

A pioneering device reveals the secrets of getting older

How science makes us face up to ageing

by SIOBHAN RYAN

THESE are the sort of images that could change your life – and your looks.

The pictures come from a high-tech scanner, which experts believe could predict how your face will age.

Researchers at Queen Victoria Hospital in East Grinstead have been working with other scientists to develop techniques that can take highly accurate three-dimensional images of the face.

The latest method allows detailed measurements to be made of the condition of the skin, its contours, folds and wrinkles and work out how they might change over the years.

Breakthrough

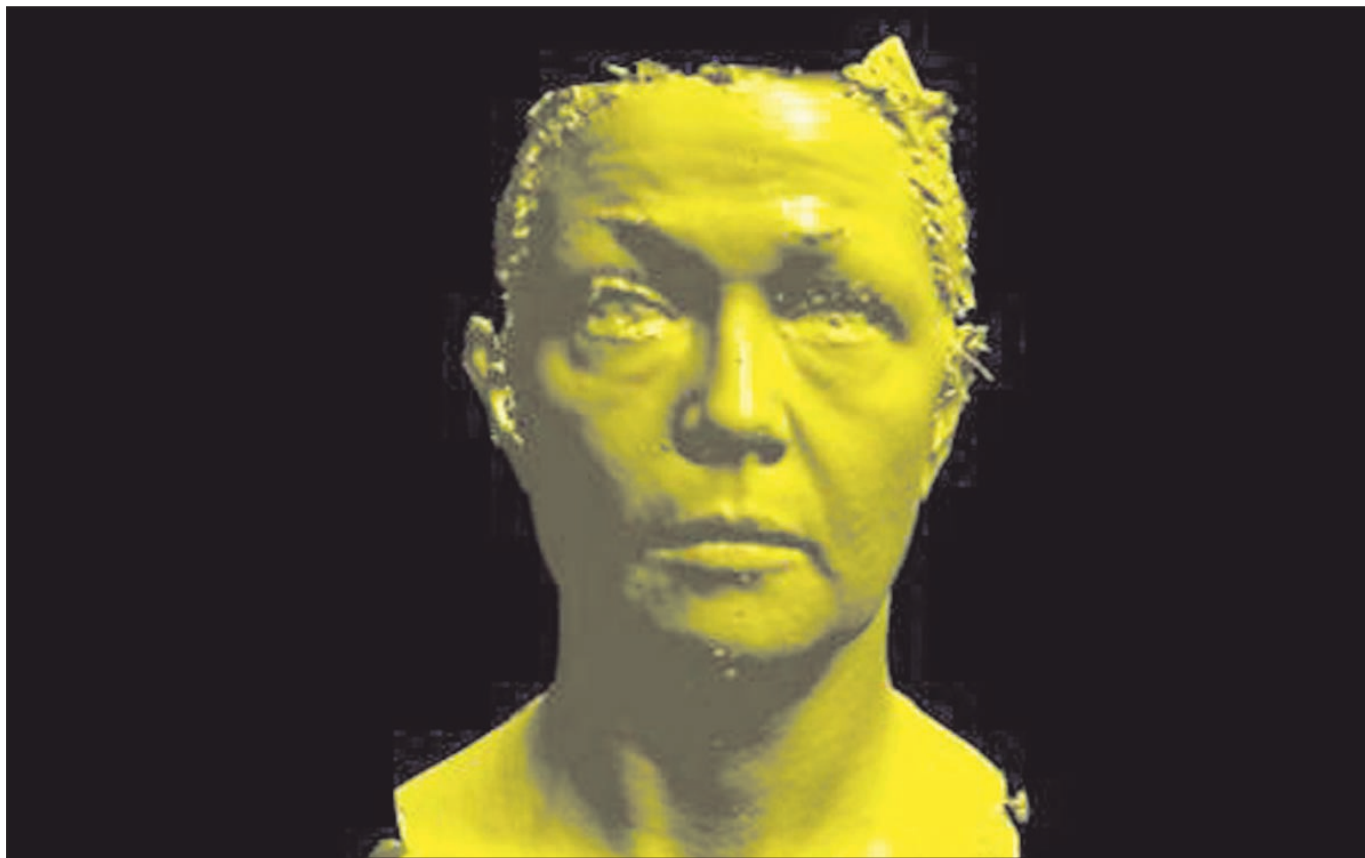
It is designed to help with cosmetic surgery and plastic surgeons say it means they will be able to take accurate measurements of how well facial reconstructive surgery will work on a patient.

This could help with cancer patients, people with badly broken jaws and cheekbones or those recovering from other serious injuries or burns.

While orthopaedic surgeons can use X-rays to compare the fractures before and after treatments and doctors can measure blood pressure to see whether a patient's medication is working, plastic surgeons have had to rely on highly subjective assessments to evaluate the effectiveness of treatments, which can be misleading.

Charles Nduka, a consultant plastic surgeon at Queen Victoria, said: "The fact we can accurately measure even subtle differences means we will be able to develop this tool for comparing the effectiveness of different surgical techniques."

"There are new techniques introduced almost every week claiming to lift, fill or smooth the face. Unfortunately, before the development of this system, there was no way to accurately measure the effectiveness of different treatments or to compare how long the treatments last.



THE FUTURE NOW: Above, this is how this female patient will look as she ages and how she looks today, below

"Many newer techniques have been widely adopted without any meaningful evaluation."

Mr Nduka specialises in treat-



MR NDUKA: Exploring uses

ing patients with facial palsy at the hospital's world-renowned specialist plastic surgery unit.

He said: "Facial paralysis is a devastating condition for patients but currently there are no means to accurately quantify the degree of facial asymmetry."

"A variety of novel techniques are now available with the help of this technology, which I believe can significantly improve the lives of these patients."

Mr Nduka is working in collaboration with Michael Gleeson, a professor at the institute of neurology at University College London, and Dr Marlene See from Imperial College, London, to see how the technique can be explored further.

They have been studying and scanning the faces of mothers and daughters to check for differences in the elasticity and shape of the skin and the con-

tours of the face. It is hoped that eventually, the method will be used on other parts of the body.

Queen Victoria Hospital is a regional specialist hospital for plastic surgery and burns, serving four million people in the

South-East. It also provides community services to the local population and was one of the first hospitals in the country to become a foundation trust.

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