



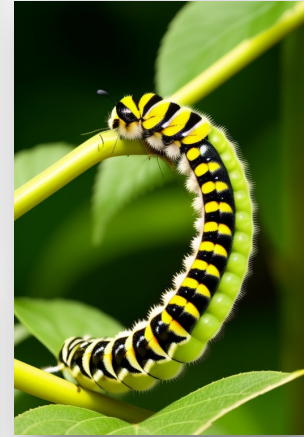
***Bioinformatics Tools
in
Digital Health and Remote
Monitoring***



US Connect 2024

*Presented by
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Algorics Inc.*





Agenda



Challenges



Effective integration,
analysis, and
interpretation



Discovery of patterns
and biomarkers



Personalized
interventions enabled
by bioinformatics



Excellence in the
approach



Conclusion

Challenges in digital health and remote monitoring



Overcoming technical challenges



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1

Interoperability issues

Standardizing protocols for interoperability is crucial to ensure seamless data exchange among diverse devices and systems

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2

Connectivity needs

Implementing robust and adaptable connectivity solutions is essential for reliable data transmission in remote settings

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3

Data security concerns

Rigorous encryption measures and compliance with data protection regulations are imperative to mitigate data security risks.

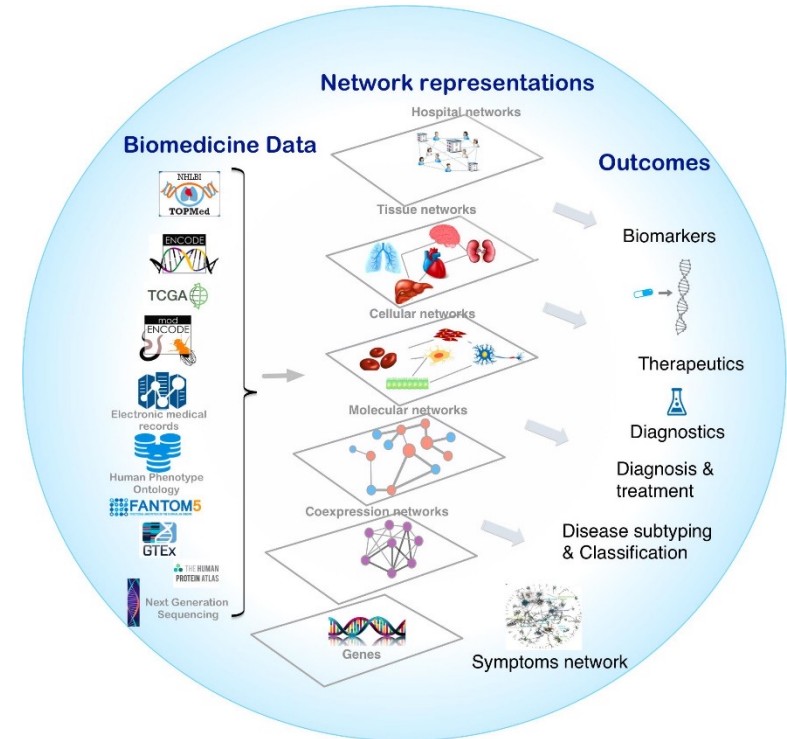
Effective integration, analysis, and interpretation

BioVU Platform

Integrating electronic health records with genetic data for comprehensive analysis of patients' health histories and genetic profiles.

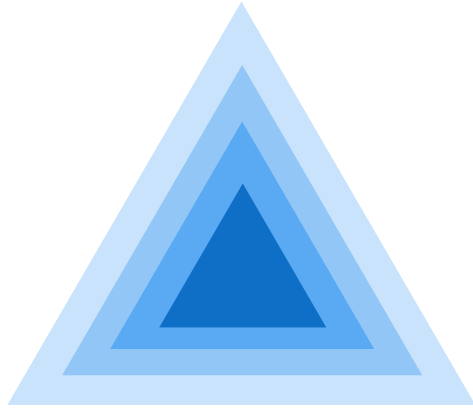
PLINK

Facilitating the analysis of genetic variations and relevant markers associated with cardiovascular health.



