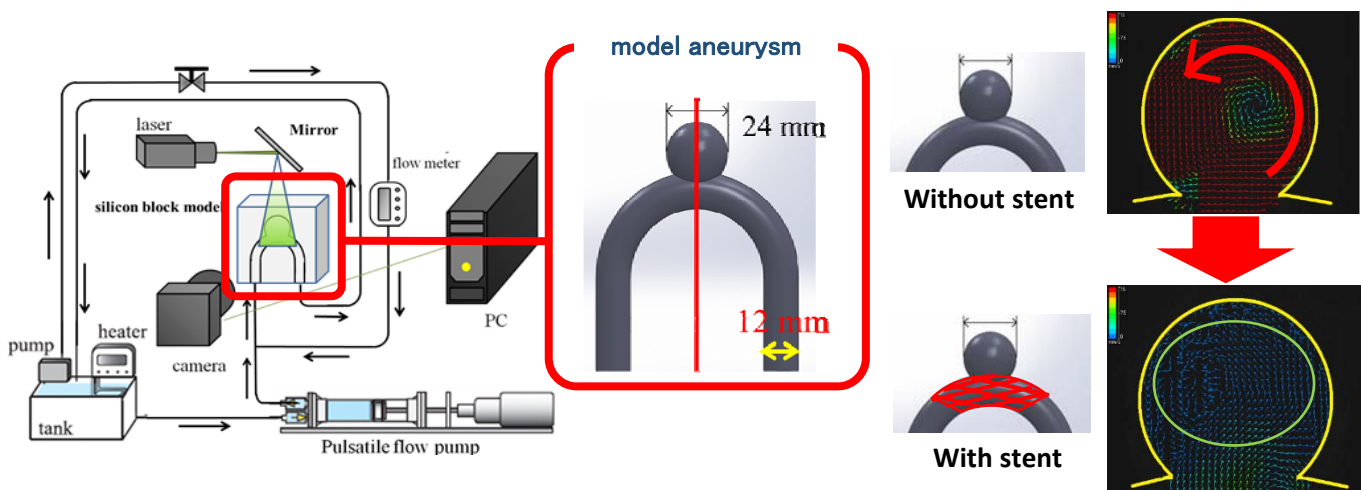


Blood flow in a cerebral aneurysm and stenting

Abstract

Rupture of cerebral aneurysms is one of the major causes of death. From previous studies, it is found that development and rupture of the aneurysm have a relationship with flow dynamics of blood in the aneurysm. In this study, we deal with this problem from the point of view of fluid engineering. From experiments and numerical simulations, the wall friction fluctuations are measured in the aneurysm. In addition, we propose new stents which shape is optimal for forming blood clot and suppressing the growth of the aneurysm.

PIV measurement of flow field in an aneurysm



Numerical simulation of flow field in an aneurysm

