

Project Definition



```
graph TD; A[Project Definition] --> B[Data Collection]; B --> C[Data Analysis]; C --> D[Statistics]; D --> E[Modelling]; E --> F[Deployment]; F --> G[Model Monitoring];
```

The diagram illustrates a sequential machine learning workflow. It consists of seven steps, each in a colored box with a downward arrow pointing to the next step. The steps are: Project Definition (orange), Data Collection (grey), Data Analysis (yellow), Statistics (orange), Modelling (grey), Deployment (yellow), and Model Monitoring (blue). The arrows are colored to match the boxes they connect: orange, grey, yellow, green, orange, grey, and yellow respectively.

Data Collection

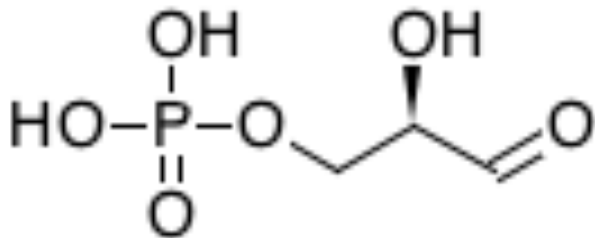
Data Analysis

Statistics

Modelling

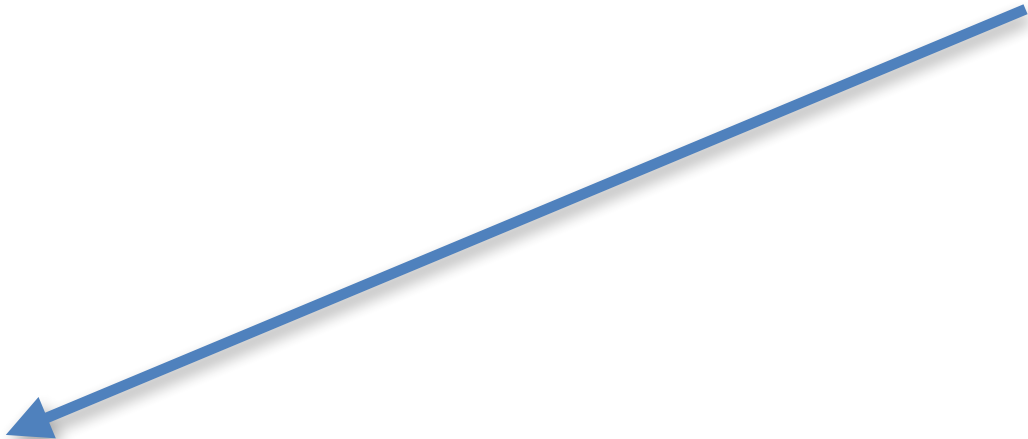
Deployment

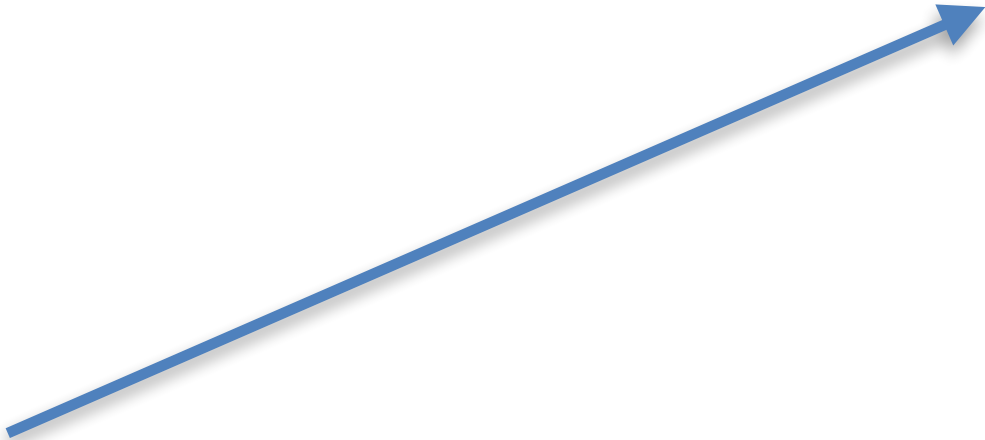
Model Monitoring



