

Opportunities Week of 2/9/18

URECA Summer Program: The URECA (Undergraduate Research and Creative Activities) Program supports SB students doing full-time faculty-mentored research or creative activity for ten weeks. At the end of the ten-week period, the URECA participants will prepare abstracts of their work and commit to presenting their work at the University's annual poster symposium in the following spring. Participants earn a \$4,000 stipend

Application deadline is March 9th, 2018

For more info and application see <http://www.stonybrook.edu/commcms/ureca/summer/urecasummer.php>

Explorations in STEM-PSEG Scholars Program: The Explorations in STEM program -- administered by the Dept. of Technology & Society, URECA and the Career Center -- seeks to provide research/professional development in STEM areas to undergraduate students. Students with demonstrated need (e.g. Pell-eligible students) and/or underrepresented students, particularly freshman/sophomores considering STEM careers, are encouraged to apply. Participants receive a \$4,000 stipend.

Application deadline is March 9th, 2018

For more info and application see

<http://www.stonybrook.edu/commcms/ureca/summer/ExplorationsinSTEM.php>

IMSD-MERGE Undergraduate Research Scholar: The Stony Brook University Initiative for Maximizing Student Development: Maximizing Excellence in Research for Graduate Education (IMSD-MERGE) Program aims to increase the number of underrepresented and disadvantaged students (URM) completing highly productive biological and biomedical science degrees at Stony Brook University, and prepare them for seamless advancement into successful research careers. IMSD-MERGE is currently accepting applications for the 2018-2019 academic year. Applicants must be available to participate in a summer research internship from May 29th through August 3rd, 2018.

Priority deadline for applications is March 15th, 2018

For more info and to apply, see <http://www.stonybrook.edu/commcms/cie/imsd/apply/application.php>

Undergraduate Research Opportunities in the Sheltzer Lab at Cold Spring Harbor: Dr. Sheltzer is currently seeking undergraduate researchers for a cutting-edge project applying CRISPR to dissect drug targets in breast cancer. The position can pay hourly or provide course credit, depending on the student's preference.

For position requirements and application instructions, please see attached flyer.

ATAS Intern Positions: Academic and Transfer Advising Services is currently recruiting undergrad students who may be interested in a two-semester internship. Student must have at least a 3.0 cumulative GPA and will have earned at least junior standing (57 credits) by the start of the Fall 2018 semester. ATAS Interns earn 6 upper division credits, satisfy the EXP+ learning objective, and gain experience in higher education by providing assistance to students, serving as a TA for ADV 101, and participating in various outreach projects and events.

Application deadline is Friday, February 23rd, 2018 at 12:00 PM.

For more info, see http://www.stonybrook.edu/commcms/advising/_apa/students_peer_about.html

*Disclaimer: Undergraduate Biology does not endorse or take responsibility for any off-campus programs listed in Opportunities emails. While we do our best to vet any opportunity that is shared, please let us know immediately if you are suspicious of any employers/programs.



Analyzing breast cancer genomes with CRISPR at Cold Spring Harbor Laboratory

The Sheltzer Lab at Cold Spring Harbor Laboratory is seeking undergraduate researchers for a cutting-edge project applying CRISPR to dissect drug targets in breast cancer. The position can pay hourly or provide course credit, depending on the student's preference.

Cancer cells require the expression of certain genes, called “addictions” or “genetic dependencies”, that encode proteins necessary for tumor growth. Targeting the proteins encoded by these genes can trigger cell death and durable tumor regression. The Sheltzer Lab is applying CRISPR to study genetic dependencies in breast cancer in order to identify new therapeutic vulnerabilities and targets for drug development. Additionally, through CRISPR mutagenesis, we investigate the on-target and off-target effects of breast cancer drugs, with profound implications for their clinical use.

More information on our previous research can be found in these publications (written by Stony Brook undergraduates):

Lin, A., Giuliano, C.J., Sayles, N.M., and Sheltzer, J.M. (2017) [CRISPR/Cas9 mutagenesis invalidates a putative cancer dependency targeted in on-going clinical trials](#). eLife, 6:e24179.

Giuliano, C.J., Lin, A., Smith, J.C., Palladino, A.C., and Sheltzer, J.M. (2017) [Combining CRISPR/Cas9 mutagenesis and a small-molecule inhibitor to probe the function of MELK in cancer](#). bioRxiv.

Position Requirements

- Ability to work in the lab at least 12 hours a week (which could include evenings and weekends, based on the student's preference, though work during those hours is not a requirement).
- Ability to get to/from Cold Spring Harbor Laboratory.
- Prior lab experience in molecular biology is preferred but not mandatory.
- Strong communication, organization, and data analysis skills.

More information can be found on the Sheltzer lab website: <http://sheltzerlab.labsites.cshl.edu/>.

Interested students should send a CV and cover letter to Dr. Sheltzer at sheltzer@cshl.edu.