I. Stroma (Weeks 1-4)

- 9/13: Intro to course/ Tumor/stromal interactions
  - 1st hour: Ellen Pure Overview Lecture
  - 2nd hour: NF1 paper (Yang et al. 2008–Wade Clapp lab as main paper; Zhu et al., 2002, Luis Parada lab, secondary paper).

- 9/20 Fibroblasts/pericytes
  - 2nd hour: Greenberg et al., A role for VEGF as a negative regulator of pericyte function and vessel maturation, Nature 2008 (David Cheresh lab).

- 9/27 Extracellular matrix/proteases (**NOTE ROOM CHANGE: TBD**)
  - 2nd hour: Ahn GO and Brown JM. Matrix Metalloproteinase-9 Is Required for Tumor Vasculogenesis but Not for Angiogenesis: Role of Bone Marrow-Derived Myelomonocytic Cells (Martin Brown lab)

- 10/4 Regulation of Metastasis:
  - 1st hour: Peinado et al., Melanoma exosomes educate bone marrow progenitor cells toward a pro-metastatic phenotype through EMT. Nature Medicine 2012 (David Lyden lab).

II. Angiogenesis (Weeks 5-7)

- 10/11 Hypoxia
  - 1st hour: Celeste Simon Overview Lecture
10/18 Angiogenesis regulators

- **1st hour**: Ding BS, et al., Inductive angiocrine signals from sinusoidal endothelium are required for liver regeneration. Nature 2010 (Shahin Rafii lab).


10/25 Endothelial cell biology

- **1st hour**: Wang et al., Glioblastoma stem-like cells give rise to tumour endothelium. Nature 2010 (Vivian Taber lab)—2 papers back to back in Nature on this topic; **2nd paper**: Ricci-Vitaiani et al., Tumour vascularization via endothelial differentiation of glioblastoma stem-like cells. Nature 2010 (Ruggero De Maria lab).

- **2nd hour**: Sawada, et al. Small GTPase R-Ras Regulates Integrity and Functionality of Tumor Blood Vessels. Cancer Cell 2012 (Komatsu lab)

III. Immune Surveillance (Weeks 8-12)

11/1 Tumor Immunity

- **1st hour**: Ellen Pure Overview Lecture


11/8 Adaptive immunity


11/15 Innate immunity


11/29 Organ-specific microenvironments

- **1st hour**: Andreu et al., FcR gamma activation regulates inflammation associated squamous carcinogenesis. Cancer Cell 2010 (Lisa Coussens lab).

IV. Therapeutic targets in the microenvironment (Weeks 12-13)

12/6 Therapeutic targets


12/11 Therapeutic targets; NOTE TUESDAY CLASS, still in BRB 301

1st hour: Robert Vonderheide Overview Lecture

2nd hour: Olive et al., Inhibition of Hedgehog signaling enhances delivery of chemotherapy in a mouse model of pancreatic cancer. Science 2009 (David Tuveson lab).