PhilaSUG

Philadelphia Area SAS Users Group

Spring '01 Meeting Announcement

PhilaSUG Spring '01 Meeting
Thursday, June 21, 2001

The Philadelphia Area SAS Users Group Spring Meeting will be on Thursday, June 21, 2001, at 1:00 PM, and will be hosted by Omnicare Clinical Research at their Corporate Headquarters, 630 Allendale Road, King of Prussia, PA 19406. A map and driving instructions can be found on our web site and later in this newsletter. **Important:** for security and logistical reasons, our host suggests that attendees pre-register via email to facilitate quicker processing to building admission. If you plan to attend, please send an email to registration@PhilaSUG.org with:

SUBJECT: PhilaSUG Spring Meeting Pre-Registration
In the Body of the email just list your name and
Company affiliation.

Registration will begin at 12:15 PM and the meeting at 1 PM. Please try to arrive early to register; this is the first meeting of 2001 so all who attend must register and pay dues. Dues for the year are $20. There are no other fees for attending PhilaSUG meetings. We will accept cash, but a check is preferred. Fees will be waived if you are a student and present a current matriculation card. Registration can be made a lot easier if you attach a business card to a check or $20 bill as there is less writing to do and it is more legible.

Employees of Omnicare Clinical Research, our sponsor for this meeting, will be given courtesy admission but we do request that they register for mailing list purposes. Please do not mail in your $20 registration fee beforehand as this creates unnecessary paper work. Receipts will be available at registration time.

Meeting Agenda

12:15	1:00	Registration
1:00 -	1:15	President's opening remarks
1:15 -	2:00	*SynCoder: A SAS/AF Application for Implementing MedDRA Coding in Clinical Trials*
		Daphne Ewing,
		Synteract, Inc
2:00 --	2:15	Break, Poster breakout and refreshments
2:15 --	2:45	SAS Macros Re-visited*: An Animated System Road Map*
		Saad Anbari, Christiana Care Health System
		Russ Lavery
		Musa Nsereko
2:45	3:15	*SAS Macros Re-visited – Part 2*
3:15 -	3:30	Break, Poster breakout and refreshments
3:30 -	3:45	Open Forum
3:45 -	4:15	*SAS Macros Re-visited – Part 3*
4:30		Meeting adjourns & Dinner!!!!!

Light refreshments will be served during breaks.

Abstracts are found later in this newsletter.

The speakers 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.

Omnicare Clinical Research
630 Allendale Road
King of Prussia, PA 19406
1-800-290-5766

Parking should be available in the front and on the sides of the building. If needed, there is additional parking behind the building.

From the North (Bucks and Montgomery Counties)
Take PA Turnpike to Exit 24 Valley Forge.
Follow the signs for 202 North.
Follow 202 North past the King of Prussia Mall to the intersection of 202 and Allendale Roads.
Make a left onto Allendale Road.
630 Allendale Road will be on the right after you pass through the 4th traffic light.

From the South (Delaware)
Take 95 North to the 476 North exit (Plymouth Meeting Exit).
Follow 476 North to 76 West.
Follow 76 West to the 202 North Exit.
Follow 202 North past the King of Prussia Mall to the intersection of 202 and Allendale Roads.
Make a left onto Allendale Road.
630 Allendale Road will be on the right after you pass through the 4th traffic light.

From the East (New Jersey Tpk to Pennsylvania Tpk)
West on Pennsylvania Turnpike to Exit 24(Valley Forge).

Follow the signs for 202 North.
Follow 202 North past the King of Prussia Mall to the intersection of 202 and Allendale Roads.
Make a left onto Allendale Road.
630 Allendale Road will be on the right after you pass through the 4th traffic light.

From Philadelphia International Airport
Take 95 South to 476 North Exit (Plymouth Meeting).
Follow 476 North to 76 West.
Follow 76 West to the 202 North Exit.
Follow 202 North past the King of Prussia Mall to the intersection of 202 and Allendale Roads.
Make a left onto Allendale Road.
630 Allendale Road will be on the right after you pass through the 4th traffic light.

