Panel Session

Statistics Graduate Student Research Day 2011

April 28, 2011

Panelists

Our Panelists for today are:

- Robert Gentleman *Genetech*
- Diane Lambert *Google*
- Joanna Mills-Flemming *University of Dalhousie*
- Robert Tibshirani *Stanford University*

Panel Format

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- Over the course of an hour 3 topics will be discussed.
- For each topic, each panelist will make an initial address lasting two minutes.
- At the end of the initial addresses, an open 5 minute round table discussion will ensue.
- The final 20 minutes is reserved for a question answer period and a brief summarization of the ideas presented during the session.

Topic 1: Data Overload

Over the past two decades computer technology has rapidly advanced allowing better retention, processing and retrieval of information. The amount of data generated within this period of time is enormous and has in many ways created a bottleneck of information. How does the panel see the direction of statistics evolving to deal with this information overflow? Will classical methods of estimation remain relevant as computation becomes easier?

Topic 2: Computer Scientist vs. Statistician

We are seeing greater overlap between statistics and other fields in the mathematical sciences specifically with computer science. What distinguishes a computer scientist from a statistician? Do you think a computer scientist can be a statistician and vice versa? Do their methods of inference differ? Who do you see driving the short-term future of statistical methodologies: statisticians or computer scientists?

Topic 3: The future of the Graduate Curriculum

In most graduate programs there is a set of required statistics
courses that focus on providing students with the foundations of
the statistical and probabilistic methodology. Do you think
students should be required to take these courses or select ones
more conducive to their field of study? What educational
adjustments should be made to current curricula to provide
students with a more competitive and relevant skill set?

Concluding Comments

Summary and concluding comments.