Part 1. The Databases

1. GenBank: The Nucleotide Sequence Database
   Ilene Mizrachi
2. PubMed: The Bibliographic Database
   Kathi Canese, Jennifer Jentsch, and Carol Myers
3. Macromolecular Structure Databases
   Eric Sayers and Steve Bryant
4. The Taxonomy Project
   Scott Federhen
5. The Single Nucleotide Polymorphism Database (dbSNP) of Nucleotide Sequence Variation
   Adrienne Kitts and Stephen Sherry
6. The Gene Expression Omnibus (GEO): A Gene Expression and Hybridization Repository
   Ron Edgar and Alex Lash
7. Online Mendelian Inheritance in Man (OMIM): A Directory of Human Genes and Genetic Disorders
   Donna Maglott, Joanna S. Amberger, and Ada Hamosh
8. The NCBI BookShelf: Searchable Biomedical Books
   Bart Trawick, Jeff Beck, and Jo McEntyre
9. PubMed Central (PMC): An Archive for Literature from Life Sciences Journals
   Jeff Beck and Ed Sequeira
10. The SKY/CGH Database for Spectral Karyotyping and Comparative Genomic Hybridization Data
    Turid Knutsen, Vasuki Gobu, Rodger Knaus, Thomas Ried, and Karl Sirotkin

Part 2. Data Flow and Processing

11. Sequin: A Sequence Submission and Editing Tool
    Jonathan Kans
12. The Processing of Biological Sequence Data at NCBI
    Karl Sirotkin, Tatiana Tatusova, Eugene Yaschenko, and Mark Cavanaugh
13. Genome Assembly and Annotation Process
    Paul Kitts

Part 3. Querying and Linking the Data

14. The Entrez Search and Retrieval System
    Jim Ostell
15. The BLAST Sequence Analysis Tool
    Tom Madden
16. LinkOut: Linking to External Resources from Entrez Databases
    Kathy Kwan

17. The Reference Sequence (RefSeq) Project
Kim D. Pruitt, Tatiana Tatusova, and James M. Ostell

18. LocusLink: A Directory of Genes
*Donna Maglot*t

19. Using the Map Viewer to Explore Genomes
Susan M. Dombrowski and Donna Maglott

20. UniGene: A Unified View of the Transcriptome
Joan U. Pontius, Lukas Wagner, and Gregory D. Schuler

21. The Clusters of Orthologous Groups (COGs) Database: Phylogenetic Classification of Proteins from Complete Genomes
Eugene V. Koonin

Part 4. User Support

22. User Services: Helping You Find Your Way
David Wheeler and Babara Rapp

23. Exercises: Using Map Viewer
David Wheeler, Kim Pruitt, Donna Maglott, Susan Dombrowski, and Andrei Gabrelian

Glossary