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medical Grapevine

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symptoms of dementia

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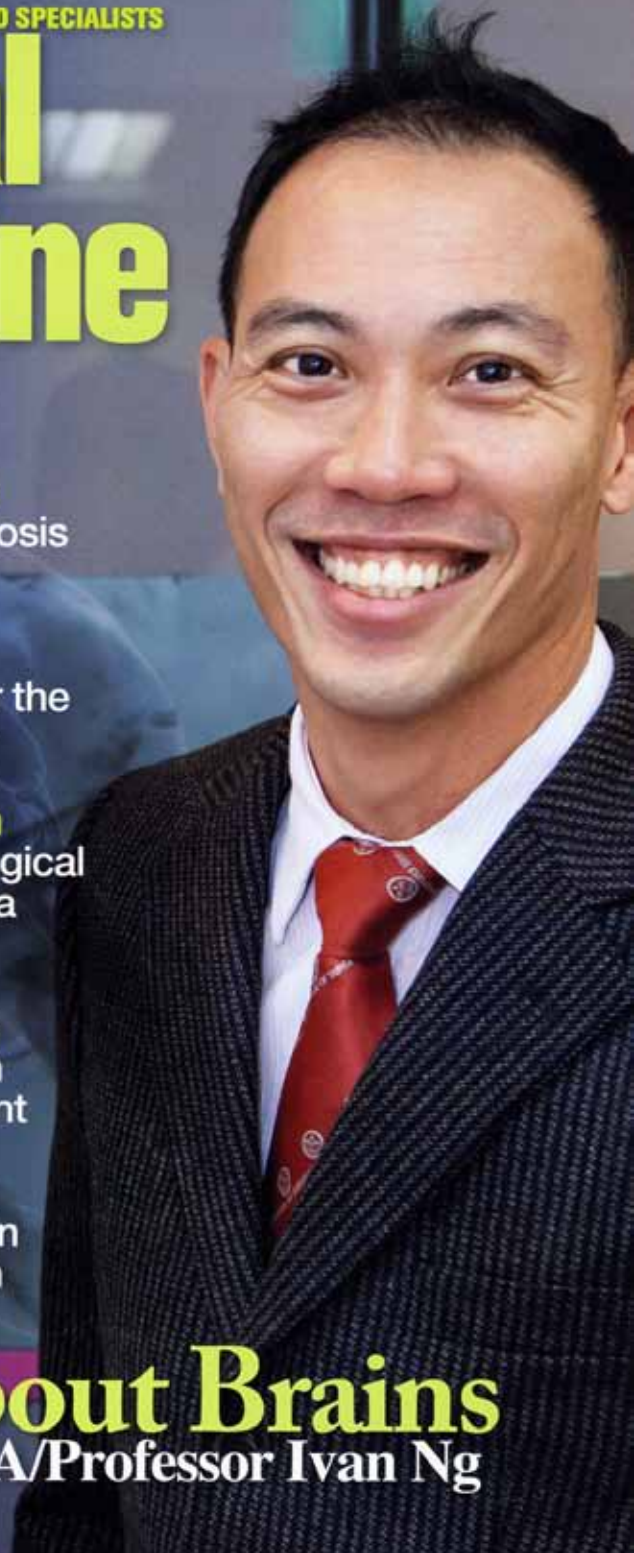
New developments in
diagnosis and treatment

Brain Rewired

Redefining 'recovery' in
physical rehabilitation

It's All About Brains

An interview with A/Professor Ivan Ng



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by Gloria D. Gamat

Surgeons might come a dime a dozen, but neurosurgeons certainly don't grow on trees. The human brain is by far the most complex organ of the body. Whilst others might look at it as just 'wires in a box', it is also the same 'box' that contains both our mind and personality – the very core of what makes us human. The complexity of the brain is just mind-boggling, for lack of a better word.

This month, we at *Medical Grapevine*, are proud to feature A/Professor Ivan Ng Hua Bak, Senior Consultant Neurosurgeon at the National Neuroscience Institute (NNI).

Currently, Dr Ivan Ng is also the Medical Co-Director of Neurosurgery Partners, Mount Elizabeth Novena Hospital, Faculty and Associate Professor of Brain and Behaviour Program, Duke-NUS Graduate Medical School, Head of Neurotrauma and Cerebrovascular Surgery at NNI and the Principal Investigator and Head of Acute Brain Injury Laboratory at NNI. In addition, Dr Ng is Visiting Consultant at Mount Elizabeth Hospital, Gleneagles Hospital, East Shore Hospital and Changi General Hospital.

This dashing neurosurgeon is busier than the birds and the bees combined. And yes, he 'digs brains' – literally and figuratively. *Grey's Anatomy's* Dr McDreamy can move over, because Dr Ivan Ng is as real a deal as neurosurgeons can get.

What was the driving force that made you decide to become a doctor? And why the interest to specialise in surgical neurology?

A/Prof Ng: Medical sciences fascinated me from a young age – I was always interested about the biology of the human body. Growing up, I had no direct contact with a doctor and so I didn't know if I would like to become one. All I knew is that I wanted to be in a profession that deals with the medical sciences.

The brain was that part of the body that I was always most interested in, because it defines us as humans. But in medical school I was put off by the frightening complex structure and connections that constitute the brain. It was only later in fourth year that my interest in the brain was rekindled when I did a posting on paediatrics. With paediatrics, neurology came alive for me and my first instinct was to become a paediatric neurologist. However, I realised during housemanship that I enjoyed surgery as a posting and thought neurosurgery would be a good area as it combined the two areas I really like.

