Insight Box:

This review provides insight on cutting-edge technical advances that have not yet applied to tumor-stroma interaction studies. These novel approaches hold promise to unravel the complex features that dictate tumor-stroma interactions, such as spatiotemporal intricacies and the compositional and genetic heterogeneous nature of the tumor and tumor microenvironment. Further, we provide specific examples of studies in which these methods might be applied. This review is innovative in its proposal of applying emerging methods to explore new regions of tumor-stroma interactions, and is integrative in a myriad of genetic and imaging approaches discussed.