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January 17, 2012

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Chancellor Steve Ballard
East Carolina University
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Greenville, NC 27858

Chancellor Ballard,

The Department of Biostatistics is writing this letter in response to the University Self-Study that was recently released by the Program Prioritization Committee. The PPC has completed its task and deserves recognition for the difficult nature of its charge and committee members should be thanked for their time and efforts in this regard. However, the Department of Biostatistics is concerned with the statistical methods used and we feel these concerns should be stated in an open format.

Following an earlier draft of the report, the Department of Biostatistics provided a consulting report in which we detailed the limitations and quality of the data, the scoring rubric, and the potential associations between department/unit scores and indicators that were out of the unit's direct control (for example the size or funding of the department or unit). While we appreciate the efforts the PPC made in terms of holding open forums to gain faculty feedback, we were hoping that more would be done in transition from the initial draft to the final draft in terms of addressing these issues. While the timeline was certainly a key factor in the progression of the report and the PPC stated many times that the department/unit narratives were used to augment information gleaned from the collected data, the issues still persist in a way that would need to be addressed before this body of work could be suggested as a template for other universities. The final report includes a cluster analysis, a figure identified as a scree plot and another as a 3D plot. These results and figures have very little, if any value. The problems pointed out in our consulting report, including those listed in the section on limitations in the PPC report, are not addressed or mitigated in any way by these analyses. On its own, the use of sophisticated statistical techniques lends no credibility to the recommendations in the report.

A more serious problem is the use of statistical methods that the committee used but were not included in the report. Between email exchanges with committee members and the university forum it was clear that there were other analyses that the committee looked at but did not include in either draft of their

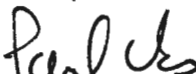
report. Many of those on the committee are researchers who are familiar with analytic methods and routinely do more analysis than what is used in the publication of their research. In general we applaud such efforts to understand collected data; however, data driven decisions made about university priorities necessitate complete transparency of all methods.

There is one particular instance with which we are especially concerned: the use of statistical modeling (or regression modeling). The PPC made it clear that such models were shown to the committee and we know that the Department of Biostatistics and others outside the PPC used such models in evaluating the scores and results from the initial draft report. Did these models accurately represent the relationship of the units and the variables included in the regression models? Given that none of this information is included in either the draft report or the website where the data is posted, concerns that judges may have been misled by inappropriate statistical methods are credible and represent a significant weakness in the report.

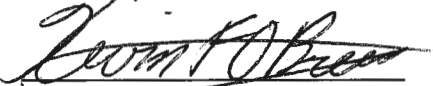
Looking forward, we feel the most productive approach is to improve the raw data that have been collected and to provide summaries that will accurately reflect the contributions of the diverse units that constitute East Carolina University. We hope that this data will see continued improvements beyond the charge of the PPC and before any potential changes are implemented by the university; we are committed to providing statistical methods and analysis that are appropriate and necessary to aid the administration in their efforts. Thank you for your time and your attention in this matter.

Sincerely,

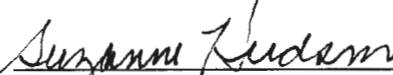
ECU Department of Biostatistics




Paul Vog, Ph.D



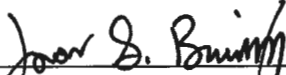
Kevin O'Brien, Ph.D



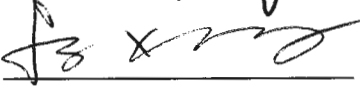
Suzanne Hudson, Ph.D



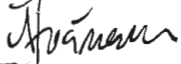
Don Holbert, Ph.D (retired)



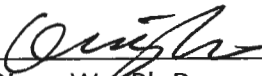
Jason Brinkley, Ph.D



Xiangming Fang, Ph.D



Andrada Ivanescu, Ph.D



Qiang Wu, Ph.D