

## **Pre-Symposium Workshop – 19 January 2025 – 11am**

### **Introduction to the fundamentals of programming in base R**

This session will introduce participants to the first steps in writing R code to manipulate data sets. R has developed into an object-orientated, weakly-typed, interpreted, functional and highly-extendable programming language for statistics and data manipulation. These concepts, and history of the development of R will be explained. Indexing vectors, classes(types), functional and object orientated programming will be introduced through an example of simple object manipulation. We will then continue to introduce some of the fundamentals of R: <https://iqss.github.io/dss-workshops/R/Rintro/base-r-cheat-sheet.pdf>. To participate you should bring along a laptop with R installed. You should also have a means of editing code and sending it to R. Rstudio is a very popular way of achieving this.

Lead by: Sean Husheer

### **Developing interactive computer applications for agricultural science.**

Have you ever thought that you have a great idea for an App but that you don't have the skills needed to create it yourself because your background is not in computer science? If you wish that developing professional Apps would be easier to achieve, then this workshop may be of your interest. In this hand-on workshop, I will introduce the Mathworks App Designer tool using simple examples focused on agricultural applications. App Designer is an interactive development environment for creating desktop and web Apps using MATLAB. Previous computer programming experience is not needed, but a basic understanding would be beneficial to get the most of this workshop. Please, bring your laptop, you can download the trial version from the Mathworks website if you don't have it already.

Lead by: Francisco Rojo

### **An unconventional career pathway starting at the bottom: What have I learnt?**

Jill Stanley, Science Group Leader, Fruit Crops Physiology. Plant & Food Research, New Zealand.

### **How did I end up here? A short story about a long career.**

Brent Clothier, Principal Scientist, Land Use Impacts. Plant & Food Research, New Zealand.

### **Taking advantage of opportunities during the 'Golden Age of Pomological Research'**

Ted De Jong, Professor Emeritus, Plant Sciences Department. University of California, Davis, USA.

