A handful of local researchers, riding high on the biomedical wave, have formed companies so successful that their “made-in-Singapore” labels now span the globe. In the last of our weekly Science series on Singapore’s millionaire researchers, Professor Freddy Boey reveals his secrets of success.

**Thick skin helped prof sell his stent**

That, plus knowing who to work with, is how he found business success.

BY CHANG AI-LIEN
SCIENCE CORRESPONDENT

One thing that Professor Freddy Boey developed in tandem with his dissolving heart stent: a thick hide.

When he and his team at Nanyang Technological University (NTU) came up with the stent for heart patients, he was sure they had a winner.

So two years ago, he left the security of his laboratory and ventured to Silicon Valley in the United States in search of funding. He had 10 venture capitalists lined up, and high hopes that he would get the millions needed to test the device before it could be sold to patients.

Then reality hit.

“One guy, he listened to me for three minutes before saying he had heard enough,” said Prof Boey.

“I had flown halfway around the world for this? I was stunned.”

But he acknowledged that of the thousands of entrepreneurs who never made it past the first stage, he could count himself lucky.

In the end, one of the first 10 investors was sold, and he got his funding.

Since then, his company Amaranth Medical has received US$12 million (S$17 million) in investment and grants from both government and foreign investors. Amaranth has received US$10 million (S$14 million) into Amaranth's first funding round.

**Medical firm valued at $20m**

PROFESSOR Freddy Boey, 52, is Chair of Nanyang Technological University's (NTU) School of Materials Science and Engineering.

**Achievements:** Prof Boey and his colleague Associate Professor Subbu Venkatraman developed soluble heart stents for patients, and founded the company Amaranth Medical to take the product to market. Amaranth is now valued at $20 million. Its investors include a US-based venture capital fund which put US$10 million (S$14 million) into Amaranth's first funding round.

His other patented invention, a tissue retractor to keep wounds open during surgery, has also been licensed, and is set to make NTU several hundred thousand dollars in royalties this year.

He has published more than 280 papers and holds several patents in biomaterials, nano-materials and electronic packaging materials.

**Advice:** “Don’t do everything yourself. Connect yourself to people with good ideas who can complement your strengths.”

Boey was contacted by researchers from the famed Mayo Clinic in the US, which wanted to work with him to deliver its patented protein to the heart.

The inspiration for Prof Boey’s decision to move into drug-releasing devices was his sister’s death from lung cancer at Christmas, 2000.

“They couldn’t operate, neither could the drugs be directed straight to her lungs; I felt she needed a stent of some form to do this.”

He maintains that he is a scientist at heart, but says the business success has been the result of knowing who to work with, and when to let go. “In every project, I have brought someone in to work with me. I’ve learnt that it’s not necessary to do everything myself... Better to have a small piece of a big cake.”

Pointing to his NTU colleague, Associate Professor Subbu Venkatraman, he added: “Subbu, my partner, he’s a details guy. He’s the technical one, the one who always worries. I’m an optimist, a big picture guy. I go out and get the money.”

And although he jumped into business late in the game, Prof Boey has been taking risks all his life. In 1980, for example, armed with a fresh first-class honours degree in materials engineering from Australia’s Monash University, he could have flown home immediately.

Instead, he opted to “go walkabout” for a year, to try and help the aboriginal settlements in the outback.

He travelled to the town of Doomadgee in North Queensland, where he ran the only general store within an 800km radius, for free.

This spirit of experimentation has served him well, and he hopes others here will dare to be different.

“Singapore is a rules-based place. I’m not saying that there should be no rules, but there must be room for interpreting them in a broad manner.”

“Let’s be prepared to get whacked a few times. It’s worth it.”

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