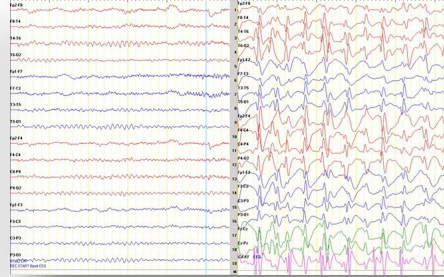
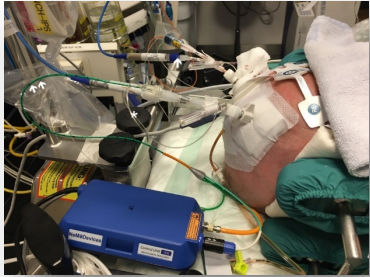


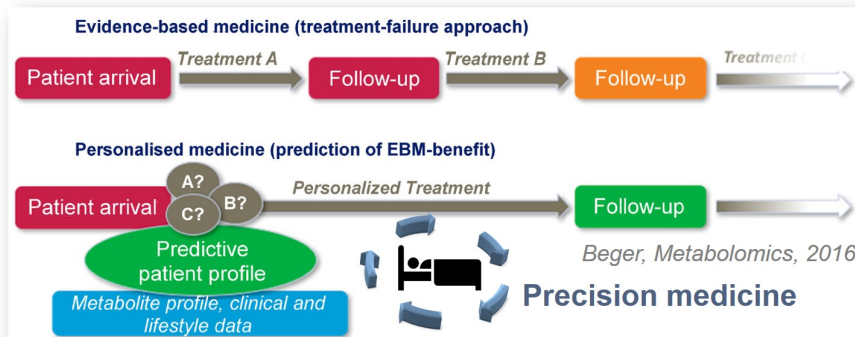


## The problem:

- Data from multiple biosensors & devices, with a time-resolution of up to 1000 Hz cannot be integrated anymore for decision making in intensive care & emergency medicine.

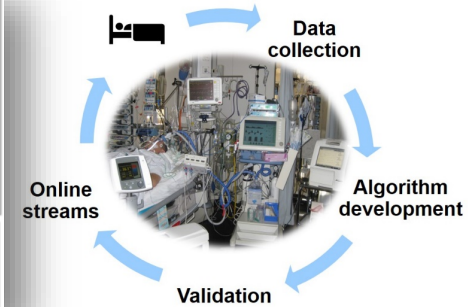
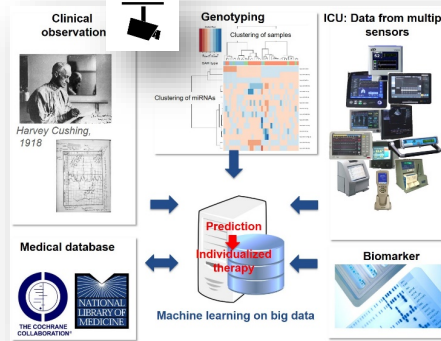


- The conventional therapy approach of «**evidence-based medicine**» (EBM) is based on investigation of the largest possible patient population and manages the treatment according to a so-called «**treatment failure approach**».
- By contrast, **personalized or precision medicine** enables the potential success of an EBM-based therapy to be predicted for an individual patient, i.e. it enables **preventive actions**. Precision medicine embraces the gathering of numerous data throughout the therapy.



## The solution:

- In 2014 the project ICU-Cockpit, an IT platform for multimodal monitoring and therapy support, was established at the Neurocritical Care Unit, University Hospital Zurich.



- Data are collected from video, genotyping, multiple biosensors and integrated with lab values as well as imaging data.
- Algorithms are developed for the prediction of critical complications as epileptic seizures, sepsis or renal failure in ICU patients.

## Collaborators:



## Supported by:

