

Press Release



Leica Image Analysis System Crucial to Research into vCJD

25 July 2001..... The Leica Q500 IW Imaging Workstation from Leica Microsystems Imaging Solutions Ltd., Cambridge, UK is proving crucial to the research carried out by the CJD Surveillance Unit (CJDSU) in Edinburgh, UK, in quantifying the pathology of vCJD and related disorders.

Creutzfeldt-Jakob disease (CJD) surveillance was re-instituted in the United Kingdom (UK) in 1990 as a consequence of the bovine spongiform encephalopathy (BSE) epidemic in UK cattle. Since the UK population was likely to have been exposed to the BSE agent through the dietary route in the 1980s, the surveillance project was established to study all forms of human prion diseases to detect any changes that might occur as a consequence of this exposure. In 1996, the CJDSU identified a new human prion disease, referred to as variant CJD (vCJD).

To date, 88 cases of vCJD have been reported in the UK, one in Ireland and three in France. This has made understanding the pathology of vCJD an urgent research priority. Neuropathological diagnosis is essential for confirmation of all cases of vCJD, however, there is enormous variability in the severity and distribution of neuropathological features in different prion diseases, between cases of the same disease, and even within an individual case. The CJDSU has addressed this by employing image analysis techniques to quantify the pathology of vCJD and related disorders, and a Leica Q500IW Imaging Workstation is proving crucial for this research.

The image analysis system is being used to capture several overlapping images in affected brain regions at high magnification and then to patch these images together to form a composite view of the region. This will lead to the assessment of diseased brain tissue over much larger regions and ultimately to a better understanding of the neuropathological profile of these disorders.

Press Release

Researcher Dr Bill Nailon, said: "We have now had our Leica Q500 IW image processing and analysis system for about 18 months, and have found it invaluable for our work. It has been particularly useful for teaching image analysis techniques to the many staff and students collaborating with the CJDSU. The user-friendly approach to image capture and analysis offered by the Leica Q500 IW and the speed with which individuals from a range of backgrounds feel comfortable using the system were the key factors in choosing this package. The support that we get from Leica for all our Leica equipment is very good."

Corporate Profile

Leica Microsystems Imaging Solutions Ltd., based in Cambridge, UK, is part of the Leica Microsystems Group. Leica Microsystems Imaging Solutions develops image processing and analysis software and workstations for quantitative microscopy, addressing the requirements of numerous life science, cytogenetic and material science applications. Leica Microsystems Imaging Solutions Ltd. range of imaging workstations are designed in the Leica tradition with over 35 years of experience in image processing and analysis. A world-wide network of Leica offices and representatives provide an exceptional level of service to both new and existing customers.

For further information on Leica Microsystems Imaging Solutions please contact:

Beverley Cruxon-Lewis

Tel: +44 (0)1223 411101

Email: imaging.support@leica-microsystems.com

Fax: +44 (0)1223 412526

<http://www.leica-microsystems.com>