We would like to invite you to a one-day workshop on teaching statistics on the campus of George Mason University (Fairfax, VA) on Thursday, July 18th (9AM-4PM). This workshop has tracks designed for both beginning and experienced instructors of introductory and intermediate statistics content at the high school and undergraduate level.  
  
Goals: The statistics education community is increasingly focusing on the use of simulation-based methods, including bootstrapping and permutation tests, to illustrate core concepts of statistical inference within the context of the overall research process. This new focus presents an opportunity to address documented shortcomings in introductory and intermediate level statistics courses. In particular, an early entry to informal inferential reasoning allows students to focus more on seeing the big picture, improving statistical thinking over mere knowledge of procedures, and critical reading of research studies. Workshop leaders will discuss (1) the motivation and rationale behind the simulation-based approach, (2) share some concrete examples of how the approach works and can be integrated into existing courses, and (3) share a wealth of instructional resources available to support instructors trying out and using these approaches, including assessment opportunities and results.  
  
The morning session (9a-12p) will be a joint workshop covering the big picture of the approach.  
  
Workshop participants will split into one of two tracks for the afternoon session (1p-4p):  
  
Track 1- AP Statistics - a workshop geared for high-school teachers that looks into teaching with simulation-based methods at the high-school level.  
Track 2 - Multivariable statistics - a workshop geared for college instructors that looks at conceptual approaches using data visualization and simulation to improve students' multivariable statistical thinking in introductory and intermediate statistics courses, and other science courses using statistics.  
  
The workshop is free, but advanced registration is required. Sign-up link here<<https://docs.google.com/forms/d/e/1FAIpQLSe9stUJtFjRgw-ORIr6pAilcUPx_o7sNTKJqNDhbUpVDyhfzw/viewform>>.  Internet access will be provided.  Several hotels (e.g., The Residence Inn at 3565 Chain Bridge Rd) are about 10-15 minutes from campus.  
  
For additional information/questions about local lodging, workshop details, etc. please email  
Beth Chance ([bchance@calpoly.edu](mailto:bchance@calpoly.edu))  
Beth Johnson ([ejohns40@gmu.edu](mailto:ejohns40@gmu.edu), local organizer)  
  
Workshop presenters:  
Beth Chance, Cal Poly - San Luis Obispo  
Ruth Carver, Germantown Academy  
Karen McGaughey, Cal Poly - San Luis Obispo  
Todd Swanson, Hope College  
Nathan Tintle, Dordt University  
Jill VanderStoep, Hope College