

Collaborative Genomics Projects: A Comprehensive Guide

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How to manage large-scale collaborative genomics research projects

KEY FEATURES

- Establishes a framework for managing large-scale genomic research projects involving multiple collaborators
- Describes lessons learned through TCGA to prepare for potential roadblocks
- Evaluates policy considerations that are needed to avoid pitfalls
- Recommends strategies to make project management more efficient

Collaborative Genomics Projects: A Comprehensive Guide contains operational procedures, policy considerations, and the many lessons learned by The Cancer Genome Atlas (TCGA) Project. This book guides the reader through methods in patient sample acquisition, establishment of data generation and analysis pipelines, data storage and dissemination, quality control, auditing, and reporting. *Collaborative Genomics Projects: A Comprehensive Guide* is essential for those looking to set-up or collaborate within a large-scale genomics research project. All authors are contributors to TCGA Program, a NIH-funded effort to generate a comprehensive catalog of genomic alterations in more than 35 cancer types.

As the cost of genomic sequencing is decreasing, more and more researchers are leveraging genomic data to inform the biology of disease. The amount of genomic data generated is growing exponentially, and protocols need to be established for the long-term storage, dissemination, and regulation of these data for research. The authors of *Collaborative Genomics Projects: A Comprehensive Guide* create a complete handbook to managing research projects involving genomic data, as learned through the evolution of TCGA program. TCGA project was primarily carried out in the United States, but the impact and lessons learned can be applied to an international audience.



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