

BIOGRAPHY

27/06/12



Title and name

Prof. HUW JONES

Nationality

British

Panel

Genetically Modified Organisms (GMO)

Education

BSc Hons, Biology/Sports Science, Loughborough University, 1979

Post Graduate Certificate of Education, University of Bath, 1981

MSc Biotechnology (Distinction), UWE Bristol, 1992

PhD, Bristol University, 1995

FSB, Elected Fellow Society of Biology, 2002

Appointed Honorary Professor, School of Biosciences, Nottingham University, 2009

Scientific and risk assessment experience

I have done all my research in publicly-funded institutions or universities. My research group has a leading position in the research and development of cereal transformation technologies and in the analysis transgenic cereals. We have developed a robust platform of cereal transformation systems based on Agrobacterium and biolistics and apply a range of transgenic approaches to study gene function and to modify input and output traits. I have interests in novel transformation technologies, cisgenesis, in validating cereal promoters for targeting expression to pre-defined tissues and in sequences for tagging or targeting proteins encoded by transgenes. I manage a fully functioning transformation laboratory with access to glasshouse and constant environment plant growth facilities for appropriate for GM containment. I collaborate widely and have held three Defra UK licences for non-commercial, environmental release of transgenic wheat modified for research purposes in the UK..

Main scientific publications

I routinely publish 3 or 4 academic papers per year in peer-reviewed journals and have authored over 30 books or book chapters on technology development in cereal transformation or the use of transgenics to study the function of cereal genes. Some are listed below

HD Jones, NCB Peters and M Holdsworth (1997). Genotype and environment interact to control dormancy and differential expression of the Viviparous 1 homologue in embryos of Avena fatua. Plant Journal 12(4): 911-921.

HD Jones, S Smith, R Desikan, S Plakidou-Dymock, A Lovegrove and R Hooley (1998). Heterotrimeric G proteins may be involved in gibberellin-induction of α -amylase gene expression in aleurone. Plant Cell 10(2):1-10.

S Kurup, HD Jones and MJ Holdsworth (2000). Interactions of the developmental regulator ABI3 with proteins identified from developing Arabidopsis seeds. *Plant Journal* 21(2) 143-157.

HD Jones, S Kurup, NCB Peters and MJ Holdsworth (2000). Identification and analysis of proteins that interact with the *Avena fatua* homologue of the maize transcription factor VIVIPAROUS 1. *Plant Journal* 21(2) 133-142.

Zhang Y, Shewry PR, Jones HD, Barcelo P, Lazzeri PA, Halford NG. (2001) Sugar sensing, metabolic regulation and development: Expression of antisense SnRK1 protein Kinase sequence causes abnormal pollen and embryo sac development in transgenic barley. *Plant Journal* 28(4): 431-441.

H Wu, C Sparks, B Amoah and HD Jones (2003). Factors influencing successful *Agrobacterium*-mediated genetic transformation of wheat. *Plant Cell Reports* 21: 659-668.

GM Pastori, A Huttly, J West, C Sparks, A Pieters, CM Luna, HD Jones and CH Foyer (2007). The maize Ac/Ds system is functional in hexaploid wheat through successive generations. *Functional Plant Biology* 34:835-843.

LF Primavesi, H Wu, EA Mudd, A Day and HD Jones (2008) Visualisation of plastids in endosperm, pollen and roots of transgenic wheat expressing modified GFP fused to transit peptides from wheat SSU RubisCO, rice FtsZ and maize ferredoxin III proteins. *Transgenic Research* 17(4): 529-543.

H Wu, A Doherty and HD Jones (2008). Efficient and rapid *Agrobacterium*-mediated genetic transformation of durum wheat (*Triticum turgidum* L. var. durum) using additional virulence genes. *Transgenic Research* 17(3): 425-436.

HD Jones and PR Shewry (2009) Editors and authors, *Methods in Biotechnology. Transgenic Wheat, Barley and Oats: Production and Characterisation*. Series Ed. J Walker. Humana Press Totowa NJ.

C Nemeth, J Freeman, HD Jones, C Sparks, TK Pellny, D Wilkinson, J Dunwell, AAM Andersson, P Åman, F Guillon, L Saulnier, RAC Mitchell and PR Shewry (2010). Down-regulation of the CSLF6 gene results in decreased (1,3;1,4)- β -D-glucan in endosperm of wheat. *Plant Physiology*. 152: 1209-1218

F Sestili, M Janni, A Doherty, E Botticella, R D'Ovidio, S Masci, HD Jones, D Lafiandra (2010). Increasing the amylose content of durum wheat through silencing of the SBEIIa genes. *BMC Plant Biology*, 10:144.

J Freeman, CA Sparks, J West, PR Shewry & HD Jones (2011). Temporal and spatial control of transgene expression using a heat-inducible promoter in transgenic wheat. *Plant Biotechnology Journal* 9: 788–796.