From the West (Harrisburg, Pa.)
Take Pennsylvania Turnpike East to Exit 24 (Valley Forge).
Follow the signs for 202 North.
Follow 202 North past the King of Prussia Mall to the intersection of 202 and Allendale Roads.
Make a left onto Allendale Road.
630 Allendale Road will be on the right after you pass through the 4th traffic light.
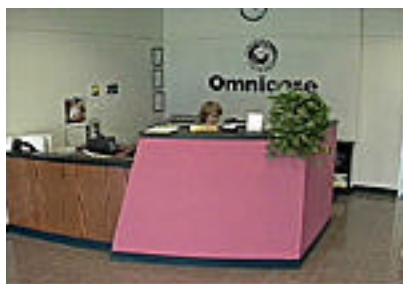
Thank You to our Host

The PhilaSUG Executive Committee wishes to thank Mark Penniston, Omnicare Clinical Research, for making the meeting possible. In addition, we wish to thank Robert Nicol for his efforts to coordinate this meeting.

About Our Host

Omnicare Clinical Research is one of the world's leading CROs, providing a full range of services to meet the growing demand for drug research and development. With the combination of IBAH, Inc., Coromed, Inc., and IFNS GmbH, Omnicare has developed a world-class drug development organization with operations in 23 countries and experience in all major therapeutic categories. As an example of its extensive research capabilities, Omnicare Clinical Research recently completed a global project, on time and on budget, involving 7,200 patients and 1,200 sites in 22 countries.

The Biometrics Department at Omnicare Clinical Research has 5 geographic locations in 3 countries using SAS as its primary analysis and reporting tool. Biometrics personnel are involved in all aspects of product development in providing integrated services to client companies in the pharmaceutical, biotechnology and medical device industries. The department has an active commitment to developing their people in learning how SAS is used in clinical trials. As such training takes a priority role within the department as demonstrated by our in-house training modules. The department offers a flexible work policy such that, once an individuals training is well established, telecommuting and flex hours are available to those who so choose. The department is continuously proactive towards new communication technologies to achieve maximum flexibility.

Presenters Wanted

You are invited to be a Presenter - PhilaSUG constantly seeks individuals who wish to participate actively in our meetings by presenting various SAS topics in the form of delivered papers or posters. This is a great way to share your knowledge 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 e-mail us at: Abstracts@PhilaSUG.org. Presentations can be from a few minutes to 50 minutes. If you wish to participate in the Fall '01 Meeting, please submit an abstract and bio by September 1, 2001. Your abstract must include desired length of presentation and specification of audio/visual needs .

Articles to be included in the newsletter should also be submitted by September 1. Newsletter articles will also be published on our website.

The PhilaSUG-L ListBot E-mail Distribution List

PlilaSUG-L is provided free of charge to all subscribers who wish to join this E-mail notification process. In order to sign up for this service, you need only send a blank E-mail message to: PhilaSUG-L-subscribe@onelist.com. If you go to the ListBot web site, you will be asked to fill in your profile. It is your decision to enter as much personal information as you wish to provide. The only datum that is necessary is your E-mail address, although your name is useful. Note that you can subscribe as many times with as many different E-mail addresses as you wish to have the announcements sent to.

Any information you enter will neither be displayed nor given out to any party.

We, the PhilaSUG Executive Committee, utilize this service to inform its members of upcoming events related to PhilaSUG activities or noteworthy issues regarding PhilaSUG or SAS. This service is a low-volume announcement-only list.

