

On the Shoulders of Giants

An interview with
Prof P Balasubramaniam

Conducted by Dr Jonathan Tan, Guest Editor

THE FIRST reaction of orthopaedic trainees, when faced with the challenges of passing the MMed (Orthopaedics) and FRCS (Orth), is to seek a master to prepare them for the test ahead.

Prof P Balasubramaniam completed his training in the UK in 1966, and then joined the University of Malaya where he was professor and head of the orthopaedics department. He joined the then Singapore University Department of Orthopaedic Surgery in 1981 and was promoted to professor in 1984. He served as Vice-Dean of the Faculty of Medicine, Deputy Chairman of Medical Board and Director of Medical Affairs, and retired in 1994 at the age of 65.

Prof Bala's retirement marked the beginning of an annual pilgrimage of orthopaedic trainees to his home for tutorials. For the next two decades, successive batches of trainees would sit around his dining table, moulded and hardened for the battles ahead.

Even at 86, Prof Bala is still an oracle of orthopaedic knowledge; a tutorial with him is a tour de force through the breadth of orthopaedics, leaving the trainees wiser but chastened by the gaps in their own knowledge. In this era of Accreditation Council for Graduate Medical Education (ACGME) and residency,

Prof Bala is unique, separate from the structured training programmes; he has taken it upon himself to educate the next generation of orthopaedic surgeons.

On teaching

Dr Jonathan Tan – JT: When did you first start teaching?

Prof P Balasubramaniam – PB: I began teaching when I was 19, after the completion of my A-levels in Sri Lanka. I worked as a relief teacher in Botany and Zoology for nine months before starting medical school. It was my most memorable teaching experience, since it was my first teaching assignment.

I started teaching medical students while I was a medical officer. My boss, who was too busy to teach, had told me to stand in for him. That was back in the 1950s where there were no computers or PowerPoint slides, and lessons were conducted with "chalk and talk".

JT: What is your philosophy on teaching?

PB: My philosophy on teaching is that every trainee can be trained. To begin with, every trainee must be a bright student, one has to be, to pass medical school and enter higher orthopaedic training, and I respect that. My style

of teaching has always been to impart knowledge; the trainees do not need to know anything at first, but if you impart your knowledge and set them on the right track, they will eventually become good orthopaedic surgeons.

I believe in imparting three things to my trainees: knowledge, skills and attitude. I do not just teach from a textbook, but I also teach based on my personal experience and what is important for the trainees in their daily practice. Training programmes can change, but they must impart adequate knowledge to the trainees to enable them to function in their daily practice.

[At this point, Prof Bala opened one of his notebooks to show me the handwritten notes and illustrations he had prepared beforehand. I could not help but be impressed by the dedication it took to update and compile this set of notes every year for a new batch of trainees.]

I place equal importance on all clinical skills – at the bedside, in the clinic and in the operating theatre. Maintaining proper clinical records is as important as good clinical work, because it allows you to learn from your mistakes and to evolve as a clinician.

Attitude is part of the unspoken syllabus, something that you impart



Prof Bala celebrating his birthday with a group of students

by personal example to your trainees. Orthopaedics is not just cutting and doing.

[Every department has its unspoken culture and some elements of Prof Bala's influence still permeate mine, even 20 years after he has left. In the same way, the surgical style of each consultant silently reveals his or her past mentors. My department's culture too speaks of the time when he was still a part of it.]

Surgery and orthopaedics

JT: What do you think is the best way to teach someone to be a good surgeon?

PB: I believe that surgical trainees need to operate at least twice a week. When I was operating, I used to operate on one side of the spine and let the trainee operate on the other. As their experience increases, I allowed them to work on more and more of the case. Eventually, I let them operate alone while I remained outside the operating theatre, so that they could consult me if they needed help.

[A/Prof J Thambiah, my programme director, still speaks fondly of how, at the end of every spinal operation, Prof Bala would instruct him to draw by hand the

vertebrae that he had operated on and colour in the areas that he had removed. It made him a better surgeon and artist, too!]

JT: What do you think is the biggest change in orthopaedics since you first started practicing?

PB: In orthopaedics, the volume of knowledge has increased to such an extent that most surgeons are unable to cope. Orthopaedic surgeons are increasingly subspecialised and interested only in their areas of subspecialisation. However, I maintain a broad interest in the whole body; it is difficult to do so, but if one understands the whole body, one is able to see how the different subspecialties meet and thus better understand the patient.

Personally speaking

JT: What have you gained from your years as a teacher?

PB: The most important thing I have gained is the personal satisfaction of being able to pass on knowledge to my students, being able to influence them, change the way they practise and ready them for their profession.

JT: Do your students still keep in touch with you?

PB: Yes, they do! Occasionally, one of them would call up or invite me out for a meal. However, I have lost touch with some of them as their practices and families grow.

JT: Besides teaching, what do you do in your free time?

PB: I enjoy going for walks to the market or shopping centre. These walks give me much pleasure, as I enjoy looking at new faces and watching people interact.

In my younger days, I used to enjoy cooking. I used to tell my wife to give me a free day so that I can cook. Of course, she was a much better cook then I. When she passed away, I woke up every morning to cook for my children, so that lunch would be ready when they returned from school, but my maid does not like it when I interfere in the kitchen, so I have stopped cooking.

[Prof Bala's wife, Ratnadevi Desilva, had a reputation for being an excellent cook. The prospect of a good meal was something every trainee looked forward to after spending hours re-editing a manuscript with Prof Bala. She passed away in 1984, and since then, Prof Bala has balanced the responsibilities of being a professor of orthopaedics and both a father and a mother to his three children. He is now a grandfather and his children have pursued successful careers overseas in the medical and educational fields.]

Some thoughts

It has been a great privilege for me to interview Prof Bala and to hear his thoughts on educating orthopaedic surgeons. It has been said that teaching is one of the paths to immortality, as those who inspire and educate are never forgotten. As we move into the brave new world of residency and ACGME, it would behove us to remember the giants on whose shoulders we stand.