

# To Do List

Gabe Harris

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- Read intros to listed texts (See Thesis section 2.1 Why Predictive Inference?) and summarize answers to that question in WhyPredictiveInference.Rnw
  - Nate Silver’s book (1st chapter or intro)
  - Hoff’s book
  - Geyser’s book (1st chapter or intro)
  - Aitchison and Dunsmore (1st chapter or intro)
  - Dean’s paper
  - maybe some googling
- ~~Create example comparing predictive inference result with plug-in parameter result~~  
~~Dean’s suggestion: 1-sample binomial with small sample size. E.g. 3 successes, 7 failures ( $\Pr(\text{success}) < 0.5$ ). Difference will be more pronounced with smaller sample sizes.~~
- Combine `rpredNormIG()`, `rpredNormIG2()`, and `rpredNormIGk()` into one function
- Read up on convergence in probability and justification for MCMC (Hoff, Casella & Berger)
- Compare variance computations: `var()` function on MCMC sample vs direct computation from theory ( $EX^2 - (EX)^2$ )
- General guidance: Read up on “How to write a thesis in Latex,” for example [https://www.overleaf.com/learn/latex/How\\_to\\_Write\\_a\\_Thesis\\_in\\_LaTeX\\_\(Part\\_1\)%3A\\_Basic\\_Structure](https://www.overleaf.com/learn/latex/How_to_Write_a_Thesis_in_LaTeX_(Part_1)%3A_Basic_Structure)
- Figure formatting: save figures as .png files and insert? Or what? Need better control over how figure appears in resulting pdf.