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This book is neither a comprehensive text nor an exam-review tool. It is an overview of the immune system, designed to give anyone who is learning immunology a feel for how the system fits together.

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## LECTURE 1

An Overview, 1

The immune system is a “team effort,” involving many different players who work together to provide a powerful defense against invaders. Focusing on one player at a time makes it hard to understand the game. Here we view the action from the grandstands to get a wide-angle picture of what the immune system is all about.

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The innate immune system is a “hard-wired” defense that has evolved over millions of years to recognize pathogens that commonly infect humans. It provides a rapid and powerful response against “everyday” invaders.

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B cells and the antibodies they produce are part of the adaptive immune system – a system that protects us against pathogens both common and rare.

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T cells, another weapon of the adaptive immune system, only recognize invaders which are “properly presented” by specialized antigen presenting cells. This feature keeps T cells focused on the types of attackers they can defend against.

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Before they can spring into action, T cells must be activated. This requirement helps insure that only useful weapons will be mobilized.

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