

FALL 2024

MWF 9:55-10:45 AM, Rm. 5001A (WIMR)

Course Director: Aussie Suzuki (262-1686, aussie.suzuki@wisc.edu, RM. 6533 WIMR)

TA: Megan Bacabac (bacabac@wisc.edu)

DAY	MONTH	DATE	LECTURE	TITLE
Wednesday	September	4	Bradfield	First Day of Instruction, Hallmarks of Cancer
Friday	September	6	Bradfield	Chemical Carcinogenesis I
Monday	September	9	Bradfield	Chemical Carcinogenesis II
Wednesday	September	11	Lambert	RNA tumor viruses and the discovery of oncogenes
Friday	September	13	Lambert	DNA tumor viruses and the discovery of tumor suppressor genes
Monday	September	16	Lambert	EBV - the first viruses identified to cause human cancer
Wednesday	September	18	Alexander	Cancer genetics I: Histopathology
Friday	September	20	Alexander	Cancer genetics II: Building models
Monday	September	23	Alexander	Mouse models I: Techniques
Wednesday	September	25	Suzuki	Cell Cycle I: Introduction
Friday	September	27	Suzuki	Cell Cycle II: Signaling and checkpoint
Monday	September	30	Suzuki	Cell Cycle Detections in Cancer Research
Wednesday	October	2	Suzuki	Checkpoint and Cell Cycle Inhibitors in Cancer
Friday	October	4	Suzuki	Chromosomal Instability and Cancer
Monday	October	7	Suzuki	DNA Damage and Cancer Driver Genes
Wednesday	October	9	Xu	Introduction of Epigenetics and DNA methylation
Friday	October	11	Xu	Dysregulated histone modifications in Cancer
Monday	October	14	Xu	Histone variants as cancer driver genes
Wednesday	October	16	Xu	Chromatin remodeling, non-coding RNA, and epigenome editing
Friday	October	18	Xu	Breast cancer genetics and precision medicine
Monday	October	21	Xu	Normal breast development, risk factor and hormone dependency
Wednesday	October	23	Xu	Breast cancer animal models
Friday	October	25	Xu	Breast cancer stem cells, microenvironment, and metastasis
Monday	October	28	Zhang	Lung cancer I
Wednesday	October	30	Zhang	Lung cancer II
Friday	November	1	Morris	Introduction to Tumor Immunology
Monday	November	4	Morris	Evasion of Immune Detection in the Tumor Microenvironment
Wednesday	November	6	Suzuki	Video lecture (Hypoxia: Dr. Bill Kaelin)
Friday	November	8	Alexander	Mouse models II: Limitations
Monday	November	11	Alexander	Colorectal cancer I: Introduction
Wednesday	November	13	Alexander	Colorectal cancer II: FAP
Friday	November	15	Alexander	Colorectal cancer III: HNPCC
Monday	November	18	Zhang	Stem cell niche and cancer
Wednesday	November	20	Zhang	Chromosomal translocations: Oncogene addiction
Friday	November	22	Zhang	Mechanism-based therapies
Monday	November	25	Morris	Cancer Immunology
Wednesday	November	27	Thanksgiving	NO CLASS: THANKSGIVING BREAK
Friday	November	29	Thanksgiving	NO CLASS: THANKSGIVING BREAK
Monday	December	2	Zhang	Introduction to normal and neoplastic hematopoietic cells
Wednesday	December	4	Zhang	Tumor initiating cells and clonal evolution
Friday	December	6	Alexander	Growth and metabolism I: Intro
Monday	December	9	Alexander	Growth and metabolism II: Best papers
Wednesday	December	11	Alexander	Last Day of Instruction, Growth and metabolism III: Discussion

Instructional Mode: In person

Director: Aussie Suzuki, Ph.D., WIMR 6533, aussie.suzuki@wisc.edu

Instructors: Chris Bradfield, Ph.D., bradfield@oncology.wisc.edu, Paul Lambert, Ph.D., plambert@wisc.edu,

Aussie Suzuki, Ph.D., Wei Xu, Ph.D., wxu@oncology.wisc.edu, Caroline Alexander, Ph.D., alexander@oncology.wisc.edu

Zach Morris, M.D., zmorris@humonc.wisc.edu, Jing Zhang, Ph.D., zhang@oncology.wisc.edu

Office hours: Aussie Suzuki, Mondays Noon-1 pm or by appointment

Format: 50 min interactive lectures from 9:55-10:45 am on Monday, Wednesday, and Friday (see above schedule)

Grading Criteria: Attendance contributes 30% and Homework 70% to the final grade.

Attendance policy: Up to 3 absences are permitted without impacting the grade. To achieve an 'A', students must limit absences to no more than 4 classes

Absences may be excused for academic engagements, such as presenting (orally or via poster) at conferences, but not for mere attendance.

If you plan to present at the local conference, it is essential that you furnish proof showing that your presentation time conflicts with the ONC703 lecture slot 15 min delay (no attendance) but will record two delay = 1 absences

Grading policy (Scores from Attendance + Homework)

A: 90-100 (with less than 3 absences), AB: 86-89 or >90 with >4 absences, B: 80-85, BC: 75-79, C: 70-74, D: 65-69, F < 65

Homework assignment policy: Must follow the deadline of each homework. Late submission may not be scored.

Important: The use of AI in completing homework assignments or falsifying attendance records will result in an immediate grade of 'F.'

Attendance is your responsibility, and adjustments cannot be made at a later time.