Propositions

Coronary Atherosclerosis: Imaging, biology and mechanics

1. Advanced coronary plaques develop in an adult LDLR-mutation porcine model on only a high fat diet. *This thesis*
2. The distribution of cholesterol and sphingolipids over a distinct low-density lipoprotein profile with 'larger' and 'regular' LDL forms a potential new biomarker for atherosclerotic disease development. *This thesis*
3. Low, multidirectional wall shear stress is predictive for fibrous-cap atheroma development in a high-risk systemic environment. *This thesis*
4. The intensity of helical flow is inversely related to coronary plaque growth. *This thesis*
5. Measuring the OCT plaque-free wall angle surmounts the limited capacity of OCT to assess plaque burden. *This thesis*
6. Bad luck plays an important role in myocardial infarctions. *Lindeman et al., PlosOne, 2018*
7. In the era of intense lipid-lowering drug therapy, plaque erosion, instead of plaque rupture, will be an increasingly important cause of acute coronary syndromes. *Nilsson, European Heart Journal, 2017*
8. Assumptions are the battle *and* breeding grounds where biology and engineering meet.
9. A publication is necessary to report to the scientific community and to move the field forward, but it should cease to be considered an end product.
10. Only a revival of interest in the riddle of the world can save sciences from narrow specialization. *Karl Popper, 'The Logic of Scientific Discovery', first published as 'Logik der Forschung', 1935*
11. Nobody can be unhappy with a balloon. *Winnie-the-Pooh*

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