# PhilaSUG newsletter

Spring 2016 Meeting Announcement

PhilaSUG Spring 2016 Meeting
Thursday, June 23, 2016

The Philadelphia Area SAS Users Group Winter Meeting will be on Thursday, June 23, 2016, at 1:00 PM, and will be hosted by the Chiltern International at the Penn State Great Valley Campus Conference Center. A map, detailed driving, and parking instructions are available later in the newsletter.

Registration will begin at 12:15 PM. The meeting will commence at 1 PM. Dues for the year are $30. There are no other fees for attending PhilaSUG meetings. We will accept cash, but a check is preferred. As a courtesy for hosting this meeting employees of Chiltern are welcome to attend this meeting at no cost.

PhilaSUG is aware of the problem that students face to attend professional meetings on limited budgets. For 2016, PhilaSUG has instituted the following trial program. Show your current student ID at the registration desk and we will issue you a 2016 PhilaSUG Membership ID card, which will allow you to attend this and the remaining PhilaSUG meetings at no cost. We hope that students will take advantage of this offer to enhance their knowledge of SAS software and to network with local fellow SAS users.

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 cash, 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.

Agenda

We thank our host for providing lunch and break refreshments.

12:15-1:00	Registration and lunch
1:00-1:30	Artied Memaj - *Is Your Randomization Really Random?*
1:30-2:20	Peter Flom - *Scatterplots: Basics, Enhancements, Problems, and Solutions*
2:20-2:50	Kevin Lee - *SAS Integration with NoSQL Database*
2:50-3:20	Break, Posters, and Refreshments
3:20-4:10	Kirk Lafler - *Five Little Known, But Highly Valuable and Widely Usable, PROC SQL Programming*
4:10-4:40	Sasikumar Palanisamy - *SAS Supervisor within You vs SAS: Debugging SAS Data Steps with the Program Data Vector*

Posters
Michael Stackhouse - *Achieving Clarity through Proper Study Documentation: An Introduction to the Study Data Reviewer's Guide*
Alyssa Wittle - *CDISC Standards End-to-End: Transitional Hurdles*
Himaja Surapaneni, Rama Kudaravalli – *"THE VISITS": SCHEDULED/UNSCHEDULED, WINDOWING & CLINICAL ENCOUNTERS*

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.

Important - **If you will be attending**, please complete the online PhilaSUG Meeting sign-up form found on our website **no later than June 19th**. If after submitting this form you later learn you can't attend please contact Max Cherny at chernym@yahoo.com. RSVPs in advance help to expedite food count and *space is limited*, so if you will be attending, please complete the online PhilaSUG Meeting sign-up form.

PhilaSUG Executive Committee

Michael Davis, President
John Cohen, Membership
Diane Foose, Treasurer
Robert Schechter, Web Master, and Newsletter Editor
Jonas V. Bilenas   Max Cherny
Barry Cohen   David Horvath
Mark Keintz   Neal Musitano Jr.
Haibin Shu   Kajal Tahiliani

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.

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 Michael Davis at **michael.davis@alumni.duke.edu.**

Presenters Wanted

PhilaSUG 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 a regional or national SAS conference, and to gain confidence as a speaker. If this is of interest to you, please use the online abstract submission form found on our website. Presentations can be from a 10-minute "coders corner" to 50 minutes.

