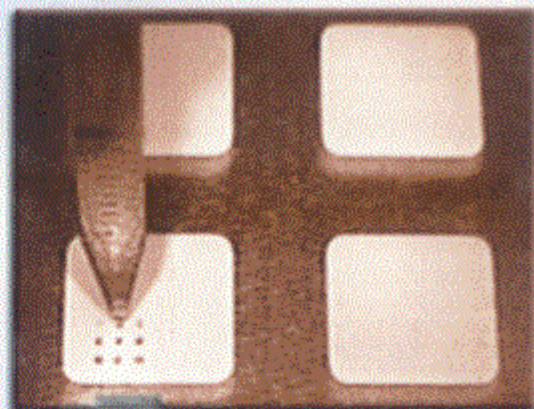


MICROARRAY INNOVATIONS

TECHNOLOGY AND EXPERIMENTATION

Gary Hardiman



In recent years, high-density DNA microarrays have revolutionized biomedical research and drug discovery efforts by the pharmaceutical industry. Their efficacy in identifying and prioritizing drug targets based on their ability to confirm a large number of gene expression measurements in parallel has become a key element in drug discovery. **Microarray Innovations: Technology and Experimentation** examines the incredibly powerful nature of array technology and the ways in which it can be applied to understanding the genomic basis of disease.

This volume explores recent innovations in the microarray field and tracks the evolution of the major platforms currently used. The international panel of contributors presents a survey of the past five years' research and advancements in microarray methods and applications and their usage in drug discovery and biomedical research.

Features

- Provides a comprehensive overview of microarray platforms
- Reviews recent advances and innovations in array technologies
- Examines assay automation strategies, electronic arrays and methylation arrays
- Demonstrates new molecular diagnostic testing using microarrays

As microarrays have evolved steadily over time from archetypical in-house complementary DNA (cDNA) arrays to robust commercial oligonucleotide platforms, there has been a migration to higher density biochips with increasing content and better analytical methodologies. This compendium summarizes the vast advances that have been made in this technology, highlighting the supreme advantages of microarray-based approaches in the field of biomedical research.



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