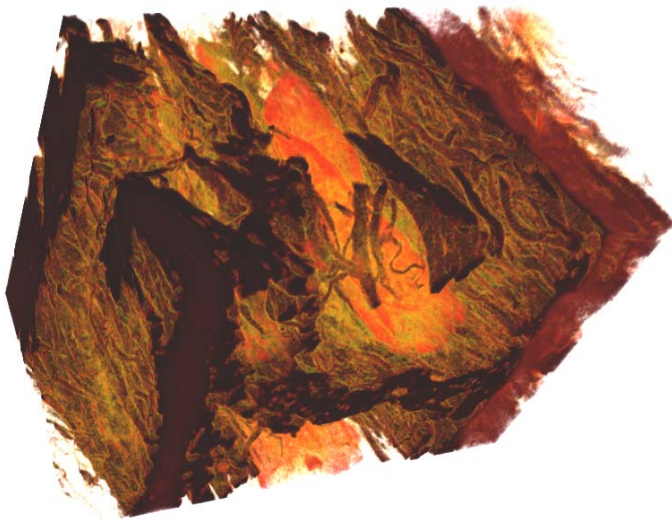
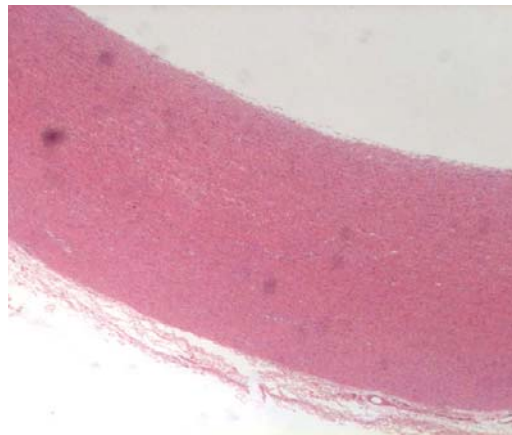


# Home run: Virtual Aorta

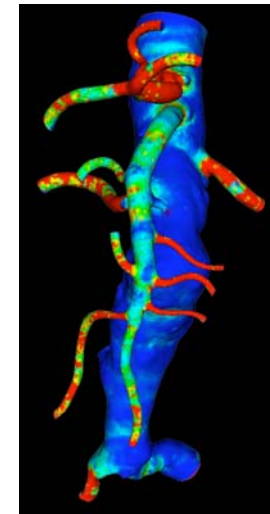
- Multiscale simulation model of human aorta:
  - Image-based micromechanics model based on Volume Scanning Electron Microscopy
  - Nonlinear Homogenization Methods
  - Macroscale properties from 4D MRI/CT data



VSEM data of rat aorta, obtained by M. O'Connell in Denk lab, Max Planck Institute Heidelberg



Lamellar units of pig aorta, obtained by C. Xu in Zarins lab



Wall shear stress from image-based aorta model, obtained by E. Bekkers in Taylor lab