Do not ask the PhilaSUG-L ListBot administrator to change your password, your E-mail address, or cancel your subscription, as he is unable to do so. Only you, the subscriber, can do these tasks.
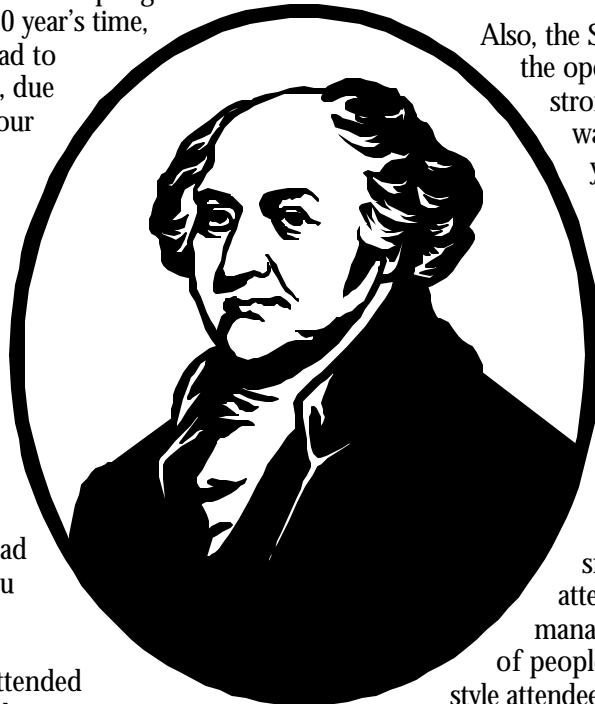
I begin to write this column from an unusual place. Specifically, PhilaSUG has not met since our Spring Meeting last June. Before now, over 10 year's time, the Executive Committee has never had to cancel a PhilaSUG meeting. And now, due to a variety of circumstances beyond our control, was have had to cancel two consecutive meetings! I know that my Executive Committee members share my feeling that we hope this does not have to happen again once, let alone twice in a row! And my EC also joins me in a special "thank you" to our presenters at this meeting, for their cooperation in presenting now, after one or two postponements. We have been looking forward to your papers and posters for some time now, and are glad we will finally get the chance to see you and them.

For those PhilaSUG members who attended SUGI 26 in April, I was wondering what you thought of the conference. Some may recall that last year, after SUGI, I shared a few of my impressions of the conference in my column for our Spring Meeting newsletter. And I was quite struck by how web-oriented and e-commerce oriented the conference was in the opening session, in the papers presented by SAS personnel, and in the demo area. I was not sure what it all meant, but I did have the feeling that SAS was now focusing on directions that many of us were simply not involved in, and were not likely to be involved in any time soon in our work.

Now I have returned from another SUGI, and my feelings and wonder from last year are only amplified. I would describe the main thrust of the SAS Institute's focus at the conference as an effort to operationalize their concept of "The Power to Know." The primary buzz word/phrase was probably "Customer Relationship Management," and "Supplier Relationship Management" was not far behind. And there was a focus on pre-built solutions, by SAS itself, to address these needs in a variety of industries. Some people call this "vertical market software." This was true once again in the opening session, in the papers presented by SAS personnel, and in the demo area. I would not say that we were seeing pure off-the-shelf solutions that we, as programmers and system developers, could/would have no role in employing. But, on the other hand, as one took

John Adams

all this in, it was a lot easier to see oneself as a systems integrator who deploys and uses sort-of-pre-built solutions, than to see oneself as a programmer who programmed system solutions and ad hoc solutions. This is definitely something for the "average SAS programmer" to think about.

Also, the SAS Institute's effort, especially in the opening session, was punctuated by its strong marketing look and feel. This was in marked contrast from previous years when the opening session had a measurable technical component to it. Used to be, we would hear announcements during opening session about new technical features in the software that we had been waiting for, and that we responded to with enthusiasm and applause. There wasn't much of that this time. It was almost as if the content of the opening session was geared toward the smaller number of "new-style" attendees. By "new-style," I mean the management level "power-to-know" kind of people. And the larger number of "old-style attendees," the more technical programmer-type people, did not know quite what to do with what we were hearing and seeing. Truly. I cannot tell you how many people asked me throughout the conference if I had seen the opening session, and what I thought of it, (i.e., what I thought it meant). It appears that the direction the SAS Institute is taking the product was on everyone's mind.

