

Real-Time Super Resolution Contextual Close-up of Clinical Volumetric Data

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Results using our System

Generated on an AMD Athlon 2500 with
1.25 GB of RAM and using OpenGL/ATI
Radeon 9550 graphics card

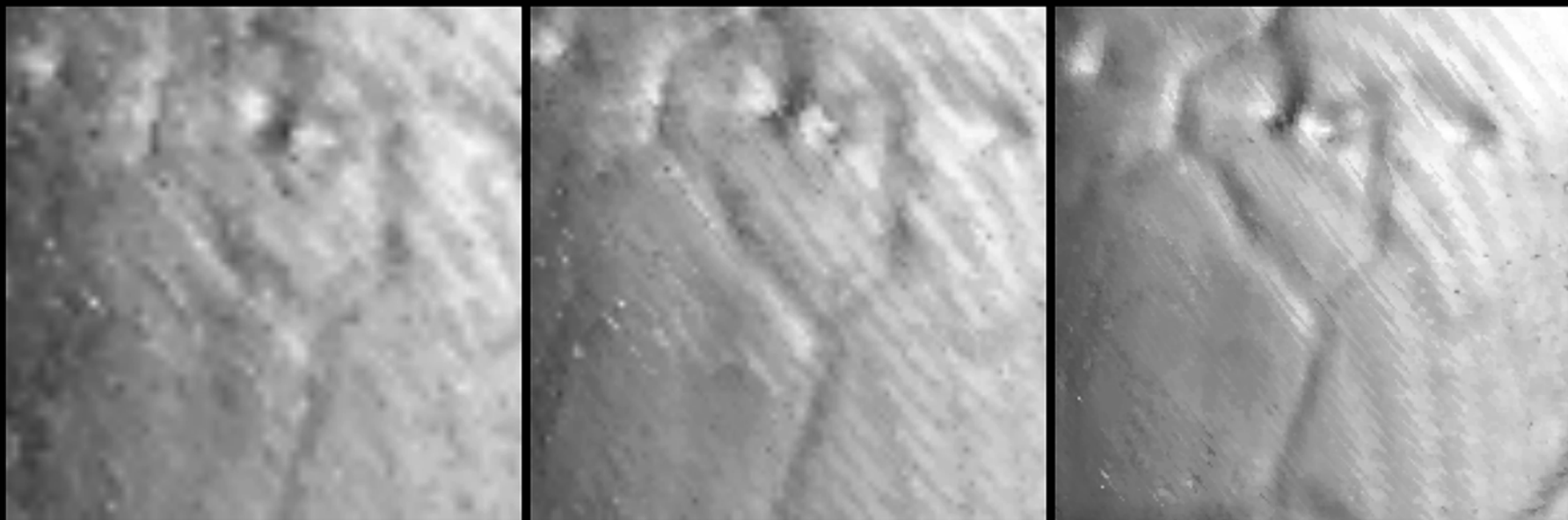
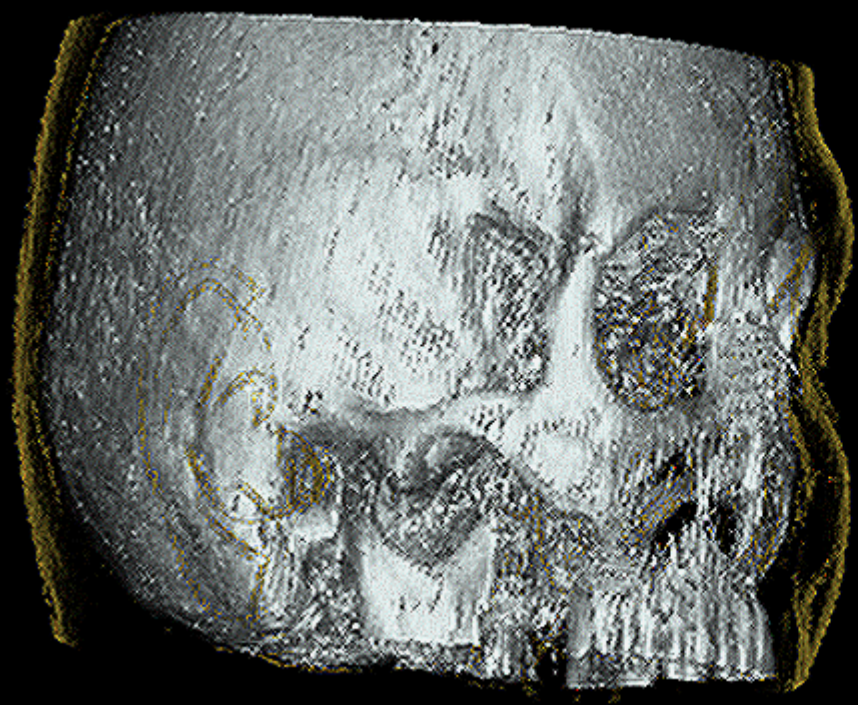
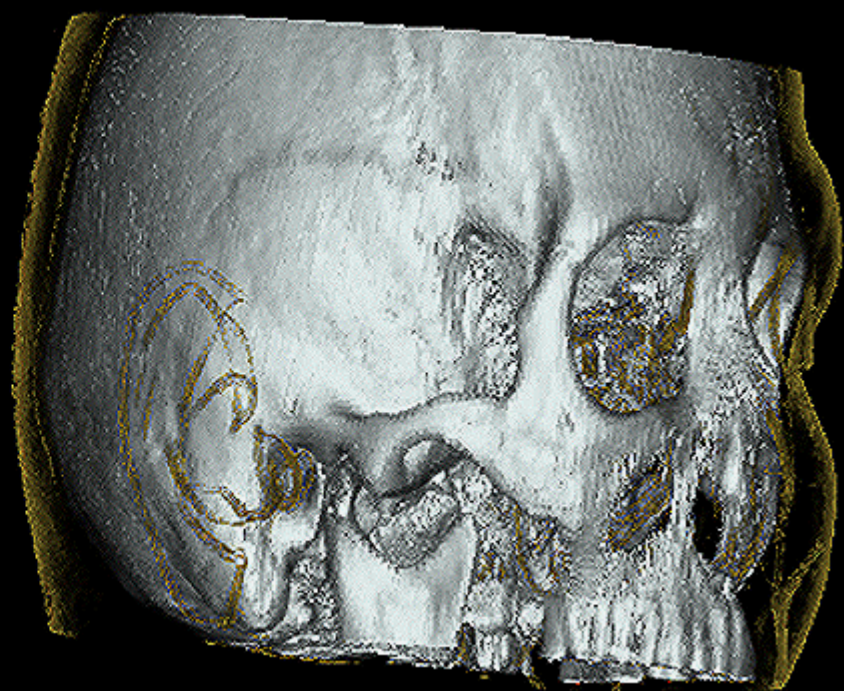


