CODATA-RDA Research Data Science School Curriculum

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This talk and poster at
http://github.com/HughShanahan/ElixirCODATARDAschools

Outline of School

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Two week event - focus on LMIC's

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Oriented towards Early Career Researchers

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"Simple things, explained well"

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"Simple things, explained well"

Show possibilities - not deep dive

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"Simple things, explained well"

Show possibilities - not deep dive

Show communities

Open Science
- Louise Bezuidenhout

3 Hours + Exercises

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Reflective sessions - focus on Ethics

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What does Open Science mean to you?

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- Louise Bezuidenhout

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What does Open Science mean to you?

Is it worth it?

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Reflective sessions - focus on Ethics

What does Open Science mean to you?

Is it worth it?

Exercises for each other course

Software Carpentry
- Multiple authors

Software Carpentry
- Multiple authors

Introduction to the command line

Software Carpentry - Multiple authors

Introduction to the command line

Git

Software Carpentry
- Multiple authors

Introduction to the command line

Git

R - language of choice for School

Software Carpentry
- Multiple authors

Introduction to the command line

Git

R - language of choice for School

SQL (deprecated)

Research Data Management
- Kevin Ashley/Sarah Jones/Steve Diggs

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Data Life Cycle

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Data Life Cycle

Licensing - appropriate use

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Licensing - appropriate use

Data Management Plans

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Data Life Cycle

Licensing - appropriate use

Data Management Plans

Principles of FAIR data

Author Carpentry
- Gail Peretsman-Clement

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Authorship/publishing for the 21st century

Author Carpentry
- Gail Peretsman-Clement

Authorship/publishing for the 21st century

Digital Object Identifiers

Author Carpentry
- Gail Peretsman-Clement

Authorship/publishing for the 21st century

Digital Object Identifiers

OrCID's

Author Carpentry
- Gail Peretsman-Clement

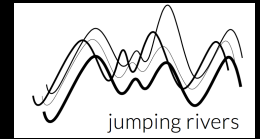Authorship/publishing for the 21st century
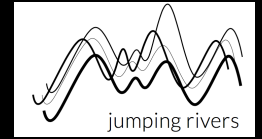
Digital Object Identifiers

OrCID's

Predatory journals

Visualisation
Colin Gillespie/Jamie Owen
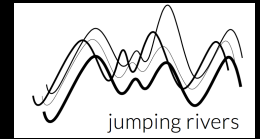
Visualisation
Colin Gillespie/Jamie Owen

Introduction to ggplot2

Visualisation
Colin Gillespie/Jamie Owen

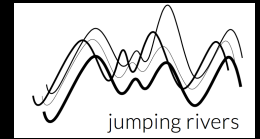Introduction to ggplot2

Building plots

Visualisation
Colin Gillespie/Jamie Owen

Introduction to ggplot2

Building plots

Faceting

Analysis
Roger Barlow/Ekpe Okorafor

Analysis
Roger Barlow/Ekpe Okorafor

Introduction to Machine Learning

Analysis
Roger Barlow/Ekpe Okorafor

Introduction to Machine Learning

Recommender Systems

Analysis
Roger Barlow/Ekpe Okorafor

Introduction to Machine Learning

Recommender Systems

Neural Networks / Classification

Computational Infrastructures
Rob Quick/Gergely Sipros

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Moving beyond a desktop/laptop

Computational Infrastructures
Rob Quick/Gergely Sipros

Moving beyond a desktop/laptop

Running jobs on grids/clouds

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Rob Quick/Gergely Sipros

Moving beyond a desktop/laptop

Running jobs on grids/clouds

Using containers

Information Security
Hannah Short/Sebastian Lopienski

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New for 2018

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Being open != not being secure

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File permissions

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File permissions

Outlining attacks in buffer overflow

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Being open != not being secure

File permissions

Outlining attacks in buffer overflow

Basic security protocols

Final thoughts

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Perfect is the enemy of good

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Iterative improvement is powerful

Final thoughts

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Iterative improvement is powerful

What's missing? - Experimental Design