


# BASUG Quarterly Meeting Announcement

## *R U Ready for R?*

R is a free and open-source programming language that provides cutting-edge data analysis methods. Combine the power of SAS® and R to enhance your data analysis capabilities, and solve increasingly complicated problems. Ken Kleinman, a SAS user for 25 years and co-author of [SAS and R: Data Management, Statistical Analysis, and Graphics](#), will present an overview of R for SAS Users. We are pleased to offer this special opportunity for our 4th quarter meeting, and we hope you can join us.

*After the meeting, we will provide an informal light buffet lunch for all attendees. We hope you can stay for this opportunity to network and socialize with your fellow SAS users.*

<b>Topic</b>	<b>An Overview of R for SAS® Users</b>
<b>When</b>	<b>Friday, December 2, 2016</b> 8:15am – 12:30pm
<b>Where</b>	Microsoft New England Research and Development Center (NERD) <sup>1</sup> One Memorial Drive Conference Center, First Floor Cambridge, MA 02142 857-453-6000 
<b>Directions</b>	Please visit the <a href="#">meeting site directions page</a>
<b>How to register</b>	Individual, on-line registration required. Please visit the <a href="#">event registration page</a>  NO WALK-INS!
<b>Payment</b>	\$10 – if paid on-line by Monday, November 21, 2016 \$15 – if paid on-line (by <b>NOON</b> Thursday, December 1, 2016) \$20 – at-the-door (checks only)
<b>Contact</b>	If you have questions about the meeting, contact <a href="#">the meeting organizers</a> .

## Agenda\*

8:15am	Sign in and Continental Breakfast
8:45am	Announcements
9:00am-12:30pm	An Overview of R for SAS Users by Ken Kleinman, Associate Professor of Biostatistics, UMass Amherst  The entire meeting will be devoted to this presentation. There will be several breaks during this time.
12:30pm	Networking Lunch

*\*Note: Times (and sequence) are approximate and subject to change. Please re-visit the BASUG website ([www.basug.org](http://www.basug.org)) for updated information.*

## Abstract and Speaker Biography

### An Overview of R for SAS Users

by Ken Kleinman

In this in-depth presentation, I will introduce R to SAS users. I'll begin by explaining why a SAS user might want to learn R. Then I will step through a toy example to highlight some of the major differences between R and SAS—knowing these from the start and keeping them in mind as you step into R can help smooth your way.

Next I will introduce the RStudio Integrated Development Environment, a windowing environment that allows R users to make the most of its capabilities. After reviewing some basics of data management, I will discuss “packages”, the feature that allows R to incorporate new methods as soon as they are developed. I'll demonstrate the R package that opens sas7bdat files in R, as well as tools for exporting data from R to SAS. I'll also share resources for finding useful R packages.

With these basic tools in hand, I'll demonstrate the power of R by showing a data analysis and a simulation experiment, each complete with graphical presentation. In the course of this, we will also see how to write functions in R, which seamlessly extend the R language. We'll conclude with a demonstration of RStudio's tools for report writing, which approach the idea of literate programming.



**Ken Kleinman** started using SAS in 1990 or so, before there was a GUI. He thinks of it as his native (computer) language, though he first coded in high school on computers that used cassette tapes for storage. When he wanted to learn R, he found there was no resource that could help him convert his SAS knowledge to the new language, so he enlisted his colleague Nick Horton to help write it. The [resulting reference](#), a bilingual SAS and R dictionary, is now in its second edition. A [related blog](#) has drawn well over a million hits. He believes that data analysts are most effective when they have more tools in their toolbox—he uses both languages every day. He holds a doctorate from the Harvard School of Public Health and is an Associate Professor of Biostatistics at UMass Amherst and a Visiting Associate Professor at Harvard Medical School.

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### BASUG Contacts

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(1) The Microsoft New England Research & Development Center (NERD) is a research and software innovation campus located in the heart of Cambridge, Massachusetts. The NERD vertical campus spans two buildings with its primary presence and conference center located at One Memorial Drive and a recently renovated and expanded space located at One Cambridge Center. NERD is home to some of Microsoft's most strategic teams including Microsoft Research New England, Microsoft Application Virtualization (App-V), SharePoint Workspace, Microsoft Technical Computing, Microsoft Advertising, Microsoft Lync, Microsoft Office 365 and more. NERD has become a

hub of activity for the local tech community and has hosted more than 500 events and welcomed more than 40,000 visitors during the past two years.