Figure 3 in the paper

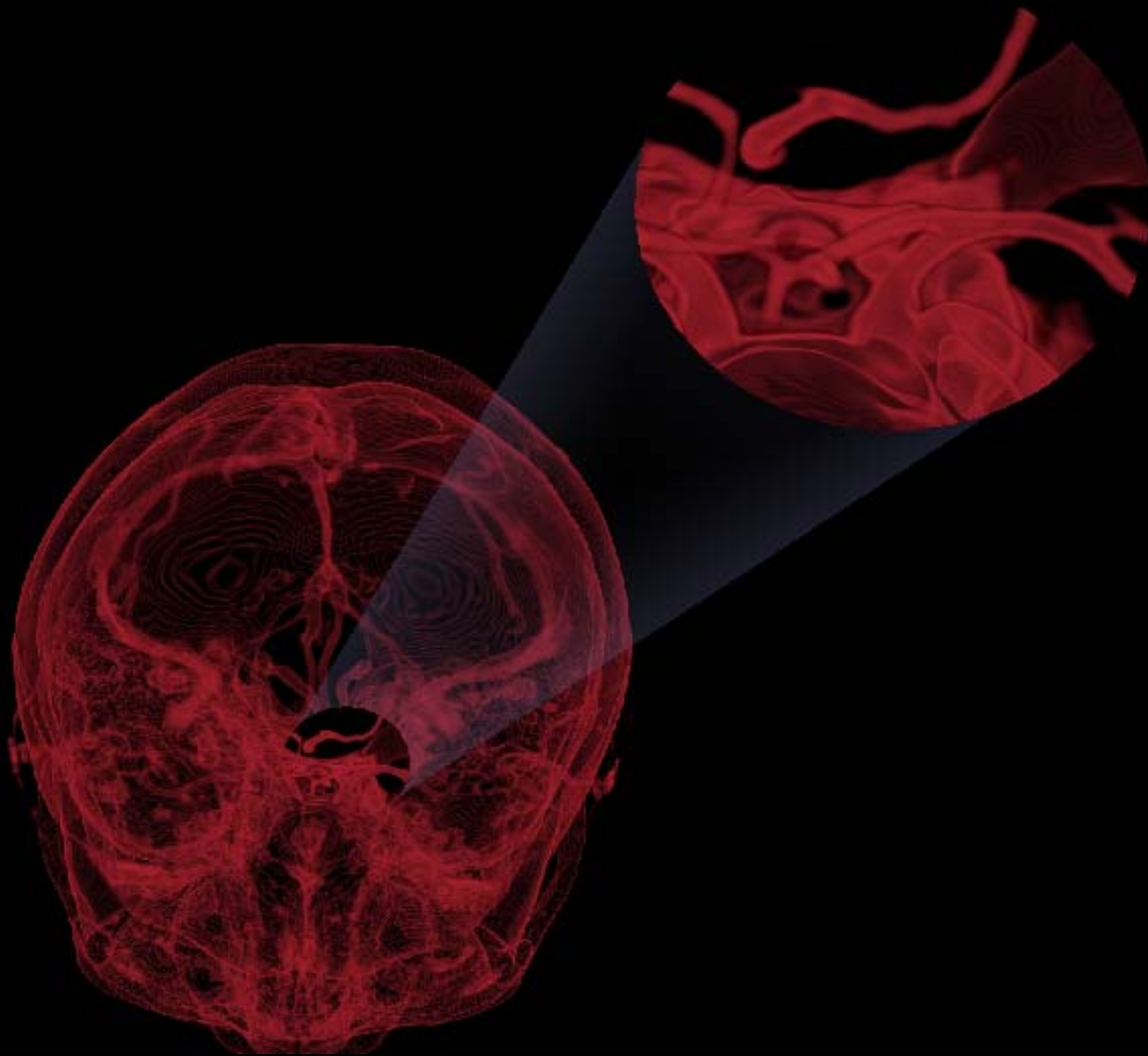


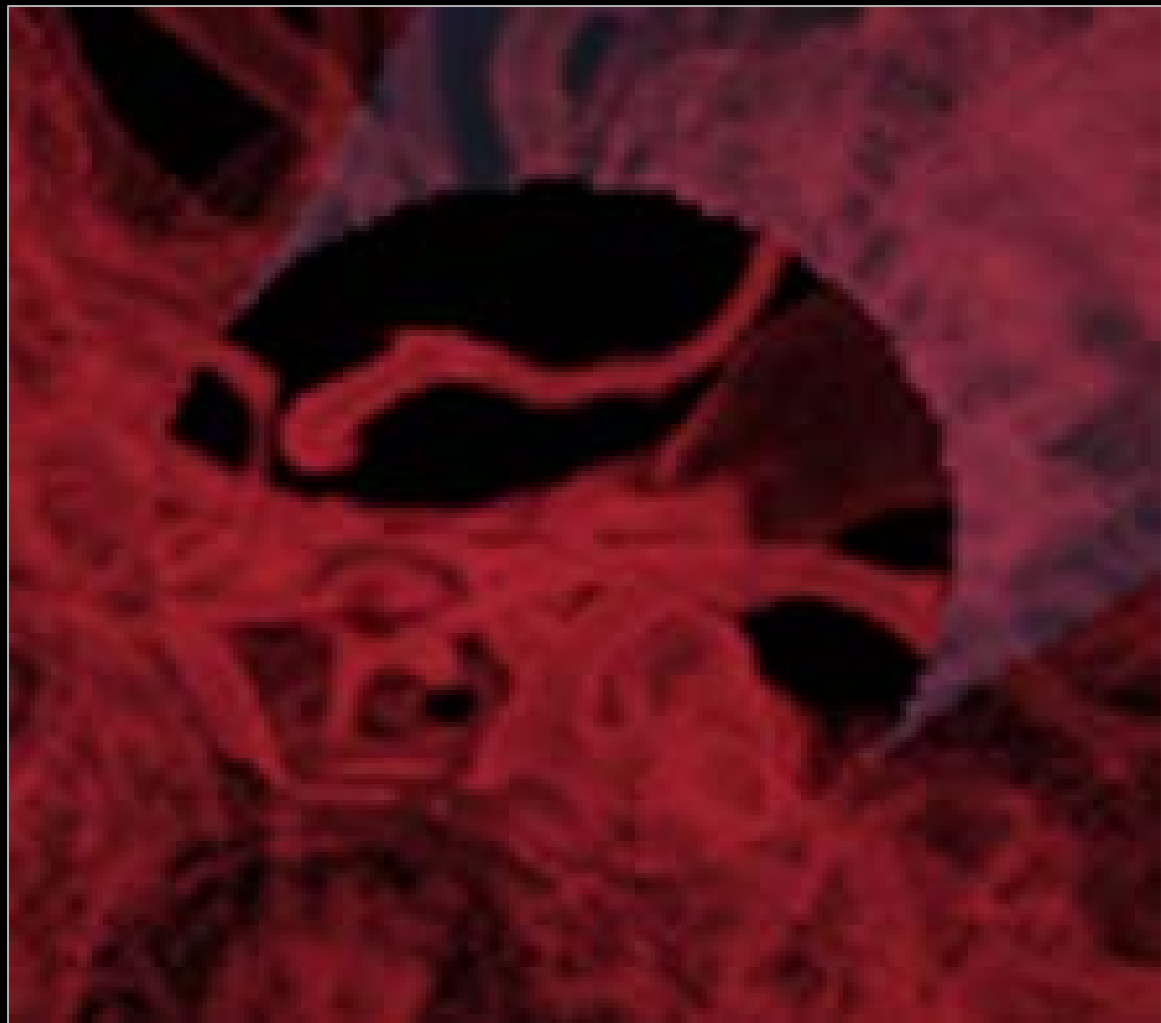
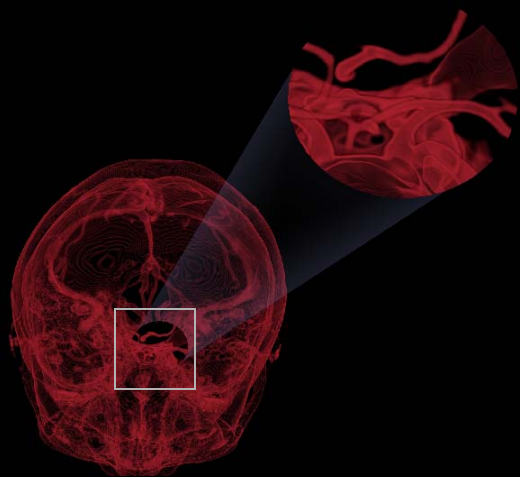
Low-resolution



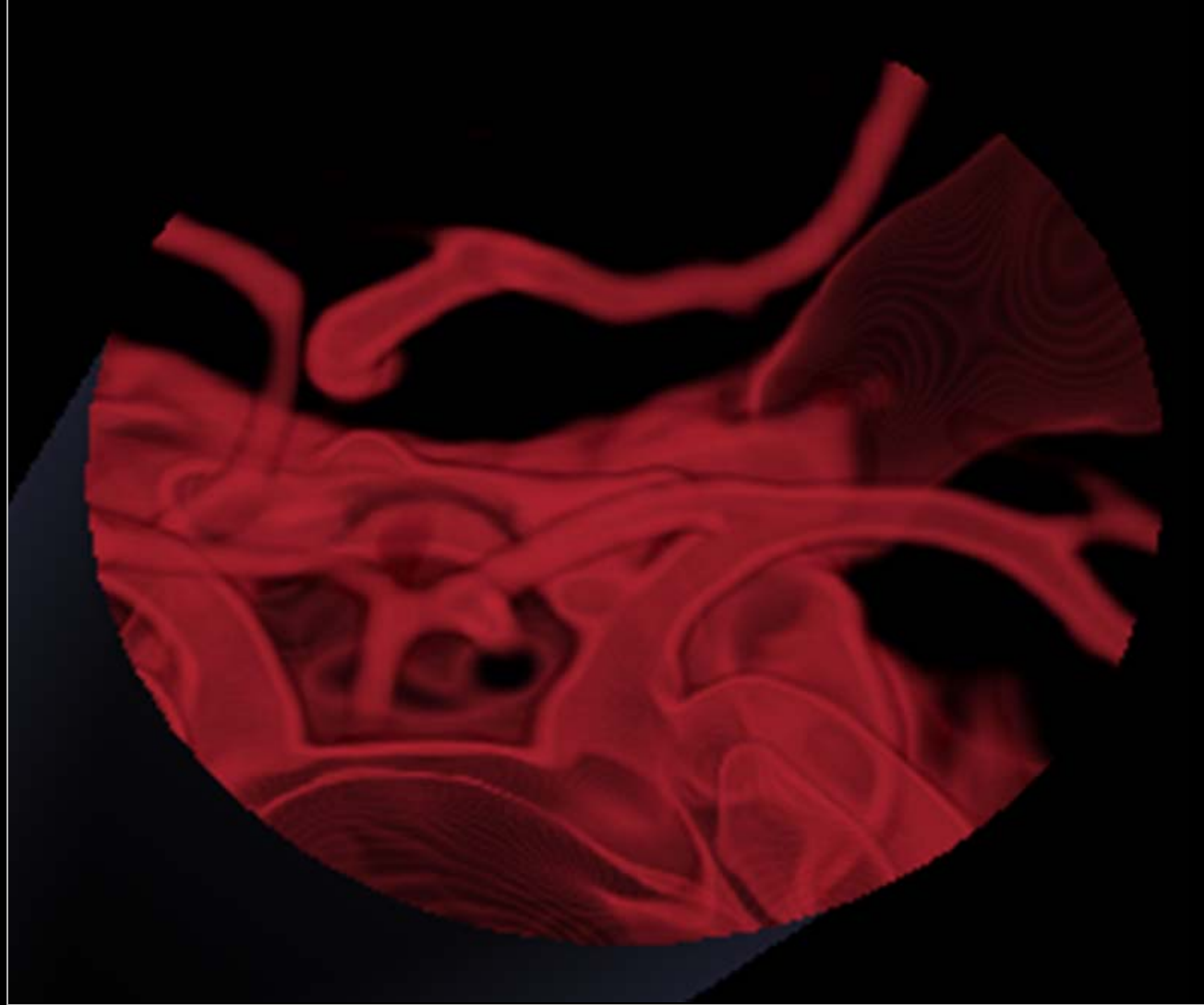
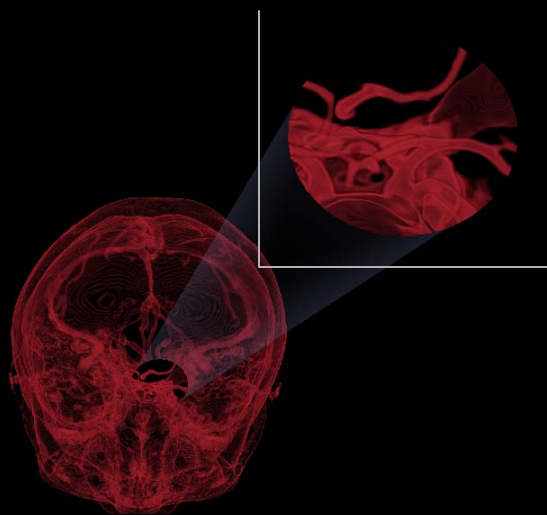
High-resolution

ROI: vessels





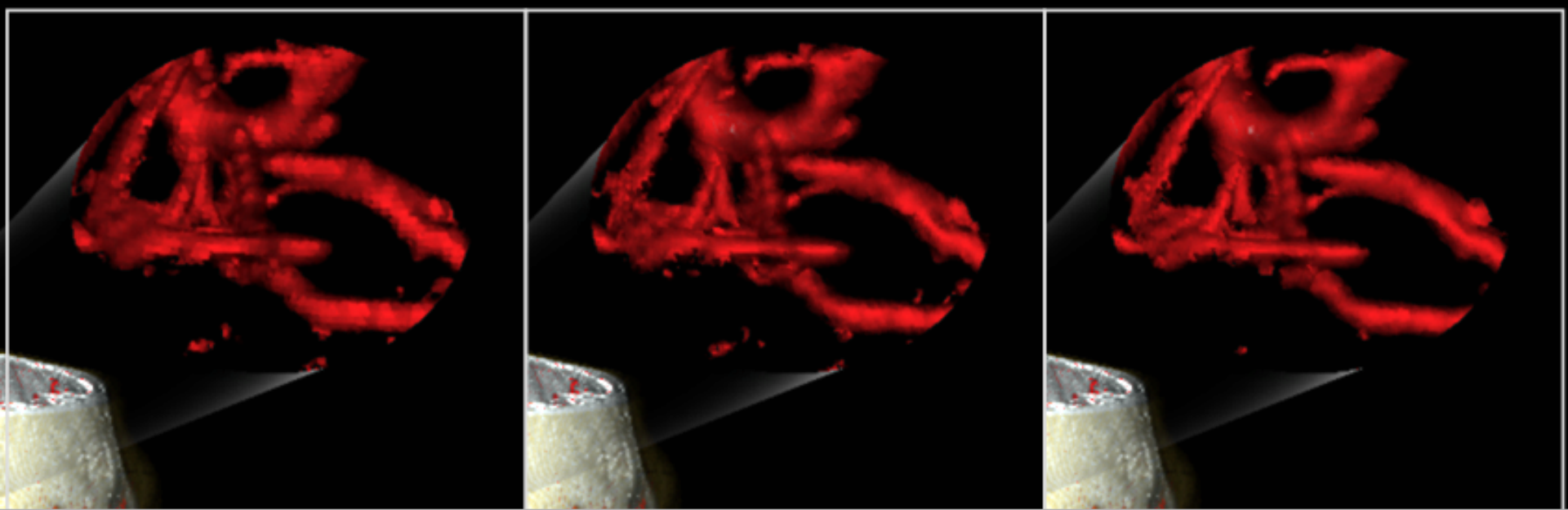
ROI sub-volume



Super-resolution ROI

Video

- File “taerum-eurovis-06-video”
- Note that video play is not a precise representation of the actual fps performance during capture
- The video plays at 30 fps while system performance ranged from 3-15 fps



