Morgana

A data visualization tool to inspect complex datasets

Overview

Researchers working in clinical studies collect a lot of patient samples, laboratory and clinical data, and these are often collected independently of each other.

How can we aim at curbing life-threatening disease when the lab data is not even remotely connected to clinical outcomes and specimen data? There is a critical need to be able to examine this data in a myriad of scales, from a birds eye view, through to specific subgroups of patients.

This project will use actual data from one of the World's leading cohorts on paediatric food allergy to develop a flexible, intuitive, visual solution to research data management.



Dr. David Martino, Dr. Jennifer Koplin and Simon Cropper are researchers working at the Murdoch Childrens Research Institute on the elimination of life threatening food allergies (e.g. peanut).

Development of new and innovative tools for collecting, managing, analyzing and visualizing data is seen as integral in the achieving this goal.

Data available

A CSV file containing lab, clinical and genetic data on 5300 participants is provided along with a description of what each column represents.

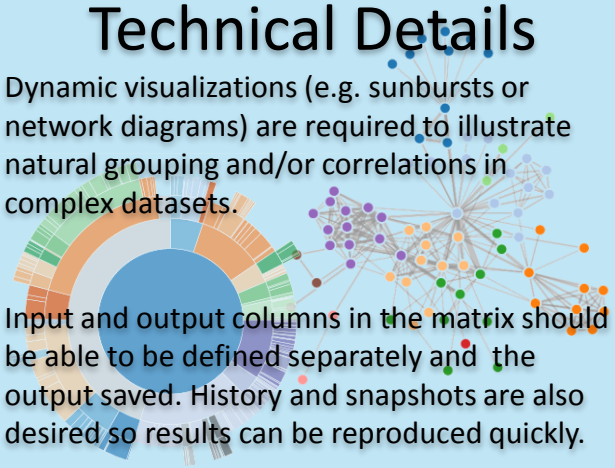
This information has been de-identified and sufficiently adjusted to protect patient privacy but not to obscure known trends.

The text file is encoded in UTF-8 with Window's line endings (CRLF).

All project data is available from GitHub (https://github.com/GFA-RDIP/Morgana).

Technical Details

Dynamic visualizations (e.g. sunbursts or network diagrams) are required to illustrate natural grouping and/or correlations in complex datasets.



Input and output columns in the matrix should be able to be defined separately and the output saved. History and snapshots are also desired so results can be reproduced quickly.

Sign up Sheet

Front end:
Back end:
UX:
Design:
Project management: