

The MMBIO Mentorship Award (MMA)

Thanks to a generous private donation, the Microbiology and Molecular Biology (MMBIO) Department is offering 12 mentorship awards of \$2,500 each (in the form of hourly wages at \$14.00/hr) to MMBIO undergraduate and master's degree-seeking students during the Fall 2020 semester. MMBIO Mentorship Award (MMA) recipients will represent diverse backgrounds and life experiences, bringing unique talent and perspectives to the MMBIO research environment. In addition to daily mentored research activities, the cohort of MMA recipients will gather periodically throughout the semester to share research updates and receive focused training on effective scientific exploration and exciting career opportunities.

MMA Application Instructions

Eligibility: Only students enrolled in MMBIO programs (BS and MS) are eligible to apply. Students not yet working in a research laboratory are especially encouraged to apply. Applicants should be able to devote 15 hours per week to research-related activities during the 2020 fall semester.

Part 1: Craft an essay describing your story: How have your circumstances and past experiences prepared you for your scientific pursuits? What unique talents, experiences, attributes, or perspectives would you bring to the MMBIO research community? What are your research interests? Name a professor or two that you might want to carry out research with. For your convenience, we provide below a list of MMBIO faculty who may be able to host MMA students in their labs this fall, along with their areas of expertise. This essay may be up to 1 page, single-spaced, with your first and last name as the heading.

Part 2: BYU Academic Summary Report. To access this, simply go to myBYU/Campus Links/School/MyMap. Under "Tools" click on "My Progress Report" to get your Academic Summary as a pdf.

Submission: The two parts of the application should be compiled into a single pdf document, and the file should be named after you: [lastname_firstname.pdf]. Submit this via email to mmbiodept@byu.edu with the subject line "MMA Application." We will confirm receipt of your application. Applications are due by 5pm on Monday August 10, 2020.

Evaluation: Applications will be evaluated primarily on the merits of the essay; academic background will also be considered. Award decisions will be announced by Friday August 21, 2020.

Please refer questions about this mentorship program to Dr. Eric Wilson.

(MMBIO research faculty and areas of expertise are listed on the following page)

MMBIO Research Faculty and Areas of Expertise

Dr. Brad Berges

How HIV causes AIDS; *Staphylococcus* biofilm mechanisms and treatments

Dr. Mary Davis

Genetic analysis of complex diseases; disease research using large medical record databases

Dr. David Erickson

Molecular basis of bacterial virulence and evolution

Dr. Julianne Grose

Genetic control of cellular metabolism; bacteriophages in nature and their use for disease control

Dr. Joel Griffiths

Engineering bacterial gene expression modules for use in biotechnology; bacterial responses to metal toxicity

Dr. Steven Johnson

Understanding DNA packaging in the nucleus using high-throughput DNA sequencing

Dr. Bill McCleary

Genetic control of bacterial nutrient acquisition; bacteriophage interactions with host cell proteins

Dr. Brent Nielsen

Microbes that assist plants in dealing with salty conditions

Dr. Kim O'Neill

Cancer detection and immunotherapy-based treatment

Dr. Brett Pickett

Using genome-scale data to understand how human cells respond to viral diseases; how viruses and bacteria evolve

Dr. Brian Poole

Viral pathogens; autoimmune disease; vaccine development

Dr. Richard Robison

Detection of bacterial and viral pathogens; mechanisms of drug resistance

Dr. Scott Weber

Activation of the immune system in response to disease

Dr. Eric Wilson

Molecular genetic mechanisms underlying staph infections