No subdivision

Order 3 subdivision

Order 4 subdivision

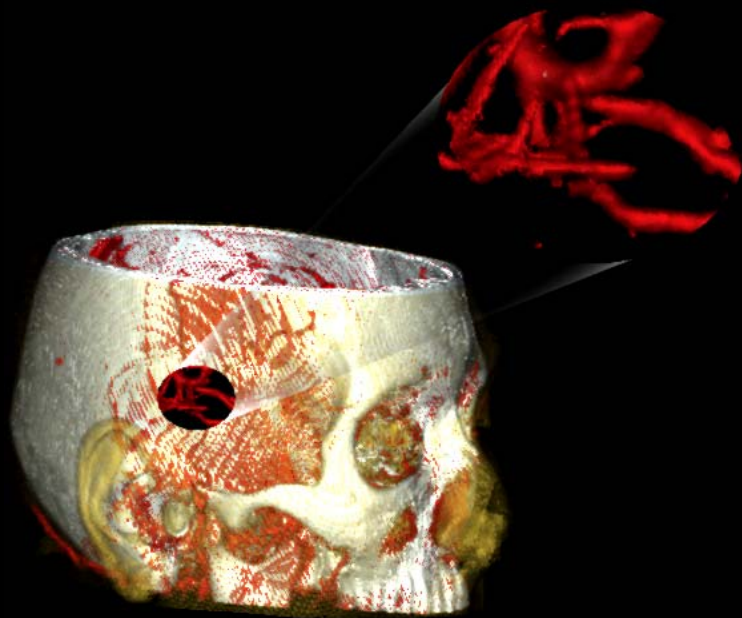
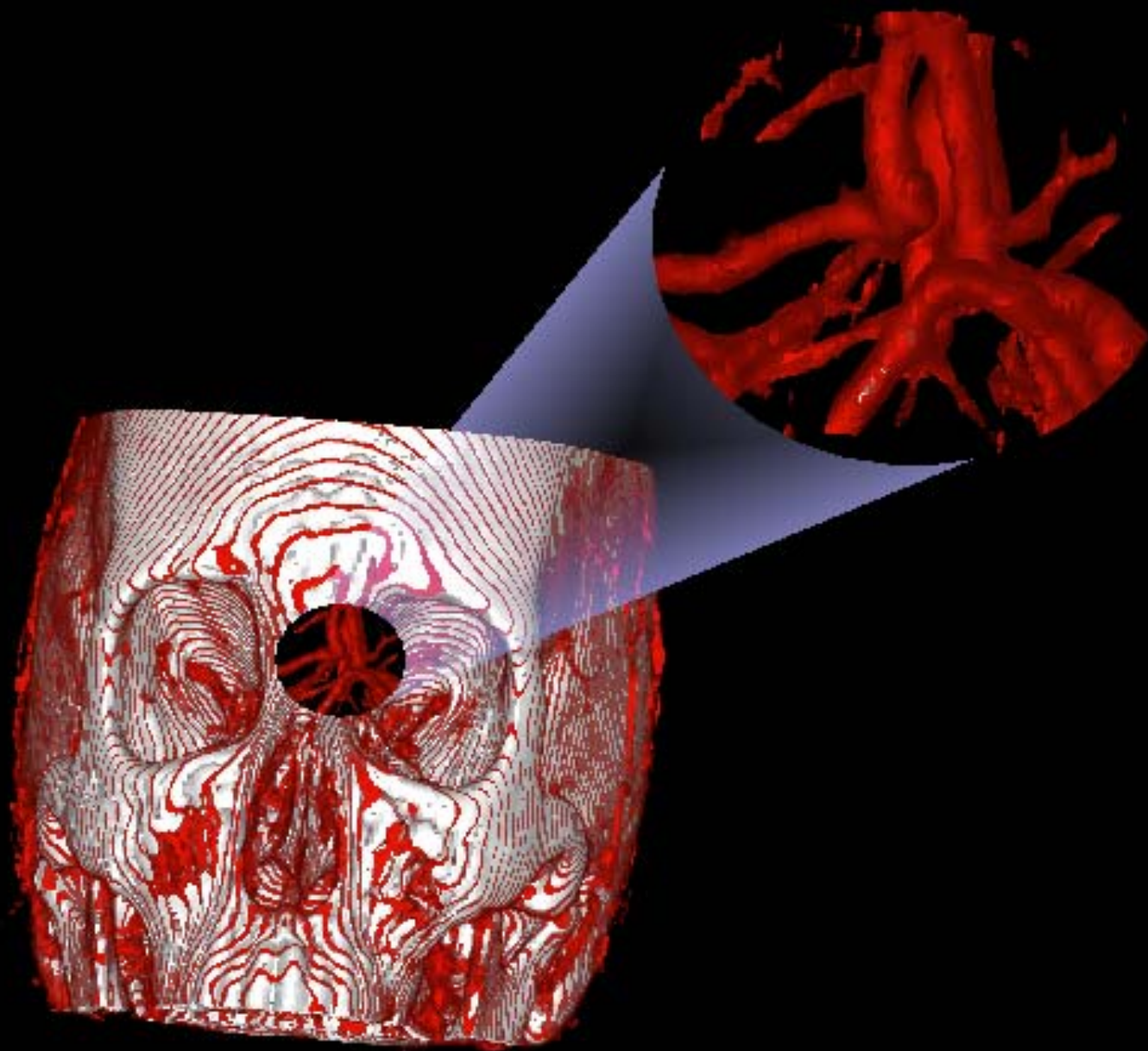
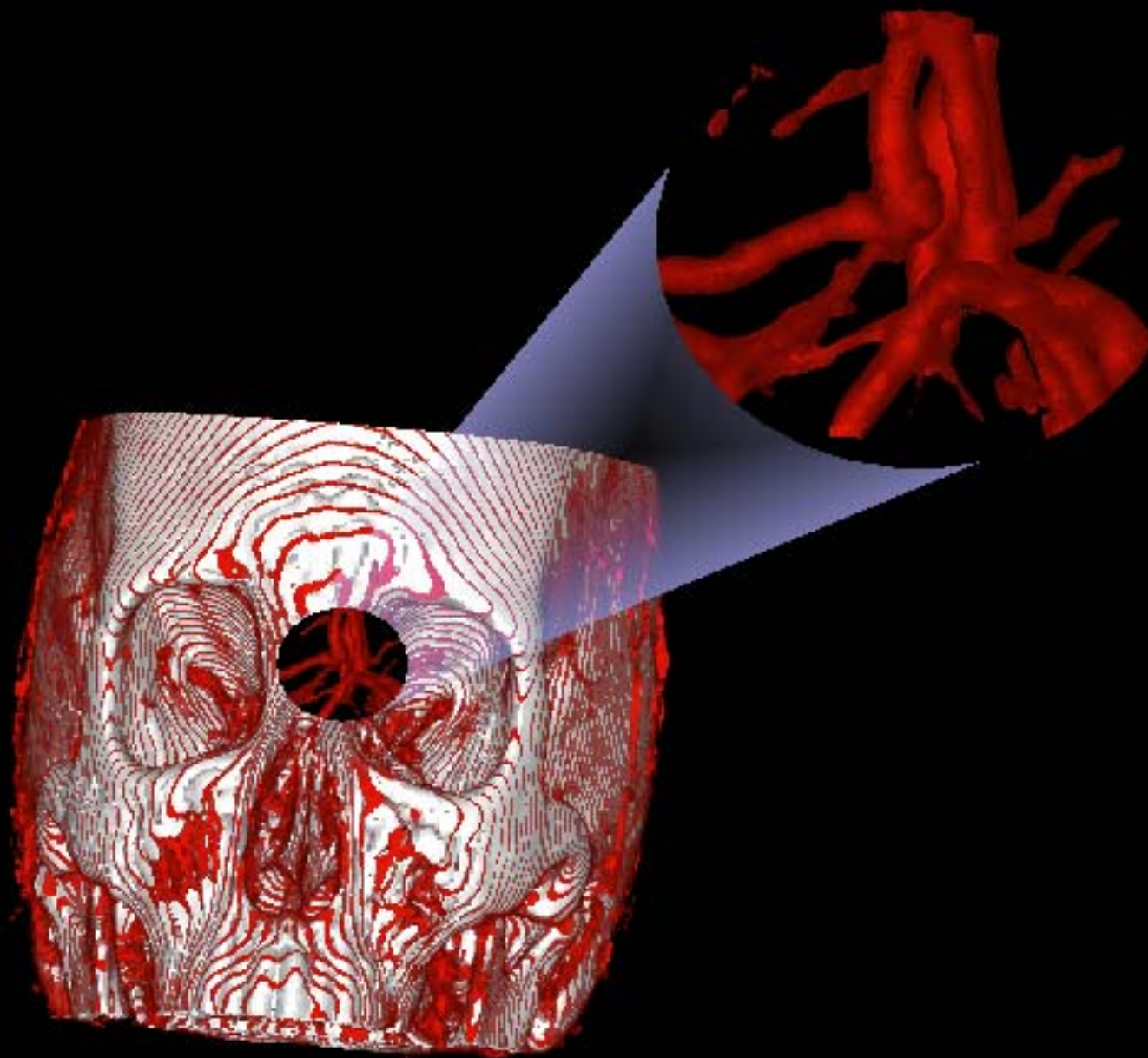


