Current Challenges in Biomed-IT
Personalized/Individualized Medicine

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Personalized and individualized medicine is the tailoring of medical diagnoses, treatment, etc. to individual patients characteristics based on their predicted response or risk of disease. One branch deals with the understanding of how patients are susceptible to certain diseases based on their the molecular and genetic profile.

Currently there is a lot of hype centered on personalized and precision medicine. Although large scale next-generation sequencing datasets exists, based on cancer genome sequencing alone, clinicians have a limited choice of targeted drugs available. Our research aims to utilize, not only genomics, but also cell-based functional assays to provide comprehensive drug sensitivity and resistance profiles on patient-derived cells. These individualized response profiles, combined with genomic and other –omic profiling could be used by clinicians to provide for molecular precision in treatment.

Radiation therapy for cancer treatment is traditionally delivered in equal fractions during a certain number of days. However, patient’s characteristics change during the treatment course, which means that the initially planned treatment may no longer be optimal after a number of fractions. Functional and daily anatomical imaging can be used to tailor the treatment for the individual patient.

Register by sending an email to biomedit@it.uu.se

Deadline to get a free sandwich: November 6

Sandwiches from 12:00

Presentations from 12:10