Interdisciplinary Research
— Engineering, Information science and Medicine —

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Keywords	Numerical Fluid Dynamics (CFD), Biofluid		
Technical Support Skills	・ Computational Fluid Dynamics (CFD) for biofluid		

Research Contents

- **Development of medical devices based on computational fluid dynamics**
- **Interdisciplinary Research of Medicine and Engineering**
- **Control for biological model**

Development of medical devices based on CFD

- 【Needs】Performance evaluation system for cerebral aneurysm based on fluid dynamics.
- Developed the performance evaluation system using the realistic aneurysm and stent.
- 【Applied research】Research for design methods of next generation stent by optimization.

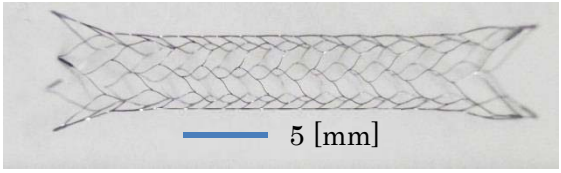

Figure 1 Cerebral aneurysm stent (Enterprise)

Interdisciplinary Research (Medicine and Robots(Control))

- The number of medical accidents per year is about 2000. The safety medical is required. (Reliable medical equipment is required)
- Research for the development of feedback control system which provide support to doctor for medical

Control for biological model

- The movement of human stomach and intestines is the complex movement. The purpose is reproduced the movement of internal organs on biological model
- Research for developme advanced medical treatme

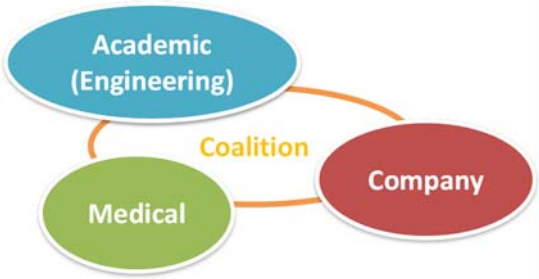

Figure 2 Coalition

Available Facilities and Equipment
