



**Showing the way:** Dr Kellock (above), Dr Ku (left) and Mr Neo. They feel a huge success story will come out of Singapore within the next few years.

# NUS honours innovators in video software, dialysis industry

## Both winners say entrepreneurship in Singapore is taking off

By **GRACE NG**

This year's National University of Singapore (NUS) Innovation & Enterprise (I&E) Awards recognise two innovators at entirely different stages of the game.

Promising NUS Start-up Award winner AWAK Technologies is still in the throes of developing the world's first wearable artificial kidney, while Outstanding NUS Innovator Award winner Pete Kellock has long since taken a back seat.

Honoured yesterday for his contributions to muvee Technologies, a homegrown company which created the world's first automated video production software, Dr Kellock is now a globetrotting music composer, having stepped down as muvee's chief executive officer in late 2006.

He said of cutting his teeth with muvee to the detriment of his health and general well-being: "Leading a startup takes over your life – at least the way I did it. I led muvee for seven years, putting in weeks of 80 hours or more with the rest of my life completely on hold."

Though he worked part-time at the start-up for a few years, he had, by 2010, developed pursuits such as writing music and travelling, and so decided to break away from it, though he still occasionally helps it with its patent portfolio.

The NUS School of Computing adjunct professor's flair for the avant-garde still comes through in his electronic music, in which he holds a doctorate. He said: "I've just finished a piece I feel pretty good about, and which sounds – to my ears at least – different from any other music I

know." He said he approaches his music from a non-commercial angle, and finds that this feels in many ways similar to entrepreneurship in that it is a quest to create something radically new and find ways to bring it out to the world.

Besides indulging his passion for travel and adventure, Dr Kellock uses his experience to help other Singapore startups; he mentors entrepreneurs at NUS, Insead and the Singapore Management University and is advisor to a local incubator called Fatfish. "I find the combination enormously fulfilling and I love having almost total control over my agenda and schedule. I've never been happier in my life."

Even so, he still holds muvee close to his heart; it was a "baby" that grew out of work he did at the Kent Ridge Digital Labs in the late-90s.

It has since scored great success, licensing its software to multi-national corporations like Hewlett Packard and LG, shipping hundreds of millions of copies to global markets to date and generating more than \$50 million in revenue.

To Dr Kellock, the award from NUS recognises not only muvee, which is less known here than overseas, but what its team has achieved.

Meanwhile, AWAK Technologies is still working on getting the technology behind the wearable dialysis system to the market.

With technology originating in the University of California-Los Angeles, AWAK chairman Gordon Ku and its president and chief executive officer Neo Kok Beng have, since 2007, kept their eye on the prize – changing the landscape of the kidney-dialysis industry by shifting current in-centre dialysis to home-based dialysis.

Mr Neo, an adjunct associate professor at the NUS Business School, said: "It will have tremendous impact

on the quality of life for end-stage renal disease patients."

AWAK Technologies has already won several awards, including the top prize at the Global Entrepreneurship Competition at bizBarcelona 2012. Besides an ongoing partnership with Temasek Polytechnic, AWAK partnered peritoneal dialysis market leader Baxter Inc earlier this year for marketing, manufacturing and distribution. Up ahead are the clinical trials and regulatory submissions. Already, its target launch date has been pushed back from 2011 to 2015, and now, to 2017.

Mr Neo said: "This are uncharted waters that require a pioneering spirit." He said the overall plan was still on track, although the industry's lack of specialists in regulatory frameworks could pose a stumbling block, as does the lack of local manpower for new product line concepts.

Both Dr Kellock and Mr Neo believe entrepreneurship in Singapore is taking off; Dr Kellock believes that a huge success story will come out of Singapore within the next few years.

Mr Neo agreed, saying that progress is encouraging, though he sees the need for more mentors and financiers to support startups, and a public market for long-gestation products in biotechnology and medical technology.

The two winners receive a trophy each. AWAK gets \$100,000, and Dr Kellock, \$10,000.

The I&E Awards, given out by NUS Enterprise and The National University of Singapore Society (NUSS), recognise individuals and companies within the NUS community for their contributions and achievements in entrepreneurship and innovation.

NUSS president David Ho said: "We believe the I&E Awards can be world class accolades which will challenge and motivate innovators in Singapore and beyond."