



# 3D quantitation of atherosclerosis

## Imaging aortic plaque burden

Assessment of vascular morphological changes is imperative for assessment of drug therapeutic effects in animal models of atherosclerosis. Gubra offers light sheet fluorescence microscopy-based 3D visualization and quantitation of atherosclerotic plaques.

### 3D imaging of the aorta

Light-sheet fluorescence microscopy allows for 3D imaging, mapping and quantification of aortic vascular pathology at high resolution.

### Unbiased 3D quantitative analysis of plaque burden

Deep learning computational analysis is applied for unbiased quantitation of aortic plaque burden in mouse models of atherosclerosis, including the ApoE knock-out mouse.

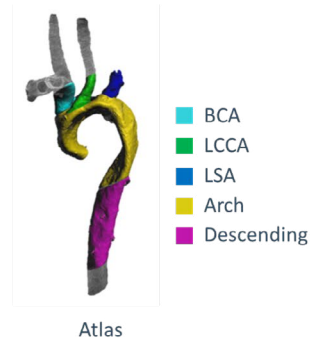
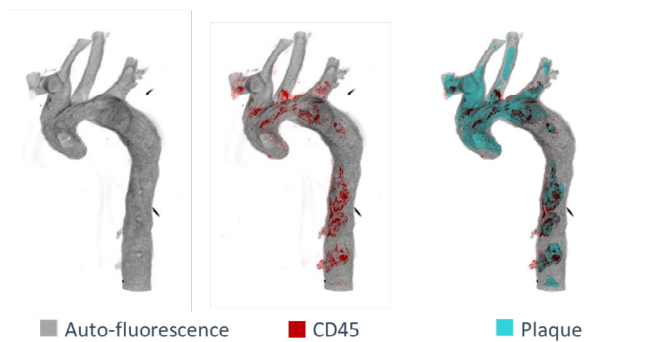
### Anatomical mapping of plaque distribution

Automated plaque detection and anatomical mapping is performed on aorta samples, covering all thoracic segments and major artery branches.

### Application to preclinical models of atherosclerosis

Quantitative 3D analysis of atherosclerotic plaque deposition is optimal for characterization of drug treatment effects in mouse models of atherosclerosis.

Send us the aorta samples – our 3D imaging platform is applicable to any relevant in vivo atherosclerosis model.



Automated 3D mapping and quantification of atherosclerotic plaques and CD45-positive immune cells in aorta sample from high-fat diet fed ApoE knock-out mouse. BCA, brachiocephalic artery, LCCA, left common carotid artery, LSA, left subclavian artery.

