

CAMB 704:**Stress Responses and Metabolism in Cancer****Fall Term 2025**

Course co-Directors: Terence Gade, Caroline Bartman, Kathryn Wellen

Canvas: Lyndsey Ann Makinen

The course will meet in 1403 BRB II/III, Thurs 1:30-3:30 PM

Metabolomics methods lectures

		<i>Lecturer</i>	<i>Directors</i>
Aug 28	Meet and Greet	Course Directors	CB, TG
Sep 4	Lecture: Metabolic Enzyme Biochemistry	Ronen Marmorstein	KW, TG
Sep 11	Lecture: Metabolomics and Isotope Tracing	Caroline Bartman	KW, CB

Student Presentations

		<i>Faculty Leader</i>	<i>Student Presenter</i>	<i>Directors</i>
Sep 18	Microbiome, Metabolism and Cancer	Rahul Shinde		TG
Sept 25	Metals and Metabolism	Donita Brady		KW, TG
Oct 2	Integrated Stress Response	Crystal Conn		CB, TG
Oct 9	Immunometabolism I	Will Bailis		KW, TG
Oct 16	Organismal Metabolism and Cancer	Caroline Bartman		KW, CB
Oct 23	Hypoxia and Metabolism	Celeste Simon		TG, CB
Oct 30	Mitochondrial Metabolism	Joe Baur		KW, TG
Nov 6	Targeting Cancer Metabolism	Zolt Arany		KW, CB
Nov 13	Immunometabolism II	Roddy O'Connor		CB, TG
Nov 20	Metabolism and epigenetics	Katy Wellen		KW, CB
Dec 4	mTOR/AMPK/Autophagy	Terence Gade		TG, CB
Dec 11	Metabolic crosstalk in TME	Katherine Aird		KW, TG
Dec 18	Make-up class if needed			

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.