Dimension reduction in the context of survival analysis with microarray data†

Javier Rojo
Statistics Department, Rice University

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Abstract: Microarray data presents a challenge due to its large dimension. Other issues such as censored data when modeling survival times of patients, and the small number of patients available for the study, exacerbate the challenges.

We will revisit classical methodologies used to reduce the dimension of the data and propose a variation of Partial Least Squares that provides better estimates for the survival function. Random projections are also discussed as potential tools for dimension reduction.

†This is joint work with Tuan Nguyen from Eli Lilly.

Dr. Javier Rojo is a Professor of Statistics at Rice University. His research interests include Survival Analysis, Partial Order Distributions and Extreme Events. He is a fellow of the American Association for the Advancement of Science. He is the former Statistics Program Director at the National Science Foundation and currently directs the Rice Undergraduate Summer Institute of Statistics. He received his Ph.D. in Statistics from the University of California at Berkeley under the direction of Erich Lehmann.