



# THE UNIVERSITY OF CHICAGO

## Department of Physics and Materials Research Center (MRSEC)

### 2021 Research Experiences for Undergraduates Program



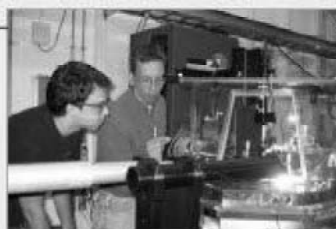
The University of Chicago Materials Research Center (MRSEC) and the Department of Physics offers qualified undergraduate students unique opportunities to experience forefront research.

Up to 20 internships will be awarded to students interested in physics or interdisciplinary materials science (chemistry, biology, computer science, math, physics & engineering related to materials).

The ten-week program runs from June 15 through August 21, 2021, and carries a stipend of \$5,000. We also provide up to \$500 travel expense reimbursement and free on-campus housing (if permitted)

For an **application** or further information, visit: <https://mrsec.uchicago.edu/reu>  
<<https://physics.uchicago.edu/research-experiences-for-undergraduates>>

or contact us at:  
Physics/MRSEC REU  
The University of Chicago  
929 East 57<sup>th</sup> Street  
Chicago, IL 60637  
email: [reu@uchicago.edu](mailto:reu@uchicago.edu)



**Deadline: February 15th, 2021**

Eligibility Requirement: U.S. Citizen or Permanent Resident currently registered in an accredited undergraduate program, and not graduating before the end of Autumn, 2021.

Center for Engineering MechanoBiology Presents

# 5 REASONS TO APPLY FOR SUMMER RESEARCH

Applications open now for June 1- August 6

*\*While we remain hopeful that this will be an in-person program, we will offer it virtually if Covid restrictions are still in place\**

## LEARN RESEARCH SKILLS

### From technical skills to critical thinking

The CEMB summer research program, Undergraduates Expanding Boundaries, challenges students to learn how to conduct mutlidisciplinary research theoretically and in the lab.

## MEET LEADERS IN THE FIELD

### Faculty and trainee mentors

Make connections with current and future leaders in mechanobiology through formal mentorships and opportunities to network with the CEMB community.

## MAKE LASTING FRIENDSHIPS

### With like-minded peers

Students get to know members of their cohorts through weekly meetings, shared housing, and social events throughout the city. Shared experiences can lead to friendships with future colleagues and collaborators!

## PRACTICE COMMUNICATION & PROFESSIONAL SKILLS

### Present at conferences & learn about graduate school

The CEMB program emphasizes the importance of communicating one's science to different audiences. Participants are encouraged to present their work at national conferences, and get training in how to apply for graduate school and beyond.

## IMMERSE YOURSELF IN A NEW CITY, CAMPUS, AND CULTURE

### Picture yourself as a grad student!

By immersing yourself in the CEMB program, either at University of Pennsylvania or Washington University, you will fully experience what it is like to live in Philadelphia or St. Louis, respectively, and conduct graduate-level research full time. You will experience what the culture of the lab, school, and city are like to help you realize new options for your future!

APPLY NOW!

[HTTPS://BIT.LY/APPLYCEMB21](https://bit.ly/applycemb21)

QUESTIONS? CONTACT [ANNJEONG@SEAS.UPENN.EDU](mailto:ANNJEONG@SEAS.UPENN.EDU)

2021 APPLICATION SITE OPENS **NOVEMBER 2020**

## SUMMER RESEARCH for UNDERGRADUATES



The Center for Engineering Mechanobiology seeks motivated undergraduate students from diverse backgrounds for its Undergraduate Summer Research Experience Program. This is a 10-week, on-campus program at the **University of Pennsylvania** and **Washington University in St. Louis**. Students are matched to projects within research groups based on their interests and educational background. Many projects are interdisciplinary and provide opportunities to develop research skills in the physical and biological sciences as well as engineering. Students develop practical skills in doing science: collaborating, designing experiments, collecting and analyzing data, and communicating results. Other aspects of the program complement the laboratory experience and are oriented toward professional development in broader scientific and career skills: seminars, journal clubs, professional skills and career workshops (research ethics, innovation, and technology transfer for instance).