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

Directions to Meeting Site

The Conference Center at Penn State Great Valley
30 E. Swedesford Road, Malvern, PA 19355
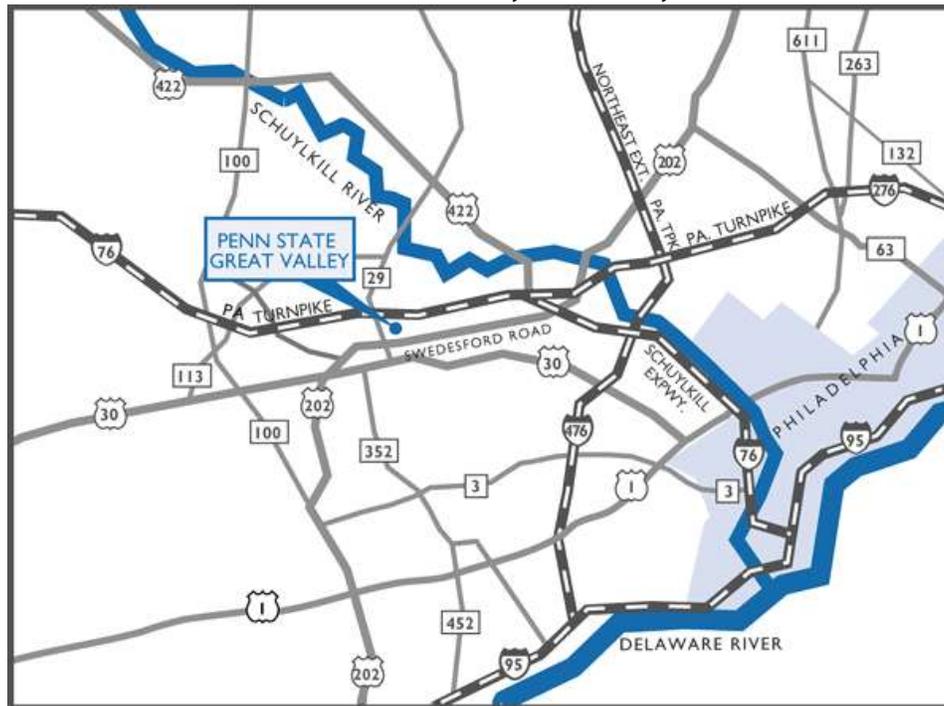
Parking

There is ample free parking in front of both buildings. Parking registration is not required for conference attendees.

From West Chester, Delaware, and South:
1. Take Route 202 North to the Great Valley Exit (Route 29 North).
2. Turn right at the end of the ramp and turn right again at the light onto Route 29 North.
3. Continue to the next traffic light and turn right onto Swedesford Road.
4. Continue approximately 2/10s of a mile to the Penn State Great Valley campus on the right.
5. As you enter the driveway into the campus, the Main Building is on the right, and the Conference Center Building is on the left.

From New Jersey and East
1. Take the Pennsylvania Turnpike westbound to Exit 326 (old Exit 24) at Valley Forge.
2. Follow signs for Route 202 South/West Chester Exit 328 (old Exit 26A).
3. Continue on Route 202 South to the Great Valley Exit (Route 29 North).
4. At the first traffic light, turn left onto Swedesford Road.
5. Then take the first left turn into the Penn State Great Valley campus.
6. As you enter the driveway into the campus, the Main Building is on the right, and the Conference Center Building is on the left.

From Reading and West
1. Take the Pennsylvania Turnpike eastbound to Exit 326 (old Exit 24) at Valley Forge.
2. Follow signs for Route 202 South/West Chester Exit 328 (old Exit 26A).
3. Continue on Route 202 South to the Great Valley Exit (Route 29 North).
4. At the first traffic light, turn left onto Swedesford Road.
5. Then take the first left turn into the Penn State Great Valley campus.
6. As you enter the driveway into the campus, the Main Building is on the right, and the Conference Center Building is on the left.

Chiltern is a leading global CRO that listens to client needs in order to customize solutions for the Biopharma industry. With 33 years in service, Chiltern delivers from three specialized business units: Chiltern Biopharma, with deep therapeutic expertise for respiratory, anti-infectives / vaccines, ophthalmology, dermatology and other specialty areas; Chiltern Oncology, led by physicians, scientists and clinicians to uniquely manage all phases of hematologic and oncologic clinical drug development; and Chiltern Source, a world leader in tailored relationships for FSP, resourcing and staffing solutions. Chiltern's 2,200 engaged professionals work across 45 countries to deliver flexible, responsive solutions that are "Designed Around You".

Further information is available at:
http://www.chiltern.com.

Thank You to our Host

The PhilaSUG Executive Committee wishes to thank Kelly Spak, Recruiter, Clinical Analytics, and Jim Doyle, Senior Recruiter at Chiltern, for arranging this meeting space, and refreshments. In addition, we wish to thank two members of our Executive Committee, Robert Schechter for site coordination, and Mark Keintz for program coordination.

