## R Workshop Day 1

## Warmup

- Introductions
- What is your main goal for this workshop?
- What type of data analysis are you most interested in?

## **RStudio basics**

- What are R and RStudio?<sup>1</sup>
- Why might one use RStudio over something like Excel or SPSS?<sup>2</sup>
- Logging in to the RStudio server.<sup>3</sup>
- Type library (hanoverbase) in the "console" window and press Enter. We will talk about what this does later.
- The different sections and panes in RStudio.<sup>4</sup>
- Using the console, including help and history<sup>5</sup>
- Basic arithmetic and use of scientific notation in RStudio.<sup>6</sup>
- Assigning to variables.<sup>7</sup>
- Working with vectors/sequences.8
- Quickly entering some data using scan().9
- Basic statistics for a vector <sup>10</sup>
- Basic graphs for a vector<sup>11</sup>

## Analyzing some data

- Packages<sup>12</sup>
- Loading data from CSV<sup>13</sup>
- Your Rstudio workspace vs your computer<sup>14</sup>
- Loading built-in datasets with data () 15
- Loading data from Excel. 16

<sup>1../</sup>morsels/whatAreRAndRStudio.html

<sup>&</sup>lt;sup>2</sup>../morsels/whyRStudio.html

<sup>&</sup>lt;sup>3</sup>../morsels/loggingToRStudio.html

<sup>4../</sup>morsels/RStudioSections.html

<sup>&</sup>lt;sup>5</sup>../morsels/WorkingWithConsole.html

<sup>&</sup>lt;sup>6</sup>../morsels/arithmetic.html

<sup>&</sup>lt;sup>7</sup>../morsels/variableAssignment.html

<sup>8../</sup>morsels/vectors.html

<sup>&</sup>lt;sup>9</sup>../morsels/usingScan.html

<sup>&</sup>lt;sup>10</sup>../morsels/basicStatisticsVector.html

<sup>11../</sup>morsels/basicGraphsVector.html

<sup>12../</sup>morsels/packagesAsToolboxes.html

<sup>&</sup>lt;sup>13</sup>../morsels/loadingDataCSV.html

<sup>&</sup>lt;sup>14</sup>../morsels/workspaceVsComputer.html

<sup>&</sup>lt;sup>15</sup>../morsels/builtInDataSets.html

<sup>16../</sup>morsels/loadingExcel.html

- Viewing a loaded dataset<sup>17</sup>
  Basic statistics for variables in dataset<sup>18</sup>

<sup>17../</sup>morsels/viewCommand.html
18../morsels/basicStatisticsDataset.html