



## BASUG Meeting Announcement

*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>"Expanding Your SAS Toolbelt"</b>
<b>When</b>	Wednesday, March 25th, 2015 8:15AM - Noon
<b>Where</b>	Microsoft New England Research & Development Center (NERD) <sup>1</sup> One Memorial Drive Cambridge MA 857-453-6000
<b>Directions</b>	Please visit the meeting site directions page ( <a href="http://microsoftnewengland.com/About">http://microsoftnewengland.com/About</a> )
<b>How to Register</b>	Individual, on-line registration required. Sorry, NO WALK-INS. <a href="http://www.basug.org/index.php?p=eventreg">Register Now! (http://www.basug.org/index.php?p=eventreg)</a>
<b>Payment</b>	\$10 -- if paid on-line by Friday, March 13, 2015 \$15 -- if paid on-line by NOON on Tuesday, March 24, 2015 \$20 -- at the door (checks only)
<b>Contact</b>	If you have questions about the meeting, please contact the meeting organizers ( <a href="mailto:eventorganizers@basug.org">mailto:eventorganizers@basug.org</a> )

## Agenda\*

<b>Time</b>	<b>Activity</b>
8:15AM	Sign-in and Refreshments
8:45AM	Announcements
9:00AM	<b>"Table Lookups in SAS"</b> , by Christopher Bost, MDRC
9:50AM	Break

Time	Activity
10:05AM	"SAS Macro Language Tips", by Bob Virgile, Independent consultant & trainer
11:05AM	Break
11:15AM	"Checking Out Your Dates with SAS", by Christopher Bost, MDRC
11:35AM	"Selecting All Observations When Any Observation Is of Interest", by Christopher Bost, MDRC
Noon	Networking Lunch

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

## Abstracts and Speaker Biographies

"Table Lookups in SAS", by Christopher Bost, MDRC (<http://www.mdrc.org/>)

Do you ever look up values in a table based on certain criteria? For example, look up a standardized score based on a student's grade level or the average temperature for a given month? It is easy with a small sample but impractical with a large sample. The goal is to do it programmatically.

This presentation covers five ways to do table lookups in SAS. Each is a valuable technique for your toolkit. The format will be interactive. Attendees are encouraged to do the exercise below and come prepared to share their ideas in small groups. The five or more solutions will be reviewed with all.

"Checking Out Your Dates with SAS", by Christopher Bost, MDRC (<http://www.mdrc.org/>)

Checking the quality of date variables can be a challenge. PROC FREQ is impractical with a large number of dates. PROC MEANS calculates summary statistics but does not format the results as dates. PROC TABULATE, however, can calculate summary statistics and format the results as dates. This paper reviews these approaches plus the STACKODS option in SAS 9.3 that might make PROC MEANS the preferred method for checking out your dates.

"Selecting All Observations When Any Observation Is of Interest", by Christopher Bost, MDRC (<http://www.mdrc.org/>)

A data set might contain multiple observations per person. Suppose you want to keep all observations for a person if at least one observation for that person meets certain criteria. This paper shows how to use PROC SQL to select all observations when any observation is of interest. The first method uses a subquery; the second method uses the GROUP BY and HAVING clauses. The SQL techniques are compared and contrasted with a traditional DATA step match-merge.

CHRISTOPHER BOST is the Director of the Research Technology Unit at MDRC where he is responsible for SAS training and support. He has used SAS for data management, analysis, and reporting since 1985 in fields including public health, criminal justice, and social policy. He also teaches graduate classes in data management with SAS

and regularly presents at SAS Users Groups. He will be presenting Edit the Editor: Creating Keyboard Macros in SAS Enterprise Guide ([https://sasglobalforum.activeevents.com/2015/connect/sessionDetail.ww?SESSION\\_ID=3502](https://sasglobalforum.activeevents.com/2015/connect/sessionDetail.ww?SESSION_ID=3502)) at the upcoming SAS Global Forum in Dallas.

## "SAS Macro Language Tips", by Bob Virgile

When learning to use SAS macro language, most programmers require similar tools and often make the same set of mistakes along the way. This presentation covers a few of the common ground areas - topics that programmers frequently need to learn, and areas where they frequently make mistakes. The tips are based on Virgile's book SAS Macro Language Magic: Discovering Advanced Techniques (see more here) (<http://support.sas.com/publishing/authors/virgile.html>). Also note that the Virgile has begun to publish macro language tips through SAS Institute's authors' blog (<http://blogs.sas.com/content/publishing/2015/01/30/sas-authors-tip-getting-the-macro-language-to-perform-a-do-loop-over-a-list-of-values/>).

BOB VIRGILE is an independent SAS trainer and consultant, with 30 years of experience developing and teaching SAS classes. He has written three books for SAS Institute, has published numerous papers and has written problem-solving contests for NESUG and SAS Global Forum. Due to his wealth of SAS knowledge, Bob was barred from participating in the NESUG SAS Bowl.



**BASUG Contacts**

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<sup>1</sup> *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.*