What is Statistics?
The Big Picture

Rob Kass

Department of Statistics
and
The Center for the Neural Basis of Cognition
Carnegie Mellon University
DATA

regularity  variability
Conclusions

EDA

Experiments or Observations

Unobserved Mechanisms

DATA

regularity variability

EDA

Conclusions
Conclusions

Experiments or Observations

Real World

Unobserved Mechanisms

Key Features

DATA

regularity variability

Algorithms

Conclusions

Theoretical World

Rules of Probability

Probability Models

parameters

noise

random variables

Formal Statistical Methods

Conclusions