

Advance candidates with comprehensive biodistribution and expression profiles

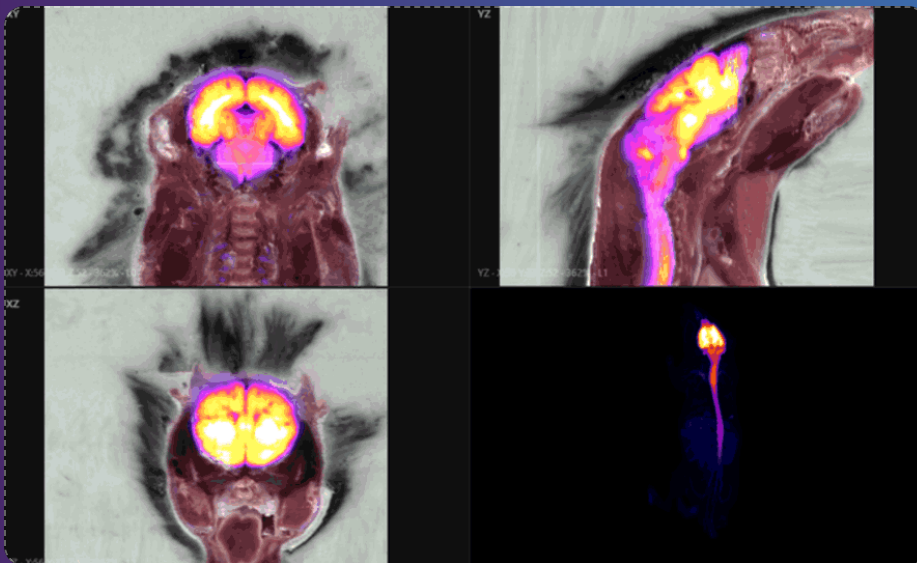
THE CHALLENGE

Gene and cell therapy programs rely on fragmented assays to evaluate delivery vehicle biodistribution, payload expression, and target localization. Conventional preclinical methods answer these questions one tissue, one section, or one timepoint at a time, leaving gaps that surface later in development, when they cost the most to address.

- ✗ Whole-body distribution is based on preselected organs, introducing sampling bias
- ✗ Uneven or localized expression is easily missed between tissue sections
- ✗ Vector location and payload expression can't be confirmed in the same tissue
- ✗ Off-target accumulation outside sampled organs goes undetected

THE SOLUTION

Cryo-Fluorescence Tomography (CFT)



CFT delivers a whole-animal or tissue 3D view that co-registers white-light anatomy with multiplexed molecular fluorescence.

- Compatible with fluorescently labeled AAVs, LNPs, cells, and reporters
- Setups engineered to image a variety of animal models and sample sizes
- Quantify signal across organs and tissues
- Collect tissue samples during CFT imaging for downstream analysis
- Use CFT services or purchase a Xerra™ system for in-house use
- Service projects include access to the newly launched EMIT Viewer for 3D data visualization

20 μ m
RESOLUTION

6
FLUORESCENCE
CHANNELS

50+
FACILITIES

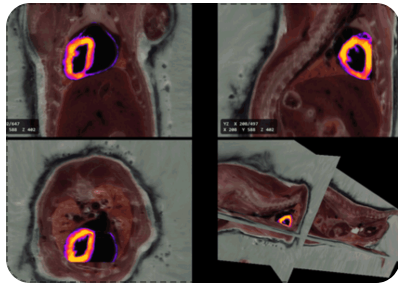
32+
PUBLICATIONS

2
WAYS TO ACCESS

WHAT CFT ENABLES

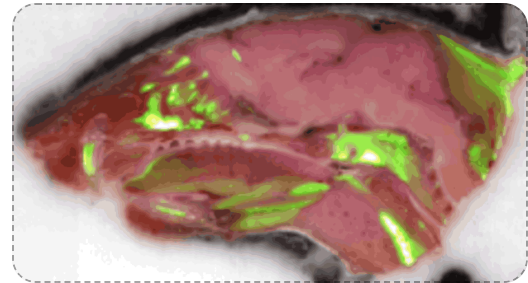
- ✓ Map biodistribution of AAVs, LNPs, and other delivery vehicles across every organ and tissue, including bone
- ✓ Flag unintended or off-target distribution
- ✓ Multiplex fluorophores to follow multiple constructs or readouts in one study
- ✓ Co-localize vector delivery with payload expression in the same animal
- ✓ Screen whole-body biodistribution patterns across candidates to inform early selection
- ✓ Guide tissue collection for downstream assays based on observed signal localization

COMMON APPLICATIONS OF CFT



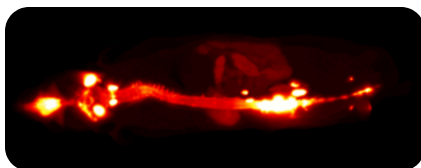
Confirm on-target delivery

Verify vector delivery to target tissues and assess the extent of biodistribution.



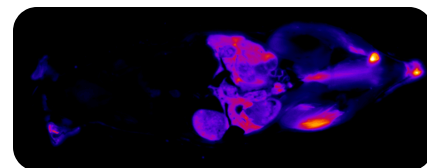
Flag off-target effects

Identify accumulation or expression in tissues outside the target.



Track clearance end to end

Follow elimination pathways across the whole animal.



Map expression tissue by tissue

Resolve where and how uniformly a payload expresses across organs.

Biodistribution studies, coordinated end to end



EMIT Imaging serves as your project management partner, coordinating *in vivo* studies, CFT imaging, and downstream tissue analysis, so your team spends less time managing vendors and more time focused on research.

In Vivo Pharmacology Study

Animals dosed and prepared for imaging via partner network

↓ Samples frozen + sent to EMIT Imaging

CFT Biodistribution Imaging

CFT creates a 3D map of vector biodistribution and expression for whole-body or multiple tissues

↓ CFT informs tissue collection

Confirmatory Tissue Analysis

qPCR/ddPCR, RNA-Seq, and histology are performed via partner network

↓ Initial results shared and compiled

Data Review

Final reports are consolidated and reviewed with your team