So, as I said, I am wondering what this all means. I do not have a sense that it is good or bad, right or wrong, or anything like that. My only strong sense right now is that it is different, that the difference matters, and that I'd better begin to understand the difference.

And yet, in spite of all this, or perhaps in contrast to all this, something else struck me very, very much at the conference. I attended a variety of papers, and two stand out in my mind because of the outright enthusiasm of the audience to receive the information. One paper was titled "Battle of the Titans: TABULATE vs. REPORT." It was a comparison of how PROC REPORT and PROC TABULATE can handle the variety of issues that we face regularly when reporting our data. The presentation was in the form of a duel, if you will, between the REPORT expert and the TABULATE expert. The room was packed "to the gills," and the audience absolutely loved the stuff.

The second paper was titled "Table Look-Up by Direct Addressing: Key-Indexing, Bit Mapping, Hashing." The paper took a sophisticated, technical look at the problems of table look-up with SAS Software, and presented sophisticated, technical solutions. It was the kind of paper that you would really appreciate if you were a real programmer-type, who had been struggling with this real programming issue, and had really large amounts of data, where performance really matters. Once again the room was very full, especially for a paper starting at 4:30PM on a beautiful, sunny afternoon in Long Beach, CA. And the audience applauded so enthusiastically when the presentation ended. Many people rushed to speak with the presenter at the end, and I overheard one person say to his friend as he left, "This is the best paper I have seen by far all day."

Now, I realize that these are just anecdotes that I am sharing, but they really did make me think about all I had been seeing. It seemed to me that the SAS Institute was speaking enthusiastically about the new directions that they are taking their product, (and rightly so). And yet the attendees at the conference were still flocking enthusiastically to the places where SAS has come from, and has mastered so well. Interesting…. very interesting. I am sure the picture and meaning of all this will become clearer to us over time.

I hope you can attend this PhilaSUG meeting and hear and see the excellent information to be presented, as well as the information that surfaces more informally at the breaks and at dinner afterwards. As usual, any PhilaSUG member is welcome to join the presenters and Executive Committee members at dinner nearby after the meeting. Try it some time. It is a great way to integrate yourself further into the local SAS community.

I hope to see you and speak with you at the meeting.

Barry R. Cohen
President, PhilaSUG

Future Meetings and Events

Pharma*SUG* will be May 20-23, 2001 in Boston, MA
DiaMond*SUG* will be May 30-June 1, 2001 in Chicago, IL

Paul Allison will be offering three 5-day courses in Philadelphia (see the web site for more details):
  ➢ July 9-13, 2001--Survival Analysis
  ➢ July 16-20, 2001--Categorical Data Analysis
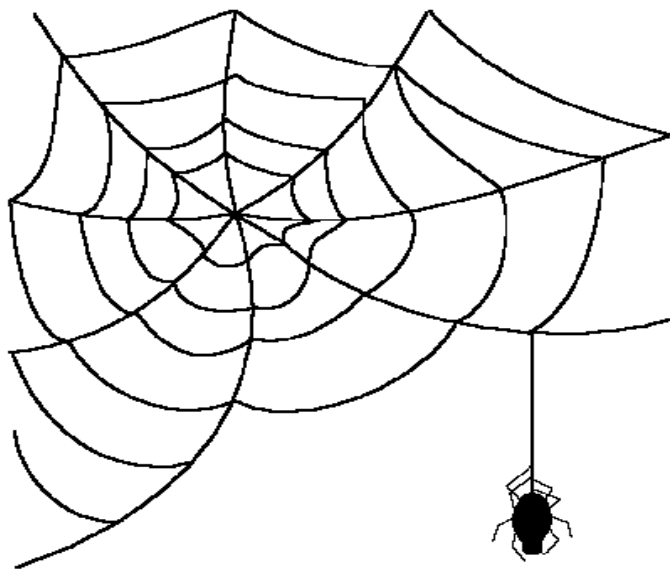 ➢ July 23-27, 2001--Survival Analysis

SAS V8 one day seminar by Destiny Corporation July 16

Sept. 5 - Dec 15 SAS Programming Class (CS228.2) taught by Daphne Ewing (Synteract, Inc.) at Arcadia University (formerly Beaver College in Glenside, PA). See the web site for more details.

