

Homework 8. Due by 5pm on Thursday 10/22.

Negligence, mistakes & how to avoid them

Researchers, like all other humans, make mistakes. Read pages 12–14 of *On Being a Scientist*. Write brief answers to the following questions, by editing the tex file available at <https://github.com/ionides/810f20>, and submit the resulting pdf file via Canvas.

1. How do authors, referees and readers keep alert to the possibility of errors? What is a reasonable level of skepticism about correctness of published results?

YOUR ANSWER HERE

2. How should one balance the professional consequences of errors with the professional requirement to publish?

YOUR ANSWER HERE

3. If you think you have identified an error in someone else's published paper, what are possible courses of action? What are their advantages and disadvantages?

YOUR ANSWER HERE

4. Look on the internet in a leading statistics journal (such as Journal of the American Statistical Association and Annals of Statistics) for papers with a corrigendum, erratum or retraction. How common is it in our discipline to publish corrections of mistakes? If you find it is rare, how does the field avoid building on incorrect results?

YOUR ANSWER HERE

5. What kinds of errors arise in statistics research, and what are good research practices to avoid or reduce them?

(a) in theoretical results;

YOUR ANSWER HERE

(b) in numerical results.

YOUR ANSWER HERE