Case: Professor Stone's research group has been investigating the effects of vigorous exercise on obese mice. Each person made significant contributions to the research.

- Professor Stone designed the study, obtained grant funding, assembled and mentored the research team, supervised data collection, co-wrote the final manuscript with Tanisha, and edited the entire document extensively.
- Tanisha, an advanced graduate student, served as project director. She collaborated with Professor Stone on the grant proposal and was responsible for animal welfare, ordering/storing research supplies, helping to collect data, and co-writing the manuscript with Professor Stone.
- Greg, an undergraduate student, was invited to the research team because Professor Stone was impressed with Greg’s methods of getting mice to swim continuously in a large tub of water, and with some weighted vests that Greg made for the mice to wear as a means of increasing intensity of exercise. In addition to use of the exercise protocol, Greg's contributions to Professor Stone's project included collecting over half of the data and entering all of data into computer files. Greg was frequently praised by Tanisha and Professor Stone for his accurate, comprehensive entries into the lab notebook for the project.
- A statistical consultant to the department, Ace, conducted the data analyses as requested by Tanisha and Professor Stone.

Greg finished his undergraduate degree and was accepted into a graduate program in another state. While conducting a literature review for a course assignment, Greg found a paper about the obese mice study co-authored by Professor Stone and Tanisha. Greg and Ace were listed in the acknowledgements. Greg was unaware that a manuscript had been submitted for publication. Greg was proud of his contributions to the project, but very angry that his name was not included in the list of authors.

Discussion Questions:

1. Are Greg's contributions worthy of authorship according to the MSU Authorship Guidelines (http://rio.msu.edu/authorshipguidelines.htm)? According to the authorship standards associated with the journals in your discipline?
2. What are some possible reasons that Greg was not listed as an author?
3. What options does Greg have for obtaining some resolution to this problem?
4. How could this problem have been prevented?