

The Fourth Virtual Intracranial Stenting Challenge (VISC10)

Each year groups of engineers around the world participate in a challenge that uses computational techniques to assess the effect of stent in cerebral aneurysm treatment. The purpose is to improve modeling techniques with a goal to provide valuable information to clinicians so that both hemodynamic and anatomical factors can be considered before any planned treatment.

The VISC10 welcomes previous VISC participants and other groups who are interested in application of stenting in cerebral aneurysms treatment to the challenge this year. Results of the VISC10 will be presented in the 7th Intracranial Stenting Meeting (ICS10) to be held on September 13-16th, 2010 at Houston, Texas. The VISC10 will demonstrate not only the capabilities of current computational techniques, but also potential applications in neurovascular disease. Therefore, the VISC10 is a great platform for engineers to exchange their results and ideas and for clinicians to learn about new modeling techniques available for endovascular treatment analysis.

Any group or individual who is interested in participating of this challenge will be given access to images and stent data and will be expected to perform 3D vascular geometry reconstruction, virtual stent deployment, and hemodynamic simulation. An independent assessment in the form of a poster demonstrating results and analysis from each group is required. Posters will be reviewed by the VISC committee.

Each poster will be then displayed at the ICS10 at Houston. Selected groups will present their innovative approaches and major findings at the ICS10 meeting. A separate roundtable discussion among participants and interested clinicians will be organized at the ICS10.

Any individual or group who is interested in this challenge is encouraged to submit his intent of participation to jou@bcm.edu or ohta@biofluid.ifs.tohoku.ac.jp by email. Instruction to download the image data will be sent to those on June 1st who express their interest to participate before then. Please visit our website for any new information. The ICS10 meeting information and schedule is also available at ICS website. Please feel free to contact Liang-Der Jou (jou@bcm.edu) or Makoto Ohta (ohta@biofluid.ifs.tohoku.ac.jp) should you have any comment or question.