

## Biochemistry and Molecular Biology 101 (BMB 101): Meet the Profs 2016

This course is designed to acquaint BMB majors with BMB faculty and facilities. A major focus of the department is research, and there are excellent opportunities for independent study with BMB faculty. Meeting the faculty in BMB 101 is an opportunity to learn about faculty research interests. You will be encouraged to navigate the BMB web pages to learn more about the department, its research and educational programs. Interested students are encouraged to talk with faculty about pursuing independent research projects. Practical laboratory training will advance a student's education and improve a resume. Working in a laboratory is fascinating, fun, and enriching. It is also a great way to "shrink" the size of a huge University and to meet interesting people. BMB 101 students are also encouraged to attend Biochemistry Colloquia (Thursdays, 11:00 a.m. in rm 101 Biochemistry) and Biochemistry & Molecular Biology Club events (check with the Undergraduate Office in rm 105 Biochemistry for dates and times). Extra credit may be earned by documenting attendance at these events.

BMB 101 Calendar (Lectures are Thursday afternoons 3:00-3:50 in rm 101 Biochemistry)

<b>Date</b>	<b>Faculty Presenter</b>	
Sept 1	Dr. Laurie Kaguni	"Mitochondrial Science and Medicine"
Sept 8	Dr. Curtis Wilkerson	"Designing Plant Cell Walls that are Easy to Deconstruct"
Sept 15	Dr. Sophia Lunt	"Cancer Metabolomics"
Sept 22	Dr. Dan Jones	"Effects of Exposures on Metabolism and Health"
Sept 29	Dr. Alex Dickson	"Drug Binding Kinetics and Pathways from Simulation"
Oct 6	Dr. Ken Merz	"Adventures in Structure-based Drug Design"
Oct 13	Dr. Eric Hegg	"Converting Biomass into Biofuels"
Oct 20	Dr. Daniel Ducat	"Engineering with Synthetic Biology in Cyanobacteria"
Oct 27	Dr. Jin He	"Epigenetic Regulation in Gene Expression"
Nov 3	Dr. Björn Hamberger	"From Scents to Drugs with Plant Synthetic Biology"
Nov 10	Dr. Gregg Howe	"The Dilemma of Plants to Grow or Defend"
Nov 17	Dr. Michael Feig	"What are Proteins Really Doing Inside the Cell?"
Nov 24	Thanksgiving Day Holiday	
Dec 1	Dr. Amy Ralston	"Making and Using Stem Cells - Lessons from the Mouse"
Dec 8	Review of the BMB major	

## Student Preparation

For each Faculty Presentation (estimated 30 to 45 min preparation)

Access the Faculty Presenter's Website, Lab Page, and Research Descriptions

<https://bmb.natsci.msu.edu/>  
<https://prl.natsci.msu.edu/>  
<https://mmg.natsci.msu.edu/>

Biochemistry and Molecular Biology  
Plant Research Laboratory  
Microbiology and Molecular Genetics

Preview any notes and materials

## Evaluation:

Essays 6 X 10 points = 60

Prepare a **typed** response of <500 words to each of six essay questions given by the Faculty Presenters and posted on D2L (due at the **beginning** of the following class period). You **must** complete two essays by **September 29**, two by **October 27**, and the final two by **December 8**. Essays that are not **typed** or have many grammatical or spelling errors will not be evaluated. **Late essays will not be evaluated.** If for some reason you will not attend the class in which the assignment is due, you **MUST** turn in the essay to Dr. Kaguni **before** that date.

Class attendance: 13 X 2 points = 26

You must sign in **before** the start of class.

Extra credit (up to 4 points) = 2 points for attending one Biochemistry and Molecular Biology Club event, and 2 points for attending one Biochemistry Colloquium presentation (send an email **within one week** after participating to [lskaguni@msu.edu](mailto:lskaguni@msu.edu), describing **specifically** in a paragraph or two the event and what you learned to obtain credit). The deadline for extra credit reporting will be **December 8**.