



Stanford eCorner

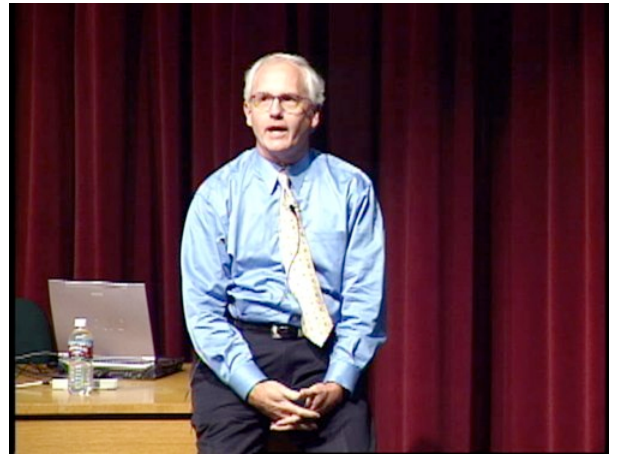
Mentoring Changed My Life

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Video URL: <http://ecorner.stanford.edu/videos/445/Mentoring-Changed-My-Life>

When Yock started getting involved in training, he worked with John Simpson and the mentoring changed his life. One thing that was starting to become clear in mid 80's was that there was a problem with angioplasty - arteries were narrowing at an alarming rate. Hence surgical procedure had a 40% recurrence rate. Yock started to focus on the need to visualize during a surgery and hence the need to get inside the blood vessel. With Simpson, Williams and Fogarty, Paul started a company with technology that went inside the artery and saw in high resolution. He talks further about this technology.



Transcript

Well, this was about the time when I started to get involve in training and angioplasty was a new technique; and we all wanted to train up, and so I went and worked with John Simpson and that changed my life, that mentoring changed my life. One of the things that was starting to become clear in the mid-80s is that we had huge problem with angioplasty and that was that these arteries were re-narrowing on us. And they were re-narrowing in an alarming rate up to 40%. So this surgical procedure, I mean what other surgical procedure do you know of that has a 40% recurrence rate? If your gallbladder came back 40% at the time, you wouldn't think that was a very good surgical procedure, so it big problem. And it hit the environment just at the time when people were starting to think about this. And I got obsessed with the idea that maybe we just don't understand what's going on well enough with angioplasty. For those of you from medical school, you know that the canon rule of surgery is visualization, right? You need to see what you're doing while we want visualizing with angioplasty. We had those angiograms which are really lousy resolution images and really hid the details and what was happening. So I was convinced that if we could get inside the blood vessels somehow and take a good look that it would help. So I went to John Simpson and Tom Fogarty and said, "Can we put together a startup here and mobilize some money?" And Ray Williams put some money and also so start to see the network developing here.

And we developed technology item. I had some background in ultrasound and thought that it might be possible to develop a tiny little ultrasound transmitter that would go on a catheter, go inside the arteries and see the plaque. And you see the concept here so that at the level of the transfusion you have a cross-sectional slice of the arteries. So anywhere you go, you could see in high resolution. I don't have a pointer to show you but basically what you see in the image on the right is a catheter in the middle and the next layer is where the blood is flowing and then the next layer around that is all of the fat that's build up in this artery.