

Whole-organ drug distribution

Assessment of organ-specific compound distribution is an important step in preclinical drug development. Gubra offers light-sheet fluorescence microscopy-based whole-organ 3D imaging analysis of fluorescently tagged peptide and antibody-based drug candidates.

Drug distribution at high anatomical resolution

3D imaging at whole-organ level

Light-sheet fluorescence microscopy allows for 3D visualization, anatomical mapping and quantification of fluorescence-labelled peptides and antibodies at the whole-organ level.

Whole-organ drug distribution

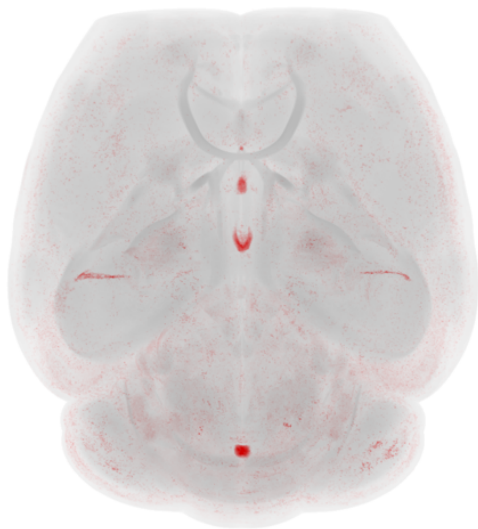
Automated registration and quantification of fluorescence intensity provides unbiased information on drug distribution and relative compound levels at high anatomical resolution.

Drug vs. target distribution

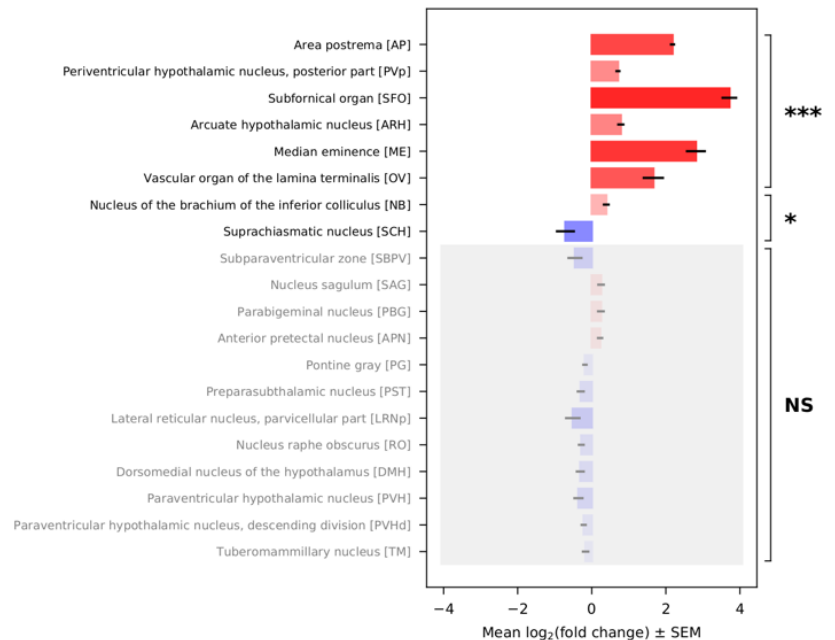
Drug-target engagement can be supported by comparing 3D whole-organ distribution of fluorescence-labelled drug candidate and therapeutic target.

Application to peptide-based drugs

Gubra offers fluorescence-labelling, in vivo dosing and 3D imaging of peptide and antibody-based drug candidates in various mouse organs, including the brain and kidney.



Whole-brain distribution (dorsal view) of a fluorescently-labelled therapeutic peptide following systemic administration in the mouse.



Semi-quantitative analysis of compound distribution (fluorescence intensity). The list shows brain regions with significant differences between compound and vehicle dosed mice.