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Glucose Metabolism of *L. pneumophila* under In Vitro Conditions; Metabolism of *L. pneumophila* under Intracellular Conditions; Metabolic Adaptation during the Life Cycle of Intracellular *L. pneumophila*; Metabolic Host Cell Responses Triggered by Intracellular *L. pneumophila*

ConclusionReferences; Chapter 3 Metabolism of Intracellular *Salmonella enterica*; Introduction; *S. enterica*-A Metabolic Generalist; Metabolism of Glucose by *S. enterica*; Connection to the TCA Cycle by Oxidative Decarboxylation of Pyruvate; The Important Role of the TCA Cycle and Anaplerotic Reactions; Metabolism of Intracellular *S. enterica*; The Metabolism of *S. enterica* Compared to Other Important Intracellular and Gastrointestinal Pathogens; *Salmonella* Induce Networks of Tubular Structures-Access to Host-Derived Nutrients?; *S. enterica* Has a Bimodal Lifestyle in Epithelial Cells

Salmonella Metabolism Limits Possibilities for New AntimicrobialsConclusions; References; Chapter 4 The Human Microbiome in Health and Disease; Introduction; Methods for Characterizing the Microbiota; Diet and Geographical Factors; Functional Gastrointestinal Disorders; Manipulation of the Microbiota; Conclusions; Acknowledgments; References; Chapter 5 Mechanisms of Dysbiosis in the Inflamed Gut; Introduction; Dysbiosis during Inflammatory Diseases of the Gastrointestinal Tract; Nutrient Acquisition by Commensal Bacteria in the Normal Gut

Nutritional Mechanisms for Dysbiosis in the Inflamed GutInflammation-Driven Bloom of Enteric Pathogens in the Gut Lumen; How Anaerobic Respiration Enhances Growth in the Inflamed Gut; Conclusions; References; Chapter 6 Strategies for Nutrient Acquisition by *Magnaporthe oryzae* during the Infection of Rice; Introduction; Adhesion and Germination; Appressorium Formation; Penetration; Growth in Planta: The Biotrophic Growth Phase; Growth in Planta: Necrotrophic Growth Phase; Growth in Planta: Sporulation; Life Outside of the Rice Plant; Conclusion; References

Part Two New Inhibitors and Targets of Infectious Diseases
