Hemodynamic analysis on cerebral intracranial aneurysms

- Hemodynamics, especially wall shear stress (WSS) and its derivatives, plays a very important role in the initiation, progression and rupture of intracranial aneurysms.
- We are now evaluating the effects of WSS and its derivatives on the vascular wall using magnetic resonance fluid dynamics (MRFD) using 3D cine phase contrast [PC] MR and computational fluid dynamics (CFD) using MR datasets.