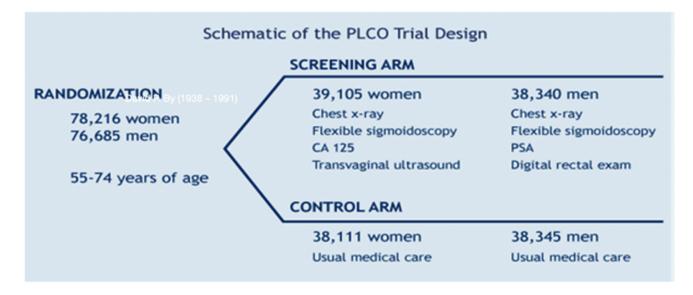


## Distinguished Visitors Program

"To Screen or Not to Screen?
Using data from randomized screening trials
to quantify risks & benefits of cancer screening"

Cancer screening is assumed to be beneficial, in terms of reduced mortality and extended survival. Screen-detected survival, when measured as the time between clinical detection of disease and endpoint (cure or death), can be biased by lead time (time by which the screening test advances the time of clinical diagnosis), length biased sampling (probability of detection depends on length), and overdiagnosis (cases that would never have surfaced in the absence of screening). We quantify these effects in this talk and illustrate their non-trivial impacts on the results from actual randomized cancer screening trials. The concepts apply to general periodic screening programs for other conditions and devices.

This work is performed in collaboration with Dr. Philip C. Prorok, National Cancer Institute



## Professor Karen Kafadar

University of Virginia

Monday, March 14, 2022

Tea at 4:15 pm - Talk at 4:30 pm Hilles 109

Sponsored by Bryn Mawr's Department of Mathematics and Haverford's Department of Mathematics and Statistics