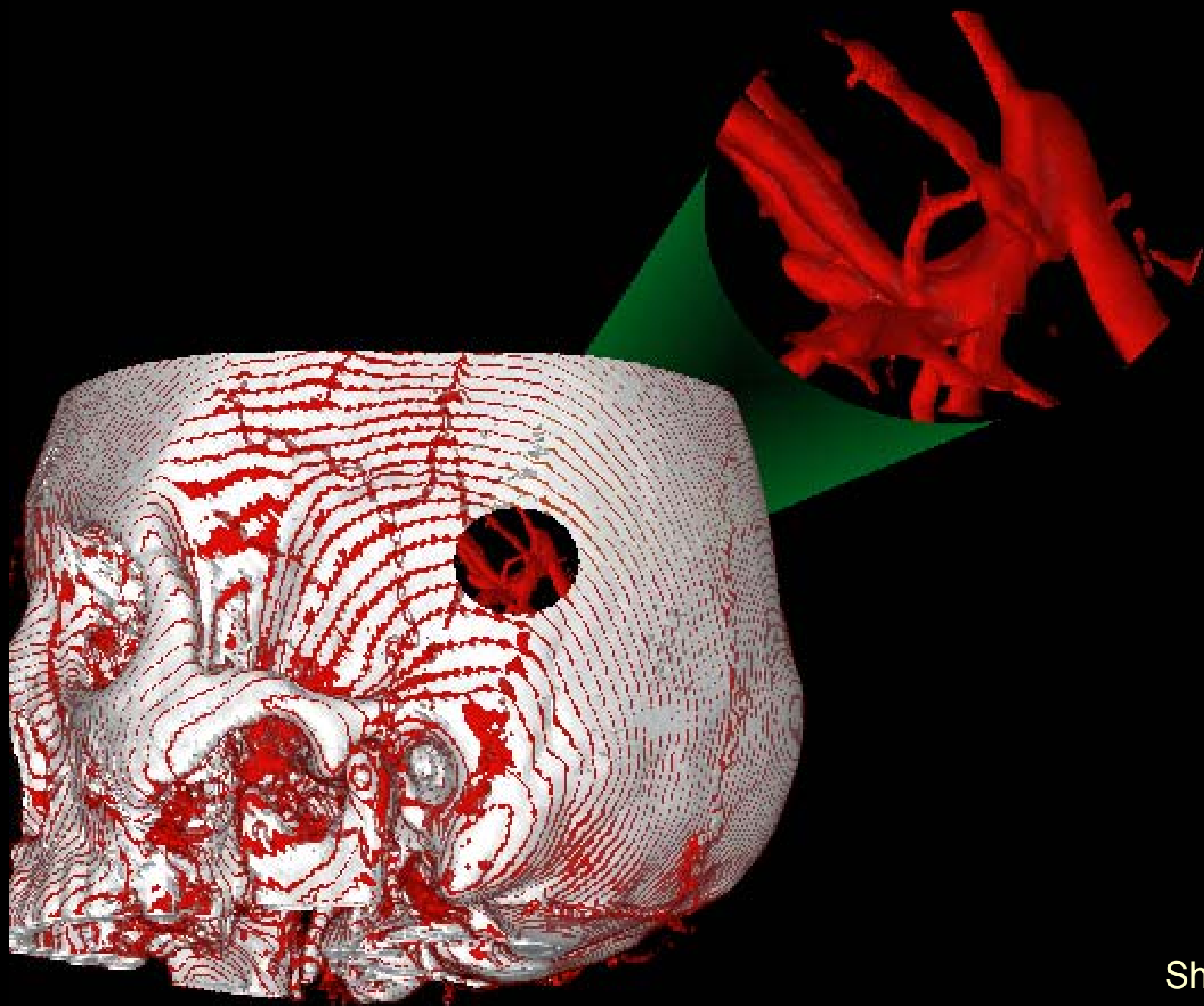
Figure 3 in the paper



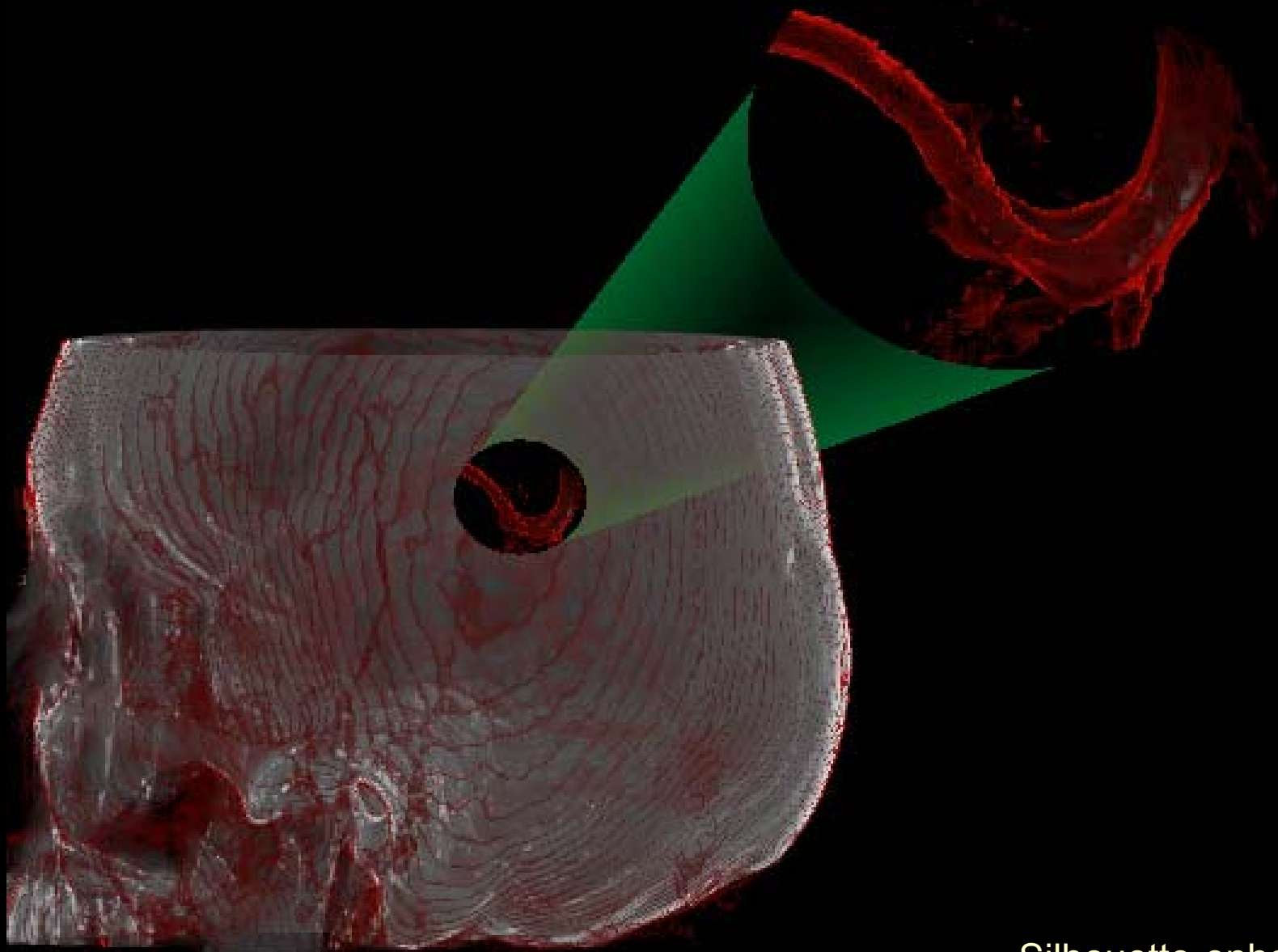
Linear



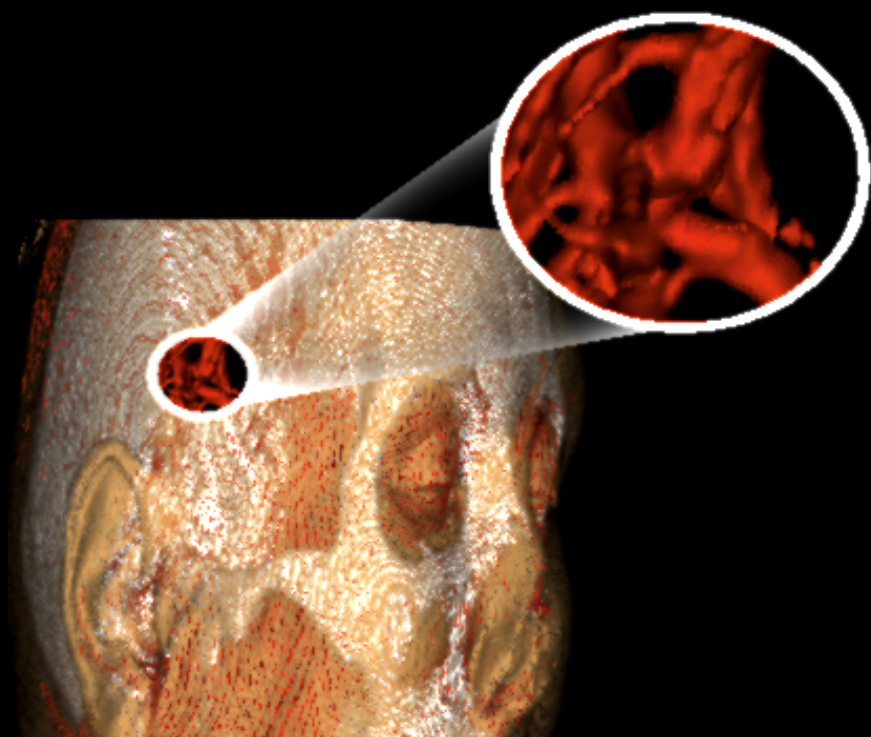
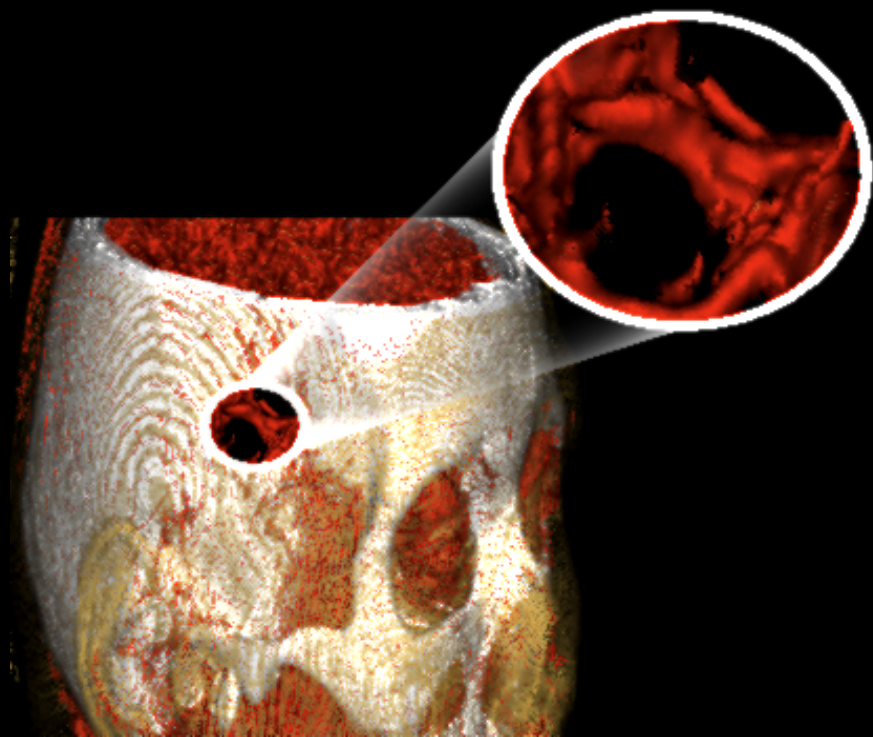
Cubic