C00118



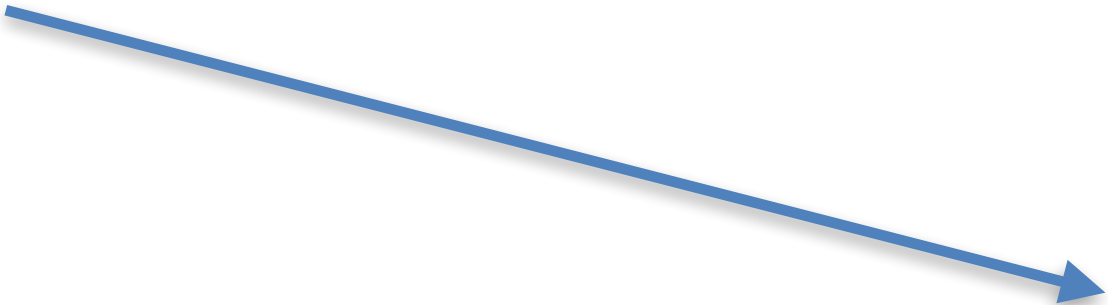


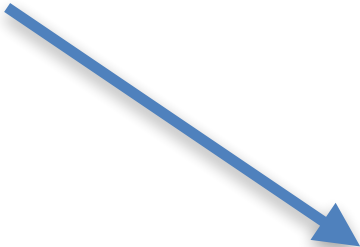


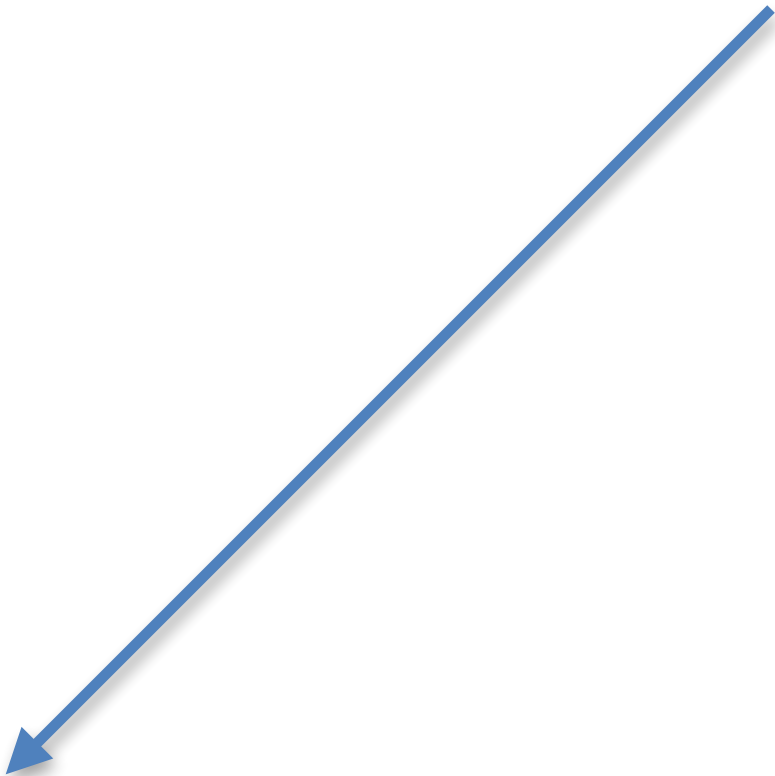












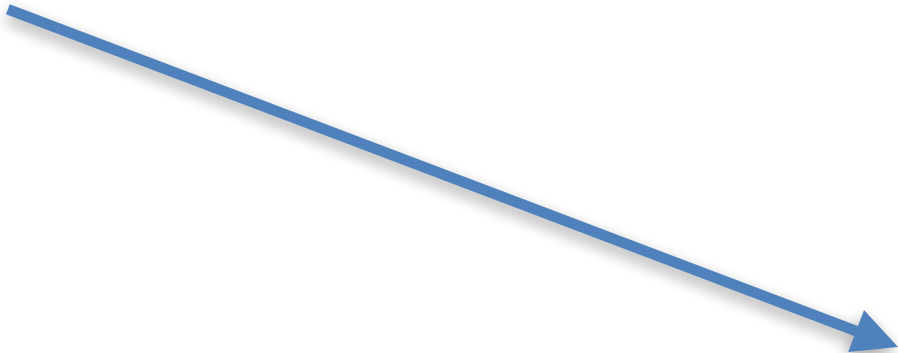




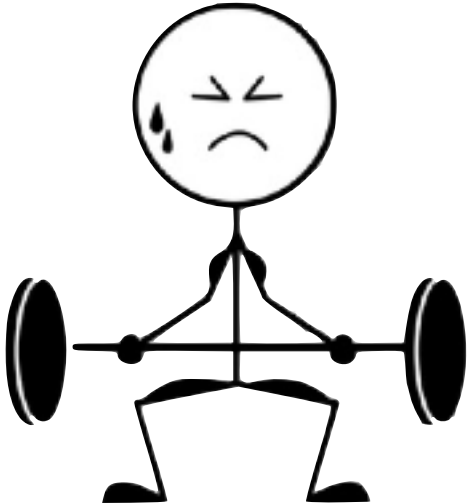




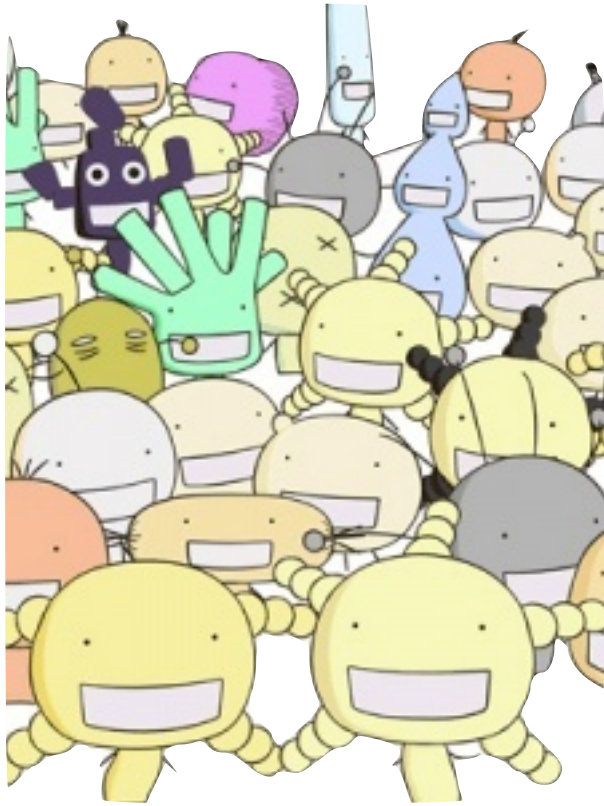




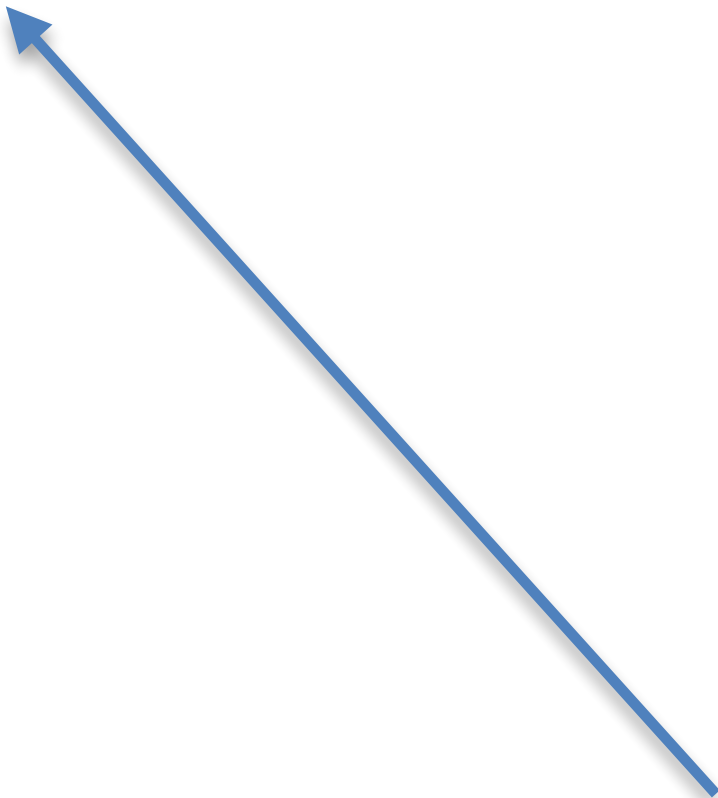




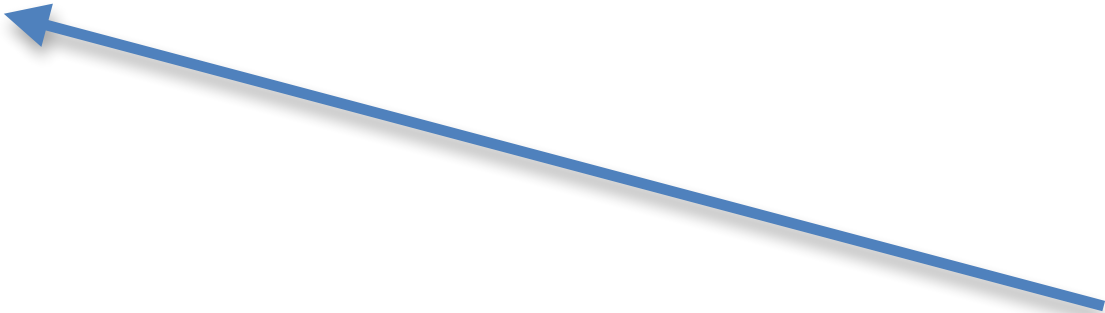




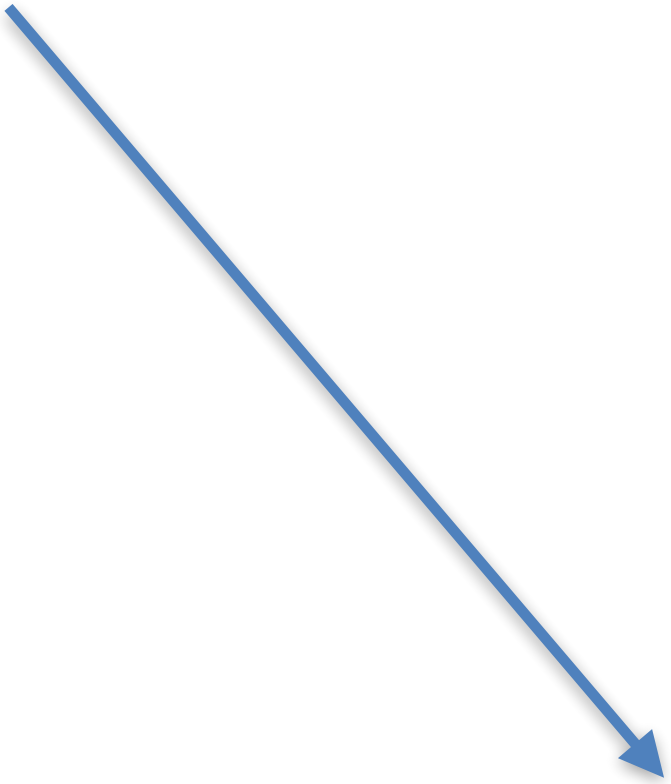