What were the difficulties and challenges you encountered when you were just starting your career, and as you moved along?

A/Prof Ng: The early days were hard work – being on 15 calls a month for a long time and assisting in 20-hour operations – and I had to learn fast and cope with the stresses of performing life-saving surgeries. In my free time, I read everything on neurosurgery that I could get my hands on. The specialty just fascinated me, and the more I learned, the more I wanted to learn. A lot of my spare time was spent scouring the library for books on neurosurgery. Neurosurgery focuses a lot on apprenticeship, where you learn from senior neurosurgeons. Just thinking about measuring up to the 'giants' of the craft always makes me afraid, but then I spent a lot of time learning in the operating theatres, assisting the senior neurosurgeons and asking questions whenever I can.

Also, I became interested in head injury research and spent a lot of my time learning the ropes of research techniques. In those days, we had no formal education on research. It was just fortunate that I had senior colleagues who helped me – I got help from whenever and whomever I could ask help from. Eventually I

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learned how to publish my research work and did numerous projects on head injury. To this day, I am still actively involved in research.

What are the important milestones and achievements that you are most proud of?

A/Prof Ng: From a career standpoint, I was most grateful that in the last 10 years, I have had the opportunity to train several bright young men and women who will be academic neurosurgeons in the next generation, for which their clinical and academic work will augur well for Singapore. Whilst I have been fortunate to be appointed to many leadership positions in the local, regional and international professional groups, nothing gives me greater satisfaction to see some of the people I have trained become neurosurgeons of exceptional quality. Some of them have returned home and assumed leadership positions in their respective countries. To be able to positively influence someone's life is a tremendous privilege and I am glad that I was able to do that.

Another achievement I treasure is that I have become firm friends with a lot of patients I have treated. We communicate a lot through emails and they send me words of encouragement. They taught me a lot about what is important in life, and they taught me what it means to be brave and what it means to have faith.

What are the biggest challenges of being a neurosurgeon? What are the challenges in treating your patients?

A/Prof Ng: One little known fact about neurosurgery, particularly vascular and skull base work, is that it is not only very physically demanding, but also mentally challenging. It is easy when you are young, but it gets more physically taxing when you are older. Therefore it is important to be physically fit for the long hours of work in the operating theatre. With such demands, I cope by being active physically – I try to exercise everyday (in the form of cycling, running or swimming). For the record, I am an avid ironman triathlete, and have completed a number of races.

Neurosurgery mostly deals with conditions that are life threatening and function limiting. When you are dealing with a complex case, you need to be available for the patient 24/7 to handle the problems. For one, I sleep with my phone and it is never off even when I am overseas. You need to think through all the patients' problems to decide what is best for them, as every intervention carries risks and benefits and you want to be able to consider all options and decide on the best for the patient.

How does work affect your family life?

A/Prof Ng: There are inevitable sacrifices but I make it a point to be at home at least twice a week to have dinner with the family. On weekends, I try to make time for them and we usually do anything the girls want to do.

What would you consider to be the best things about your work?

A/Prof Ng: In its purest form, neurosurgery is about saving lives. Sometimes it is more than that – and we are called to preserve personality, keeping somebody *corpus mentis* and everything else that makes us human. The tremendous satisfaction to see a patient recover from a devastating condition is priceless. For me the greatest thing is that in these little microcosms we see as cases, life's drama is played out – individual's bravery in the face of death, a mother's love for her sick child – to be part of this in someone's life is enriching for me. It is the human touch more than the science that I consider to be the best part of my work.

Through the years, are there developments in your speciality that have been positive or negative? What is your opinion on these?

A/Prof Ng: The developments have been positive. Neurosurgery is not considered as morbid as before and it is possible in good hands to have good results in the majority of cases. We are relying more on technology and its appropriate use can help reduce the risk and increase the effectiveness of the procedures.

What do you think could be done better in your field of specialisation?

A/Prof Ng: We are obsessed with technology, and we forget the fact that we deal with humans. What I would like to see is neurosurgeons connecting more with patients as individuals and fellow human beings. It can be difficult in a busy practice and we lose sight of that sometimes.

If you can live your life all over again, would you still aspire to become a doctor and choose the same specialities?

A/Prof Ng: If I were to live my life all over again, I will still marry the same woman, have the same kids and choose neurosurgery as my career – I would not change anything.

You seem to be so young for an accomplished neurosurgeon.


What are the advantages (or disadvantages, if any) of being relatively young in your field of specialisation?

A/Prof Ng: Actually, I am not young, I am 46! And I don't think there is any specific advantage or disadvantage. Being competent is I think the critical factor. That, and having the empathy to understand what is happening to the patient, and building that crucial doctor-patient relationship is very important.

Aside from your profession, what other things in life are you most passionate about?

A/Prof Ng: For a number of years I have been involved in ultra-distance racing and I recently did two ironman races (3.8km-swim, 180km-bike followed by a full marathon) in six months. Whenever I can, I train for up to two hours daily unless work takes me away – I find that therapeutic. It is where I find my inner sanctum. It is where I am alone with my thoughts and I get to examine my mental terrain in all its forms – my fears, plans, work and my family.

Any words of wisdom for aspiring young doctors out there?

A/Prof Ng: For any aspiring doctor, the first value one must have is a sincere and genuine desire to help people/patients and relieve their suffering. Medicine is the utilisation of science to positively influence patients' health. This does require human contact and empathy for your patients. It is both an art and a science. Pursue that passion with all your heart and care not for the glory it brings you but the comfort it brings to those you care for. 

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