### RESEARCH AREAS INCLUDE

- molecular biology
- cell and tissue mechanics in plants and animals
- bioengineering
- biochemistry and biophysics
- computational biology
- biomedical devices
- nanoscale science and engineering

### PROGRAM DETAILS

**Dates:** June 1 – August 6, 2021 (10-weeks)  
**Locations:** University of Pennsylvania (PENN) in Philadelphia, Pennsylvania  
Washington University in St. Louis, Missouri (WUSTL)

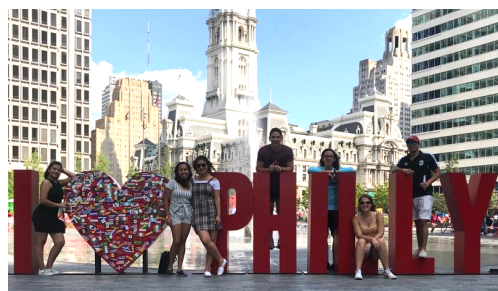
#### The program offers:

- A competitive stipend
- Summer housing
- Travel assistance (if eligible)
- Social activities (access to museums, cook-outs, baseball games)

**Application deadline: February 1, 2021**

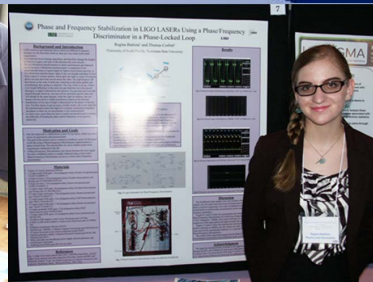
**Learn more and apply online at:**

<https://cemb.upenn.edu/education/undergraduate-research-opportunities/>

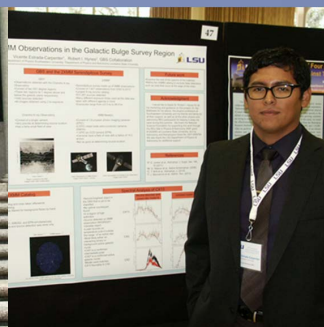


**Questions or information:** Please contact Dr. Annie Jeong (PENN) at [annjeong@seas.upenn.edu](mailto:annjeong@seas.upenn.edu) or Ms. Patricia Widder (WUSTL) at [pwidder@seas.wustl.edu](mailto:pwidder@seas.wustl.edu)

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# REU Program in Physics & Astronomy



## Would you like to...

- ✓ See ripples in space-time?
- ✓ Deduce astronomical knowledge from ancient writings?
- ✓ Create clean renewable energy sources?
- ✓ Observe the oscillation of neutrinos?
- ✓ Collect cosmic rays with a balloon?

Then come be an **REU program** student in the Department of Physics & Astronomy at Louisiana State University! You can be in any undergraduate academic year and need not have a declared major, but must have completed the introductory physics sequence at your school.

Participants are lodged in apartment-style University housing and paid a stipend for food and personal expenses. Further information is available on our web page.



## Research Areas

- ✓ Astronomy, astrophysics, astro-history
- ✓ Gravitation and relativity
- ✓ Atomic/molecular/optical physics
- ✓ Quantum optics and computing
- ✓ Condensed matter physics
- ✓ Materials synthesis & characterization
- ✓ Energy and materials research
- ✓ Computational physics
- ✓ Neutrinos and cosmic rays
- ✓ Nuclear physics
- ✓ Medical and health physics

## LSU & Local Facilities

- ✓ LIGO-Livingston
- ✓ CAMD 1.3 GeV synchrotron
- ✓ Landolt Observatory
- ✓ Machine and electronics shops
- ✓ Highland Road Park Observatory
- ✓ Center for Computation & Technology

[www.phys.lsu.edu/REU](http://www.phys.lsu.edu/REU)

For questions, please contact the REU Program at  
[reu@phys.lsu.edu](mailto:reu@phys.lsu.edu)