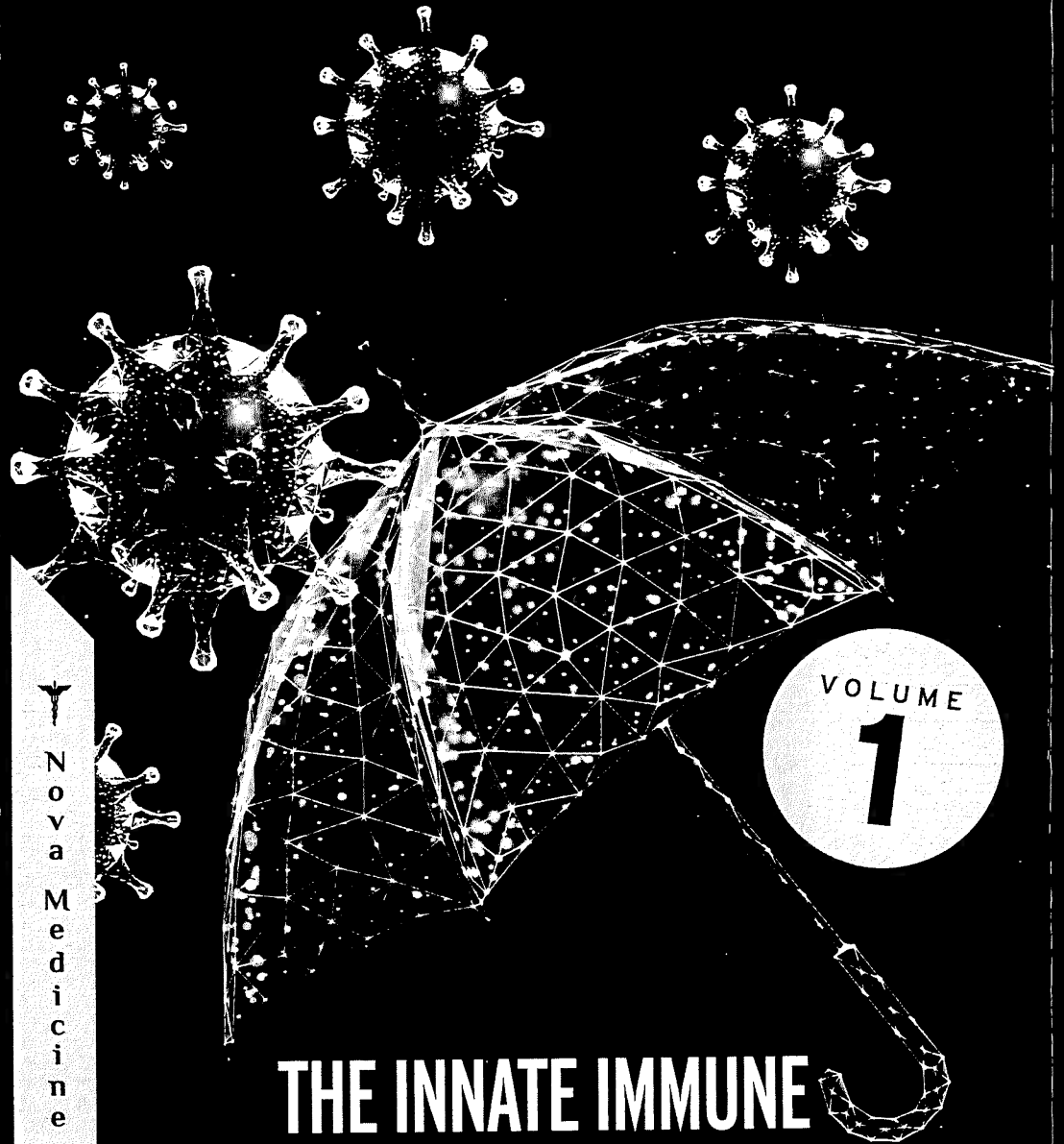


IMMUNOLOGY AND IMMUNE SYSTEM DISORDERS



VOLUME

1


# THE INNATE IMMUNE SYSTEM IN HEALTH AND DISEASE

FROM THE LAB BENCH WORK TO ITS CLINICAL IMPLICATIONS

**JORGE MORALES-MONTOR**

EDITOR

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## Chapter 1

# **Innate Immunity in Chronic HIV Infection: Relationship Between Viral Reservoir and Inflammatory Response and Its Clinical Implications**

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### **Abstract**

The innate immune system plays an essential role in controlling viral infections and represents the first line of defense against pathogens. Human immunodeficiency virus type 1 (HIV) still remains as a global disease burden. Despite an effective combined antiretroviral therapy (cART) to control viral replication and to maintain a chronic infection, it does not eradicate HIV. During HIV replication, RNA genome undergoes reverse transcription and integrates the resulting double-stranded HIV DNA into the cellular genome, constituting HIV proviral DNA, that persists indefinitely in a small reservoir of latently infected

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