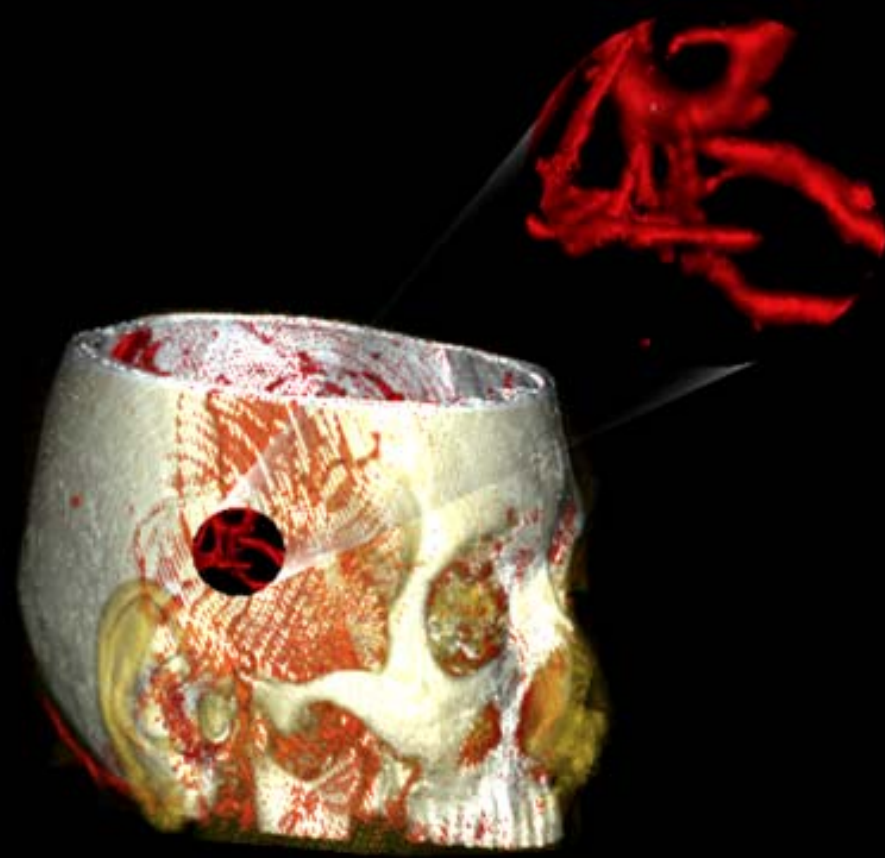
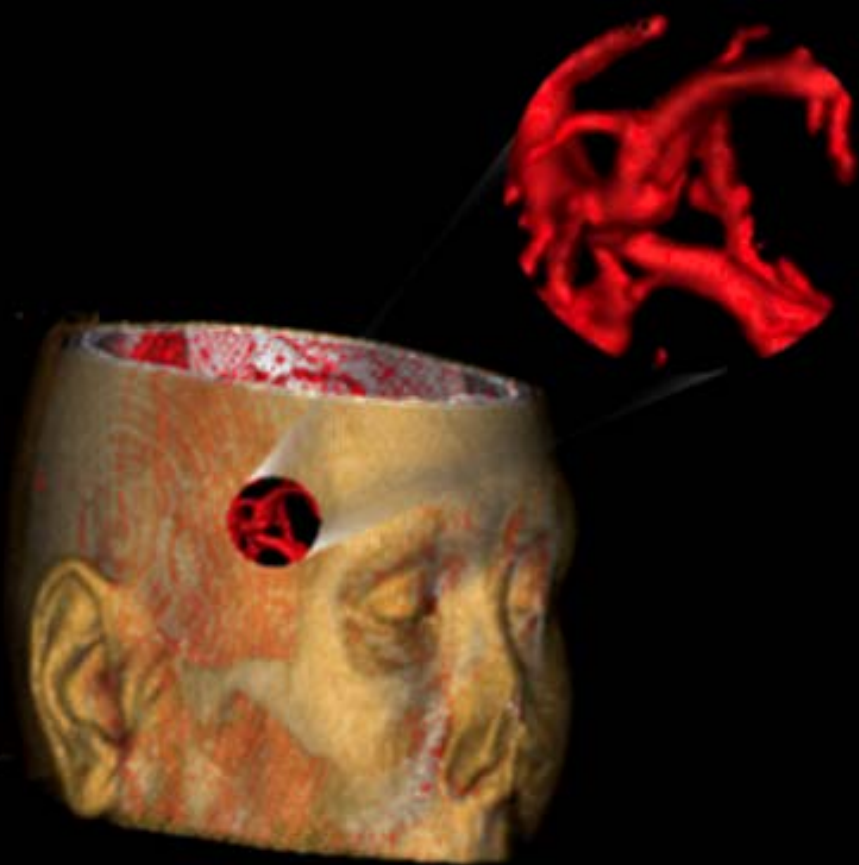


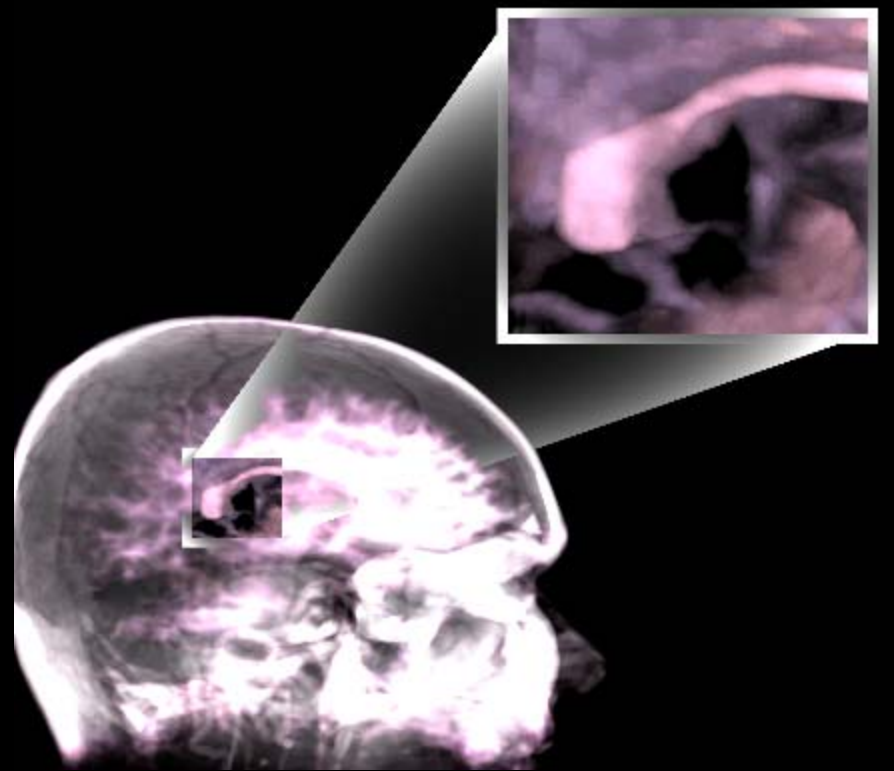
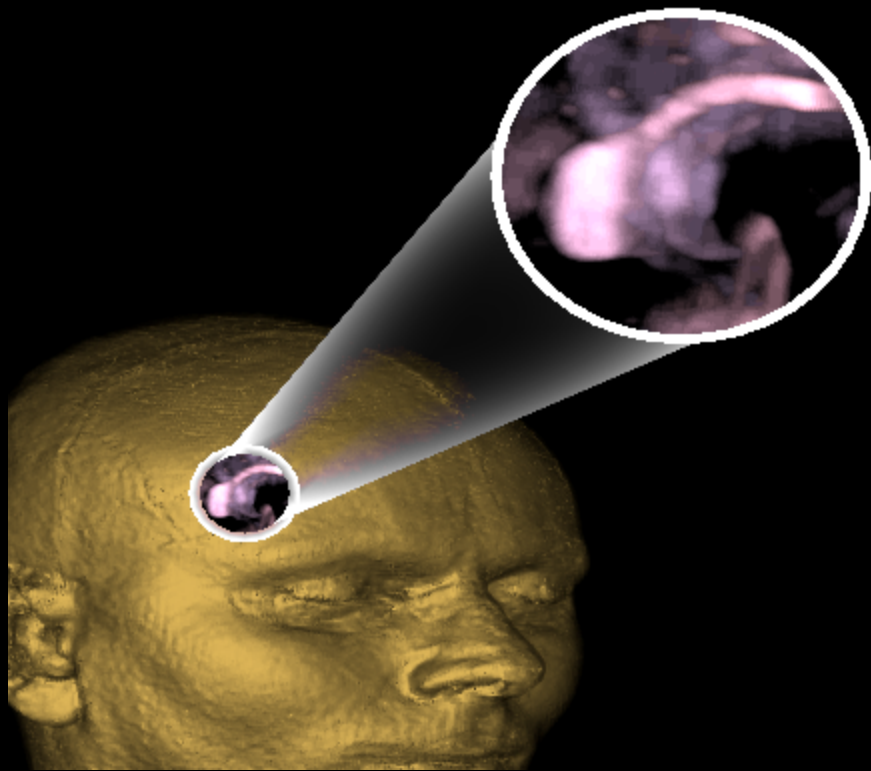
Shaded

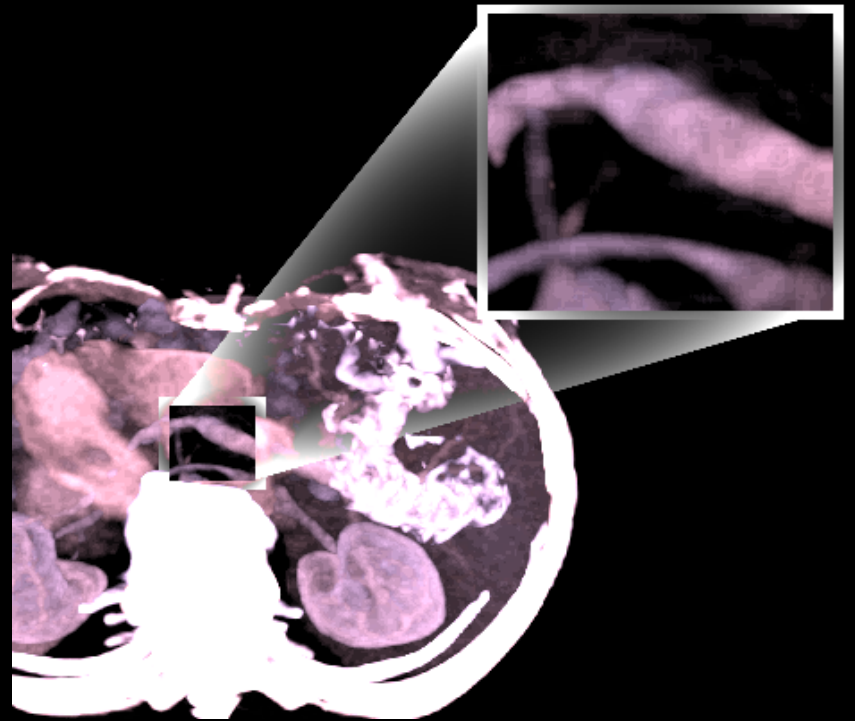
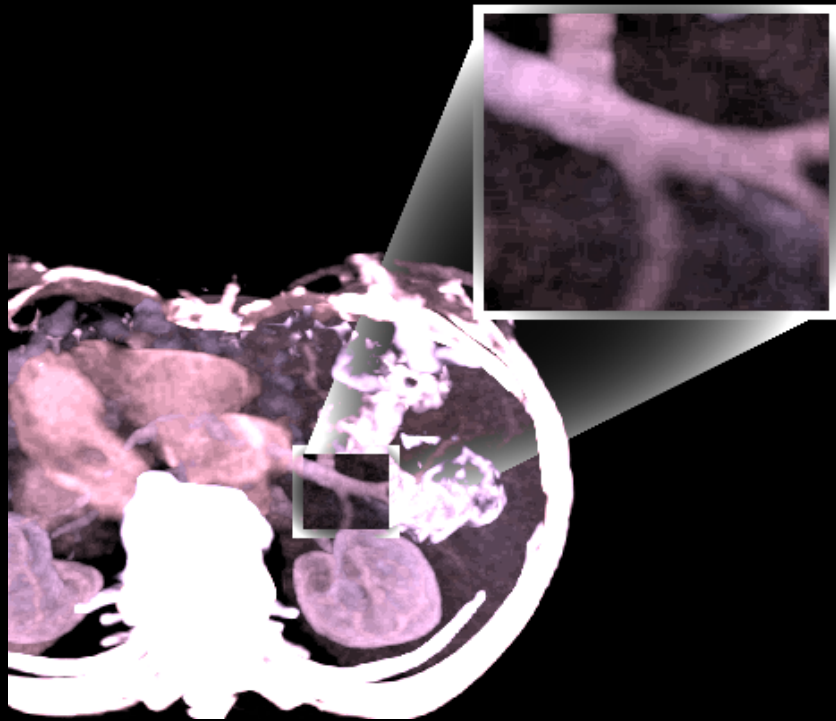


