

My Brilliant Career

The joy of restoring beauty and function

Frank Graewe is an associate professor at the University of Stellenbosch and head of plastic surgery at Tygerberg Hospital; he also works part time in private practice and was on the team that performed the recent penile transplant. He tells **Margaret Harris** he learns something new every day

What is microsurgery?

It is surgery performed with the help of an operating microscope. Specifically, in plastic surgery we use microsurgical techniques mainly in free tissue transfers — which is the complete detachment, including the blood supply, of an isolated and specific region of the body containing skin, fat, muscle and sometimes bone. This tissue is then transferred to another region of the body with reattachment of the divided arteries and veins to blood vessels in the region it is transferred to.

The advantages of microsurgery include better wound coverage, improved aesthetic and functional outcomes, and less damage to the donor site. Microsurgical techniques are also applied to reattach body parts after trauma, and to repair vascular or nerve injuries.

Did you always want to be a doctor?

I grew up and completed high school in the German countryside. I went through different phases and medicine wasn't always on top of my list. From a young age I enjoyed drawing, and did a few paintings in oil. My dad took me to a design

company and the owner quickly discouraged me when he explained how difficult it is to make a living from art. Medicine, for me, always had this cloud of mystery around it; the human body and anatomy and the history of medicine kept fascinating me. I happened to work in a hospital and operating room during part of my military training and community service in Germany. It was then that I decided to apply at medical school.

What was your first paying job?

Working as a manual worker on a road-building site was the first paying temporary job I had, and the first permanent paid job was my internship after my medical training.

What qualities make for a good plastic surgeon?

Listening skills and empathy to identify what really matters to my patients; a sense of [what is] normal and a sense of beauty; and sound anatomical knowledge and technical skills and ability. And I continuously strive for perfection.

And for an academic?

Patience, taking pride in training

great plastic surgeons, innovative thinking, looking for challenges.

What was your role in the recent successful penile transplant?

I was involved in the planning and execution of the surgery, which was performed by a multidisciplinary team of plastic surgeons and urologists. I led the plastic surgery team during the harvesting and transplant surgeries. Part of the planning was the cadaver study preceding the surgery. During the surgery we did all the microsurgery, consisting of dissecting and isolating blood vessels and nerves and reattaching them during the transplant surgery. We also performed the penis reconstruction for the donor.

How did you prepare for surgery?

Most free tissue transfers take many hours of concentrated work under loop magnification and with the microscope and I do this on a regular, weekly basis. This, together with the knowledge that I have a great team behind me and the willingness to push the boundaries, was the best preparation.

What do you enjoy most about



CREATIVE PURSUITS: Frank Graewe is an associate professor at the University of Stellenbosch

your job?

A happy patient saying what a difference my work has made makes my day. I do enjoy the creative side.

What part of your job would you

prefer to outsource?

Administrative tasks.

What advice would you give to aspirant surgeons?

It is a very long road to get there,

with obstacles along the way, so it is important to keep your eyes fixed on this goal. It took me almost 15 years to complete my medical training. And I am still learning something new every day.

