





Winter 2009 Meeting Announcement

# PhilaSUG Winter 2009 Meeting Thursday, March 12<sup>th</sup>

The Philadelphia Area SAS Users Group Winter Meeting will be on Thursday, March 12, 2009 at 1:00 PM, and will be hosted by ReSearch Pharmaceutical Services (RPS), Inc. at their Corporate Headquarters, 520 Virginia Drive, Fort Washington, PA 19034. A map and driving instructions are available later in the newsletter.

Registration will begin at 12:15 PM and the meeting will commence at 1 PM. Dues for the year are \$20. There are no other fees for attending PhilaSUG meetings. We will accept cash, but a check is preferred. If you are a student and present a current matriculation card, or you're an employee of our host, fees for this meeting will be waived. A tip – to breeze through registration – bring in the completed registration form found in the back of this newsletter to the meeting, otherwise registration can still be simplified if you attach a business card to a check or \$20 bill, as there is less writing and it will be more legible. Please do not mail in your registration fee beforehand. Receipts will be available at registration time.

An **RSVP** is required. Please see the RSVP paragraph on page three of this newsletter.

#### Snow Closing Information

To check for cancellations, check <a href="https://www.Cancellations.com">www.Cancellations.com</a> after 10 AM on the day of the meeting for any last minute cancellation notices. On the left hand side of the page where it asks you to Enter an organization and state, for Partial name: just enter <a href="https://philasug.com/Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-Philasug-

# PhilaSUG Winter Meeting RPS 520 Virginia Drive Fort Washington, PA 19034

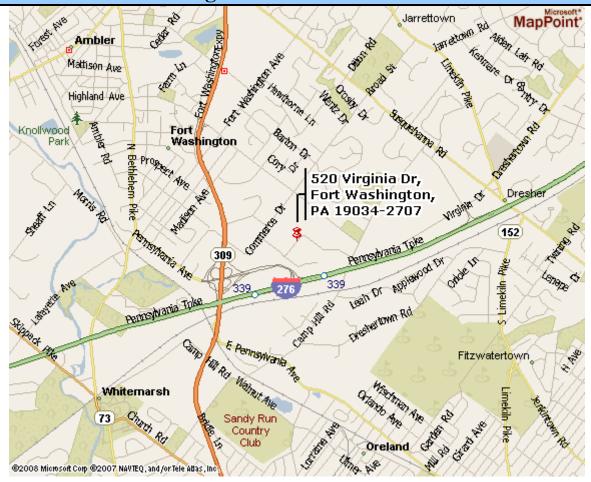
The schedule is tentative and subject to change	
Registration, Posters and light lunch	
Opening Remarks	
A SAS® Programmer's Guide to Generating CDISC Define.xml, Mike Molter	
V5XPT: A Macro to Verify SAS Datasets then Create and Validate SAS Version 5 Transport Files, Jim Johnson & Gui Gao	
Break, Posters, and refreshments	
Open Forum	
Building the Better Macro, Frank Dilorio	
Innovative Analytics and Data Visualization with JMP®, George Lyon & Jian Cao	

Posters will be on display throughout the meeting. Authors will be present alongside their posters during registration and the break for questions and discussions.

Abstracts and bios are found later in the newsletter.

The presenters and the PhilaSUG Executive Committee will adjourn for dinner at a nearby restaurant when the meeting concludes. You are invited to join us. The location will be announced at the meeting.

#### Directions to Meeting Site - ReSearch Pharmaceutical Services



#### From Downtown Philadelphia

FROM THE DOWNTOWN AREA, TAKE JOHN F. KENNEDY BOULEVARD (ROUTE 3) WEST. MERGE ONTO ROUTE 76 WEST TOWARD VALLEY FORGE. MERGE ONTO ROUTE 476 NORTH AT EXIT 331B TOWARD PLYMOUTH MEETING. TAKE EXIT 20 FOR THE ROUTE 276 EAST/PA TURNPIKE. TAKE THE PA 309, EXIT #339 TOWARD FORT WASHINGTON. AFTER THE TOLL PLAZA, STAY STRAIGHT ONTO WEST PENNSYLVANIA AVENUE. TURN RIGHT ONTO COMMERCE DRIVE. TURN RIGHT ONTO VIRGINA DRIVE AND FOLLOW THE ROAD INTO OUR PARKING LOT.

