

OPPORTUNITIES FOR HARVARD UNDERGRADUATES

MCB ~

Department of Molecular and Cellular Biology













The Department of Molecular and Cellular Biology (MCB) houses three undergraduate concentrations – MCB, Chemical and Physical Biology (CPB), and Neuroscience. The head tutors and concentration advisors closely guide over 400 undergraduate students through their academic journeys at Harvard. In addition, the labs in the department provide research opportunities to students from all concentrations. In the department, we constantly strive for diversity; both in research interests and the people conducting research. We invite you to explore a small sample of the numerous opportunities that are available in the department and the various fields of study from which our undergraduate researchers come.







Interested in joining us?

We encourage you to contact faculty directly and/or our CPB, MCB, and Neuroscience concentration personnel.

For a full list of labs in the Department of MCB, please visit: https://www.mcb.harvard.edu/faculty/faculty-profiles/





Kemi Ashing-Giwa OEB '22 Hopi Hoekstra Lab

"It can certainly be intimidating, but don't be afraid to reach out to professors for research opportunities!"



Yi Hua Chen CPB '20 Andrew Murray Lab

"I believe that an undergraduate research experience is an opportunity to learn and receive mentorship, rather than making flashy discoveries. Therefore, it was important to me that the environment of the lab was conducive to training me to be a better scientist."



Andrew Cho CPB '20 Ethan Garner Lab

"I had never done research before college, so I really appreciate how supportive my lab is. MCB labs are incredibly friendly towards undergraduates!"



Jerome Edwards MCB '21 Victoria D'Souza Lab

"I really value being able to find independence in my project and work."



Michael Gao CPB '20 Victoria D'Souza Lab

"Structure is closely tied to function. In the D'Souza lab, we study the structure of RNA molecules to better understand the important biological functions they have."



William Gao Chemistry '20 Sean Eddy Lab

"This was my first time doing computation biology research (after doing wet lab work for many years) and this research experience has certainly helped me develop as a researcher in ways that would not necessarily be possible in a wet lab."



Samuel Gould CPB '21 Nancy Kleckner Lab

"Often, it feels like I know nothing at all, but I feel that from this ignorance comes the deepest learning."



Mauranda Men Physics '20 Nancy Kleckner Lab

"Work in my lab strikes a great balance between self-initiative and having people to consult for advice and help."



Ifedayo Omotunde Neuro '21 Takao Hensch Lab

"I really enjoy looking at the results of my work after doing all the busy lab work and compiling all the data. In many ways, lab is more fulfilling than class because you get to see the real world impact of the work you are doing."



Mit Patel MCB '21 Rachelle Gaudet Lab

"Understanding the structure of proteins helps us better understand proteins and molecular mechanisms and in turn allow us to understand how our cells work!"



Anna Victoria Serbin Neuro '21 Takao Hensch Lab

"I am investigating postnatal stress and its effects in adult cognitive function could be significant in its applications for infant studies, as well as in its application to government and health policy."





"Learning while doing and conducting your own experiments is fulfilling in a much different way than courses."



William Stainier CPB '21 Craig Hunter Lab

"I really enjoy my lab community. From our discussions at our weekly roundtable lab meetings to talking about different experiments that we could do, I find the lab environment to be a very open and intellectually stimulating one."



Unice Yoo CPB '20 Rachelle Gaudet Lab

"I like that I know all of the members of the lab and they all know me. I feel included and equally respected, even as an undergraduate."



Benjamin Velez MCB '21 Vlad Denic Lab

"When picking a lab, the location (lab being located on the main campus) and mentorship were some of the most important things to me - my mentors take the time to work around my schedule and are always willing to explain complicated ideas."



Jackson Walker Applied Math '21 Sean Eddy Lab

"My research in the Eddy lab pertains to protein homology and using machine learning and neural networks to model families and clans. I would like to add that getting involved in research is easier than you think - just reach out to faculty!"



Jennifer Yu Wang Neuro '22 Takao Hensch Lab

"I love the novelty of my research topic and its immediate relevance in the field of neuroscience. Through my lab I have been able to meet amazing researchers!"



Catherine Dulac with Isabella Beckett (Neuro '21) and Aba Sam (Neuro '21)

"Undergraduates come to the lab with little or no research experience, but by pursuing their own thesis research, they become familiar with the process of scientific research and more often than not, end up totally hooked to the enjoyment and challenges of scientific discovery, like it happened to myself, many years ago!"











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"Undergraduates are an integral part of my research team, working side-by-side with graduate students and postdocs. As they develop their research skills, they take on progressively more independent lines of research, and often enable our lab to take on new project directions."

Rachelle Gaudet

MCB 100: Experimental Research in the Life Sciences (dual listed on my.harvard as LS100)

Want to experience research in an undergraduate-focused program for a semester? MCB 100 is a research course that offers a wide selection of projects linked to ongoing Harvard faculty research.

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Japan Summer Science Undergraduate Research Program

Are you a Harvard College student looking to experience scientific research abroad? This program places students in leading science laboratories in Japan.

Learn more: https://rijs.fas.harvard.edu/undergraduate/science

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Takao Hensch

(3rd from left) with Ali Nasser (Neuro '20), Taylor Shirtliff-Hinds (Neuro '21), Maria De Leon (MCB '20), Jennifer Wang (Neuro and Music '22), and Ifedayo Omotunde (Neuro '21)

"My own research career started with a Hoopes Prize at Harvard. We enjoy sharing such first moments of discovery with eager and committed undergrads in the lab."













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