiries about admission to Summer Internship Program in Biomedical Research (SIP) or the High School-Summer Internship Program in Biomedical Research (HS-SIP) must be made to the Office of Education and Training ([www.training.nih.gov](http://www.training.nih.gov)) to Dr. Yewon Cheon ([cheony@mail.nih.gov](mailto:cheony@mail.nih.gov)) and not to BESIP. For more information on SIP or HS-SIP please visit <https://www.training.nih.gov/programs/sip> or <https://www.training.nih.gov/programs/hs-sip>.

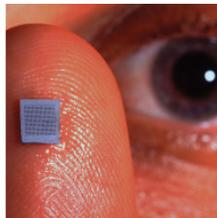
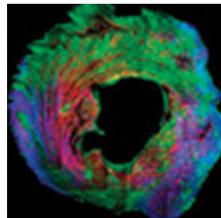
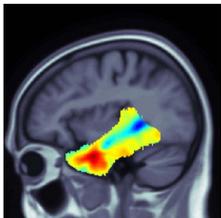
## BESIP Website

For more information about the BESIP program and to read about past BESIP projects and interns, please visit the BESIP website at <https://www.nibib.nih.gov/besip>.

## NIBIB Contacts

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