#### From New York/New Jersey Turnpike

TAKE NEW JERSEY TURNPIKE SOUTH (I-95 S) TO PA TURNPIKE (EXIT 6). FOLLOW THE PA TURNPIKE ROUTE 276 WEST TO ROUTE 309, EXIT #339 TOWARD FORT WASHINGTON. AFTER THE TOLL PLAZA, STAY STRAIGHT ONTO WEST PENNSYLVANIA AVENUE. TURN RIGHT ONTO COMMERCE DRIVE. TURN RIGHT ONTO VIRGINA DRIVE AND FOLLOW THE ROAD INTO OUR PARKING LOT.

#### From Baltimore/Wilmington, DE

TAKE I-95 NORTH TOWARD NEW YORK. MERGE ONTO ROUTE 476 NORTH AT EXIT 7 TOWARD PLYMOUTH MEETING. TAKE EXIT 20 FOR THE ROUTE 276 EAST/PENNSYLVANIA TURNPIKE. TAKE THE PA 309, EXIT #339 TOWARD FORT WASHINGTON. AFTER THE TOLL PLAZA, STAY STRAIGHT ONTO WEST PENNSYLVANIA AVENUE. TURN RIGHT ONTO COMMERCE DRIVE. TURN RIGHT ONTO VIRGINA DRIVE AND FOLLOW THE ROAD INTO OUR PARKING LOT.



#### SPECIAL PARKING CONCERNS

RPS requests you do not park in the RPS visitor parking in front of the 520 Virginia Drive building, this is being reserved for handicap parking permitted attendees. Parking is available in the lot behind the RPS building (520 Virginia Drive) and in the parking structure behind the 500 Virginia Drive building.

# RSVP

Please RSVP no later than Monday, March RSVPs in advance help to expedite security and food count, so if you will be attending, please complete the online PhilaSUG Meeting signup form found on our web site.

#### **Host Sites Wanted**

We continuously seek host sites for future PhilaSUG meetings. There is not a lot of work involved, and it is a great way to put your company on the local SAS map. We need your help with this. If your company would like to host a meeting, within reasonable geographic proximity to Philadelphia, PhilaSUG would be grateful if you would contact Barry Cohen at President@PhilaSUG.org.

#### E-mail Announcements

PhilaSUG-L is a low volume, announcement-only e-mail notification service provided free of charge to all members who wish to subscribe. In order to sign up for this service, you need only send a blank e-mail message to: PhilaSUG-L-subscribe@onelist.com. Note that you can subscribe as many times with as many different e-mail addresses as you wish to have the e-mail sent to; e.g., home and office.

#### About RPS



RPS, a next generation CRO, provides comprehensive global Phase 1-4 clinical development solutions to the pharmaceutical, biotechnology and medical industries. device Bv

combining an experienced clinical research operations infrastructure with the industry's largest resourcing engines, RPS is uniquely positioned to offer our Clients both integrated and full service global outsourcing solutions. These solutions are powered by highly experienced and seasoned study teams providing innovative, cost-effective and high quality services.

For more information visit: <a href="http://www.rpsweb.com/">http://www.rpsweb.com/</a>.

# Thank You to our Host

The PhilaSUG Executive Committee wishes to thank ReSearch Pharmaceutical Services management and specifically Jim Johnson, Scientific Programming Manager, in Biostatistics and Programming at RPS for making the meeting possible. In addition, we wish to thank Jessica Lam and Jonas Bilenas of the PhilaSUG Executive Committee for their efforts to coordinate this meeting.

