Biomedical Engineering

*Engineers that protect and cure*

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*Gear Up Campus Visit*
6 May 2004

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**What is an Engineer?**

- An Engineer is a person trained to apply science and use technology to solve problems and invent new things.

- In college, engineering students study chemistry, physics, biology, computer science, and MATH, along with their engineering courses.
Engineering and Medicine???

Artificial Knee

Artificial Heart

Robotic Surgery
Hip Fractures

- Falling is the leading cause of injury death in the elderly.
- Last year, 1.6 million people over 65 years of age fell.
- Most elderly people who break their hip never regain their quality of life.

Anatomy of the Hip Region

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Hip Fractures . . .

X-Ray of Hip Fracture

Artificial Hip

Types of Hip Fracture

The Challenge

Can hip fractures be prevented when a person falls?

Approach

◆ Work in teams of 3 or 4.
◆ Brainstorm to come up with 5 different ways to prevent hip fractures.
◆ Draw concepts on the poster board.
◆ Report back in 20 minutes.