NESUG 2001 will be Sept. 30 – Oct. 3 in Baltimore, MD
SUGI 27 will be April 14 - 17, 2002 in Orlando, FL

PhilaSUG Fall '01 Meeting will be hosted by Sanofi-Synthelabo at the Wyndham Valley Forge Nov. 12th.

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: http://www.PhilaSUG.org

Paper Abstracts

SynCoder: A SAS/AF[a] Application for Implementing MedDRA Coding in Clinical Trials
Deborah Testa, Seven of Nine Systems, Studio City, CA
Russell Holmes, Synteract, Inc., Encinitas, CA
Daphne Ewing, Synteract, Inc., Ambler, PA

This paper presents SynCoder, a Version 7/8 SAS/AF® application that implements the new MedDRA international medical terminology for coding adverse events in clinical trials. The presentation will be accompanied by a brief demonstration of three of the application's modules: batch coding using a synonyms data set and a data mart of MedDRA hierarchical terms, an efficient search engine for browsing the hierarchies, and on-line coding of terms requiring human decision making. The application demonstrates the superiority of new features (both in the user interface and in the component technology) in SAS/AF software in Version 7 and 8 over earlier versions.

Daphne Ewing is Managing Director, Northeast Operations at Synteract, Inc. located in the Philadelphia, Pennsylvania area. Synteract is a Clinical Research Organization based out of San Diego, California. Daphne holds a B.S. in Computer Science Engineering from the University of Virginia. She has been working in the pharmaceutical data processing area since 1987, including SAS programming on a variety of platforms since 1989. Daphne is a member of the NorthEast SAS Users Group, Inc. Executive

Committee, and has presented at the local, regional and national level.

SAS Macros Revisited: An animated system road map
Saad Anbari, Russ Lavery, Musa Nsereko

Macros are a powerful tool for the SAS professional. To obtain full benefit of macro processing, the user must understand how the different components of the macro system relate to each other, and to the rest of the SAS system. We review SAS macro processing via a simple animated map that shows the relationship between the different components and discuss in detail the following: Components of the SAS system map, tokenization, transfer of "control" among the system components during SAS processing, macro assignment & resolution, macro compilation & execution, resolving the double & Macro functions that interface with the data step, local and global symbol tables, macro timing issues, iterative & conditional macro execution
Macro system errors with special emphasis on how an understanding of timing and scope issues can be useful when writing and/or debugging macros systems

Saad Anbari is currently employed as a biostatistician with Christiana Care Health System. He has used SAS for over 3 years. He is a Certified SAS Programmer.

Russ Lavery has used SAS for fifteen years. He has experience in several SAS modules and has passed two SAS certification exams.

Musa Nsereko has been using SAS for over 5 years and is a Certified SAS Programmer.

Poster Abstracts

Creating a Consolidated Report from Several SAS® Outputs: Using DATA NULL and PUT Statements
Anne Horney and Gail F. Kirk
Cooperative Studies Coordinating Center
VA Medical Center, Perry Point, Maryland

We often find it necessary to combine output values from several procedures into one table or page of a report. When we need a p-value from one procedure, and means and standard errors from another and frequencies from a third procedure, the separate pieces of information must be brought together in one DATA step before using PUT statements to print the table. The problem of how to get the data/output/information ready to print is particularly difficult for inexperienced programmers. We will show examples using several different methods such as PROC FREQ, PROC MEANS, PROC UNIVARIATE and DATA steps. In addition to creating PUT tables these methods can also be used to create delimited ASCII files

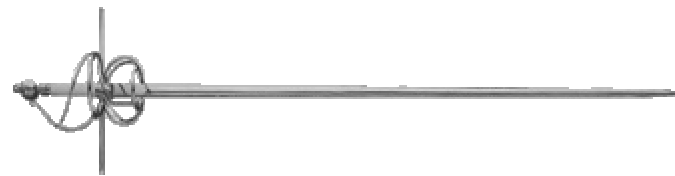that can be merged into word processing or spreadsheet packages.

