Department of Chemistry – Yale University

Undergraduate Research Registration Form 2019-2020 (For research not for Yale College credit)

Student Responsibilities for Undergraduate Research:

A student conducting independent research must agree to the following:

- To have a basic proficiency in aspects of chemistry required for my planned activities.
- To fulfill basic safety requirements, including completion of all pertinent training.

By signing below, the student affirms they have read the extended description of the requirements for undergraduate research (attached document), and will abide by all stipulations and requirements listed therein:

Student Name:_____ SID:_____ College/Class:_____

Student Signature:_____ Date:_____

E-Mail Address:_____ Major/Degree:_____

Phone Number (optional):_____

Emergency Contact (name/phone):_____

Faculty Research Mentor (in Chemistry):_____

Title of Proposed Research:_____

When will Research will be Performed (select all that apply)? Fall ☐ Spring ☐ Summer ☐

Undergraduate Faculty Research Mentor Responsibilities:

A mentor supervising independent undergraduate research must agree to the following:

- To ensure student meets basic safety requirements before starting laboratory work.
- To administer to student any specialized training required for planned research activities.

Faculty Mentor Name:_____

Faculty Mentor Signature:_____ Date:_____

Please list any rooms that the student needs key or card access to:_____

Undergraduate Research Safety Certification:

Cognizant staff from Yale's Office of Environmental Health and Safety (EHS) or the DUS of Chemistry (upon consultation with EHS personnel) must affirm that the student has fulfilled basic safety requirements *prior to them engaging in any research activities*. This includes completion of online courses on laboratory chemical handling and hazardous waste disposal, as well as any other specialized training deemed necessary.

EHS Staff/DUS Name:_____

EHS Staff/DUS Signature:_____ Date:_____

Final Departmental Approval:

DUS Name:_____

DUS Signature:_____ Date:_____

Undergraduate Research in Chemistry (For research not for Yale College credit)

The following information affords a more detailed description of the requirements for undergraduate research in a Chemistry Department Laboratory with a faculty research mentor, enumerating the basic Departmental expectations for students.

Brief Description:

Undergraduates may perform research as either a volunteer or as part of the work-study program in a Chemistry Department Laboratory with a faculty research mentor during the academic year and over summer. Students working in this capacity do not receive Yale College credit. Individuals wishing to perform research as a volunteer or as part of the work-study program must have demonstrated proficiency in the aspects of chemistry required for planned activities, as ascertained and certified by the supervising faculty member. A student who is performing research as either a volunteer or as part of the work-study program must complete the Undergraduate Research Registration Form, have it signed by their faculty research mentor, and submit it to Chemistry DUS for final approval *no later than the end of the first week of classes in the academic term they wish to start research or prior to commencing research over the summer*.

Program Overview:

The primary purpose of independent research is to provide undergraduate students with a hands-on exposure to basic research in the chemical sciences and a practical introduction to the modern research environment. The goal is to build on concepts and techniques honed during formal coursework, and allow students to direct their efforts towards the generation of chemically relevant data designed to engage and address a specific research problem, as coordinated and supervised by their selected faculty mentor. Students are responsible for finding a faculty mentor, who will provide guidance and laboratory facilities. A student who performs research as a volunteer or as part of the work-study program does not receive Yale College credit for research and is provided with guidelines about expectations from their faculty mentor. Performing research as a volunteer or as part of the work-study program provides undergraduates with greater flexibility than completing research for Yale College credit through a course such as CHEM 480 is recommended for students still completing the core requirements towards the Chemistry Major.

Time Commitment:

A student performing research as either a volunteer or as part of the work-study program will determine with their faculty mentor the time commitment required per week. Typically students work between 4 and 15hrs per week during the academic year. Over summer the time commitment is generally greater.

Safety Requirements:

Undergraduates performing research must fulfill basic safety requirements, including *at least* the online courses entitled “Laboratory Chemical Training” and “Hazardous Chemical Waste Training” as administered by the Yale Office of Environmental Health and Safety (EHS) at http://ehs.yale.edu/training.

Students must complete these courses successfully and receive formal certification from EHS *prior to beginning any laboratory activities*. Depending on the nature of specific efforts undertaken by the student, additional safety courses or other training requirements might be imposed by the faculty mentor and/or EHS personnel.

Ethical Conduct:

Academic and professional dishonesty are antithetical to science, which critically depends on the integrity and ethical conduct of its participants to ensure the successful advancement of scientific knowledge and understanding. Students performing undergraduate research should be familiar with regulations composed by Yale's Office of Research Administration to govern the responsible conduct of research (http://researchadministration.yale.edu/responsible-conduct-research).

Registration Procedure:

It is expected that individuals wishing to perform independent research will have demonstrated proficiency in the basic aspects of chemistry required for their planned activities, as ascertained and certified by the supervising faculty member. Students should complete the Undergraduate Research Registration Form, have it signed by their faculty research mentor, and submit it to the Chemistry DUS for final approval *no later than the end of the first week of classes in the academic term they wish to start research or prior to commencing research over the summer*..