

- 00:00 Introduction of the guest lecture and about the speaker
- 02:16 The Aspiring Mind - So, we are all aspired. When young, I aspired to be an artist. Later, architecture took over as next of kin. I gained admission to be an architect but found it a rough, jumpy journey. Ultimately it became a pilgrimage. Years past, faced with the turmoil of economy, I left practice and aspired to be a teacher of design, in the land of Singapore. Then twice in my career came the opportunity to be a Doctor of Philosophy (with a lucrative sponsorship), but I said, 'Not Yet'. The first No was owing to a bigger aspiration, to teach at my alma mater. The second was due to yet another lure – the aspiration to be a PhD Supervisor without a PhD, thinking that I would leave my own education until retirement? To this date, I have graduated nearly 40 PhDs, won an award of outstanding supervisor, been PhD Program Chair for almost 15 years at both HKU and NUS. Over the years, an insightful friend asked, what was the achievement beyond aspiration?
Until this day, I realize that it is about the training of minds in pursuit of novelty and discovery, for I believe that there is a PhD in every one of us, whether implicitly or explicitly. I am but a coach, or at best an aspired mentor. I am thankful for the trust and entrust of my alma mater, especially Dean Webster - my former superior and friend, and those I call future, for you are the future, to which I have named this series of my Lecture as FUTURE 2. I am but one, but together we craft the future. In the one hour plus a little bit, I shall share you what is in the head of the trainee, coach or mentor as he gradually transformed from one to another. The main part of this talk refers to the extroverted challenges of research – changing phenomenon around us (e.g., climate change, technology, and others).
- 13:20 Futurism was an artistic and social movement that originated in Italy in the early 20th century which later also developed in Russia. It emphasized dynamism, speed, technology, youth, violence, and objects such as the car, the airplane, and the industrial city.
- 17:19 Is there a PhD Factory?
- The world is producing more PhDs than ever before
- The annual number of science and engineering doctorates graduating from US universities rose to almost 41,000 in 2007, with the biggest growth in medical and life sciences. It took a median of 7.2 years to complete a science or engineering PhD – yet the proportion finding full time academic jobs within 1-3 years of graduating is dwindling.
- 29:17 On enhancing the ability to serve major strategic needs whilst the number of Chinese PhDs has been increasing rapidly.
- 30:45 It seems that 3 out of 8 hours is hardly a productive office worker. Writing 3 – 5 papers in 7.2 years of PhD is hardly productive. Are PhD students the most and least productive people on the planet?
- 37:35 If Productivity is not the focus, how about Innovation, Discovery, Creativity?
FUTURE: In responding to the rapid increase in published information and data, the suggested way forward is “Managing Knowledge”
FUTURE: How to be productive or innovative? Suggestion: Research is Discovery
On Research is Discovery:
- How one makes use of technologies such as big data, & machine learning to change & predict user behaviors and preference in a collective setting?

- How to integrate a new product with the building design process?
- How to quantify the impacts of elements of nature in a human-oriented work environment?

The essence of graduate program – acquiring existing knowledge, and creating new knowledge