#### PhilaSUG Executive Committee

Barry Cohen, President John Cohen, Membership Diane Foose, Treasurer Robert Schechter, Web Master

Ellen Asam Jonas V. Bilenas Max Cherny Michael Davis John Dennis Lee Dodoo Timothy Kelly Jessica Lam Karin LaPann Robert Nicol Randy Noga Terek Peterson

Donna Usavage

### PhilaSUG Web Site

Our site on the World Wide Web always contains the latest information concerning upcoming meetings, SAS training and seminars, links to SAS related hot topics, and local SAS job opportunities.



Visit us regularly at: <a href="http://www.PhilaSUG.org">http://www.PhilaSUG.org</a>

#### **Presenters Wanted**



with others, to brush up your presentation prior to delivery at NESUG or SUGI or some other major conference, and to gain confidence as a speaker. Short technical SAS related articles are also desired for inclusion in the Newsletter. If this is of interest to you, please use the online abstract submission form found on our web site. Presentations can be from a few minutes to 50 minutes. If you wish to participate, the deadline for the Spring meeting is April 11th. Your abstract must be submitted online at our web site.

# **Paper Abstracts**

# A SAS® Programmer's Guide to Generating CDISC Define.xml

Michael Molter, INC Research

How would you like to be able to generate a Define.xml with just a few simple PROC PRINT statements? Not possible, right? Believe it or not, with a well thought-out metadata environment, we can make this dream come true, but it won't happen overnight.

CDISC's requirement of an XML-based metadata document introduces at least three potentially new challenges to the SAS programmer asked to generate it. One is at least a basic understanding of XML. A second is a thorough understanding of the CDISC-specific XML structure of Define.xml. A third is the use of SAS to generate it. All three of these tasks most likely lie outside the scope of what a SAS programmer building clinical databases, tables, listings, and graphs ever needed to know. This paper addresses all three of these challenges. After a brief discussion of XML basics, we will study carefully the structure of Define.xml. With these tools in place, we'll see how ODS's Markup destination provides a powerful tool for generating the final document with the familiar PRINT procedure.

Mike Molter is a SAS programmer for INC Research and makes his home in Cary NC. With a Bachelors and Masters degree in mathematics from Western Michigan University, he began learning SAS in 1999 in the healthcare industry before moving to clinical trials in 2003. Mike's programming interests include ODS, PROC REPORT, and tool building through the macro facility and PROC TEMPLATE.



#### V5XPT: A Macro to Verify SAS Datasets then Create and Validate SAS Version 5 Transport Files

Jim Johnson & Gui Gao, RPS, Inc.

The SAS Version 5 transport file is the FDA standard format for submitting SAS datasets for review. There are several limitations of the version 5 transport file including 8 characters for dataset name, 40 characters for dataset label, 8 characters for a variable name, 40 characters for a variable label and 200 characters for the value of a character variable. SAS version 9 allows all of these elements to be longer, and transport files can be created using the longer values, but they will not be version 5 compliant. Therefore, before creating version 5 transport files from SAS datasets, the datasets should be checked for any violation of the above limitations. This paper introduces a macro used to identify violations, and when none are found, creates the version 5 compliant transport file and then validates the transport file by opening it in another area and comparing the contents with the original data.

Gui Gao has been a biostatistician for 7 years and has a strong SAS programming background. In addition to statistical processing he is actively involved in SAS programming work. He has written macros for conducting most of statistical analyses and outputting key statistics. Gui also has strong graph experience and creates most of the graphs at RPS. Recently, he has been working on writing a series of SDTM mapping macros.

Jim Johnson has been programming in SAS in the Pharmaceutical Industry since 1986. He has presented at many local, regional, and national conferences, and has been teaching in the SAS Certificate Program at Philadelphia University since its inception in 1997. Jim has a reputation as a "problem solver". His recent work includes large SAS systems, writing programs that write programs, an SDTM compliance verification system, infrastructure programming, and advanced validation and documentation skills.