PhilaSUG Fall 2016 Meeting

Next PhilaSUG Meeting

October 11
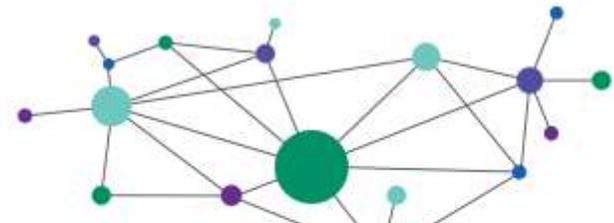
Watch our calendar page at http://philasug.org/calendar.htm#SAS_Day for details as they develop!

Paper Abstracts

Five Little Known, But Highly Valuable and Widely Usable, PROC SQL Programming Techniques

Kirk Lafler, Software Intelligence Corporation

The SQL Procedure contains a number of powerful and elegant language features for SQL users. This presentation highlights five little known, but highly valuable and widely usable, topics that will help users harness the power of the SQL procedure. Topics include using PROC SQL to identify FIRST.row, LAST.row and Between.rows in BY-group processing; constructing and searching the contents of a value-list macro variable for a specific value; data validation operations; data summary operations to process down rows and across columns; and using the MSGLEVEL= system option and _METHOD SQL option to capture information into the processes during query evaluation, the algorithm selected and used by the optimizer when processing a query, testing, and debugging operations, and other processes.

Kirk Lafler has been programming in SAS since 1979 and is a consultant and founder of Software Intelligence Corporation. Kirk is a professor at UCSD Extension, SAS Certified Professional, application developer, data scientist, mentor, and provider of IT consulting services and education to SAS users around the world. Author of six books including PROC SQL: Beyond the Basics Using SAS, Kirk has written more than 500 papers and articles; been an Invited speaker at 500 -plus SAS International, regional, special interest, and other user group conferences/meetings; and is the recipient of 23 "Best" contributed paper, hands-on workshop (HOW), and poster awards.

SAS® Integration with a NoSQL Database

Kevin Lee, Clindata Insight

We are living in the world of abundant data, so-called "big data". The term "big data" is closely associated with any data structures – unstructured, structured and semi-structured. They are called "un- or semi-structured" because they do not fit neatly into a traditional row-column relational database. A NoSQL (Not only SQL) database is the type of database for those kinds of data.

The paper will show how data is stored in the NoSQL database and ways to transfer it to the SAS environment for analysis. First, the paper will introduce how NoSQL database can natively store any data structures. Secondly, the paper will show how the SAS system connects to NoSQL databases using REST API. For example, SAS programmers can use the PROC HTTP option to extract XML files through REST API. Finally, the paper will show how SAS programmers can convert XML to SAS datasets for analysis. For example, SAS programmers can convert the extracted XML files to SAS datasets using the XMLV2 LIBNAME engine.

Kevin Lee, M.S., is a Director of Data Science at Clindata Insight. Kevin has been in the pharmaceutical industry more than 15 years and a very active data-driven solution supporter such as CDISC, Standards Metadata, and Data governance. Kevin is also a current member of the CDISC ADaM, SHARE Team, and PhUSE Semantic Technology working group. Kevin has presented more than 30 papers at the various conferences. Kevin earned an M.S. in Applied Statistics at Villanova University following a B.S. from the University of Pennsylvania. Kevin is a lifetime learner who loves to learn and share.

Is Your Randomization Really Random?

Arteid Memaj, Carolyn Romano,
Chiltern International

Randomizations can go from simple and straightforward to complex and dynamic. When should random number generators and data steps be used versus PROC PLAN? Examples will be provided of different randomization designs along with how to build these randomizations in SAS®. How random is your randomization? If you use a random number generator or PROC PLAN does that make your randomization random? Once the foundation of building randomizations is set we will demonstrate how to test whether the randomization list is random using the "Wald-Wolfowitz runs test". There are different tests that can test randomness, but we will focus only on runs test in SAS®. The runs test looks at the number of runs within the sequence and compares it to the expected number of runs based on the number of units being tested. The run test is based on the null hypothesis that each element in the randomization is independently drawn from the same distribution. So now you know your randomization is really random.

