

Exploring Genetic Associations with GWAS and PRS

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Welcome to the GWAS and PRS Shiny App!

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Introduction

- Dive into the world of genetics with this interactive tool!
- Developed by experts at the University of Florida.
- Explore Genome-Wide Association Studies (GWAS) and Polygenic Risk Scores (PRS).

Traits Section

- **Download Traits:** Access genetic traits from the EBI database.
- **Search Feature:** Find specific traits using keywords.
- Get started by fetching valuable genetic trait data.

Search a Trait

- **Submit a Trait:** Enter a trait you're interested in.
- **Search Button:** Retrieve associations related to the submitted trait.
- Visualize associations with Volcano and Manhattan plots.

Search an ID

- **Insert an ID:** Enter an ID for specific trait associations.
- **Search Button:** Access detailed information and visualizations.
- Explore the fascinating world of genetic variants and associations.

Calculate PRS

- **P-Value Threshold:** Set a significance threshold for analysis.
- **Genotype Data:** Input your genotype data for personalized insights.
- Compute Polygenic Risk Scores and understand their implications.

PRS Effects

- **Positive Effects:** Identify variants associated with increased risk.
- **Negative Effects:** Explore variants linked to reduced risk.
- Gain a comprehensive understanding of genetic influences.

Viewing Your Data

- **Genotype Data:** Visualize effects of specific variants.
- **Calculated PRS:** Understand your genetic risk profile.
- Analyze and interpret your personal genetic information.

Future Possibilities

- **Access Other Databases:** Extend the app's scope to other fields.
- **Potential for Anesthesia:** Investigate GWAS on anesthesia.
- **Design or Perform GWAS:** Explore anesthesia genetics collaboratively.

Thank You!

- Explore, analyze, and unlock genetic insights.
- Reach out for assistance and questions.
- Start your genetic exploration journey today!

More: Exploring Genetics in Anesthesia

- **Access Anesthesia Databases:** Uncover genetics in the anesthesia field.
- **Potential GWAS:** Search for existing anesthesia-related GWAS.
- **App Expansion:** Develop a similar app tailored to anesthesia genetics.
- **New Research:** Perform a GWAS on anesthesia genetics if needed.

Questions?

- Feel free to ask questions or seek help.
- We're here to assist you on your genetic journey!

Happy Exploring!

- Explore genetic associations and risks.
- Empower your research with GWAS and PRS insights.
- Enjoy your journey into the world of genetics!