

**Workshop on R Shiny**

**CGIAR CoP on Biometrics and Bioinformatics**

**From 27th – 29th Sep 2018**

**Objective.**

Learning the basics of using R Shiny to build interactive web apps straight from R, explore and connect to a dataset/database and generate customized plots.

**Agenda.**

|  |  |  |
| --- | --- | --- |
| Day 1 | Activities | Responsible |
| Morning  9.00 am – 12.00 pm  Break. 15 min | Presentation  Demo of applications using R and Shiny | I.Perez  O.Benites |
| Afternoon  1.00 pm – 4.00 pm  Break. 15 min | How to build a Shiny app:   * Introduction * R * App architecture * App template * Inputs and outputs | I.Perez  O.Benites |

|  |  |  |
| --- | --- | --- |
| Day 2 | Activities | Responsible |
| Morning  9.00 am – 12.00 pm  Break. 15 min | How to build a Shiny app:   * The server function * Sharing apps * Shinyapps.io * Shiny servers | I.Perez  O.Benites |
| Afternoon  1.00 pm – 4.00 pm  Break. 15 min | How to customize reactions:   * Reactivity * Reactive values * Reactive functions   Example using statistical application | I.Perez  O.Benites |

|  |  |  |
| --- | --- | --- |
| Day 3 | Activities | Responsible |
| Morning  9.00 am – 12.00 pm  Break. 15 min | How to customize reactions:   * render\*() * reactive() * isolate() * observeEvent() * eventReactive() * reactiveValues()   How to connect to databases | I.Perez  O.Benites |
| Afternoon  1.00 pm – 4.00 pm  Break. 15 min | How to customize appearance:   * HTML UI * Adding static content * Building layouts * Panels and tabsets * Layouts and CSS | I.Perez  O.Benites |

**Research Informatics Unit - RIU**