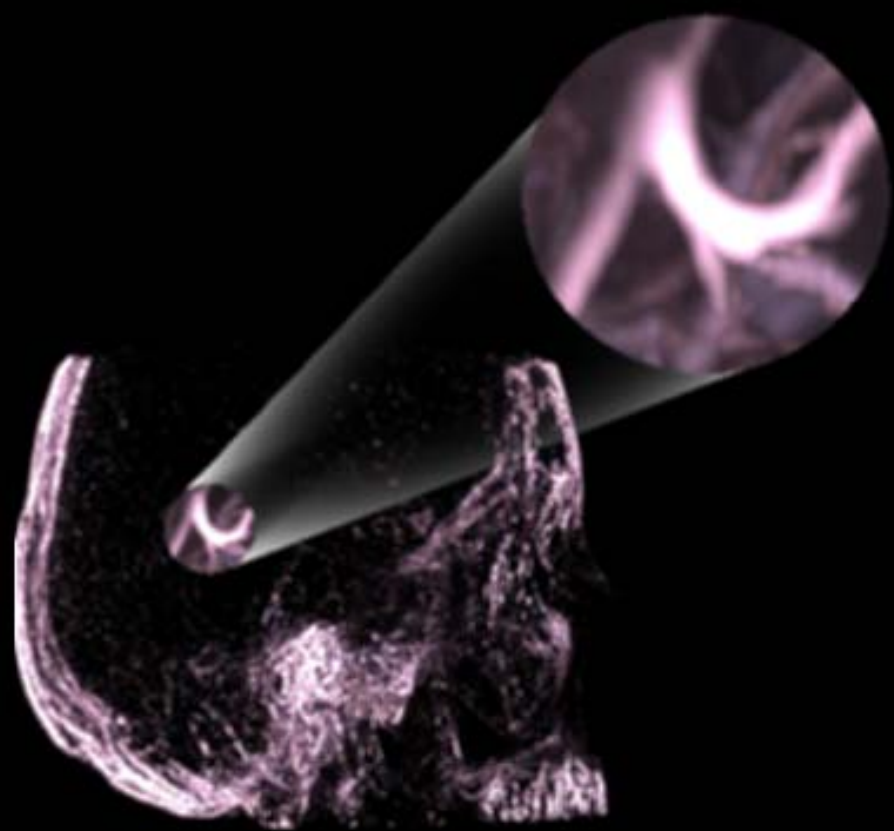
Silhouette-enhanced

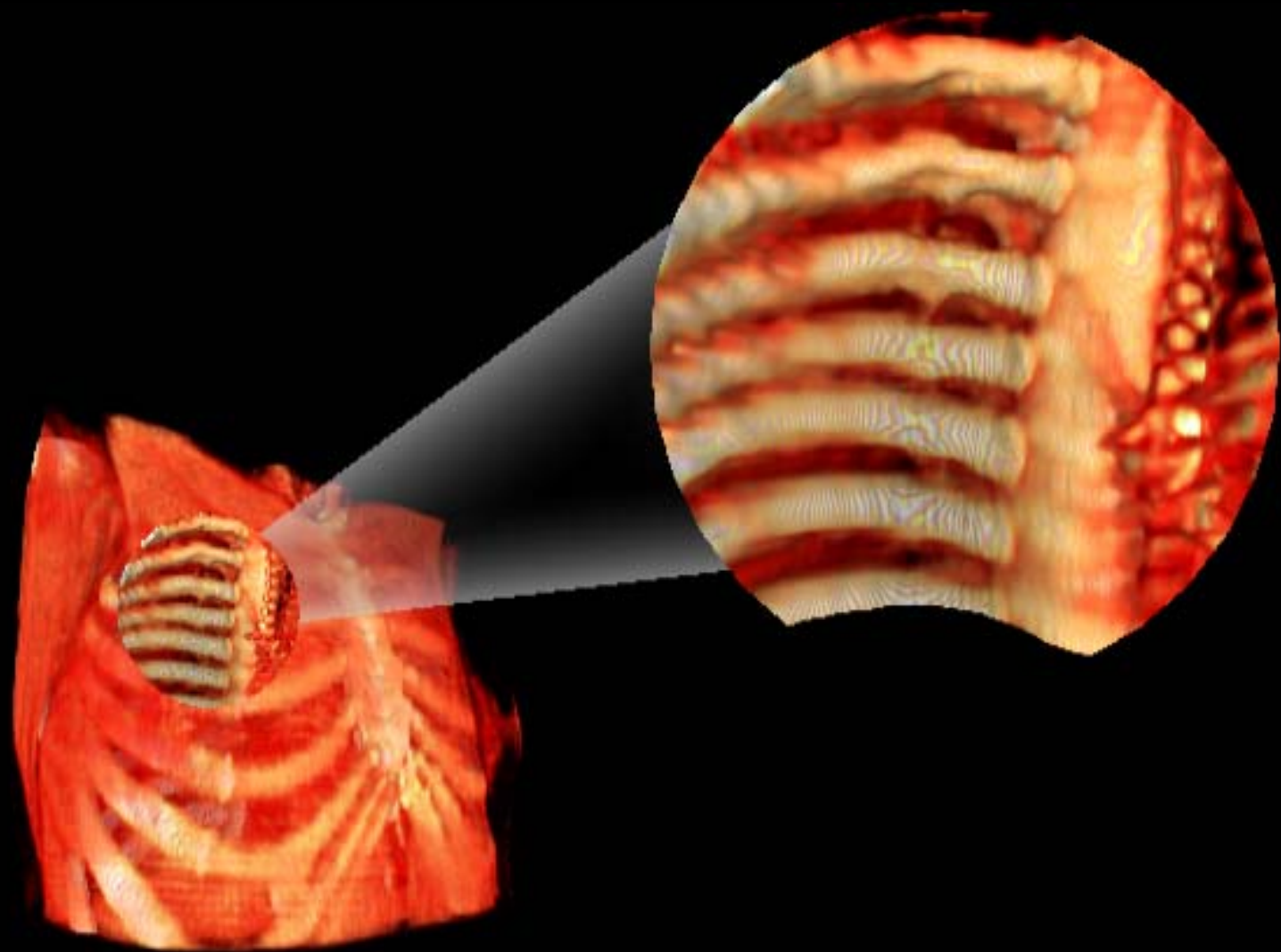


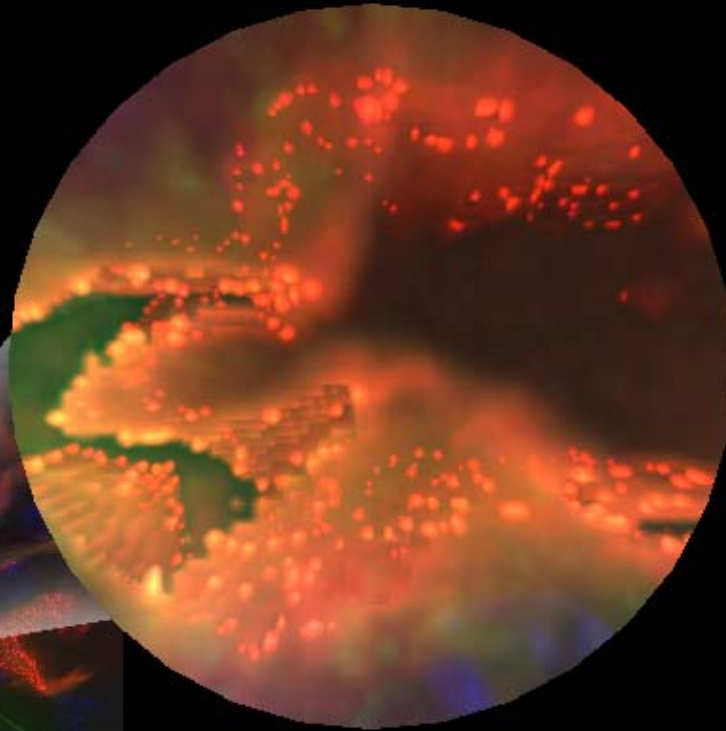
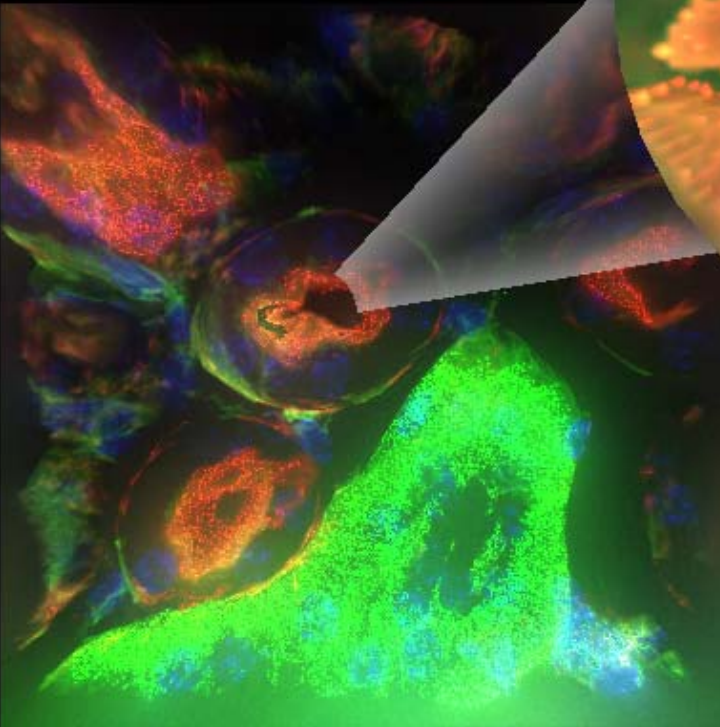
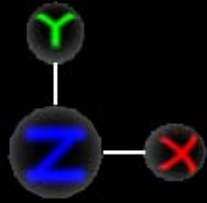




