

## AE report of "HIGH-DIMENSIONAL REGULARIZED DISCRIMINANT ANALYSIS" by Ramey, Stein and Young

This is a paper that addresses the heavily studied problem of classification based on gene expression data. The paper is carefully written, numerical examples are presented and R code with data are provided. These are certainly big pluses which make this writing to be a potentially promising addition to the literature.

Having said that, I must say that the presentation of the paper is not focused on a particular novel applied problem. The authors are not concerned with a key question of applied interest (e.g., a specific biological question studied with a novel dataset). Instead, the authors' goal is to refine already existent classification procedures. For this reason alone AOAS does not seem to be the best venue for the publication of this work. Aside from that, the proposed approaches seem to suffer from major shortcomings in terms of their novelty and in terms of their computational efficiency with respect to existent classification methods. Both reviewers point out key issues which I hope the authors will find useful to take into account when revising their manuscript. The novelty of statistical methodology is not necessarily a deal breaker for AOAS publications, but an in-depth study of an applied problem certainly is a deal breaker.

At least as far as this AE is concerned, the authors should do a better job when identifying a specific applied question and presenting, in detail, relevant answers to this question as evidenced by their proposed approaches. This manuscript does not seem to stand out from an applied perspective which is not precisely consistent with AOAS's mission. A computationally oriented journal seems to be a much more suitable publication venue for this writing.