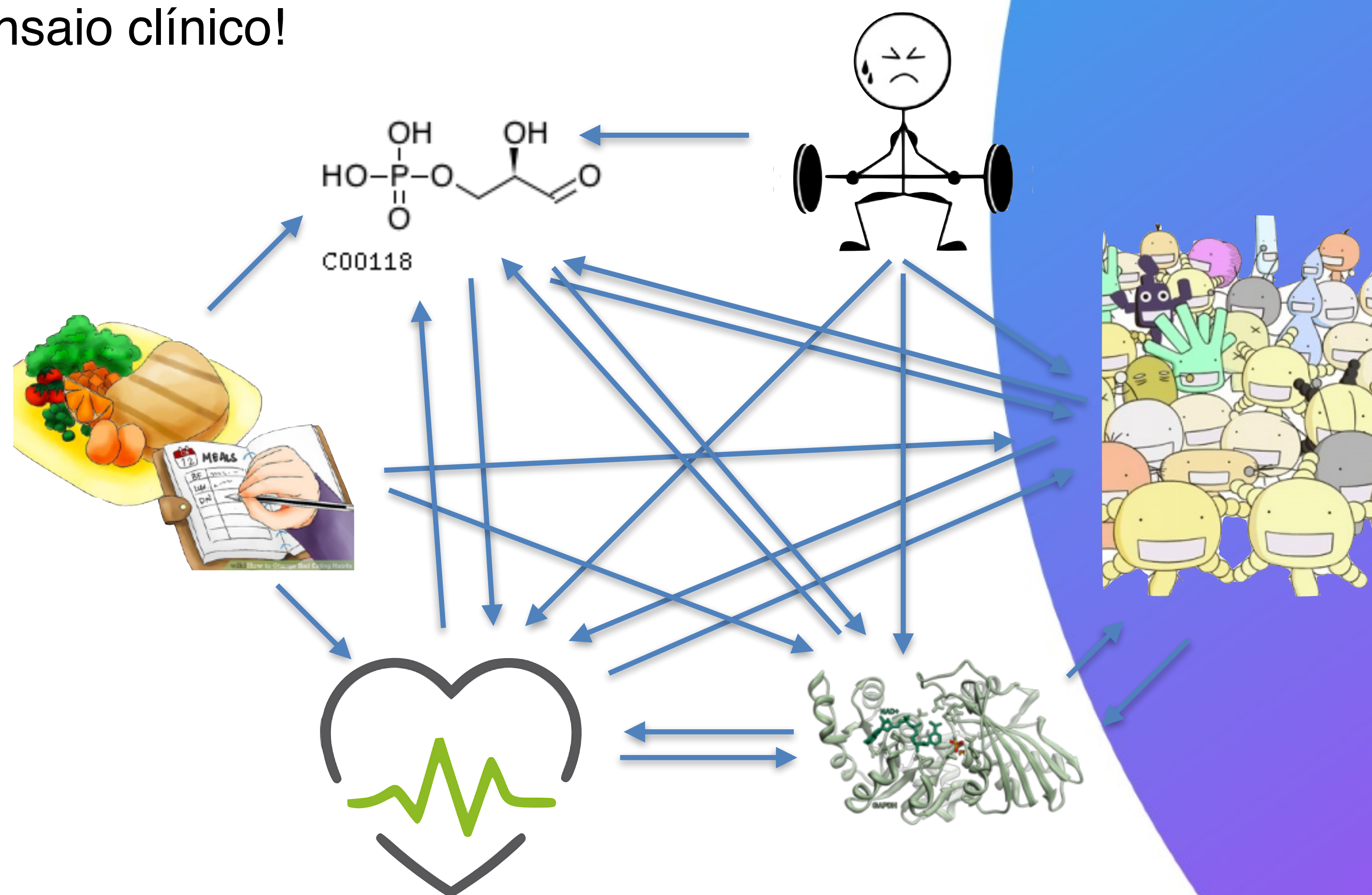




DeSaFiOS

- Integração dos dados
- Experimentos conclusivos, com validação
- Análise de performance.
- Ensaio clínico!

- Integração dos dados
- Experimentos conclusivos, com validação
- Análise de performance.
- Ensaio clínico!



Project Definition

Data Collection

Data Analysis

Statistics

Modelling

Deployment

Model Monitoring



Conclusão



- Nosso estado de saúde é multifatorial (menos para características mendelianas)
- Microbioma tem muitos confundidores
 - Quando procura qualquer coisa, alguma coisa é resultado.
- Dificuldade de reproduzir os resultados
 - Viéses de amostragem
- Conflito causa/consequência.
- Talvez não seja a presença da bactéria em si, mas como ela reage ao seu ambiente.
 - Linearizar a complexidade das iterações metabólicas é um erro.
 - Não reconhecer as limitações computacionais, experimentais e biológicas.