# **Building the Better Macro:** Best Practices for the Design of Reliable, Effective Tools

Frank Dilorio, CodeCrafters, Inc.

The SAS® macro language has power and flexibility. When badly implemented, however, it demonstrates a chaos-inducing capacity unrivalled by other components of the SAS System. It can generate or supplement code for practically any type of SAS application, and is an essential part of the serious programmer's tool box. Collections of macro applications and utilities can prove invaluable to an organization wanting to routinize work flow and quickly react to new programming challenges. But the language's flexibility is also one of its implementation hazards. The syntax, while sometimes rather baroque, is reasonably straightforward and imposes relatively few spacing, documentation, and similar requirements on the programmer. In the absence of many rules imposed by the language, the result is often awkward and ineffective coding. Some amount of self- imposed structure must be used during the program design process, particularly when writing systems of interconnected applications. This paper presents a collection of macro design guidelines and coding practices. It is written primarily for programmers who create systems of macro-based applications and utilities, but will also be useful to programmers just starting to become familiar with the language.

A SAS programmer since 1975, Frank DiIorio is President of CodeCrafters, Inc. and the author of "SAS Applications Programming: A Gentle Introduction" and "Quick Start to Data Analysis with SAS." He is past President of the SouthEast SAS Users Group, and co-chaired its 1994 and 1996 conferences. He is also active in several local SAS user groups and was a co-founder of the Research Triangle CDISC Users Group. A native New Yorker, he lived in North Carolina from 1974 until 2008, when he returned to his Yankee roots, relocating to Philadelphia.



# Innovative Analytics and Data Visualization with JMP

Jian Cao, SAS/JMP

If you like programming in SAS...You'll love programming SAS using JMP.

If you're ready for the best of both worlds, you're ready to visualize your SAS data through JMP. You've already experienced the unparalleled depth of SAS analytics and data integration. Now get ready for a SAS client that's unlike anything you've experienced. Get ready for software that will let you grab your data, slice it, spin it and make it come alive.

From JMP you can...

- Generate reports from a SAS® server
- See point-and-click interfaces instead of complex procedures
- Run SAS Stored Processes authored by SAS Enterprise Guide®

JMP statistical discovery software has an attitude toward data that allows close, personal and intimate interaction with the data. JMP brings dynamic visualization to the SAS user. That's important to the SAS programmer because leveraging the powerful JMP environment with SAS code results in SAS applications that deliver rich graphics.

JMP has the feel of a spreadsheet, but with the supportive structure of a database – and much more graphical responsiveness. Changes happen instantly, eliminating the step of sending jobs to the server and retrieving results.

We will show how to leverage your existing investment in SAS with business visualizations using JMP.

Jian Cao is the senior Systems Engineer for the Mid-Atlantic Region of JMP, a business unit of SAS specializing in statistical discovery software. He has more than 12 years of experience in using statistics and SAS® products to solve business problems. Cao began his career at AT&T Bell Labs in 1995 as a research analyst. He later moved onto management positions within the AT&T business organization, providing analytical support to sales and marketing. From 2001 to 2006 Cao worked in the pharmaceutical industry as a business consultant and the manager of statistical applications for a software company. He holds a Ph.D. in econometrics and a master's degree in statistics.

#### **Poster Abstracts**

#### A Generalized Procedure to Create SAS/Graph Error Bar Plots

Sanjiv Ramalingam, Octagon Research Solutions

Different methodologies exist to create Error bar related plots. Procedures exist to use the dataset by itself to create error bars either for standard deviation +/- mean (INTERPOLATION=STD1JT), standard errors +/- mean (INTERPOLATION= STD1TJM), min and max values but it becomes cumbersome to generate figures by just using the PROC Plot procedure as one has to go through numerous options available to find the right option. If the error bars are obtained as the standard errors of not one treatment (as related to the Pharmaceutical industry) but as the difference of two different treatments it is always advantageous to have a general procedure where the PROC MEANS/UNIVARIATE procedure can be used to calculate the statistics and a separate data step can be used to calculate the derived statistics such as the standard error for two different treatments. Then one generalized plot procedure can be used to create the error bar plot.

