

DNA Analyses Designed to Give Racehorses Competitive Edge

The Thoroughbred Genetics Company (TGC) is leading the international field in genetic husbandry for racehorses. The UK-based company is pioneering new techniques by which athleticism and pre-potency can be assessed through DNA analyses, with the aim of benefiting owners and breeders alike.

Based at Sittingbourne Research Centre in Kent, TGC offers DNA screening tests that identify specific characteristics relating to 'trainability', performance and soundness, even identifying optimum track distances for individual horses.

Dr Stephen Harrison, managing director of TGC, said, "Using mitochondrial DNA inheritance analyses, we can also determine how in-bred or out-bred a particular horse is. The DNA analysis is extremely accurate and can show very different results to a pedigree worked out on paper. The information is already proving invaluable to breeders, as it enables them to see which characteristics, both good and bad, will or won't be passed down the line, and breaks the deadlock imposed solely by conventional approaches.

"Millions of pounds are spent speculatively producing foals and yearlings who later prove to be unsuccessful on the track and are therefore of little value as stud. We have developed tools to provide enhanced genetic management of bloodstock with the sole objective of

increasing winnings from the outset and, ultimately, stud fees.

Over the last decade, genome mapping and genetics have become vital and integral components of human, plant and agricultural animal reproduction and in the detection and avoidance of disease. Genetic analysis is the way forward for thoroughbred selection and many of the more imaginative and competitive organizations have already embraced this."

The Thoroughbred Genetics Company is currently advising large breeding organisations in the UK, Ireland, France, Australia, New Zealand and the USA, as well as smaller owners and breeders in England and Ireland on: matings, purchases and sales, restructuring of breeding stock, building and selecting breeding stock, analysis of pedigrees, breeding schedules, genetics advice relating to problem horses, and bespoke genetics projects.

Depending on the complexity and volume of tests required, costs per test range on a sliding scale from £250 to £450 per horse (approximately \$500 to \$1,000). All tests are subject to contract and are treated in the strictest confidence.

For further information please contact The Thoroughbred Genetics Company at + 44 (0)1795 411544 or visit: www.thoroughbredgenetics.com