Technologies for Understanding and Treating Cancer

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How big is the problem?

~40% of us will be diagnosed with cancer during our lifetimes

~1.3% of US GDP in 2010 was spent on cancer care

Many types of cancer, including breast, lung, prostate, colon, bladder, melanoma of the skin, non-Hodgkin lymphoma, thyroid, kidney, leukemia, endometrial and pancreatic
Cancer = diseases in which abnormal cells divide without control and are able to invade other tissues.
Understanding factors that drive cancer

Detecting cancer for early diagnosis

Treating cancer using biotherapeutics

How do chemical and mechanical signals influence cancer progression?

How can rare cancer cells in the blood be detected and used for diagnosing disease?

How can natural proteins and the immune system be engineered to combat cancer?

http://www.pbs.org
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