

Inside the beautiful mind of a simple boy

Raised on a farm, Nanyang Technological University president Bertil Andersson is equally at home in the company of the world's top researchers or pushing the ecological cause, Lin Yanqin discovers



Professor Bertil Andersson at The St Regis Singapore. PHOTOS BY JASON HO

the ST REGIS perspectives

He has sat on the committee that awarded the Nobel Prize in Chemistry and courts some of the most brilliant minds in the world to bring their expertise to the Nanyang Technological University (NTU), which he is planning to transform into a varsity at the forefront of research.

But while Professor Bertil Andersson appears every bit the well-travelled academic who effortlessly orders his lunch at the Brasserie Les Saveurs in French, he cheerfully describes himself as a "simple boy" — one whose childhood on a farm in Sweden left an indelible influence on him, both as a renowned plant biochemist and an ecologically-conscious dad who drives a hybrid car.

"I come from a farm in Sweden and it was a very simple life. You lived on what the farm could give you," says the freshly-inaugurated president of NTU, who orders a beer right away while he examines the menu. "We had the forest around us and we could chop wood ... it was a very natural life."

From the farm in Finspang, 200km south of Stockholm — which he and his relatives still own — Prof Andersson, 62, went on to pioneer research on the artificial leaf, mimicking the process of photosynthesis by which plants convert solar energy into other types of energy. "Society hasn't solved its energy problem but nature has," says Prof Andersson, who came to NTU as the provost in 2007 from the European Science Foundation where he was chief executive.

He officially succeeded Dr Su Guanqing as president this month. And he has big plans to grow NTU further as a research-intensive university, with sustainability ranking high among the five "peaks of excellence" the varsity hopes to achieve according to its five-year strategic blueprint.

ADDICTS TO OIL (AND ELEVATORS)

"I have worked in energy research for a long time before it became hype. And I feel we have missed opportunities historically because we have been like drug addicts to oil," he says. "But today, we realise we cannot continue like this and, now, it is good to get funding for this type of research, for solar, wind and so on."

He is proud that NTU has garnered the "lion's share" of funding — more than S\$830 million worth — from agencies like the National Research Foundation (NRF) and the Agency for Science, Technology and Research (A*STAR). "I don't know any European university that has as much money for sustainability research as NTU."

Noting NTU's presence in the new JTC CleanTech Park — Singapore's first business park devoted to clean technologies — he adds: "I'm very excited about how NTU can contribute to Singapore's economy and, at the same time, help to solve one of the world's global challenges." But if the Republic has made headway investing in clean energy, its journey to becoming a model of sustainability is only beginning, says Prof Andersson, who observes that there are far fewer hybrid cars here than in his native Sweden.

"I always make a joke: When you go one floor up, people take the elevator. I don't and people always look at me like I am some strange person when I take the stairs," he says. "Everything counts, when you talk about sustainability. Nothing is too little to save energy."

He takes a kinder view of Singapore's extensive use of air-conditioning. "I feel that there is a little bit of stigma about air-conditioning. Because no one would question in Canada or Scandinavia that people would

heat their houses in winter and I think it's the same to need to cool them in summer. But of course one has to do it smartly."

NOBEL AMBITION

Despite a childhood spent on a farm and his father expecting that he would go on to work in one of Sweden's large metalwork factories, he answers with a swift "yes" when asked if he has always wanted to be a scientist.

"Science, it has to do with being curious and you want to have answers," says Prof Andersson, whose passion is evident in the reverential way he describes himself as an "industrial spy" on plants. "I think it's a privilege to be a scientist, because your job and your hobby is the same."

A member of the Nobel Committee for Chemistry from 1989 to 1997 and currently a member of the Board of Trustees of the Nobel Foundation, he has devoted a great deal of energy to wooing top scientists worldwide to NTU. His latest coup is Dr Stephen Smith, NTU's new vice-president for research, who was Imperial College London's Pro Rector of Health.

He is often asked what it takes to be worthy of a Nobel. "The soul of the Nobel Prize (is) someone who opens the door, not someone who later walked through it," he says. Freedom is essential to the kind of environment that spawns winners. "Most of the big discoveries where they get the Nobel Prize, they are serendipities, where the national systems and the university systems have given them the big trust to do what they are best at. You do not say, 'Charlie, you cannot do this and this, NRF or A*STAR wants you to do this'."

Prof Andersson, who did a semester of journalism when he was studying for his PhD in biochemistry at Sweden's Lund University, also emphasises the need for scientists to effectively communicate their ideas. He recounts the moment he was due to announce the winners of the Nobel Prize in Chemistry in 1997 for their pioneering work on enzymes that participate in the conversion of ATP, the carrier of energy in cells.

He had been so hungry that day that he had brought a sandwich with him to the press conference. "To this day I don't know how I dared to do it. I put my script aside. And I took a bite from the sandwich and I said, 'the mechanism for which how the sandwich is converted into energy, is given this prize' ... And everyone thought it was brilliant — except for my daughter, who was furious because she thought I shouldn't go on television and talk with my mouth full."

MEATBALLS AND GRANDMA

Moving to cosmopolitan Singapore with his wife, a lecturer at NTU's School of Biological Sciences, has been pretty "easy" for the most part, says the professor — quipping that he can even buy Swedish meatballs at Ikea.

What is hard, he says, is adjusting from a country with four very different seasons to one that is warm all year round. "In Sweden or Europe you would say, 'Ah let's do that in spring and let's do it after the summer'. But here, everything is the same and no one takes any breaks and that affects the mentality, it's work, work, work, work."

His two daughters live in London and Stockholm, and Prof Andersson makes it a point to visit them as well as return to his childhood home regularly to "do nothing".

"It was never meant that I should be an academic," he says. "I'm the only one in my family who has studied. And my father discouraged me from studying, he thought it was wasteful, but it was my grandmother who saved me. She said, 'The boy is intelligent, he must study'. It was basically thanks to the Swedish system with free education ... A lot of Swedish of my generation, we have the same story."

He pauses, then continues: "It's interesting ... Freddy (Boey, NTU's Provost), he also lived in a house without floors and things like that — so, the simple boys are going to run NTU."



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SINGAPORE

What Bertil Andersson had at Brasserie Les Saveurs

Saint-Jacques
A selection of matured
cheese by artisan
cheese-maker Hervé Mons

Mignon de Veau de Lait
Roasted milk-fed veal strip
loin, mashed potatoes,
green asparagus and
creamed morels

Barre Coco & Chocolat
Coconut and chocolate bar
with coconut ice cream

Total: S\$106



DOWNTO A SCIENCE

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