

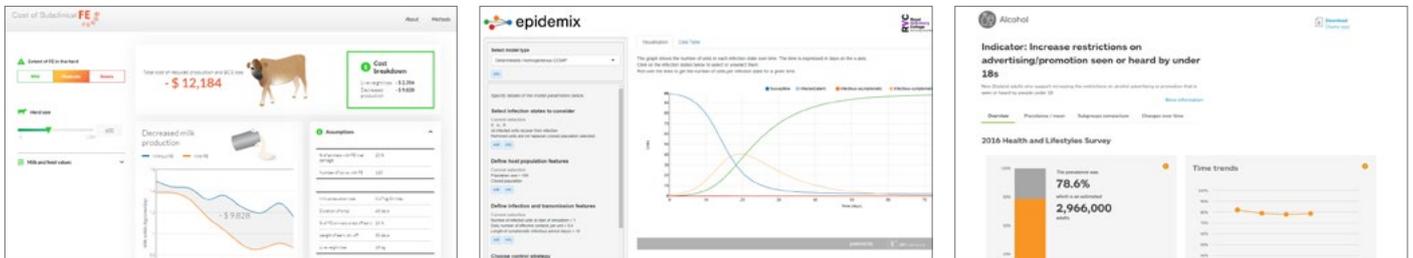
CONNECTING DATA WITH PEOPLE

Interactive, web-based visualisation with R Studio Shiny

Hosted in Wellington, New Zealand

10% discount for early registration by 14Feb2020: \$1305(excl. GST) per workshop; \$2385(excl. GST) for both workshops.
Registration from 15Feb2020: \$1450(excl. GST) per workshop; \$2650(excl. GST) for both workshops.

Contact and registration: epi-interactive.com/connecting-data-with-people
or email info@epi-interactive.com



SUMMARY

R Shiny is becoming an increasingly popular tool for highly customised data visualisations for the web. The open source framework provides an accessible and flexible way to create modern information dashboards. While R Shiny is able to draw on the analytical power of R it can also be used to visualise any data or outputs from other statistical software such as STATA or SAS. Learn in our workshops how to use R Shiny for your next data visualisation project and get insights into what R Shiny is capable of.

MATERIALS

Provided (per download link):

- Workshop notes and instructions
- Coding examples

Participants to bring:

Their own laptop with R and R Studio installed:

- R version 3.3.0 or later
- RStudio 1.0.136 or later
- R packages – instructions will be provided
- Optional: Git

FACILITATORS



The workshop will be led by Dr. Uli Muellner (EPI-interactive Director - IT & Learning) and taught with support from EPI-interactive team members.

Linkedin: [linkedin.com/in/ulimuellner](https://www.linkedin.com/in/ulimuellner)

INTRODUCTION

Two-day workshop | 12–13 March 2020

This hands-on workshop will familiarise you with R Studio Shiny programming and will cover R Shiny capabilities, design approaches, coding essentials and how to publish your newly created app.



PREREQUISITES

- Basic R programming skills; we can provide online learning resources prior to the workshop if you haven't used R before or are unsure if you have the required knowledge
- Some programming experience in HTML would be beneficial; however it is not mandatory

PROGRAM

Day 1

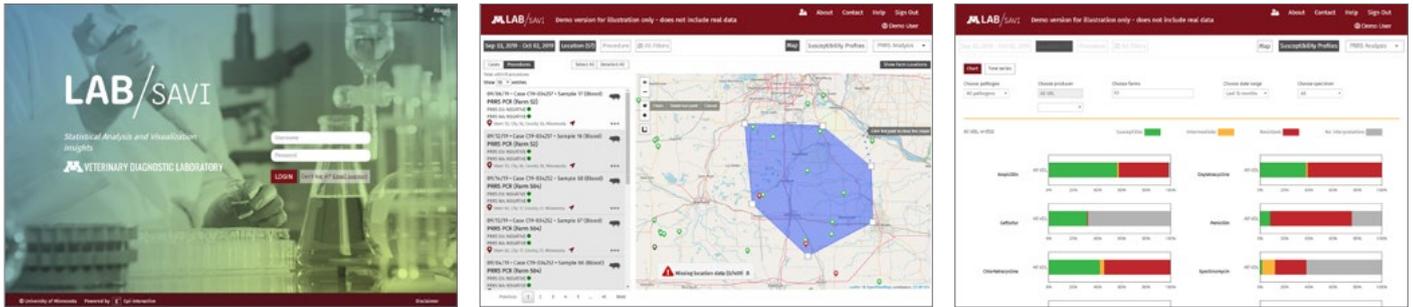
- Welcome and intro, incl. demonstration of Shiny apps
- Getting set up in R Studio and version control with Git
- How to build a basic app
- Shiny interface layout
- Adding user interface components and reactivity
- Shiny publishing and hosting: options, pros and cons

Day 2

- Case study: New Zealand Health Survey Data Explorer
- Design approaches for effective and stunning interfaces for data visualisations
- Creating dynamic user interfaces and null-checking
- Integrating interactive, vector-based graphs using Plot.ly and other charting libraries
- Top 10 tips when working with Shiny

Two-day workshop | 26–27 March 2020

We will expand on basic R Shiny functionality and enable you to tackle more advanced features in a structured way. We will dive into creating dynamic interfaces for multi devices and investigate other R packages useful for providing a rich user experience.



PREREQUISITES

- You have joined the Introduction workshop or have worked with R and R Shiny before. You are familiar with elementary R Shiny UI and server functions.
- Some programming experience in HTML would be beneficial; however, it is not mandatory

PROGRAM

Day 1

- Case study: LAB/savi - advanced Shiny app to support a Veterinary Diagnostic Laboratory
- Utilising different data sources
- Controlling reactivity: observe, isolate, eventReactive, observeEvent, freezeReactiveValues
- Using bootstrap grid system for supporting multi-devices
- Demo: Mobile-first Shiny app

Day 2

- Breakout session: The good, the bad and the ugly
- Shiny debugging strategies
- Using different R packages to extend core Shiny functionality: DT, shinyJS, shiny.router
- Setting up a basic authentication method
- Spatial visualisations with Leaflet
- Break-out session: considerations when working with open source software