Early In Vitro Fertilization Improves Development of Bovine Ova Heat Stressed During In Vitro Maturation. By Schrock et al., page 4297. Heat stress shifted developmental responsiveness of ova, indicating an effect to hasten developmentally important processes during maturation. An effect to hasten maturation is not without consequence, as insemination of heat-stressed ova at the same time as nonheat-stressed controls likely results in fertilization of an “aged” ovum. Earlier fertilization was beneficial, but not entirely effective for restoring development of heat-stressed ova to control values. Efforts to gain a better understanding of the basic mechanisms through which heat stress compromises the ovum are a first step towards development of practical solutions to ameliorate heat-induced infertility related to poor ovum quality.