

A Life in the Day

PROF DAN REINSTEIN

The laser eye surgeon, 44, is the medical director of the London Vision Clinic. He is also professor of ophthalmology at the University of Paris. He and his wife, Ursula, live in central London with their children: Julia, 7, Maxwell, 4, and Oscar, 2

The alarm goes off at 6.30, and at least three times a week I go to the gym. As an eye surgeon, spending a lot of my time doing things like peering into a microscope, it's easy to end up with neck and shoulder muscle tension. To combat this I have a great trainer who helps me work through all the muscle groups that hold me up when I'm doing things like that. I'm back home within an hour. I'll help Ursula get the kids ready and prepare breakfast, which for me is Alpen and fresh fruit. We live in a small town house in the West End, and the clinic, the schools, shops and gym are all within 5 to 10 minutes' walking distance. I can drop Maxwell off at the kindergarten on my way to work.

I established the clinic in 2002 and we now have over 20 trained staff. My days are divided between operating on patients and seeing them before and after surgery. As we know, the eye is an extension of the brain — a part that is visible to the external world. The eye acts as a digital camera; it has a focusing system at the front (the cornea), a film at the back (the retina), and a cable that carries information (the optic nerve) to a computer for image analysis (the brain). The length of the eye — from the cornea to the retina — is surprisingly well controlled by nature. However, the tolerances are very small — any error in eye length and the eye becomes short- or long-sighted. In fact, it only takes about ten-thousandths of a millimetre of error in the length of your eye to drop your vision below the standard required for driving.

Focusing the eye is my job: I need to alter the curvature of the cornea to compensate for those tiny errors of nature. Then, of course, there's the ageing process; once we reach our forties, our "zoom" mechanism starts to



MY ENTIRE UNIVERSE WILL BE FOCUSED ON MY PATIENT'S EYE. IF A BOMB WENT OFF NEXT DOOR, I WOULDN'T HEAR IT

fail. To most people, it starts to feel as if their arms are too short to hold a book far enough away to focus on the print.

These days my entire professional life is devoted to laser eye surgery, which has progressed in leaps and bounds over the last 20 years. It's very safe, too, now. I attribute my very low complication rates to a device called the Artemis scanner. This uses VHF ultrasound — like the ultrasound imaging used in antenatal clinics, only the resolution is far higher. It means we can measure the internal layers of the cornea to within one-thousandth of a millimetre — and we can see it all in 3-D. I actually helped to develop this technology with colleagues at Cornell University in the 1990s.

When I get a break, lunch is usually something like an avocado-and-ricotta salad from Pret. I drink a fair bit of coffee

but try to balance it with plenty of water.

The laser procedure is painless and takes four minutes on each eye. But don't confuse speed with simplicity — after all, it only takes four minutes to land a 747! I love the moment I start the operation. My patient will be awake and lying down. The eye I'm working on is open. Looking at it through a microscope, I see it magnified 30 times. It's like being in another world — my entire universe now is focused on my patient's eye, and on making a tiny change in the corneal tissue — as little as ten-thousandths of a millimetre. If a bomb were to go off next door, I probably wouldn't hear it.

Once one eye is completed, I take a deep breath and move on to the second. Patients see a lot better the second they sit up after the procedure. By the next morning, almost all of them can see

clearly. I've done upwards of 12,000 of these operations — from my best friend at medical school to other eye doctors, members of the special armed forces, professional golfers, Formula One drivers... I haven't needed the surgery yet myself, but when I do, I won't think twice. Sadly, it's elective surgery, so you can't get it done on the NHS. In our clinic, the standard charge is £4,200.

If I'm home early enough, I like to spend time with the kids — tell them stories, read, or maybe watch a DVD. One of our favourites is *The Incredibles*. When I was a kid in the 1960s, I remember coming home from school and watching *Dr Kildare*, which was a television series about a dashing young intern who saved the lives of all his patients — usually beautiful young women — and I swear to God, it had an impact on me. As far as my own kids are concerned, only one of them wants to be an eye surgeon — I'm still working on the other two! One thing I do like to make time for at least once a week is my hobby: the saxophone. I've been playing for 30 years now. It's just a wonderful creative release and I still perform whenever I can. I sometimes play at the 606 jazz club in Chelsea.

Around 7.30, Ursula and I have dinner, maybe steak and salad, or a light pasta. We met in Vancouver, where we were

doing postgraduate research at British Columbia University. She was studying veterinary science. She's from Austria, but we decided to settle down and raise our family here. I was actually born in Peru. My father was a pharmacist and we travelled a lot. From Peru we went to San Francisco and then Mexico. I ended up going to a Quaker boarding school in Reading; from there I got into Cambridge to study medicine.

I'm usually in bed by 11.30, but I like to read until my eyes refuse to stay open a moment longer. Sometimes the eyes tell us everything we need to know.

Interview: Ria Higgins.
Photograph: Ollie Woods