Virus specific cytokine responses 7 weeks post boost with the 2006-2007 Fluzone influenza vaccine alone (-) or formulated with either an oil and water emulsion (SE) or a synthetic TLR4 agonist formulation (GLA-SE). Splenocytes were harvested from 4 mice/vaccine and cultured with 5 HAU of inactivated Wis/05, Bris/07, Wyo/03 or Pan/99 influenza strains. Supernatants were collected 72hrs post culture and analyzed by ELISA. Values represent the average virus specific cytokine responses detected in cultures +SD. One asterisk represents significantly greater responses to Fluzone alone (p<0.05). Two asterisks represents significantly greater responses to Fluzone+SE (p<0.05). Three asterisks represent significantly greater responses to Fluzone +GLA-SE (p<0.05).