T-CELL MATURATION, ACTIVATION, AND DIFFERENTIATION

I. T-Cell maturation and the Thymus

II. Thymic Selection of the T-Cell Repertoire
   A. Positive Selection
   B. Negative Selection
   C. Experimental Evidence for Positive Selection
   D. Experimental Evidence for Negative Selection
   E. Some Central Issues in Thymic Selection
      1. Avidity Hypothesis
      2. Differential-Signaling Hypothesis
      3. Cell Fate
         a. Instructional Model
         b. Stochastic Model

III. Tₜ-Cell Activation
   A. Some Common Themes in Signal Transduction
   B. TCR-Coupled Signaling Pathways
   C. The Co-Stimulatory Signal
   D. Clonal Expansion Versus Clonal Anergy
   E. SuperAntigen-Induced T-Cell Activation

IV. T-Cell Differentiation
   A. Generation of Effector and Memory T Cells
   B. Co-Stimulatory Differences Among Antigen-Presenting Cells

V. Cell Death and T-Cell Populations

VI. Peripheral T Cells
   A. Distribution of T Cells
   B. Ligands Recognized by Cells
   C. Function of Cells