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BIOSTATISTICS SEMINAR

Confidence Densities, Uninformative Priors, and the Bootstrap

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Abstract: There have been a series of conferences around the world under the label "BFF," standing for Bayesian, Frequentist, and Fiducial. I will give a version of the keynote talk at the most recent one. A general problem of BFF interest goes as follows: A family of densities with vector parameter "mu" has yielded data "X" from which the statistician wishes to infer a real-valued parameter theta = t(mu). For example, X might be multivariate normal, X~N(m,V), and theta the trace of V. A statistical holy grail task is to find a convincing posterior density of theta given X, when there is no prior information on the distribution of mu. A suite of more or less related answers have been proposed: uninformative priors, matching priors, fiducial methods, and confidence densities (the last being derivatives of confidence distributions.) This talk reviews the various theories, connecting them to bootstrap methods for their implementation.

This talk is co-sponsored by:

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Thursday
October 13, 2016, 3:30 PM
Room T-639, Health Sciences
Refreshments served at 3:15 PM