This poster discusses a methodology to plot the difference between the means with the standard error as an example.

Sanjiv Ramalingam is presently working as a Clinical SAS Programmer/consultant at Octagon Research Solutions. A Base SAS Certified professional and a prolific SAS user, he holds a Masters degree in Biomedical Engineering. He has a publication in the Journal of Interventional Cardiac Electrophysiology and has also presented posters at the Biomedical Engineering Society, Gill Heart Institute and FASEB (Experimental Biology). He will also be presenting a paper at PharmaSUG 2009.



Array Programming Basics
John J. Cohen, AstraZeneca LP

Using arrays offers a wonderful extension to your SAS® programming toolkit. Whenever iterative processing is called for they can make programming easier and programs easier to maintain. You will need to learn some new syntax, but we will explain several of the key components such as indexing and subscripts, temporary and

multi-dimensional arrays, determining array dimension, and a few special tricks.

John has been working in the Pharmaceutical Industry for over 17 years, presently supporting Commercial Analytics at AstraZeneca LP. He vaguely remembers writing his first SAS program in 1976, but still has no idea of what he is doing. He lives in Newark, DE with his wife and two basset hounds. In his spare time he likes to eat and sleep.



#### Automated Data Sub-setting: A Scheme for Data Disbursement and Description

Asaf Hanish, University of Pennsylvania

This presentation is intended to provide SAS programmers & statisticians with a scheme for the management of projects that require repetitive subsetting of variables from a central database. Commonly, health field projects involve dozens of collaborators, leading to the publication of many In light of the need for more manuscripts. consistent reporting standards, programming is often handled by a dedicated data management team, tasked with the disbursement of variables based on second party instructions. Using a sequence of macros and the SAS/ACCESS module, variables from the central database are converted into a linear list in excel format. The list can be embedded with html script and sent to the collaborators who may manually select the variables they wish to use by marking an adjacent column. The excel file is then imported back into SAS where additional macros subset the data based on second party selections. Further code may be employed to generate basic univariate output. This scheme requires no manuscript specific coding beyond a few instructions, greatly reducing code duplication.

Asaf started programming in SAS while working on a Masters in Epidemiology from the University of Pittsburgh. In the spring of 2007 he began working at the University of Pennsylvania's Biostatistician Analysis Center, a health research consulting group housed in the School of Medicine. In that time he has worked on a number of projects including: the interplay of diabetes &cardiovascular diseases, phase III clinical trials and the effectiveness of electronic decision support systems in the hospital setting.

# Philadelphia Area SAS User Group (**Phila SUG**) Membership Form

To speed through registration complete this form (please print) and return it to the registration desk of any PhilaSUG meeting (do **NOT** mail it). Checks should be made payable to PhilaSUG. Our membership year runs from Jan. 1 to Dec. 31. Dues for the year are \$20.

This is a new, renewal or update / correction.
Name:
Affiliation:
Address:
City: STATE: Zip: Day Time Phone Number: ( )
PhilaSUG-L is a low volume, announcement-only e-mail notification service provided free of charge. By subscribing you'll be notified of the latest information about upcoming events, especially meeting announcements. By listing your e-mail address below you will be added to the electronic mailing list, you can cancel at anytime.
E-mail: (Be sure to clearly distinguish a dash from an underscore)
For updates / corrections, please list your old / incorrect information below:





# **Next PhilasUG Meeting**

Exact date and location will be posted shortly Tentatively Planned for Mid June 2009



will be held September 13-16 at the Hilton Burlington In Burlington, VT.

