2019 Biostatistics Program Instructions for First Year Take Home Examination Due: Thursday June 6, 2019 by 1:30 PM, unless otherwise arranged

Basic rules:

- 1. You should not discuss this exam with anyone else.
- 2. You may use any resources (books, literature, internet) except another individual.
- 3. If you have questions about the exam, then you should contact Dr. Anna Barón (Email: anna.baron@ucdenver.edu). As appropriate, she will e-mail the question and an answer to everyone who is taking the exam. Please also copy Dr. Gary Grunwald (Email: gary.grunwald@ucdenver.edu) on any communications.
- 4. You must abide by and sign the CU Anschutz Honor Code. You can turn in a hard copy with your signature, or you can sign, scan the page and include it as a separate page with your electronic submission:

I understand that my participation in this examination and in all academic and professional activities as a CU Anschutz student is bound by the provisions of the CU Anschutz Honor Code. I understand that work on this exam and other assignments are to be done independently unless specific instruction to the contrary is provided.

Signature

Instructions for assembling your answers:

We ask that you use the following instructions to facilitate the grading process:

- 1. Put your exam number on each page. Use your in-class exam number.
- 2. Do not put your name or initials on any pages, or use your name or initials in any of your answers (e.g. in your R/SAS output or R/SAS variable names).
- 3. Start each question on a new page. There are 3 questions on this exam.
- 4. Submit a single electronic file to Kenton Owsley (kenton.owsley@ucdenver.edu) with a maximum of 15 pages including text, tables, figures, and key R or SAS output (i.e. key code or results directly answering the question). Put extended annotated R or SAS code and output into an appendix (no page limit) in the same electronic file. Minimum font size 11, no figures smaller than a large postage stamp, etc. Do not copy faculty members on your submission. This is so faculty members are blinded from knowing whose papers they are grading.

General guidelines for answering questions:

Remember that faculty have to read your exams. It is difficult to score answers that are difficult to read or are poorly organized. The following instructions will help to assure your answers are given full consideration:

- 1. Answer each question completely, but be concise.
- Organize your answers so that they are easy to follow and easy to read. You should type your answers.
- 3. Do not submit unnecessary computer output. The output that you submit should be referenced in your answer, and the output should be organized and annotated so that we know how you are interpreting the results.
- 4. Some questions ask you to summarize or interpret an analysis for an investigator. When answering these kinds of questions you should use statistical terminology that would be understood by an investigator.