

## OS9: Biomedical Flow Dynamics

October 28, 2021  
ROOM5

OS9-1        **Challenge of CFD for Clinical Assessment of Intracranial Aneurysm**  
17:10-17:50    *(Invited)*  
Yi Qian (Macquarie University, Australia)

OS9-2        **Structure Design and Finite Element Analysis of Patch in Intraventricular Tunnel** *(Invited)*  
17:50-18:30    Xiao Li, Aike Qiao (Beijing University of Technology, China)

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OS9-3        **Hydrodynamical Evaluation of Microporous Covered Stent for the Treatment of Intracranial Aneurysms by Using Particle Imaging Velocimetry and *in vitro* Flow Simulator** *(Invited)*  
15:20-16:00    Takeshi Moriwaki (Hirosaki University, Japan), Tsutomu Tajikawa (Kansai University, Japan), Yasuhide Nakayama (Biotube Co., LTD., Japan)

OS9-4        **Parametric Study of Device Insertion Simulator for Endovascular Treatment**  
16:00-16:15    Hiroto Ota, Kazuto Takashima (Kyushu Institute of Technology, Japan), Yoichi Haga, Makoto Ohta, Chenming Dai (Tohoku University, Japan), Masaaki Shojima (Saitama Medical University Saitama Medical Center, Japan)

OS9-5        **Relationship between Contact Force and Catheter Movement in Aneurysm Model**  
16:15-16:30    Takuya Oishi, Kazuto Takashima (Kyushu Institute of Technology, Japan), Kiyoshi Yoshinaka (National Institute of Advanced Industrial Science and Technology, Japan), Kaihong Yu, Makoto Ohta (Tohoku University, Japan), Koji Mori (Yamaguchi University, Japan), Naoki Toma (Mie University, Japan)

OS9-6        **The Effect of Three Kinds of Blood Flow-diameter Scaling Laws on Computed Tomography Fractional Flow Reserve (FFR<sub>CT</sub>)**  
16:30-16:45    Na Li, Bao Li, Youjun Liu (Beijing University of Technology, China)

- OS9-7      **Development of an Original Software Applying Virtual Stent Deployment and CFD Simulation for the Selection of Patient-Specific Braided Stents**  
17:10-17:40      *(Invited)*  
Soichiro Fujimura (Tokyo University of Science / Jikei University School of Medicine, Japan), Issei Kan (Jikei University School of Medicine, Japan), Hiroyuki Takao (Jikei University School of Medicine / Tokyo University of Science, Japan), Yuya Uchiyama (Tokyo University of Science, Japan), Toshihiro Ishibashi, Katharina Otani (Jikei University School of Medicine, Japan), Koji Fukudome (Tokyo University of Science, Japan), Yuichi Murayama (Jikei University School of Medicine, Japan), Makoto Yamamoto (Tokyo University of Science, Japan)
- OS9-8      **Simulation of Aneurysmal Haemodynamics after Flow-Diversion Treatment: Modelling the Flow-Diverting Stent as a Porous Medium**  
17:40-18:10      *(Invited)*  
Yujie Li (Tohoku University, Japan), Mingzi Zhang (Macquarie University, Australia / Tohoku University, Japan), Makoto Ohta (Tohoku University, Japan)
- OS9-9      **Assessing of the Relationship between WSS and TAV for Disturbed Flow on the Geometry of AVF for Hemodialysis**  
18:10-18:25      Kazuki Takeda, Hitomi Anzai (Tohoku University, Japan), Mingzi Zhang (Tohoku University, Japan / Macquarie University, Australia), Wang Haoran, Ai Kajiyama, Makoto Ohta (Tohoku University, Japan)
- OS9-10      **Numerical Simulation in Lower Airway Using Eulerian Wall Film Model: Influence of Mucus Viscosity on Droplet Generation**  
18:25-18:40      Yugo Shindo (Tohoku University, Japan), Shunji Mugikura, Naoko Mori (Tohoku University Hospital, Japan), Takaaki Akaike, Tetsuro Matsunaga, Makoto Ohta, Hitomi Anzai (Tohoku University, Japan)