## HOW TO GET STARTED IN SCIENTIFIC RESEARCH AT LEHMAN COLLEGE

Edward J. Kennelly, PhD

Professor



Begins with a comprehensive review of the literature



Hypothesis-generating research



Hypothesis-testing research



Goal is to generate new knowledge

## WHAT IS SCIENTIFIC RESEARCH?







READ ABOUT THE RESEARCH BEING DONE BY PROFESSORS IN YOUR MAJOR AND TALK TO YOUR MAJOR ADVISOR ABOUT YOUR INTEREST

TAKE CLASSES TAUGHT BY PROFESSORS WHOSE RESEARCH INTERESTS YOU AND DO WELL IN THEIR CLASS DISCUSS WITH YOUR PROFESSOR OPPORTUNITIES TO TAKE RESEARCH CLASSES WITH THEM, E.G. BIO 489 INTRODUCTION TO EXPERIMENTAL BIOLOGY (1 CREDIT, AND CAN BE REPEATED FOR MAXIMUM OF 3 CREDITS) AND BIO 490 HONORS IN BIOLOGICAL SCIENCES.

## HOW CAN LEHMAN STUDENTS GET INVOLVED IN SCIENTIFIC RESEARCH?

#### Determine if you qualify for programs at Lehman like RISE Determine (biomedical research for students interested in aetting their PhD) or LS AMPS. Look for summer undergraduate research programs (SURP) at other institutions, e.g. Look https://www.aamc.org/professional-development/affinitygroups/great/summer-undergrad-research-programs Get involved in a professional society that can help with placement in SURP programs, e.g. American Chemical Get Society https://www.organicdivision.org/student-andpostdoc-awards/surf/

#### HOW CAN I GET PAID TO DO SCIENTIFIC RESEARCH AS A STUDENT?



LEARN NEW
TECHNIQUES THAT CAN
BE USEFUL FOR FUTURE
JOBS.



MAKE NEW
DISCOVERIES THAT CAN
FURTHER SCIENTIFIC
KNOWLEDGE.



MORE COMPETITIVE
APPLICATIONS TO
GRADUATE AND HEALTH
SCIENCES SCHOOLS.



MORE COMPETITIVE FOR JOBS REQUIRING SPECIALIZED SCIENTIFIC SKILLS.



HAVE A DEEPER UNDERSTANDING OF YOUR SCIENTIFIC INTEREST.



LEARN TO BE A BETTER CRITICAL THINKER.

# WHAT ARE THE BENEFITS OF CONDUCTING SCIENTIFIC RESEARCH?



Talk to one of your professors in your major about your interest in research.



Look to see if you qualify for any Lehman programs.



Search for SURP and apply to one for summer programs

## HOW TO GET STARTED?

- Most common method has been as part of a research program, like RISE, LS-AMPS and other programs.
- Students also have taken classes, received good grades, and asked the professor afterwards to join their research group.
- Sometimes e-mail contact works. The more specific an e-mail is, the more likely the professor is to respond positively to the student's request.

# HOW HAVE UNDERGRADUATE STUDENTS HAVE JOINED LEHMAN RESEARCH LABORATORIES?



### GETTING MORE INFORMATION

- ► LS-AMPS <u>www.nyclsamp.org/participating-campuses</u>
- Office of Pre-Health Advising
   <a href="https://www.lehman.edu/academics/pre-health-advising/pre-medicine.php">https://www.lehman.edu/academics/pre-health-advising/pre-medicine.php</a>
- Lehman Department websites, for example <a href="https://www.lehman.edu/academics/biology/research.php">https://www.lehman.edu/academics/biology/research.php</a>
- ► American Chemical Society
  <a href="https://www.acs.org/content/acs/en/education/students/college.html">https://www.acs.org/content/acs/en/education/students/college.html</a>
- ► Hispanic Association of Colleges and Universities https://www.hacu.net/hacu/HNIP.asp