



Proceedings

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Next Generation Biobanking - From Biorepository To Data Integration Center

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Introduction/ Background

Biobanks and their operators are gaining popularity. However, they face a range of growing challenges. Many of these biobanks used to be smaller and mid-sized collections of data and samples, but are now being developed into centralized networks within clinics and consortia. These large biobanks require the integration of as many sources of information as possible, including imaging data in addition to any relevant structured data. This is especially the case in the field of virtual microscopy. Data collection is increasingly being orchestrated by workflow based systems and must eventually be incorporated entirely into rule based IT-processes.

Aims

In order to achieve this goal, the Charité University Medicine Berlin, VMscope GmbH, and Kairos GmbH formed a consortium in the framework of the joint project, "Biobanking 3.0", which is funded by the German Federal Ministry for Education and Research (BMBF). Furthermore, after this successful project, a second KMU funded project called POST (Patient-centric Open Multi Center Study Tool) will begin in the autumn of 2015 to expand the data integration to pathology information systems in a standardized manner.

Methods

One of the project goals is to use an IT-platform with an integrated workflow-engine to orchestrate all necessary processes and document all findings. Defined SOPs during sample extraction and information acquisition can be executed, and all result data can be made available to local research groups as well as project partners.

Results

Thus, the platform pursues the research approach of personalized medicine, which requires exact controlling of therapy cycles in a logical and chronological order.