



## Trustee: Mark Wilkinson

Having completed my PhD at NUI Maynooth, Ireland, I joined Rothamsted Research in 1997 and have been involved in many diverse and exciting research projects. In more recent years the main emphasis of my research has been on wheat quality improvement.

I have mainly worked on cereal grains. They and their products are the major sources of dietary fibre in the human diet. Furthermore, grain fibre, and particularly the fibre present in whole grain, has well-established health benefits in reducing the risk of chronic diseases and certain forms of cancer. However, whereas whole wheat contains between about 10% and 15% fibre most foods are made from white flour which is derived from the starchy endosperm of the grain and has a much lower fibre content (up to about 5%) Hence, increasing the fibre content of white flour could have significant benefits for human health.

I have mainly worked with and generated transgenic wheat lines in these studies which have given valuable insights to the molecular mechanisms i.e., the genes that are involved in the generation of the endosperm cell wall-cell wall polysaccharides , the main source of the fibre.

I have always had a passion for teaching and been involved with the STEM programme at RRES for over 10 years. I have hosted 4-5 GCSE/A level students a year. They have shadowed me in the laboratory for a week carrying out a wide range of experiments and getting an idea of the many aspects involved with scientific research. It has always inspired me to see how in a matter of a week they grow and develop in confidence.

Since 2018 I have been the Studentship Alliance Manager at RRES. The main role of this job to liaise effectively with designated Universities within the various doctoral training schemes to ensure we get the best PhD projects and students coming to Rothamsted.

I am also the chairman of Rothamsted Tennis Club and a published poet.