

# Medical advances of the 21st century



# Artificial heart

In July 2001, a group of surgeons from Louisville, Kentucky managed to transplant a new generation artificial heart into a patient. The device, known as AbioCor, was first transplanted to a person, who was suffering from heart failure.

Artificial heart –

[ɑ:ti'fiʃəl]

искусственное сердце

Heart failure – сердечная  
недостаточность



Transplant – пересаживать  
(органы)

Transplantation (n) - пересадка

# Camera capsule

With this pill doctors can diagnose cancer at the earliest stages. The device was created for producing high-quality color images in confined spaces. Camera capsule can detect signs of esophageal cancer.

Esophageal cancer – рак  
пищевода  
[i:'sɒfəgəl]  
Camera capsule –  
видеокапсула  
|'kæpsju:l|



# Bioresorbable stents

Scientists have developed the world's first bioabsorbable stents for treating thrombosis. A stent expands the blood vessels to prevent a blockage. Stents are manufactured from a material that may dissolve or be absorbed in the body.

**bioabsorbable stents** -  
биорассасываемые  
стен­ты



**thrombosis**

|θrɒm 'bæʊsɪs| - тромбоз;

**expand the vessel** –

расширить сосуд;

**prevent the blockage** –

предотвратить стеноз;

**dissolve, absorb** –

рассасываться,

растворяться

# Bionic arm iLIMB

Created by David Gow in 2007, the iLIMB bionic arm is the world's first artificial limb with five individually mechanized fingers. **Bionic arms** work by picking up signals from a user's muscles.

\* **Prosthetics** - replacement of lost or irreversibly damaged body parts with artificial substitutes.



**Bionic arm** – бионическая рука

**Artificial limb** – искусственная конечность

**Mechanized fingers** – механизированные пальцы

**Prosthetics** – протезирование  
|prɒs'θetiks|

# Biomechanical devices and prostheses

In 2013 scientists invented the first prototypes of "smart" prostheses with feedback (emulation of tactile sensations), which enabled a prosthesis to perceive and transmit the feeling of pain or discomfort.

**Prosthesis – протезы**

**[prɒs'θi:sis]**

**Perceive, transmit –**

**ощущать, передавать**

**Tactile sensations –**

**осязательные, тактильные**

**ощущения**



# Coronavirus vaccine

Russian and American scientists have just developed anti-coronavirus vaccines. The vaccines are still undergoing large-scale clinical trials, which show that they are all likely to be effective. The US is about to start vaccine distribution and shipping.

The vaccine must be stored at a temperature of around  $-70^{\circ}\text{C}$ . It will be transported in a special box packed in dry ice and installed with GPS trackers.



Vaccine – вакцина;  
Undergo clinical trials – проходить клинические испытания;  
Distribution and shipping – распространение и поставка;  
Store - хранить