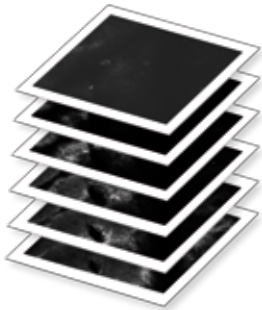


ConfoScan

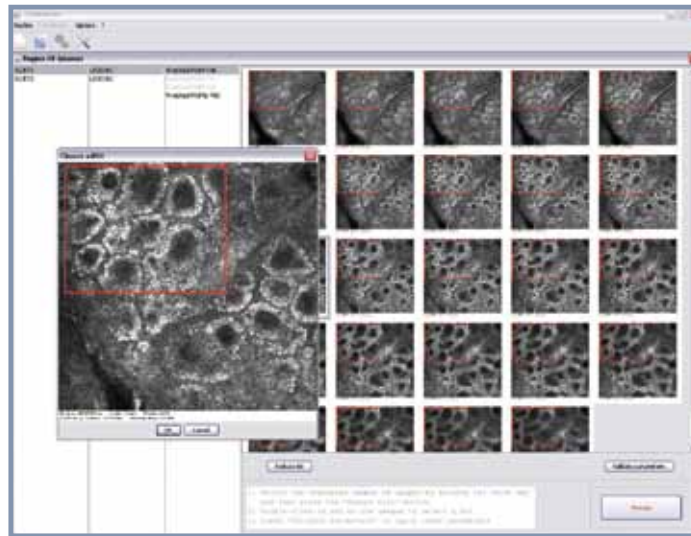
Quantification and Analysis of Confocal Images



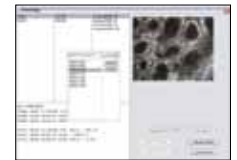
The skin structures and tissue changes depicted in the confocal images can be analyzed, quantified, and further processed with **ConfoScan software** (OrionTechnoSoft). This software program especially designed for VivaScope products is well-suited for the researching cosmetics industry – and is continuously optimized to meet the specific needs of these types of organizations. The capabilities of the qualification software developed by Jean Christophe Pittet from ORION Concept (Tours, France) includes measuring the thickness of the stratum corneum, quantifying melanin, as well as recording size, shape, and number of different skin cells and dermal papillae. Quantitative and qualitative image processing makes it possible to analyze color nuances and shapes precisely.



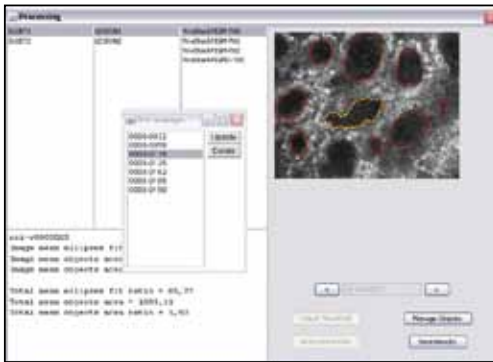
After a VivaStack (here) or VivaBlock image acquisition has been generated, the confocal images can be exported to the software for further image processing.



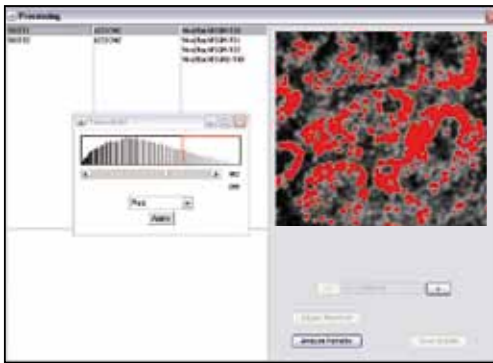
In the main window, the selection of images (continuous or non-continuous) of a VivaStack or VivaBlock is presented. In the pop-up window, the region of interest can be selected and is applied to the whole selection.



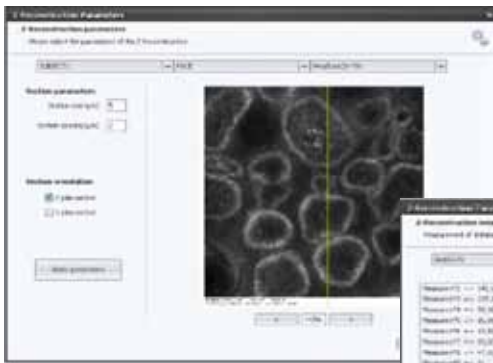
Explanation see back of this page



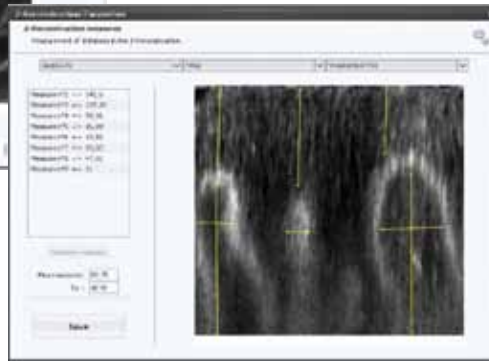
Automatic papillae detection for the selected region of interest with either the elliptic model (red lines) or a finer contour determination (yellow line). The geometrical properties of the contours are registered.



Example of analysis: pigmentation detection related to the basal cells on the entire selected image corresponding to the basal layer.



Vertical image reconstruction: In one of the images, the plane for the vertical reconstruction is selected (yellow line = resection of the whole VivaStack in z direction).



On the reconstructed image, it is possible to measure and quantify different properties (e.g. dimensions of papillae, thickness of layers, distances).

Enhanced reconstructed vertical image in real size (500 x 150 µm, from the stratum corneum to the papillary dermis).

