Multimodal Image Fusion in Endovascular Complex Aortic Aneurysm Repair

1. Use of multimodal image fusion technology decreases procedure time and iodinated contrast media dose in endovascular repair of complex aortic aneurysms – this thesis.

2. Rigid co-registration of pre-operative imaging and dynamic fluoroscopy is the main limitation of fusion road-map accuracy in areas with (respiratory) movement – this thesis.

3. Patients radiation exposure from an abdominal cone beam CT is about half of the dose of a multidetector CT – this thesis.

4. A key risk factor for postoperative renal function deterioration is long procedure time – this thesis.

5. Interactive three-dimensional visualization of medical imaging offers tremendous opportunities for pre-operative planning, intraoperative guidance, interdisciplinary communication and communication towards the patient.

6. Technological innovations in medical imaging have revolutionized health care; Radiology is one of the fastest evolving high-impact medical specialties.

7. Interventional Radiology is 90% mental and the other half is physical. (adapted from Jogi Berra)

8. Lack of knowledge on the health effects of low dose radiation exposure determines the broad range of risk perception among physicians and patients.

9. You can observe a lot by watching. (Jogi Berra)

10. When life gives you lemons, make lemonade! (Phil Hubbard)


Anna M. Karmann, 14 December 2016