Cryo-Fluorescence Tomography, A Technique to Bridge Multi-Resolution Multi-Modal Assays

The ability to engineer mouse models with human cancer is valuable tool used by research groups around the world to better understand the biology of disease and drug targeting characteristics. Many human cancer cell lines have been engineered to express fluorescence so that in vivo imaging can be used to monitor and stage disease progression. Following in vivo imaging, traditional histo-pathology can be performed to validate in vivo measurements. However, a gap in sensitivity and resolution between in vivo and ex vivo techniques may make it hard to characterize an animal model. *In vivo* fluorescence allows for monitoring of tumor progression over time. Traditional ex vivo techniques only focus on small sample sizes while allowing for high-resolution evaluation and characterization. Using a Cryo-Fluorescence Tomography (CFT) imaging approach, an imaging modality based on serial slicing and off-the-block fluorescence imaging, we can bridge the gap between *in vivo* and *ex vivo* resolution of the entire animal. Various examples are available online at www.emitimaging.com

**CFT images across a wide range of volumes**

