***A Taste of R***

***Free Workshop for Faculty***

R is a free, open-source, and tremendously powerful and flexible software for data analysis. Thousands of users across the globe contribute to R on a nearly daily basis, providing users with access to cutting edge analyses and, often, some of the most modern thinking in statistical methodology. Many educational and statistical doctoral programs have begun adopting R as the primary software for statistics courses.

Dr. Daniel Anderson of the Center on Teaching and Learning (CTL) and the Behavioral Research and Teaching Center (BRT) will offer 4 free workshops on R.

**Purpose**: To provide faculty with a basic introduction to R (*no advanced statistical prerequisite skills required*) that will orient faculty as to why R is a unique, powerful, and flexible tool for manipulating, summarizing, and visualizing data.

**When**: 12:00- 2:00 pm, on the following dates: January 20, February 3, February 17, March 3. Workshop topics are listed below. Daniel will also be available for individual or research group meetings outside of the workshops. In the spring term, Daniel will offer a formal course open to faculty, doctoral, and masters students.

**Where**: A COE classroom TBA. Sessions will also be recorded for later viewing.

**How do I sign up?**: Email us at [daniela@uoregon.edu](mailto:daniela@uoregon.edu) and [leve@uoregon.edu](mailto:leve@uoregon.edu)

**Workshop #1: What is R and why should I care?**

* This session introduces R and external packages, addressing the basics of a reproducible workflow and data visualizations. A broad overview is provided for the R landscape, illustrating both its power and flexibility.

**Workshop #2: Tidy data**

* The concept of tidy data, introduced by Hadley Wickham, is a technical term to describe a specific data structure. As Hadley notes, “Tidy datasets are all alike, but every messy dataset is messy in its own way”. This session introduces the concept of tidy data, explains why it is useful, and covers tools to help get your data into a tidy format through R.

**Workshop #3: Data visualization**

* Numerous data visualization packages are discussed with an emphasis on fast and powerful exploratory plotting.

**Workshop #4: Bring your own data**

* The final session focuses on individual participant datasets to tackle real challenges. One or two datasets will be explored in depth, including data manipulation, visualization, and basic analysis.