

OBSAH

FOREWORD.....	9
1. NUCLEIC ACIDS; METHYLATION OF URACIL TO THYMINE	13
2. THE CATABOLISM OF NUCLEOTIDES, THE FORMATION OF URIC ACID, AND GOUT.....	13
3. SICKLE CELL ANEMIA.....	32
4. BIOSYNTHESIS OF HEME, AND PORPHYRIAS.....	37
5. THE DEGRADATION OF HEME AND THE FORMATION OF CO (CARBON MONOXIDE)	53
6. THE BIOSYNTHESIS OF CHOLESTEROL.....	62
7. BIOSYNTHESIS OF BILE ACIDS STARTING FROM CHOLESTEROL; BILE ACIDS REQUIRED FOR EVACUATING CHOLESTEROL VIA THE BILE	68
8. THE UREA CYCLE, TCA CYCLE, GGT CYCLE, AND ROLE OF ARGININE IN THE FORMATION OF NO (NITRIC OXIDE)	81
9. PHENYLKETONURIA: PROTOTYPE OF THE INHERITED METABOLIC DISORDERS	91
10. ACETYLCHOLINE AS NEUROTRANSMITTER: ACETYLCHOLINESTERASE INHIBITORS	100
11. INSULIN, DIABETES MELLITUS AND ANTIDIABETIC DRUGS.....	114

12. CORTISONE, THE MAGIC STEROID HORMONE.....	119
13. AROMATIZATION (PHENOLIZATION)IN THE BIOSYNTHESIS OF THE OESTROGENS.....	125
14. VITAMIN A: ROLE OF RETINAL IN LIGHT PERCEPTION	129
15. VITAMIN D: HORMONE RATHER THAN VITAMIN?.....	137
16. VITAMIN B ₆ AND THE ROLE OF SCHIFF BASES IN TRANSAMINASE (AMINOTRANSFERASE) REACTIONS.....	142
17. VITAMIN B ₁₂ : A COBALT (CO) CONTAINING COENZYME REQUIRED FOR A CARBON-CARBON REARRANGEMENT	150
18. PENICILLIN: STRUCTURALLY AND FUNCTIONALLY RELATED TO THE DIPEPTIDE D-ALA-D-ALA	156
19. RESISTANCE TO VANCOMYCIN: DEPENDING ON ABSENCE OF JUST ONE HYDROGEN BOND.....	164
20. ANTIBIOTICS: PROBLEM OF RESISTANCE AND MECHANISMS OF DEVELOPMENT OF RESISTANCE.....	168
21. ANTITUBERCULOSIS AGENTS	179
22. AN APPARENTLY INNOCUOUS GROUP: THE CARBOXAMIDE GROUP (GUANINE → RIBAVIRIN → FAVIPIRAVIR)	192
23. THE SANGER DNA SEQUENCING REVISITED IN THE HIV NRTIS (NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS).....	200
24. THE NON-NUCLEOSIDE REVERSE TRANSCRIPTASE INHIBITORS (NNRTIS): THE BUTTERFLY CONNECTION.....	210

25. THE -CH(OH)-CH ₂ -CORE IN HIV PROTEASE INHIBITORS	220
26. THE SULFONATE AS COMPARED TO THE SULFATE	227
27. THE PHOSPHONATE AS COMPARED TO THE PHOSPHATE: THE ACYCLIC NUCLEOSIDE PHOSPHONATES.....	232
28. TREATMENT OF HSV INFECTIONS: ACYCLOVIR, THE GOLD STANDARD.....	244
29. THE (E)-5-(2-BROMOVINYL) GROUP IN (E)-5-(2-BROMOVINYL)-2'-DEOXYURIDINE (BVDU).....	248
30. INFLUENZA NEURAMINIDASE INHIBITORS: THE PRINCIPLE OF THE TRANSITION STATE	257
31. HEPATITIS C: DIRECT-ACTING ANTIVIRALS (DAAS).....	262
32. HEPATITIS B VIRUS (HBV): MUCH TO BE LEARNED FROM HIV.....	273
33. HEMORRHAGIC FEVER VIRUSES: EBOLA VIRUS, A NEW THREAT?	280
34. THE BICYCLAM STORY	290
EPILOGUE: MACROMOLECULES AND MUTATIONS.....	305
BIOGRAPHY ERIK DE CLERCQ.....	313