Cancer and its spread: the wolf in sheeps clothing
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Abstract
The incidence of cancer is rising and is expected to strike over 2 million people annually in the United States by 2020. Everyone has been, or will be touched by cancer in some way during their lifetime. This seminar will be helpful to students who want to develop a deeper understanding of cancer and how it spreads (metastasis). The seminar will describe the biology behind cancer, tumor microenvironment, cancer stem cells, and steps in metastasis. We will highlight cutting edge research conducted at USC in order to spur enthusiasm in students for joining faculty labs. Furthermore, we will delve into how metastases harm the patient and potential therapies (targeted drug therapy and immunotherapy).

Faculty Biography
Dr. Neman is an Assistant Professor of Neurosurgery and member of the Norris Comprehensive Cancer Center at the Keck School of Medicine of USC. Dr. Neman received his doctoral degree at the UCLA David Geffen School of Medicine in neurobiology. He then went on to complete his cancer biology fellowship at the City of Hope’s Beckman Research Institute where he was a California Institute for Regenerative Medicine (CIRM) Fellow. Dr. Neman’s current research at USC investigates the biology of brain metastases and pediatric brain tumors. His expertise and strengths in stem cell biology and neuroscience have allowed him to develop novel molecular, cellular, and systems approach to study the interaction between the brain and cancer cells (termed the tumor microenvironment)—a bidirectional interplay poorly understood.