

May 29, 2017

Representative Joel Kretz, Deputy Minority Leader
335A Legislative Building
PO Box 40600
Olympia, WA 98504

Senator Mark Schoesler, Majority Leader
307 Legislative Building
PO Box 40409
Olympia, WA 98504

Dear Representative Kretz and Senator Schoesler:

Thank you again for meeting with Vice President Colleen Kerr, Dean Ronald Mittelhammer, and me on March 29, 2017 regarding WSU involvement in discussions of wolf depredation of livestock and its associated impacts. As you recall, at our March 29, 2017 meeting you provided me comments on this paper prepared by the Office of Professional Responsibility (OPR). Professor Nairanjana (Jan) Dasgupta, Director of the Center for Interdisciplinary Statistical Education and Research and Professor of Mathematics and Statistics has analyzed Professor Wielgus' paper and the OPR comments as described in my April 21, 2017 letter to you.

I am writing to summarize WSU's conclusions based on Professor Dasgupta's analysis and OPR's comments. The main points are as follows:

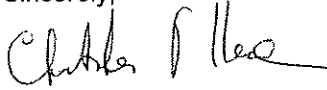
- 1) Professor Dasgupta conducted her own analysis of the data and discussed the results with Professor Wielgus. This interaction was carried out as a colleague-to-colleague technical discussion, similar to what normally occurs between faculty engaged in similar areas of research.
- 2) Professor Dasgupta was provided full access to the data and was able to reconstruct and verify the fits to the data presented in Professor Wielgus' paper. These fits assumed the use of particular statistical models as described in Professor Wielgus' paper. Professor Wielgus' analysis is thus mathematically correct.
- 3) The data set is complex with all the variables in question highly correlated to each other. It is possible to analyze this data set using a number of *different but mathematically correct* statistical models. Given the complexity of the data set, the trends observed depend on the statistical model chosen. Thus, different researchers analyzing this data set could arrive at different conclusions. While the model used by Dr. Wielgus is a statistically *viable* model, it is possibly not the optimal one due to the fact the variables in question are highly correlated. Given the complexity, finding an optimal model will require more thought, research and potentially more data. Therefore, it is premature to draw definitive conclusions at this point.
- 4) Discussion of the data set and its analysis is continuing among Professor Wielgus, Professor Dasgupta, and other WSU researchers. The University believes the best path forward is continued analysis and discussion of the data within the research community, culminating in submission of articles to scientific journals as appropriate.
- 5) There is no evidence of research misconduct in this matter. Accordingly, the University has not opened a research misconduct investigation.

As a final point, I would also like to offer the assistance of the WSU Office of Research in future matters of this type, where individual researchers can analyze a given data set and arrive at different conclusions. A peer-review panel approach to this situation, which allows a set of researchers to debate their

interpretations and come to a consensus, is often useful. Such panels are commonly used at the federal level, for example. The WSU Office of Research would be pleased to arrange panels of this type if you or your legislative colleagues find it helpful.

Thank you again for our meetings and discussion on this subject- it has been very helpful and instructive for us here at WSU. Please contact me if I can provide additional assistance, or you wish to discuss this further.

Sincerely,



Dr. Christopher J. Keane
Vice President for Research
Professor of Physics

cc:

Senator Jim Honeyford
Representative Dan Kristiansen, Minority Leader
Representative Jacquelin Maycumber
Senator Shelly Short

Colleen Kerr, Vice President for External Affairs and Government Relations, WSU
Dr. Ronald Mittelhammer, Dean, College of Agriculture, Human, and Natural Resource Sciences, WSU
Christopher Mulick, Director of State Relations, WSU