Immunodominance: It Just Ain't What it Used to Be

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Antiviral CD8+ T cells respond to only a minute fraction of the potential peptide determinants encoded by viral genomes. Immunogenic determinants can be ordered into highly reproducible hierarchies based on the magnitude of cognate CD8+ T cell responses. Until recently, this phenomenon, termed immunodominance, was largely defined and characterized in model systems utilizing a few strains of inbred mice infected with a handful of viruses with limited coding capacity. In this talk, I will review work that has extended immunodominance studies to viruses of greater complexity and to the real world of human antiviral immunity. Although the complexity of most anti-viral $CD8^+$ T cell responses is greater than previously believed, immunodominance remains an essential feature of anti-viral $CD8^+$ T cell responses, and has even gained in importance as it becomes clearer that there is a perplexing relationship between $CD8^+$ T cell specificity and anti-viral effector function.