Introduction to R Workshop

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Course Introduction

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Goals and Objectives

- Advocate for the use of R as a means of improving reproducibility in clinical data analysis
- Demonstrate how R is used to perform analyses of laboratory operational data
- Establish a basis of understanding in the 'tidy' approach to data analysis within the framework of R

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Session	Instructor
Instructor Introductions, Introduction to technology	Amrom Obstfeld
Introduction to R and RStudio	Joe Rudolf
Reproducible Reporting	Joe Rudolf
Data Visualization	Stephan Kadauke
Data Transformation	Amrom Obstfeld
Group and Summarize	Patrick Mathias
Advanced Reporting	Patrick Mathias

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Who are we?

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Joseph Rudolf

Assistant Professor, Department of Pathology, University of Utah Medical School

Medical Director, Automated Core Laboratory, ARUP Laboratories

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Patrick Mathias

Assistant Professor, Department of Laboratory Medicine and Pathology

University of Washington School of Medicine

Associate Medical Director, Laboratory Medicine and Pathology Informatics

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Stephan Kadauke

Assistant Professor of Clinical Pathology and Laboratory Medicine

University of Pennsylvania Perelman School of Medicine

Assistant Director of the Cell and Gene Therapy Laboratory

Children's Hospital of Philadelphia

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Amrom Obstfeld

Assistant Professor of Clinical Pathology and Laboratory Medicine

University of Pennsylvania Perelman School of Medicine

Director of Pathology Informatics

Children's Hospital of Philadelphia

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Workshop Workflow

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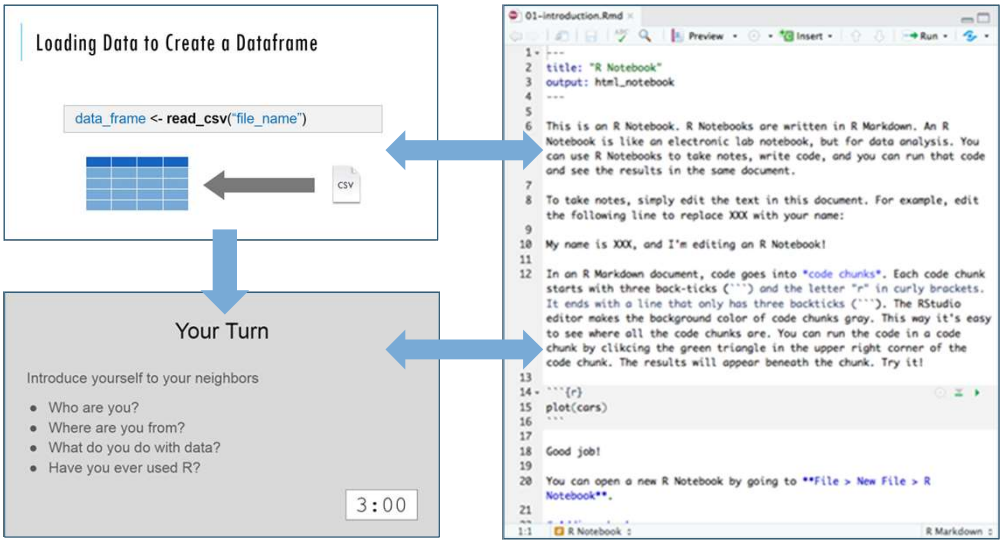
Sessions



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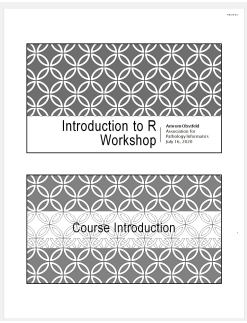
Workshop Coursebook

- Print out of all slides
- Appendix
  - Cheat sheets
  - Useful resources



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Your Turn

Introduce yourself to your breakout roommates

Who are you?
Where are you from?
Why are you here?
Have you ever used R?

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Final Tips

- The best way to learn to code is by doing
- Practice is key!