

Johns Hopkins
Department of Biostatistics
Open House

Welcome

October 18, 2008

What is biostatistics?

- ❖ *“... Statistical Science [is] the particular aspect of human progress which gives the 20th century its special character.... It is to the statistician that the present age turns for what is most essential in all its more important activities.”*

Sir R. A. Fisher, 1952 address to IBS

What is biostatistics?

- ❖ *“Figures often beguile me, particularly when I have the arranging of them myself; in which case the remark attributed to Disraeli would often apply with justice and force: ‘There are three kinds of lies: lies, damned lies and statistics.’”*

Autobiography of Mark Twain

What is biostatistics?

- ❖ *“...a straightforward discipline designed to amplify the power of common sense in the discernment of order amid uncertainty.”*

S.S. Stevens, Science 161:841-56, 1968

What is **bio**statistics?

- ❖ *The science of learning from **biomedical** data involving appreciable variability or uncertainty.*

Amalgam

Why biostatistics?

- ❖ *Because you get to take a crack at solving the most interesting problems in the world*
 - ❖ *How does lead exposure change the brain?*
 - ❖ *Which genes underlie pancreatic cancer?*
 - ❖ *What does insomnia look like?*
 - ❖ *How long should preventive antibiotic be given following an anthrax attack?*
 - ❖ *Should LASIK be approved for general use?*
 - ❖ *Can we intervene on biological aging?*
 - ❖ *Does A **cause** B?*

Why biostatistics?

- ❖ *Because solving the most interesting problems in the world comes along with the **satisfaction** of*
 - ❖ *Perpetual learning*
 - ❖ *Working with great colleagues*
 - ❖ *Advancing science*
 - ❖ *Improving the world condition*

Why biostatistics?

- ❖ *\$\$ Because you'll be virtually **guaranteed** a terrific job \$\$*
- ❖ *Academia, government, industry*
- ❖ *Ph.D. starting salaries: \$80,000-\$100,000*
- ❖ *Our last 25 Ph.D. graduates - positions including Stanford, Princeton, Duke, Univ. of Minnesota, Pennsylvania, Virginia, Washington, National Cancer Institute, Food and Drug Administration, JP Morgan Chase, Merck, Genentech*

Why biostatistics at Hopkins?

- ❖ *Close-knit community of scholars*
- ❖ *Lacrosse rules*
- ❖ *Most exciting science in the world*
- ❖ *Saving millions at a time©*
- ❖ *Baltimore: It's better than you think©*
- ❖ *Excellence bar none*