Retinol Improves Development of Bovine Oocytes Compromised by Heat Stress During Maturation. By Lawrence et al., page 2449. The presence of retinol during oocyte maturation prior to fertilization protects bovine oocytes from harmful effects of heat stress. These results implicate potential for developing therapeutic strategies for reducing heat stress effects on decreased oocyte quality. However, additional studies are needed to determine the protective mechanisms of retinol.