Differential expression of TcR-CD3 zeta as evidence for altered immunoregulation in preeclamptic versus normotensive women.

Dr. Garrett Lam’s Vision Grant project served as his senior thesis for his Maternal-Fetal Medicine fellowship, was presented at the Society for Maternal-Fetal Medicine annual meeting poster session in 2003, and was published in the American Journal of Obstetrics and Gynecology that year, as well. [link to http://www.ncbi.nlm.nih.gov/pubmed/14526327#]

Dr. Lam writes, “Our research was successful in finding a significant difference in the expression of zeta chain proteins (which are an integral component of the T-cell receptor and modulates its function) in normal pregnancy. We suspect there is an immune suppressed state so that the mother can tolerate a fetus that is half alien to her (i.e., the father's DNA make-up). However, in preeclamptic women, we don't see that suppression, thus implying that preeclamptic women may be more immunoreactive, supporting the theory that there's an immunogenic component to preeclampsia.”