Source: <https://www.frontiersin.org/articles/10.3389/fgene.2019.00294/full>

Discovery of patterns and biomarkers



Advanced Algorithms



Machine learning



Pathway analysis



Personalized interventions enabled by bioinformatics



Identifying genetic variants

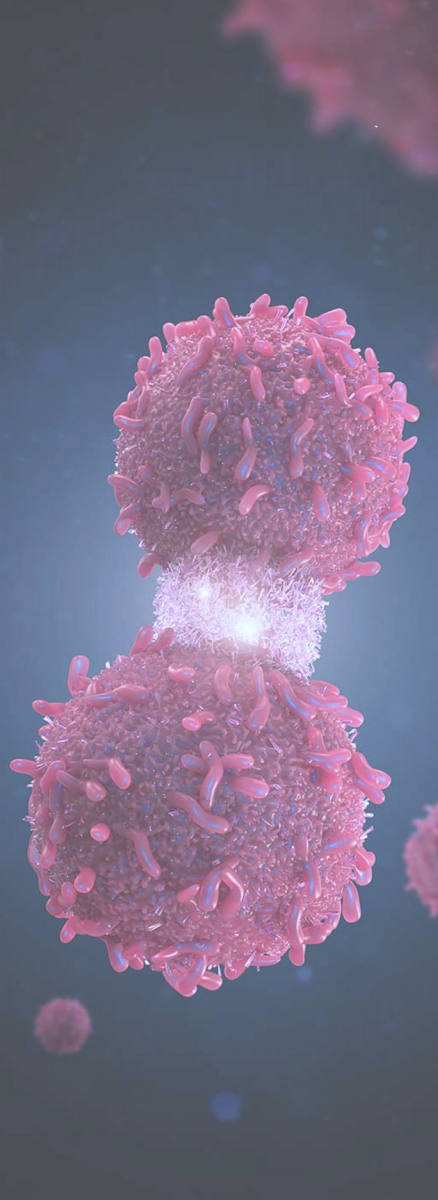
Genome-wide association studies analyze genetic variations and associated disease susceptibility for early intervention.

Understanding disease pathways

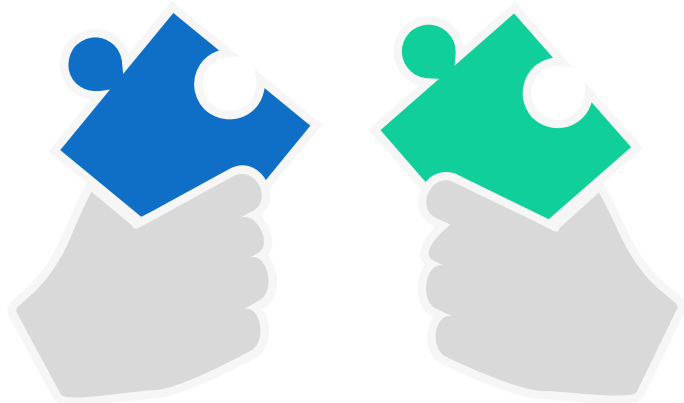
Analyzing omics data reveals key players in disease progression, leading to targeted therapies.

Predicting drug responses

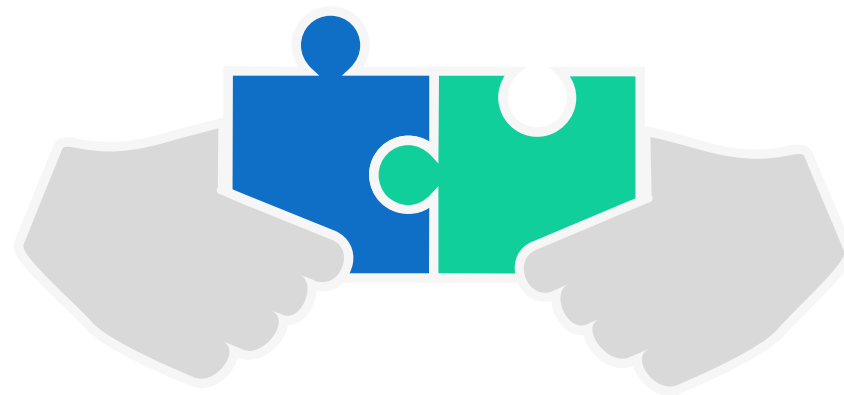
Pharmacogenomics analyzes genetic variations influencing drug metabolism to tailor prescriptions.



What lies ahead...



**Collaborative efforts and
future potential**



**Technology
developers**

Addressing
technical
challenges

**Healthcare
providers**

Ensuring
regulatory
compliance

**Regulatory
bodies**

Fostering ethical
decision-making

**Bioinformatics
specialists**

Optimizing data
interpretation

A large graphic on the left side of the slide. It features a blue-toned image of a globe with a network of glowing yellow nodes and connecting lines, suggesting a global network or data flow. To the left of the globe, there is a vertical strip of blurred code or data, also in blue tones.

Thank you

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References and acknowledgments



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