Carpentries at Otago

Building a local community
Increased in use of Computational Research

More data

Traditional methods being challenged

New approaches to scale data
“Big Data Initiative”

1. Build upon leadership and expertise for analysis of large data
   ○ Increase capability for Otago to support research, improve grants, and attract Post Grad students

2. Support cross campus/agency network of researchers
   ○ Facilitate sharing -> improve health related research outcomes
Vision

- **Coordinate** Divisional training activities in large-scale data analysis.
- **Develop** intermediate and advanced training materials
- **Contribute** training materials as Open Source resources for the wider community
- **Interact** with national and international training initiatives/organisations
- **Incorporate** digital literacy training into post-graduate training, and into the undergraduate curriculum.
What is Software Carpentry
  ○ Teaching of tools

Data Carpentry
  ○ Data centric workflow

Library Carpentry
  ○ Build tools and data skills within library community
Otago

Funding for 1.0 EFT

Murray and Matt

Silver level Carpentries membership -> yearly quota of instructors being trained

Beginner workshops (SWC/DC)

Develop intermediate/advanced workshops

Collaborate with Genomics Aotearoa
Yearly Increase in Delivered Workshops
Multi-campus effort

- Dunedin
- Christchurch
- Wellington
21 Carpentries Instructors

- Anatomy
- Biochemistry
- Computer Science
- Library
- Microbiology and Immunology
- Pathology
- Zoology
Carpentries Workshops at Otago

- Ecology
- Genomics
- Social Sciences

- Unix Shell
- Python or R
- Version control with git
Events and non-Carpentries Workshops

- Research Bazaar
- Version Control with Git
- Digi SYSKA
- CarpentryChat
- CarpentryConnectNZ
- Study Group
- Tidy Tuesday

- GBS
- RNAseq
- eDNA
Otago Study Group

Structured and unstructured sessions to share and learn

Version control with Git

Making R packages

Rmarkdown
# Tidy Tuesday

A weekly data project in R from the R4DS online learning community

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- **Variables:**
- **Observations:**
- **Values:**
Challenges

Reliance on volunteer effort

Work outputs vs Productivity lag

No-shows

Requirement of laptops
What’s in store for 2020?

- Carpentries workshops
- Mini workshops for intermediate/advanced content
- Target skills towards key researcher tasks
Questions