

## NPTEL Video Lecture Topic List - Created by LinuXpert Systems, Chennai

NPTEL Video Course - Chemistry and Biochemistry - Essentials in Immunology

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Co-ordinating Institute - IISc - Bangalore

Sub-Titles - Available / Unavailable | MP3 Audio Lectures - Available / Unavailable

- Lecture 1 - Introduction to the immune system
- Lecture 2 - Cells and Organs of the immune system - Part 1
- Lecture 3 - Cells and Organs of the immune system - Part 2
- Lecture 4 - Cells and Organs of the immune system - Part 3
- Lecture 5 - Innate immunity - Part 1
- Lecture 6 - Innate immunity - Part 2
- Lecture 7 - Development and differentiation of B cells - Part 1
- Lecture 8 - Signaling in B cells
- Lecture 9 - Organization of immunoglobulin genes and Mechanism of immunoglobulin gene rearrangement
- Lecture 10 - Generation of antibody diversity
- Lecture 11 - Immunoglobulin class switching Regulation of Immunoglobulin gene regulation
- Lecture 12 - Structures and functions of Immunoglobulins
- Lecture 13 - The three complement pathways
- Lecture 14 - Hypersensitivity type 1
- Lecture 15 - Hypersensitivity types 2, 3, 4 and Autoimmunity
- Lecture 16 - Autoimmunity Autoimmuno-deficiencies of the B cells
- Lecture 17 - Autoimmuno-deficiencies of the B cells
- Lecture 18 - Cancer
- Lecture 19 - The major histocompatibility complex - Part 1
- Lecture 20 - The major histocompatibility complex - Part 2
- Lecture 21 - The major histocompatibility complex - Part 3
- Lecture 22 - The Major Histocompatibility Complex
- Lecture 23 - The Major Histocompatibility Complex
- Lecture 24 - The Major Histocompatibility Complex
- Lecture 25 - T cell receptors
- Lecture 26 - T cell Activation
- Lecture 27 - T cell Activation / Differentiation
- Lecture 28 - T cell synapse, motility and subsets
- Lecture 29 - T cell survival

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- Lecture 30 - Cytokines - Part 1
- Lecture 31 - Cytokines - Part 2
- Lecture 32 - Autoimmunity
- Lecture 33 - Immunodeficiency
- Lecture 34 - Host response mechanisms during infectious diseases - Part 1
- Lecture 35 - Host response mechanisms during infectious diseases - Part 2
- Lecture 36 - Transplantation immunology
- Lecture 37 - Vaccines
- Lecture 38 - Antigens and Immunogens
- Lecture 39 - Synthetic vaccines
- Lecture 40 - Evolution of the immune system