

## CONTENTS

	<i>Page</i>
<i>Contributors</i> .....	vii
<i>Preface</i> .....	ix
 <i>Chapter</i>	
1. PATIENT POWER: A PATIENT-ORIENTED VALUE SYSTEM— Warner V. Slack	3
2. SIGNAL DETECTION IN MEDICAL DIAGNOSIS—John A. Swets	8
3. OBSERVER ERROR, SIGNAL DETECTABILITY AND MEDICAL DECISION-MAKING—Lee B. Lusted	29
4. MEDICAL INFORMATION PROCESSING BY COMPUTER— Benjamin Kleinmuntz	45
5. EMPIRICAL APPROACHES TO CLASSIFICATION—John E. Overall	73
6. STATISTICAL CLASSIFICATION METHODS—Jerome Cornfield	108
7. DIAGNOSIS AND THE BAYESIAN VIEWPOINT—Leonard J. Savage	131
8. $N = 1$ : DIAGNOSIS IN UNIQUE CASES—Ward Edwards	139
9. SYNTAX-DIRECTED CONCEPT ANALYSIS IN THE REASONING FOUNDATIONS OF MEDICAL DIAGNOSIS—Robert S. Ledley	152
10. DIAGNOSIS AND PREDICTION IN METEOROLOGY— Edward S. Epstein	169
11. BAYES' THEOREM FOR INTELLIGENCE ANALYSIS—Jack Zlotnick	180
12. THE TESTING OF CLINICAL JUDGMENT—AN EXPERIMENTAL COMPUTER BASED MEASUREMENT OF SEQUENTIAL PROBLEM- SOLVING ABILITY—G. Octo Barnett, John B. Baillieul and Barbara B. Farquhar	191
13. THE DIAGNOSTIC PROCESS VIEWED AS A DECISION PROBLEM— Allen S. Ginsberg	203
14. SOME APPROACHES TO COMPUTERIZED MEDICAL DIAGNOSIS— T. Allan Pryor and Homer R. Warner	241

- |     |   |     |
|-----|---|-----|
| 15. | WISCONSIN COMPUTER AIDED MEDICAL DIAGNOSIS PROJECT—<br>PROGRESS REPORT—David H. Gustafson, Robert L. Ludke,<br>Paul J. Glackman, Frank C. Larson and John H. Greist | 255 |
| 16. | COMPUTER-AIDED DIFFERENTIAL DIAGNOSIS OF HEMATOLOGIC<br>DISEASES (A BAYESIAN PROBABILITY MODEL) —<br>Ralph L. Engle, Jr., Martin Lipkin and Betty J. Flehinger      | 279 |
| 17. | EXPERIMENTS WITH STATISTICAL AND QUASI-STATISTICAL<br>METHODS IN DIAGNOSIS—Judith M.S. Prewitt  | 294 |
| 18. | DIAGNOSIS OF THE ELECTROCARDIOGRAM—Hubert V.<br>Pipberger, Jerome Cornfield and Rosalie A. Dunn   | 355 |
| 19. | ALGORITHMIC DIAGNOSIS: A REVIEW WITH EMPHASIS ON<br>BAYESIAN METHODS—John A. Jacquez  | 374 |
|     |   | 394 |

*Index*