Solutions for Data management and Data Fusion in Correlative Microscopy

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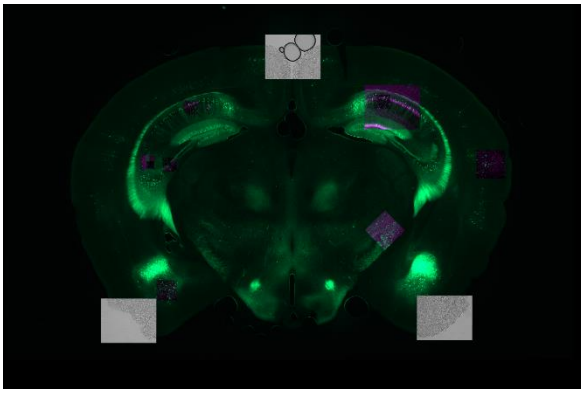
Data management in correlative applications is becoming more important as complexity of sample investigation increases. More and more users move between different systems to investigate their samples to the full extend and to leverage the full potential of analytical possibilities. As a result, they are facing a data overload dilemma trying to combine often heterogenous data and to visualize, analyze and document the variety of results. Keeping the data connected and accessible during a workflow becomes critical, even more so if several users are involved.

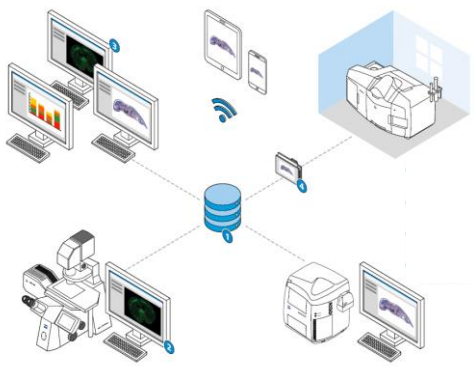
In this situation integrated solutions for data management and data fusion are required which help microscope users in facilities in their daily workflows towards a truly connected lab.

The ZEN Connect module integrated in the ZEN microscope control software allows a seamless fusion of data from different instruments not only in 2D but also in 3D. The combined data can then be used for guided navigation and comprehensive documentation of the results. At the same time, ZEN Connect is keeping a track of the data and presents it in well structured projects so that users can easily reconstruct from which instrument certain data originates and when it was acquired.

Storing and retrieving the data from a central repository can be achieved using the ZEN Data Storage image database. It allows a central server-based access and sharing of images and is directly integrated into ZEN. The ZEN Data Storage database is complemented with the ZEN Data Explorer, a web browser and app-based solution to view and annotate data remotely and away from your microscopes.



ZEN Connect: Fused dataset spanning multiple microscope modalities



ZEN Data Storage: Lab setup with multiple acquisition and analysis stations connected by a central data repository