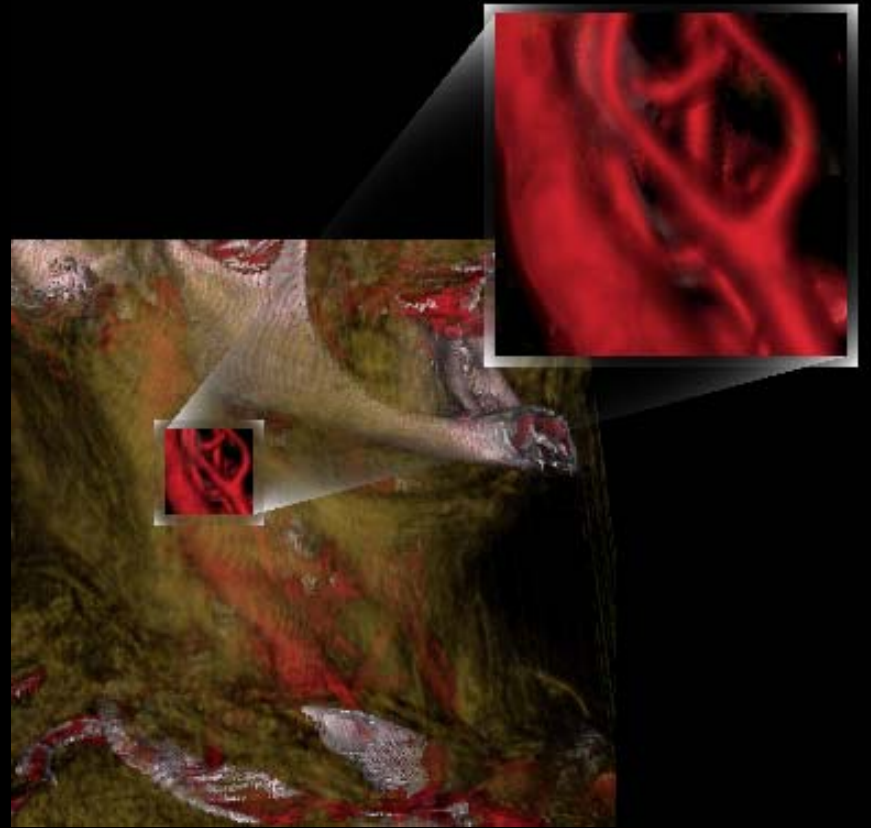
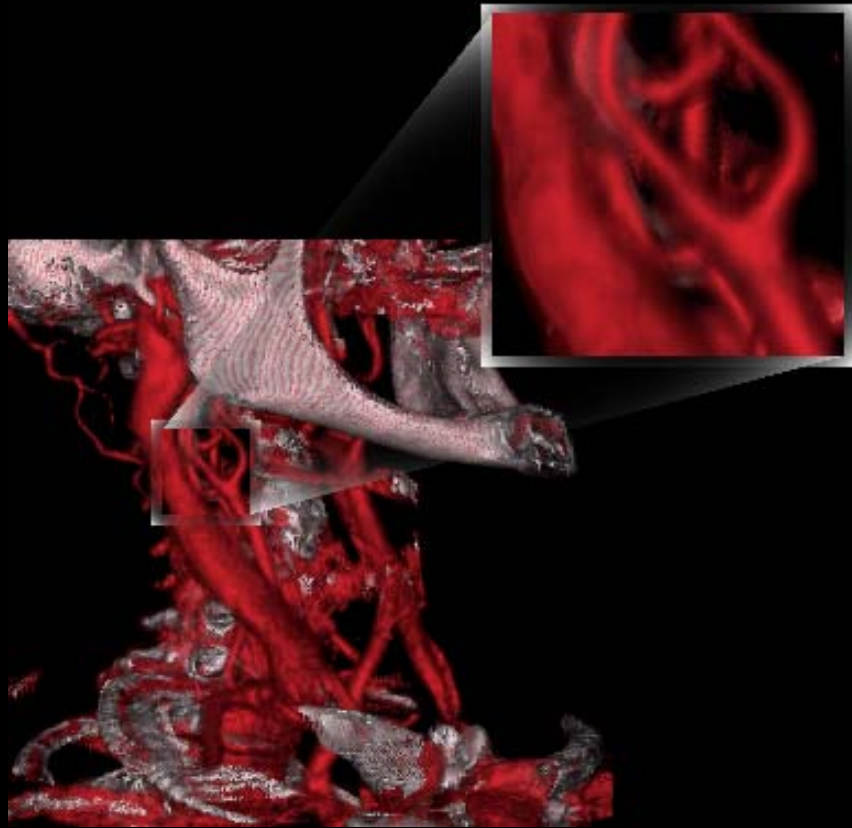


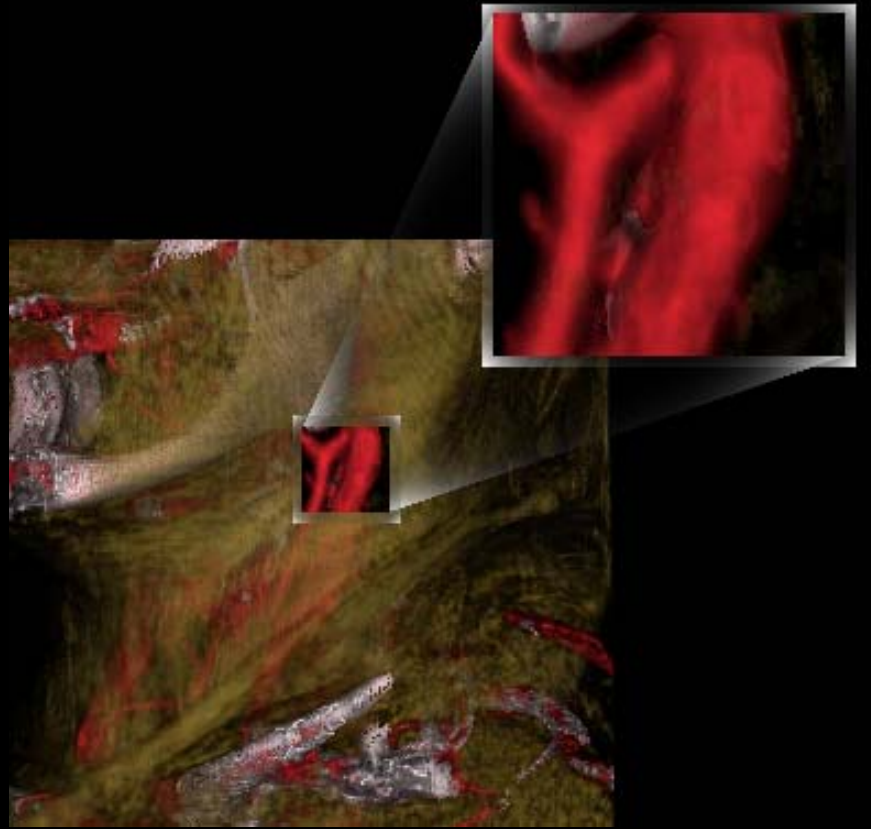
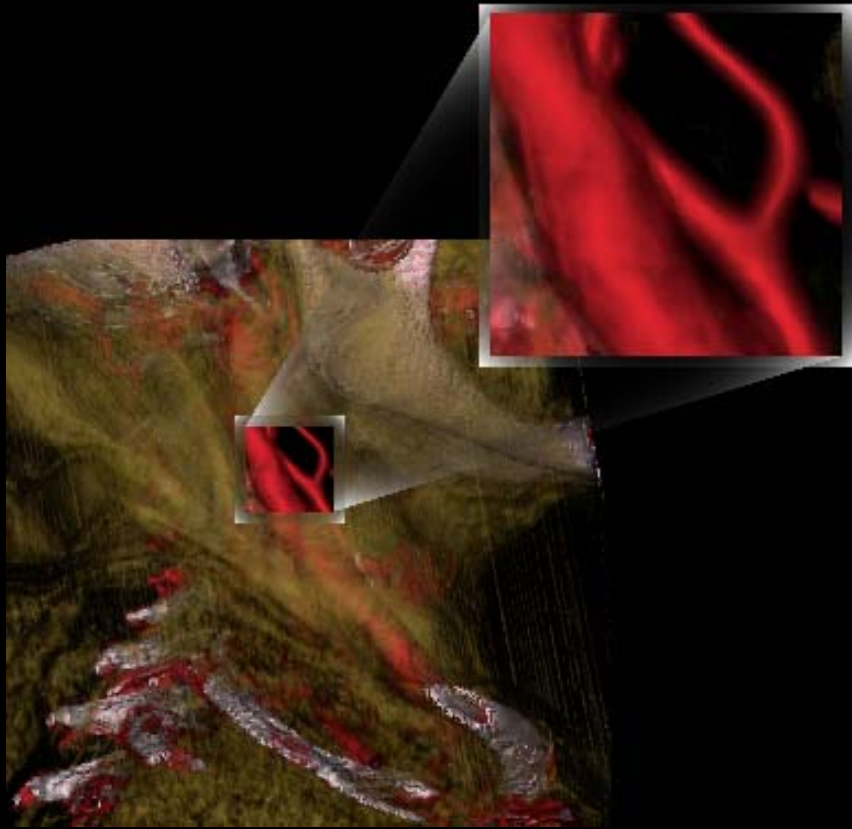


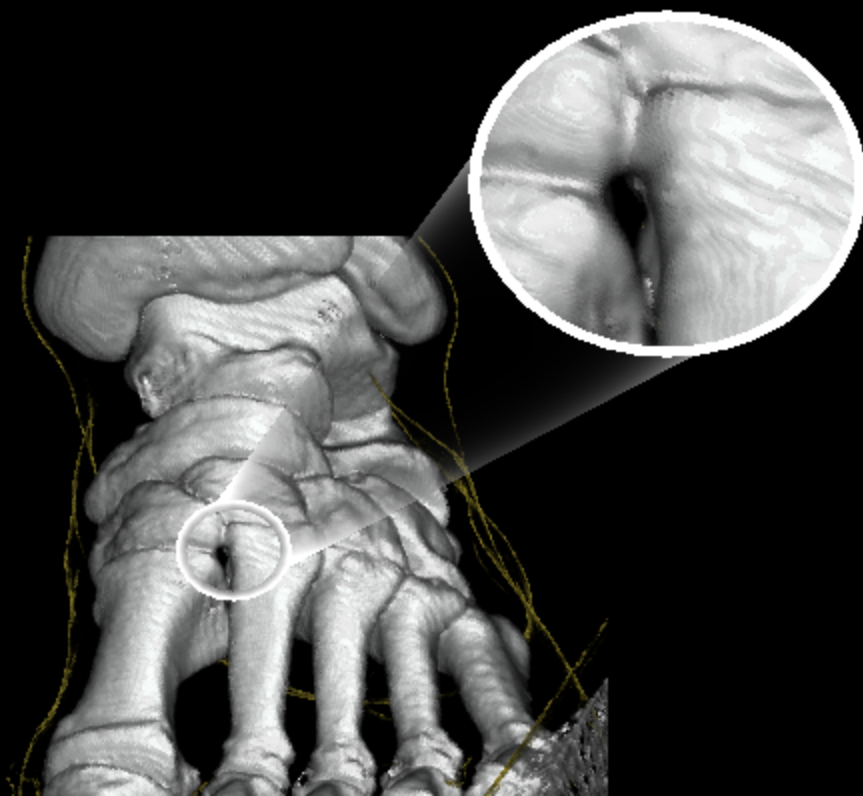
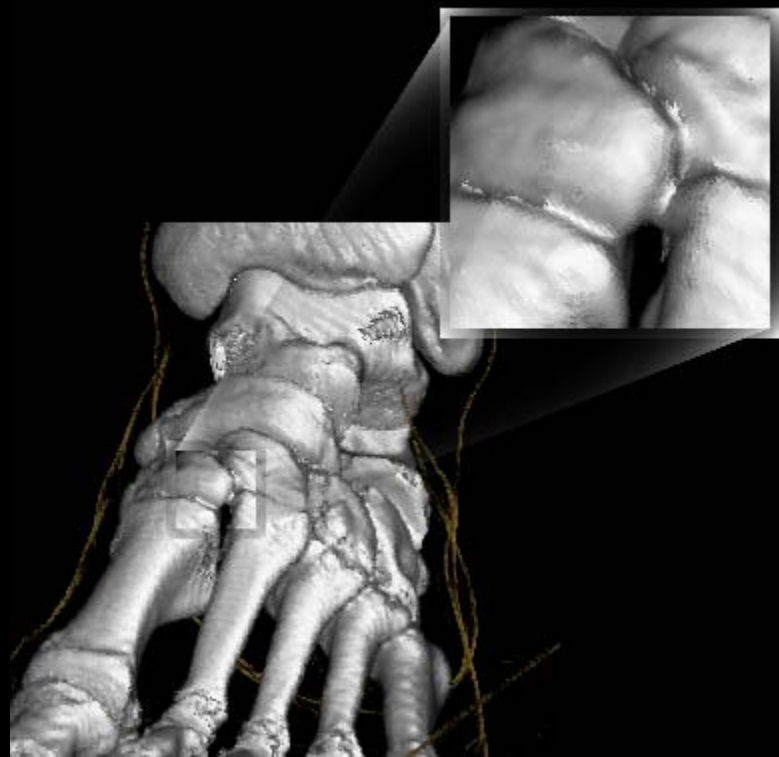


