MOLECULAR MECHANISMS OF ANTIBIOTIC RESISTANCE



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I. Antibiotic Resistance: The Problem-The Dilemma

Defined

Origin

Historical

II. Categories of Resistance

Natural intrinsic

Mutational

Extrachromosomal

III. Genetic basis of Resistance

Genes and mechanisms

IV. Current Problem Areas

MRSA

VRE

MDR-TB

Gram negatives

V. Factors that Contribute to Emergence and Spread

Health Professionals

Regulations (or lack)

Agriculture

VI. Future Problems and Solutions

VISA > VRSA ???

New diagnostics

New approaches in antimicrobial design