## **Foundations of Biomedical Research 2021**

## Week 11: Challenging the Genome – Joya Chandra

Time	Monday November 8	Tueday November 9	Wednesday November 10	Thursday November 11	Friday November 12
8:30 9:00	Lecture:	Lecture Context matters: Oncogenes and tumor suppresors (SP)	Biostats	Lecture: Killing cells softly (JC)	Breakout: Debate
9:30			Break		
		Breakout: Debate introduction and prep	Lecture: Replication stress and genome instability (BW)	Breakout: Debate prep	Breakout: Debate
10:00		Break		Break	Break
10:30		Breakout: Debate introduction and prep		Breakout: Debate prep	Breakout: Debate

GL – Gigi Lozano

SP – Sean Post

BW – Bin Wang

JC – Joya Chandra

## **Learning Objectives**

## Week 11: Challenging the Genome – Joya Chandra

- \* Understand how p53 was discovered, implications of mutations, and targeting strategies
- \* Briefly review and reexamine the canonical functions of additional well established oncogenes/tumor suppressors
- \* Discuss paradoxical functions oncogenes/tumor suppressors
- \* Develop a basic understanding of how alterations in these genes/pathways can be therapeutically exploited
- \* Learn how replication stress and DNA damage pathways affect cancer risk and progression
- \* Understand mechanistic aspects of cell death linked to p53