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## SCIENCE

Radio 4

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## PROGRAMME INFO

Wednesday  
21:00-21:30

Frontiers explores new ideas in science, meeting the researchers who see the world through fresh eyes and challenge existing theories - as well as hearing from their critics. Many such developments create new ethical and moral questions and Frontiers is not afraid to consider these.

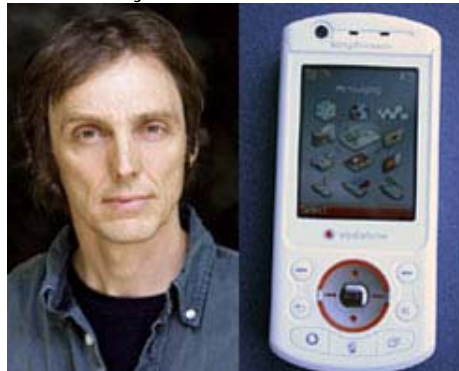
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## PROGRAMME DETAILS

Wednesday 28 November 2007



Presenter Philip Ball (left); mobile phone (right)

## Digital Medicine

Science journalist Philip Ball looks at the dawn of a brave new era of medical technology that promises to revolutionise the way we receive health care.

Digital medicine aims to take health care out of the hospital and into the home using simple devices found in our mobile phones and home computers.

Philip visits Imperial College in London to talk to Professor Chris Toumazou and his colleagues at the Institute of Biomedical Engineering. Professor Toumazou is using wireless technology to monitor and treat patients without them having to set foot in a hospital.

One of these devices is a digital plaster that will allow doctors to monitor their patients' vital signs any time and from anywhere in the world. He's also working on an artificial pancreas that can monitor and supply insulin to someone with diabetes, in exactly the same way a healthy pancreas would, without the need for daily monitoring and uncomfortable injections.

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The true frontier, however, is to combine a computer chip with DNA to create the ultimate in personalised healthcare, drugs that are designed and prescribed specifically to your body's needs.

Philip Ball talks to the team at Imperial and discovers whether a visit to the GP's surgery or hospital is about to become a thing of the past

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