**2020 UM Science, Technology, Engineering, and Math Summer Research Experience for Undergraduates (STEMS REU) Program Application**

**Name: Date:**

**Student’s Current University:**

**Major:**

**Current Class (2019-2020): Freshman Sophomore Junior Senior**

**Report Your Overall GPA Report Your STEM GPA**

**Telephone Number: Email Address:**

**List Honors/Awards you have received:**

**List Professional Organization Memberships/Leadership Activities:**

**Pick three faculty members you are interested in working with and rank them 1, 2, and 3 in the order of your preference (use 1 for your top choice):**

**\_\_\_\_\_\_\_Dr. Wei-Yin Chen (Department of Chemical Engineering)**

**\_\_\_\_\_\_\_Dr. Courtney Roper (Department of BioMolecular Sciences - Pharmacology)**

**\_\_\_\_\_\_\_Dr. Kristie Willett (Department of BioMolecular Sciences - Environmental Toxicology & Pharmacology)**

**\_\_\_\_\_\_\_Dr. David Colby (Department of BioMolecular Sciences - Medicinal Chemistry)**

**\_\_\_\_\_\_\_Dr. Nicole Ashpole (Department of BioMolecular Sciences - Pharmacology)**

**\_\_\_\_\_\_\_Dr. Cole Stevens (Department of BioMolecular Sciences - Pharmacognosy)**

**\_\_\_\_\_\_\_Dr. Jason Paris (Department of BioMolecular Sciences - Pharmacology)**

**\_\_\_\_\_\_\_Dr. Hoang Le (Department of BioMolecular Sciences - Medicinal Chemistry) (Program Director)**

**I give my permission for the UM Science, Technology, Engineering, and Math Summer Research Experience for Undergraduates (STEMS REU) Program to which I am applying to review and confirm all information on my application including information on grades.**

**Applicant Signature:**

**Application Checklist:**

* **Application Form**
* **Resume**
* **Letter of Interest (Limit 250 words)**
* **Copies of Academic Transcripts (Unofficial copies are acceptable)**

**All application materials should be sent as a single pdf file to the Program Director, Dr. Hoang Le, (****hle@olemiss.edu****) by April 20, 2020.**

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**Free online PDF editor tool:** [**https://www.pdfescape.com**](https://www.pdfescape.com)

**2020 UM Science, Technology, Engineering, and Math Summer Research Experience for Undergraduates (STEMS REU) Program**

The objective of the program is to provide educational science research opportunities at the University of Mississippi to undergraduate students who are seeking research experiences and considering a career in research or academia.

**Eligibility:** All UM and non-UM undergraduate students **(Note: Depending on the guidance from our university concerning the coronavirus at the start of the program, non-UM undergraduate students may be ineligible for the program this year.)**

**Selection:** Applicants rank-order the **sponsoring faculty’s** labs they wish to join (Drs. Wei-Yin Chen, Courtney Roper, Kristie Willett, David Colby, Nicole Ashpole, Cole Stevens, Jason Paris, or Hoang Le). The sponsoring faculty consider the applicants’ rankings and select students from the application pool that fit best to a specific research project in their labs. If a student is selected by more than one lab, the Program Director will make the final decision on the lab the student will join, and the other sponsoring faculty will have another chance to select a different student from the applicant pool.

**Duration**: 10 weeks (40 h/week) of education, networking, and research activities

**Stipend: $3,000** The stipend, averaging $7.50 per hour, is intended to be used to offset the living cost of students participating in the program. Please note that the total living cost in the summer in Oxford, MS might be more than the stipend. Funding for the stipend will come from the sponsoring faculty’s research funds. The sponsoring faculty will also provide $100 per student to fund the extracurricular activities portion of the program. Research-related and lab-related costs will be covered by the sponsoring faculty. Please note that participating students are not allowed to take courses at UM for the duration of the program.

The program provides students with opportunities to learn about cutting-edge STEM-related topics, develop presentation and communication skills, and practice networking skills, as well as opportunities to explore and develop their interest in cutting-edge STEM-related research. The program aims to educate students beyond lab specifics and nurture students for successful careers in STEM, graduate, and/or professional programs. We will administer a test on general STEM awareness in week 1 and week 5 and a satisfaction poll at the end of the program. We will collect institutional and personal email addresses to be able to keep in touch with the graduates of the program. We will also issue a standard survey each year to track the graduation, publications/presentations, awards, and entry into graduate/professional programs of the students who graduate from the program.

**Schedule:** The program will run from May 26 to August 4, 2020. Each student is associated with a specific research project, on which he/she will work closely with the sponsoring faculty and other researchers. In addition, all students will participate in the following activities:

Mondays (11am–noon): Lectures on cutting-edge STEM-related topics will be taught by the following faculty:

**Sponsoring Faculty:** Dr. Wei-Yin Chen (Department of Chemical Engineering)

Dr. Courtney Roper (Department of BioMolecular Sciences - Pharmacology)

Dr. Kristie Willett (Department of BioMolecular Sciences - Environmental Toxicology & Pharmacology)

Dr. David Colby (Department of BioMolecular Sciences - Medicinal Chemistry)

Dr. Nicole Ashpole (Department of BioMolecular Sciences - Pharmacology)

Dr. Cole Stevens (Department of BioMolecular Sciences - Pharmacognosy)

Dr. Jason Paris (Department of BioMolecular Sciences - Pharmacology)

Dr. Hoang Le (Department of BioMolecular Sciences - Medicinal Chemistry) (Program Director)

**Guest Faculty:** Dr. Saumen Chakraborty (Department of Chemistry and Biochemistry)

Dr. Dao Nguyen (Department of Mathematics)

Dr. Shan Jiang (Department of Mechanical Engineering)

Wednesdays (11am–noon): For the first 9 weeks, the students will give presentations on literature STEM-related topics in a journal club setting. During the last week, the students will give a 15-minute presentation on the research they have been conducting in the program. The effectiveness of individual presentations will be evaluated each week, and feedback will be provided to each student.

Fridays (11am–noon): The students will interact with and get to know one another and faculty from the program and, when appropriate, gain career assistance, in a networking setting. Refreshments will be provided. There will be a welcoming event and a pizza bowl at Premier Lanes in Oxford, MS in the first week of the program and another major social event, such as a gathering lunch with the faculty, during the program. On the last Friday of the program, the students will have a pizza party.

**Note: Depending on the guidance from our university concerning the coronavirus at the start of the program, the lectures on Mondays may be conducted via Zoom and the social activities on Fridays may be cancelled.**

**Submission Guidelines**:

* Application form
* Resume
* Letter of interest from the applicant including a justification for why they are interested in acquiring research experience and what the student hopes to gain from program participation (Limit 250 words)
* Copies of academic transcripts (Unofficial copies are acceptable)
* Students may participate in the program for up to 4 summers, depending on the selection from the sponsoring faculty.
* All application materials should be sent as **a single pdf file** to the Program Director, Dr. Hoang Le (hle@olemiss.edu) by April 20, 2020.

Free online PDF merger tool: <https://smallpdf.com/merge-pdf>

Free online PDF editor tool: <https://www.pdfescape.com>

**Processing:** The application pool will be forwarded to the sponsoring faculty, and they will opt to sponsor the students best fit to a specific research project in their labs. Announcement of selected students will be made on April 30, 2020.