### We help find the cure

# SCIENCE

## Meet engineers working in medicine and explore where a career in engineering could take you:



#### Kaspar Althoefer

Job: Robotics engineer

Employer: King's College London

What I do all day: I'm designing new tools for surgery. My robotic octopus arm can get to hard-to-reach places inside patients without damaging delicate tissue.

Perk of the work: I get to use my robot test lab to make things to help people.

In future, engineers like me...Will invent smaller, smarter surgical robots that can detect tumours inside the body, or even perform surgery without human control.

(Image credit: Lito Apostolakou)



#### Andrew Flewitt

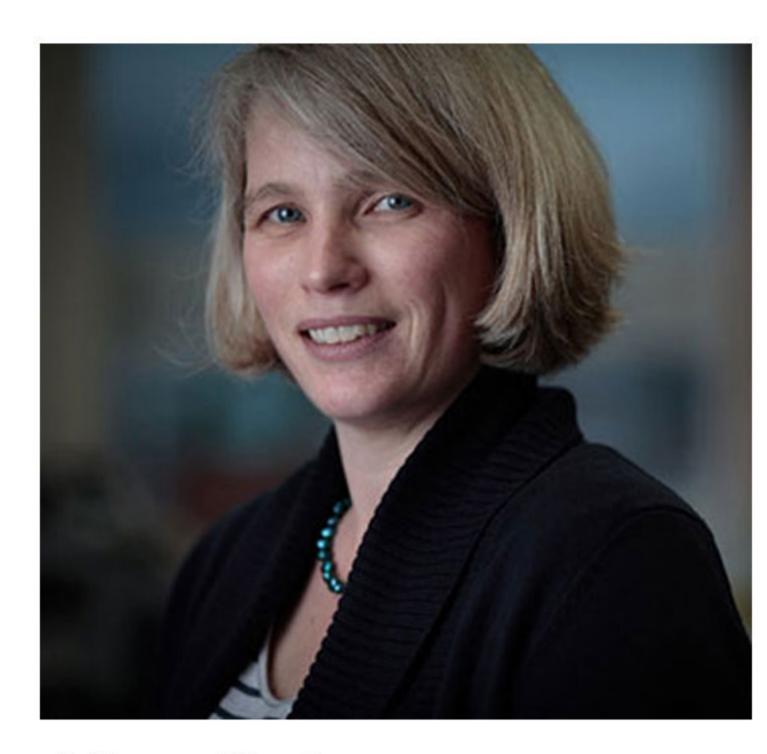
Job: Electronic engineer

Employer: Cambridge University

What I do all day: I use my knowledge of electronics and materials to make tiny nanosensors that monitor your body and tell you if you're getting sick.

**Perk of the work:** My technology could let doctors spot illnesses like cancer while they're still treatable.

In future, engineers like me...Will develop technology that constantly monitors people's health. My nanosensors could be in your toothbrush, giving you a health check every time you brush your teeth.



#### Alison McGregor

Job: Biomedical engineer

Employer: Imperial College London

What I do all day: I use hi-tech sensors to study how the GB rowing team move, making them go further with every stroke.

**Perk of the work:** I get to work with the UK's top athletes.

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In future, engineers like me...Will help athletes push the limits of human performance.

(Image credit: Imperial College)



#### Carolyn McGregor

Job: Software engineer

**Employer:** University of Ontario Institute

of Technology

What I do all day: I make computer programs to keep an eye on thousands of readings from hospital monitors and spot if fragile newborns are getting ill.

Perk of the work: My research helps doctors save hundreds of lives.

In future, engineers like me...Will give doctors a heads up when people are getting sick, before they can see symptoms.

Watch Research Matters to find out more about Carolyn's life-saving research

(Image credit: Kalvin Taylor University of Ontario Institute of Technology)



#### Tarit Mukhopadhyay

Job: Biochemical Engineeer

Employer: University College London

What I do all day: My team and I slice and splice genes and proteins to make vaccines that help your body fight illnesses like flu, HPV and anthrax.

**Perk of the work:** I help prevent outbreaks of disease, saving hundreds, or even thousands, of lives.

In future, engineers like me...Will invent vaccines for new diseases, and work on preventing some of the illnesses we face today, like hay fever and HIV.