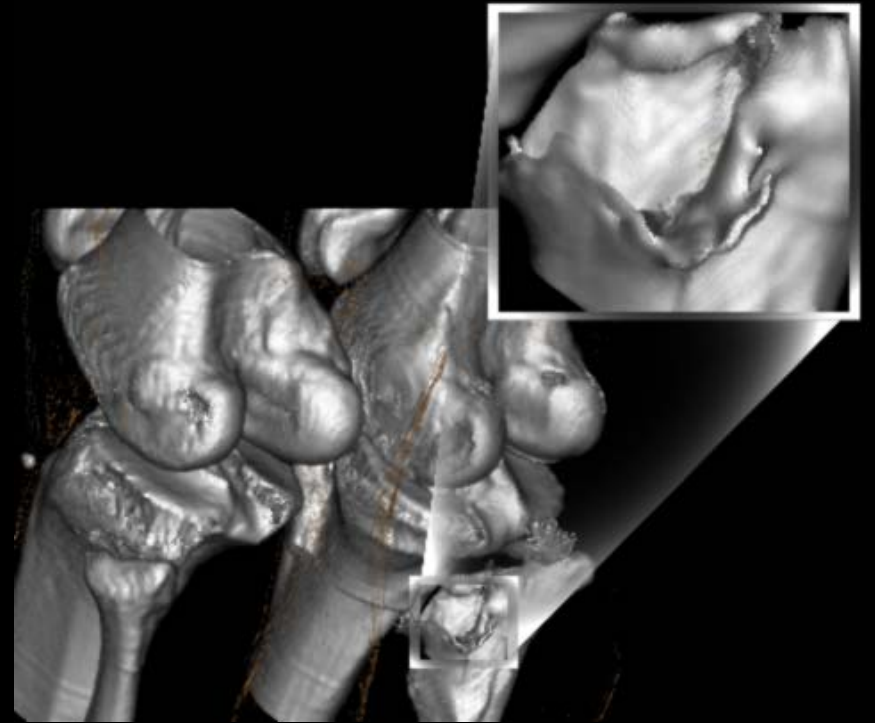
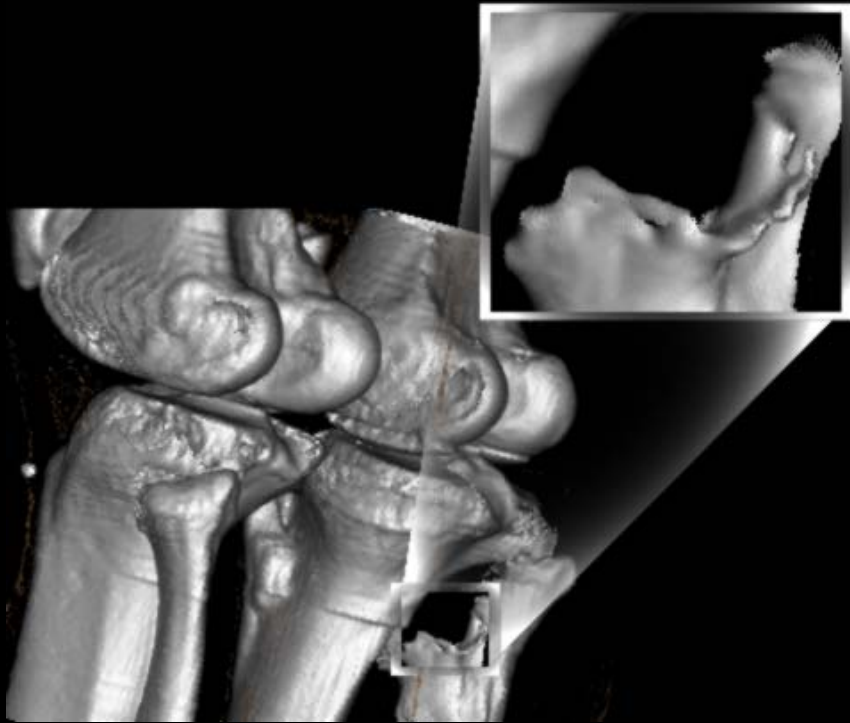


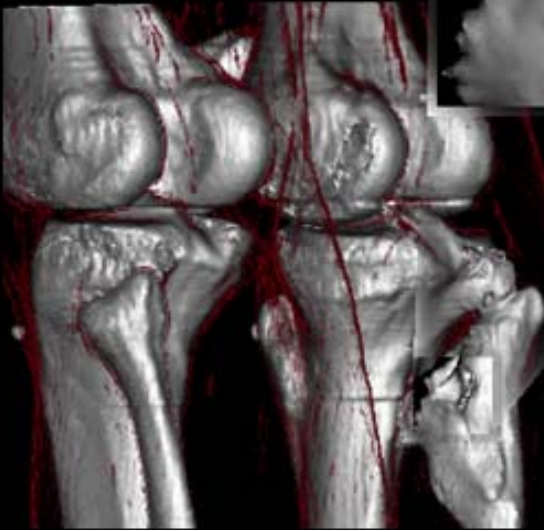
3D color florescent confocal microscopy image of kidney cells, rendered with maximum luminosity projection.

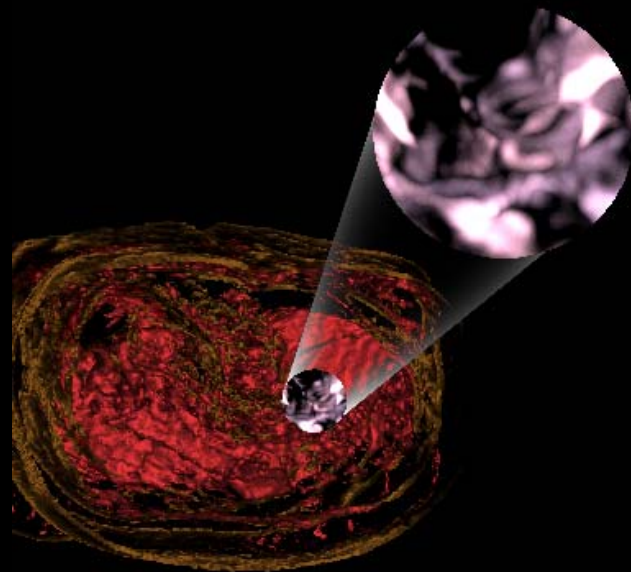
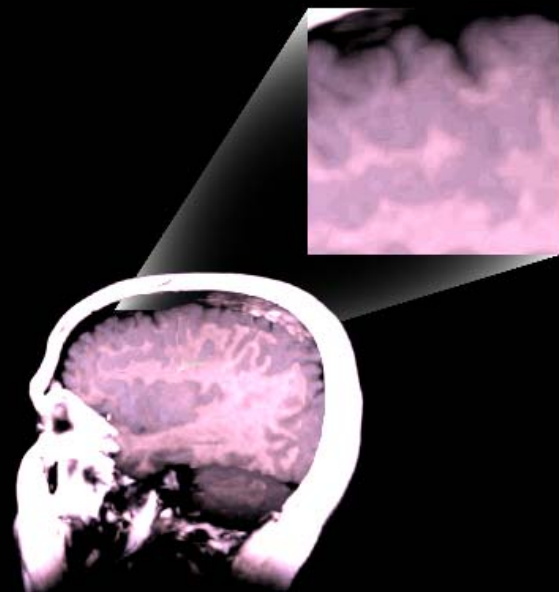
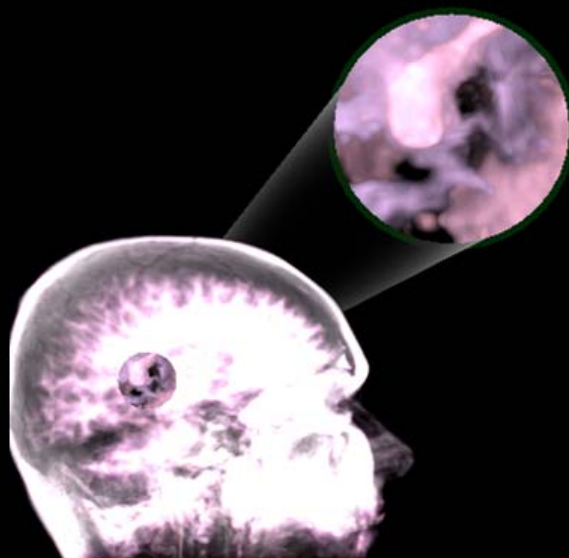
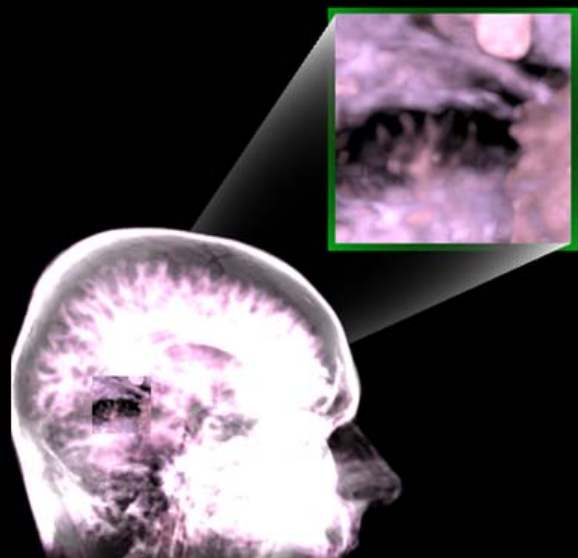












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