## **CAMB 704:**

## Stress Responses and Metabolism in Cancer Fall Term 2024

Course co-Directors: Terence Gade, Zach Schug, Katy Wellen

Canvas: Lyndsey Ann Makinen

The course will meet in SCL 104, Thurs 1:45-3:45 PM

Metabolomics methods lectures		Lecturer	Directors	
Aug 29	Meet and Greet	Course Directors	All	
Sep 5	Lecture: Metabolomics and Isotope Tracing	Zach Schug	ZS, KW	
Sep 12	Lecture: Metabolic Enzyme Biochemistry	Ronen Marmorstein	ZS, TG	

Student Pre	Student Presentations Faculty Leader		Student Presenter	Directors
Sep 19	Glucose Metabolism	Zachary Schug		ZS, KW
Sept 26	Mitochondrial Metabolism	Caroline Bartman		TG
Oct 3	Integrated Stress Response	Crystal Con		KW
Oct 10	Branched Chain Amino Acid Metabolism	Zolt Arany		ZS, TG
Oct 17	Organismal Metabolism	Paul Titchenell		TG
Oct 24	Metabolism and Epigenetics	Katy Wellen		ZS, KW
Oct 31	Hypoxia/HIF/MYC	Celeste Simon		TG, KW
Nov 7	IDH Mutation	Nico and Sarah Skuli		ZS, TG
Nov 14	NAD Metabolism	Joe Baur		ZS, KW
Nov 21	Immunometabolism	Will Bailis		ZS, TG
Dec 5	Metals and Metabolism	Donita Brady		TG. KW
Dec 12	mTOR/AMPK/Autophagy	Terence Gade		TG, KW
Dec 19	Make-up class if needed			ZS, KW

**Presentations:** We want you to put together a presentation that integrates the data of the papers, comparing and contrasting the results, the quality of the data and the technologies used. You should not only be a presenter but also a discussion leader, eliciting opinions from the group on the results and whether or not there is agreement with the conclusions. Each week of student presentations will begin with 10-15 minutes **(no more!!)** introduction by the faculty leader for that day. Not all of the data in a paper needs to be presented; and the papers do not have to be presented one after the other. Instead, you should put together a seminar that integrates the important data from all the papers in a way that makes points and builds to a conclusion or a controversy; in other word, in a way that tells a story. The papers assigned can be augmented by a papers you find that will strengthen your presentation, possibly by introducing controversy. As mentioned above you should work with the faculty member assigned to your topic to put together the presentation and discuss any additional papers you may want to discuss. After your presentations, the class will be asked to submit evaluations directly to you. You will also meet with the co-organizers to discuss the presentation.

50% of your grade will be based on your presentations.

**Discussion:** The success of a seminar course depends on group discussion. Each week you should come to class knowledgeable enough with the material that you could talk about it in detail. You should be ready to ask questions and enter into discussions. If you don't understand something, ask and get a discussion going. Come to class with at least **2** questions prepared from the assigned papers: these will be collected by the directors.

50% of your grade will be based on your participation in questioning and discussions.