Increase in *Escherichia coli* Inoculum Doses Accelerates CD8\(^+\) T-Cell Trafficking in the Primiparous Bovine Mammary Gland. By Mehrzad et al., page 193. To assess the dynamics of lymphocyte subsets with flow cytometry and proliferation assays during coliform mastitis, different *Escherichia coli* inoculum doses were intramammarily injected into the mammary gland of primiparous cows. High inoculum doses resulted in faster trafficking of lymphocytes and significantly more decline in CD4\(^+\)/CD8\(^+\) ratio in infected quarters at postinfection hours 6 to 24 at which time CD8\(^+\) cells were the predominant lymphocytes in milk. In blood, the increase of CD8\(^+\) cells appeared much faster. This study provides one more reason for the greater immunocompetence of the mammary gland in primiparous dairy cows.