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***GeneTools and GeneDirectory used at Major Animal Research Centre  
To Detect Proteins Associated with a Serious Equine Disease***

**Cambridge, UK:** Syngene, a world-leading manufacturer of image analysis solutions, is delighted to announce its GeneTools and GeneDirectory automated DNA and protein gel analysis software packages are being used in a world-leading equine research centre at the University of Lincoln in the UK. The software is being used to accurately quantify and identify protein trends in a debilitating equine disease.

Researchers in the Department of Biological Sciences at the University of Lincoln are using GeneTools to quantify proteins derived from muscle and blood of horses suffering from Equine Exertional Rhabdomyolysis (EER) run on 1D SDS PAGE gels reverse stained with copper dye. The scientists are then using GeneDirectory to determine which of the thousands of proteins present are linked to this condition. They hope this study will provide information to produce a diagnostic test for EER.

Emma Banfield, a researcher in the Department of Biological Sciences at the University of Lincoln said: "EER is a very serious disease in competition and race horses as it not only leads to a loss of performance but can also result in necrosis of skeletal muscle tissue. Currently, the only method of diagnosing this disease is to use a muscle biopsy, which is invasive and painful. By looking for specific proteins in the muscle and blood of horses that are suffering from EER, we are hoping to identify any trends associated with this disease which will lead to being able to diagnose this condition with a simple blood test."

Emma continued: "This is why we need software which can accurately quantify small amounts of protein on gels and then allow us to group all these proteins together to see any trends, and this is why we chose to use GeneTools and Gene Directory."

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***GeneTools and GeneDirectory used at Major Animal Research Centre press  
release continued***

Laura Sullivan, Syngene's Divisional Manager stated: "Syngene is well known for providing high performance image analysis systems so it is very pleasing to see the software behind these being used for such an interesting application. The research at the University of Lincoln shows Syngene's software is so good it can be used on its own to accurately detect similarities in vast numbers of proteins making GeneTools and GeneDirectory an excellent choice for use in animal or human genetic studies."

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**For Further Information Contact:**

Jayne Arthur, Syngene, Beacon House, Nuffield Road, Cambridge, CB4 1TF, UK.  
Tel: +44(0) 1223-727123 Fax +44 (0) 1223-727101  
Email: jayne.arthur@syngene.com Web site: www.syngene.com

Emma Banfield, Department of Biological Sciences, University of Lincoln, Riseholme Park, Riseholme, Lincoln, LN2 2LG, UK.  
Tel + 44 (0) 1522 895488  
Email: ebanfield@lincoln.ac.uk Web site: www.lincoln.ac.uk

**Editor Contact:**

Dr Sue Pearson, PO Box 170, Hitchin, Hertfordshire SG5 3GD, UK.  
Tel/Fax + 44(0) 1462-635327 Email: sue6.pearson@ntlworld.com

**Note to Editors**

**About Syngene**

Syngene is a world-leading supplier of integrated imaging solutions for analysis and documentation of gel-based information. Syngene's systems are used by more than 10,000 research organisations and over 50,000 individual scientists world-wide and include many of the world's top pharmaceutical companies and major research institutes.

Syngene, founded in 1997 is a division of the Cambridge based Synoptics Group. The Group's other divisions, Syncroscopy and Synbiosis, specialise in digital imaging solutions for microscopy and microbial applications respectively. Synoptics currently employs over 40 people in its UK and subsidiary operation in Frederick, USA.

**About the Department of Biological Sciences**

Located at the picturesque Riseholme Park Campus on the northern outskirts of Lincoln, the Department of Biological Sciences at Lincoln University was formed in August 2004. The Department offers single honours courses of study across a range of exciting and challenging science subjects. Excellent links exist between the Department, industry and professional practices, offering many opportunities for work experience and relevant placements, both in the UK and abroad. The Department also has diverse research programmes including many in unique areas of equine science and physiology.