Inside The Cocoa Room

Tom Louis and his chocalatiers

Emerging Opportunities

- Biosurveillance
  - Populations, outbreaks, cancer clusters ..
  - Real time
- Drug safety
  - Post-marketing, pre-marketing
  - Medical errors
  - Network of studies

Emerging Opportunities

- Screeing programs & evaluation
- Accountability/Evaluation of "Big Issues"
  - E.g., Air population
- Disease models/ Drug development
  - Mechanistic-based modeling
- Inference for networks
  - Social, genetic, ecologic, …

Emerging Opportunities

- Emerging measurement technologies ("omics")
- Communicating uncertainty
  - Policy makers, general public
- Innovation diffusion
  - Statistical or biomedical findings
- Biomarkers
  - Integrating over information sources of exposure and effect

Emerging Opportunities

- Surrogate Endpoints
- Systems Biology

Cross-Cutting Methods

- Mechanistic models
- Micro-simulation
- Methods for sparse data
- Integration of multiple data sources with mis-aligned scales
- Network modeling
- Machine learning/Pattern recognition
- Causal modeling

Cross-Cutting Methods

- Statistical methods for measurement - incorporating uncertainty
- Agent-based statistical models
- Reproducible research
- Statistical input from the data collection phase.
- Visualization