

ISSN : IJCMI Volume 1 • Issue 2 • 1000115

January, 2014

http://dx.doi.org/10.4172/ijcmi.1000115

Clinical Image

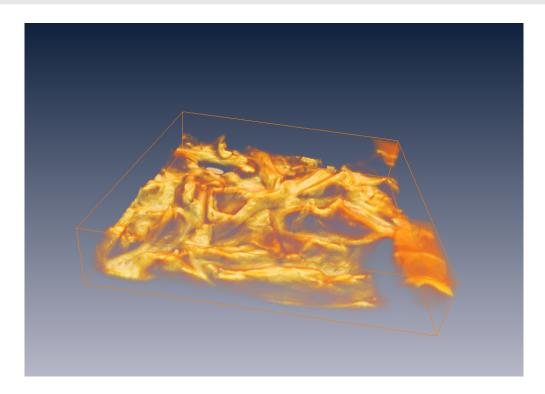
Title: Microscopic Examination of the Skin Structure

D. Werthem, Covington N. Petford, T. Murray & A.P.M. Antunes

¹Institute for Creative Leather Technologies, University of Northampton, Northampton UK

²InVision, University of Northampton, Northampton U.K

³Faculty of Science, Engineering and Computing, Kingston University, Kingston upon Thames U.K,



Microscopic examination of the skin structure may help in identifying possible lesions as well as studying the integrity of the tissue; two dimensional examination of the structure may not be able to easily identify the complexity of the collagen bundle network in skin sections. In this area our research involves examination of skin sections in three dimensions. Thin dermal sections were stained with Haematoxylin and Eosin (H & E) and mounted on glass slides with a cover slip. The sections were imaged using a Leica TCS SP2 confocal microscope (Leica Microsystems GmbH, Germany). We have developed software techniques for 3D visualisation of the confocal data allowing display on a computer monitor or an observation cube. The image shows an example of visualisation from confocal microscope data of collagen bundles in a skin section (microscope image width 750 microns).