Collapsing Adverse Experiences Records
Shi-Tao Yeh, EDP Contract Services, Bala Cynwyd, PA

One of the most challenging tasks for SAS® programmers in the clinical studies is to collapse the adverse experiences (AE) records. The AE records are identified as either collapsible or non-collapsible. The collapsible AE records can be categorized into two types. The first type is a set of multiple records with the same AE onset date. If the AE record has a missing end date, this indicates the event is continuing. The second type shows the records with a time consecutive sequence. This paper provides two SAS macros for AE records collapsing, one for each type of collapsible AE records.

The SAS product used in this paper is SAS BASE®, with no limitation of operation systems.

Using Style Sheets to Format SAS**ã** Output Web Page Layout
Shi-Tao Yeh, EDP Contract Services, Bala Cynwyd, PA

SAS® Web Publishing Tools are SAS macros that enable users to convert data files or output files into HTML format and display it on Web browsers. A style sheet is a set of rules that format the web page layout. This paper discusses SAS Formatters, and how to implement style sheets to format SAS output to a web page. SAS Formatting Tools version 1.1 does not support style sheets. In addition, a SAS macro is provided in this paper for users using SAS software without style sheets support to be able to implement style sheets for a web publishing task.

The SAS product utilized in this paper is SAS BASE®, with SAS Formatters installed on a Unix platform.

Calendar and Clock Elements
Rick Aster

Time, as we measure it, is a linear effect. This means that time can be measured numerically by picking a unit of measurement and a point of reference, and this is the way SAS measures time. However, time is also understood in terms of cycles, such as years, months, weeks, and hours. These units form the elements of the clock and the calendar. This poster describes the SAS features for working directly with the various calendar and clock elements in order to work with the many ways in which dates and times of day are commonly written.

Rick Aster is a SAS programmer and the author of numerous books and other writings on SAS programming. His new web site, globalstatements.com, features a computer dictionary for SAS programmers. His latest book, Professional SAS Programming Logic, *focuses on the general programming and data-handling features of SAS.*

A Comparison of Binomial Proportion Interval Estimation Methods
John Ulicny

Some recent research has shown that the standard Wald confidence interval approximation for the binomial proportion is inadequate in key respects, especially for extreme values of *p*. Even for moderately large values of *n* the coverage probabilities can prove to be erratic for various specific values of *p*. This fact makes general rules for the use of the Wald method problematic (refer to the article by Brown, Cai & DasGupta entitled "Interval Estimation for a Binomial Proportion" in a forthcoming edition of Statistical Science). Alternative methods have been proposed, and this poster compares some of those alternatives with new capabilities built in to SAS Version 8.1 to calculate exact intervals. A decision rule is proposed for the selection of an appropriate technique. Also, a few extensions to other discrete distributions will be considered.

This topic is relevant to both statisticians and programmers because of the fact that binomial proportion estimation is so commonly needed in a wide variety of situations, and the Wald (normal approximation) technique is taught in even the most basic statistics courses. The task of interval estimation of this type is therefore often handled by non- statisticians.

John Ulicny is an independent consultant specializing in statistical programming in the healthcare industry. Some of his recent projects include: using ODS to extract the results of multiple comparison procedures generated by PROC GLM; an evaluation of DCG (diagnostic cost grouping) risk adjustment methods to predict future patient costs based on claims history; and generating hospital performance and quality indicators based on hospital inpatient data. John has an MS in Applied Statistics from Temple University. He has 15 years of experience in healthcare data management, and 10 years of experience with the SAS system.