



**D**uring her Easter and Christmas vacations at the University of Salford in Britain, Ong Jing Fang used to lead her university mates on short treks to Ireland and Scotland.

Now at work as a Prosthetist and Orthotist at Tan Tock Seng Hospital, Jing Fang leads her patients on a different kind of journey. To overcome their disability and win their personal race in life.

## The Human Mechanic

### Ong Jing Fang

A **prosthetist & orthotist**, Ong Jing Fang provides care for patients who require an artificial limb (prosthesis) or a medical device to support or control part of their body (orthosis).

**University:** University of Salford  
**Degree:** BSc (Hons) Prosthetics and Orthotics

#### Seeing Your Babies Walk

Jing Fang provides care for patients who require an artificial limb (prosthesis), or a medical device to support or control part of their body (orthosis). She also advises patients on rehabilitation.

"The fulfillment you get from seeing your patients take their first steps with their prostheses, is akin to seeing your babies stand up and walk," says the outgoing Jing Fang.

"It is not only a fulfilling job, but a challenging one too, as the clinical cases vary from day to day."

Jing Fang's role as a prosthetist is to provide the best possible artificial replacement for patients who have lost a limb, or who were born without one. The artificial limb should not only fit the patient comfortably, but also empower the patient to carry out their day to day activities.

As an orthotist, she provides a range of splints, braces and special footwear to aid movement, correct deformity, and relieve patients' discomfort. She also works closely with doctors and physiotherapists to assess patients' conditions, and help control their limbs and spinal deformities.

#### Vast Exposure

The former student councillor at Raffles Junior College chose to study at the University of Salford, on a PSC Overseas Specialist Award (now called the MOH Health Science Scholarship), for its well-established curriculum, and the chance to do a full year's clinical

attachment in the British National Health Service (NHS).

"I gained experience of how the NHS works, and had exposure to many types of patients and disorders. This vast exposure to cultures and patient experience helped in my career as a prosthetist and orthotist when I was back in Singapore."

As the only Asian in her course, Jing Fang had the opportunity to interact and share experiences with her British and European course mates, which was "an eye-opening experience."

"Being overseas, I learnt to be even more independent, not only in looking after myself, but also in sharpening my thinking and analytical skills. The challenge is being exposed to different cultures and ways of life, yet keeping to your own beliefs and principles."

#### Going Forward

After her studies, Jing Fang worked as a prosthetist and orthotist in Foot Care and Limb Design Centre at Tan Tock Seng Hospital for 3 years. Besides her regular job responsibilities, she also went for further training in the UK, did a pilot study on Lycra Dynamic Orthoses, and presented a short paper on her findings at a Prosthetics and Orthotics Conference in Osaka, Japan.

In 2006, she joined the Ministry of Health as a Health Policy Analyst. "My new role allows me to gain a broader perspective of the healthcare provision in Singapore, and analyse our healthcare manpower needs, going forward."

**J**ing Fang has this piece of advice for young professionals. "The knowledge you gain from your studies is only a small portion compared to what you will learn on the job. So do not be discouraged when you find you don't have all the answers."

It is an admirable attitude that has helped her patients to learn to cope with their medical condition and win their personal battle to live life anew.

#### Some Prosthetic and Orthotic Devices

##### Prostheses

Different types of artificial limbs can be used to replace a leg missing above or below the knee, or an arm missing above or below the elbow.

##### Spinal Orthoses

Depending on the condition, different spinal orthoses can be used to support the spine and/or control the spinal conditions such as scoliosis, low back pain etc.

##### Knee Orthoses/Braces

From the common knee braces for sports injuries to extended knee-ankle-foot orthoses for post-polio patients etc, different knee orthoses can be prescribed to help a patient continue with their normal activities.

##### Ankle-Foot Orthoses

Ankle foot orthoses are used for stroke patients to control their lower limbs and help their ambulation and for children with cerebral palsy to control their lower limbs.

##### Foot Orthoses

Simple insoles and foot orthoses help to alleviate the pain and control the foot positions.

“Consider what kind of work you want to do after you graduate, and the fulfillment your future career can offer you.”