In the first part of this talk, we will review the concept of “checkpoint inhibitor” in immunology and illustrate the application of this concept to immuno-oncology with emphasis on the PD-1/PD-L1 system. The presenter will describe the most common PD-L1 antibodies and relative scoring paradigm together with their performance in predicting patients’ response to checkpoint inhibitor therapy.

In the second part of this talk, the presenter will demonstrate how Flagship’s image analysis capability can be applied to the characterization of the immune system and the quantification of PD-L1 expression. In particular, the presenter will describe some recent Flagship’s work aimed at the characterization of the tumor microenvironment in the context of PD-L1 quantification.

Bio:
Dr. Gianani graduated in Medicine and Surgery from the University of Rome “La Sapienza” and, after joining a postgraduate course in Endocrinology, moved to Boston and subsequently to Denver where he worked in Dr. Eisenbarth’s laboratory developing assays for biomarkers associated with the progression of Type I diabetes. During his pathology residency, he served an extended rotation in Dr. Shroyer’s lab where he developed a lifelong interest in biomarkers associated with cancer diagnosis and prognosis. Currently, Dr. Gianani is the Medical Director at Flagship Biosciences in Westminster, CO; his main research interest is immuno-oncology and more specifically, immunological biomarkers in the context of digital image analysis.

Questions? Please call the Biomedical Informatics Department at 631-638-2590.