

CAMB 610: Gene Therapy and Genome Editing - Fall 2018

Monday / Wednesday / Friday 1:00-2:00 PM, unless otherwise indicated

Director: Kiran Musunuru, MD, PhD, MPH (email: kiranmusunuru@gmail.com)

	Day	Date	Time	Room	Format	Instructor	Topic
UNIT 1: Genome Editing	W	29-Aug	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Introduction / Overview of Course
	F	31-Aug	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	History, foundations, and principles of genome editing
	M	3-Sep					NO CLASS - Labor Day
	W	5-Sep	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Zinc finger nucleases and TALENs
	F	7-Sep	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	CRISPR-Cas9 and other RNA-guided endonucleases
	M	10-Sep	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Defining, improving, and altering the specificities of genome-editing tools
	W	12-Sep	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Research applications, part 1
	F	14-Sep	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Research applications, part 2
	M	17-Sep	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Therapeutic applications, part 1
	W	19-Sep	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Therapeutic applications, part 2
F	21-Sep	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Hands-on workshop with CRISPR-Cas9 (computer-based)	
UNIT 2: Vector Platforms	M	24-Sep	1:00 - 2:00 pm	TRL 2002	Lecture	Calcedo	Basics of Immunology Part 1
	W	26-Sep	1:00 - 2:00 pm	TRL 2002	Lecture	Calcedo	Basics of Immunology Part 2
	F	28-Sep					NO CLASS - following lecture is 2 hours
	M	1-Oct	1:00 - 3:00 pm	TRL 1201	Lecture	Wilson	Adenovirus, Parts 1 and 2
	W	3-Oct	1:00 - 2:00 pm	TRL 2002	Lecture	Calcedo	Immunology Assays
	F	5-Oct	1:00 - 2:00 pm	SCTR 11-120	Lecture	Weissman	mRNA
	M	8-Oct	1:00 - 2:00 pm	TRL 1201	Lecture	Wilson	AAV Part 1
	W	10-Oct	1:00 - 2:00 pm	TRL 1201	Lecture	Wilson	AAV Part 2
	F	12-Oct	1:00 - 2:00 pm	TRL 1201	Lecture	Wilson	AAV Part 3
	M	15-Oct	1:00 - 2:00 pm	SCTR 11-120	Lecture	Rivella	Retrovirus
	W	17-Oct	1:00 - 2:00 pm	SCTR 11-120	Lecture	Rivella	Lentivirus
	F	19-Oct	1:00 - 2:00 pm	SCTR 11-120	Lecture	Bushman	Characterizing Integration Events
	M	22-Oct	1:00 - 2:00 pm	SCTR 11-120			REVIEW
W	24-Oct	1:00 - 4:00 pm	SCTR 11-120			Exam, Units 1 and 2	
F	26-Oct					NO CLASS	
UNIT 3: Clinical Applications	M	29-Oct	1:00 - 2:00 pm	SCTR 11-120	Lecture	Bennett	Retinal Disorders Part 1
	W	31-Oct	1:00 - 2:00 pm	SCTR 11-120	Lecture	Bennett	Retinal Disorders Part 2
	F	2-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	Marrazzo	Clinical Translation
	M	5-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	TBD	TBD
	W	7-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	Wolfe	Central Nervous System (CNS) approaches
	F	9-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	TBD	TBD
	M	12-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	TBD	TBD
	W	14-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Liver Part 1
	F	16-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	Musunuru	Liver Part 2
	M	19-Nov					NO CLASS - Thanksgiving
	W	21-Nov					NO CLASS - Thanksgiving
	F	23-Nov					NO CLASS - Thanksgiving
	M	26-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	Arruda	Hemophilia
	W	28-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	Peranteau	In Utero Gene Therapy
	F	30-Nov	1:00 - 2:00 pm	SCTR 11-120	Lecture	Limberis	Airway / Influenza
	M	3-Dec	1:00 - 2:00 pm	SCTR 11-120	Lecture	Stedman	Duchenne Muscular Dystrophy
W	5-Dec	1:00 - 2:00 pm	SCTR 11-120	Lecture	Quinn	Gene Therapy in Motor Disease	
F	7-Dec	1:00 - 2:00 pm	SCTR 11-120	Lecture		STUDENT PRESENTATIONS	

SCTR = Smilow Center for Translational Research

TRL = Translational Research Laboratory