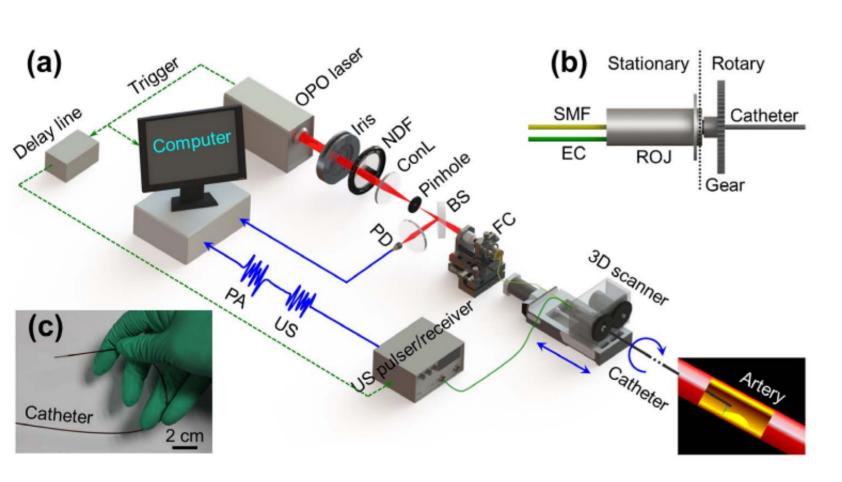


Fig. 71.10 Examples of OCT images of stented coronary arteries. (a) Stent with well-apposed struts (b) Stent with malapposed struts (5–9 o'clock)



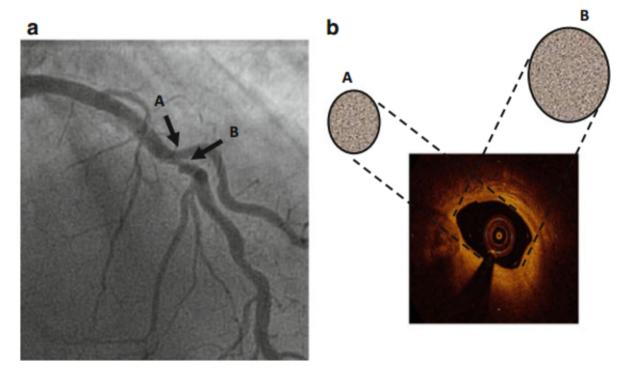


Fig. 71.1 Illustration of the effects of projection angle on angiographic visualization of an eccentric lesion. (a) Coronary angiogram of a lesion in the left-anterior descending artery. (b) Apparent diameters of the lumen of a cross section of the lesion, viewed from the two projection directions A and B. The OCT image of the artery shown here shows the actual cross section of the lumen

Figure 1. Illustration of the OR-PAT system. (a) Overall architecture of the system. (b) Schematic of the rotational mechanism of the catheter. (c) A photo of the catheter showing its flexibility. OPO, optical parametric oscillator; NDF, neutral density filter; ConL, condenser lens; BS: beam splitter; PD, photodiode; FC, fiber coupler; US, ultrasonics; PA, photoacoustics; SMF, single mode fiber; EC, electrical cable; 3D scanner, consisting of an optical-electric rotary joint (ROJ), a step motor, and a motorized pull-back stage. doi:10.1371/journal.pone.0092463.g001