Arteid Memaj is a Biostatistician at Chiltern International. He has a BS in Mathematics from Arcadia University and an MS in Applied Statistics from West Chester University. Programming SAS in the pharmaceutical industry for over 4 years, he has expertise in base SAS, macros, and PROC SQL.

Carolyn Romano is Statistical Programmer at Chiltern. She has a BS in Mathematics and MS in Mathematics from Villanova University. She has been programming SAS for a little less than two years in the pharmaceutical industry.

SAS Supervisor within You vs. SAS®: Debugging SAS Data Steps with the Program Data Vector

Sasikumar Palanisamy, Chiltern International

The SAS DATA Step is a primary method you have used to create SAS data sets. Most of the time they work as expected but sometimes they don't. Sometimes you know why and sometimes don't. Stuck in a rut, scratching your head. What went wrong and where? Does this describe you, then let's talk. Let's take a deep dive into data set processing as a SAS Supervisor using the PDV. This presentation will explore how SAS Supervisor creates, compiles, and executes a dataset using the PDV and how you can take advantage of it for debugging a program.

Sasi is a Senior Manager at Chiltern with in-depth technical and functional knowledge in data management and statistical programming with over 13 years of experience in the Bio-Pharmaceutical industry. He has specialized knowledge in the implementation, submission of CDISC/SDTM and ADaM standard using meta-data.

Achieving Clarity Through Proper Study Documentation: An Introduction to the Study Data Reviewer's Guide (SDRG)
Terek Peterson, Michael Stackhouse,
Chiltern International

With the ever-growing standardization requirements of FDA submissions, it can be difficult to understand where exactly you place non-conformant, essential information that does not have a home within other submission documentation. With the Study Data Reviewer's Guide, this information has a home and can be effectively communicated. The SDRG provides reviewers with details they will need to perform a thorough review of the data, along with a space to answer questions from the reviewer before they are asked, expediting the review of the full documentation package. PhUSE has provided a step-by-step template that helps you understand what to report, where to report it, and makes sure nothing is lost so that traceability is clear. This paper will help you understand why it is important to think about the SDRG from the start, how to use these documents to your advantage, and provide examples of their flexibility and utilization.

Terek Peterson is Senior Director of Global Statistical Standards at Chiltern with over 20 years of experience performing statistical analyses for a wide range of clinical trials. He participates as a member of the CDISC Advisory Committee, the ADaM team, the ADaMIG v1.2 authoring co-Lead and sub-teams such as ADaM compliance, ADaM integration, ADaM questionnaire, and PhUSE FDA/CSS teams. Experienced and frequent presenter on Standards and SAS programming related topics.

Michael Stackhouse graduated from Arcadia University with a Bachelor's degree in Business Administration with a concentration in Economics and a minor in statistics. Michael has CDISC experience in both SDTM and ADaM standards and creation of Define.xml. Past therapeutic areas of experience for Michael include Asthma, COPD, psychiatric disorders, oncology and rare disease. Michael is an Assistant Manager at Chiltern.

CDISC Standards End-to-End: Transitional Hurdles
Alyssa Wittle, Tony Cardozo, Christine McNichol
Chiltern International

"Plus", "-like", "-ish" – We have all heard it in some variation: SDTM… plus, ADaM…ish, CDISC…like. It is evident there are still some things preventing us from accepting pure CDISC. Many companies find the transition to CDISC difficult for a variety of reasons. They enjoy a "CDISC+" philosophy and believe it is "compliant enough" to work. This poster discusses common challenges encountered while a company transitions onto CDISC. The pitfalls of the "CDISC+" design will be discussed in depth. Conversely, the pros of what having a fully CDISC – and CDASH – compliant database will also be covered. By using CDISC from end-to-end, meaning from Protocol and CRFs through TLGs, many efficiencies can be gained for project team members at every level. In addition, the different options available for training through CDISC along with examples of teaching methods which have a positive impact on user knowledge will be presented.

Alyssa Wittle is a Statistical Programmer III with Chiltern. Alyssa is a volunteer on the CDISC ADaM team, Compliance and ADaM 1.2 sub-teams, and SDS and SHARE sub-teams for Associated Persons.

Tony Cardozo is a clinical programmer with a background in high-level programming languages. Tony has lead studies across multiple therapeutic areas and has several years of experience implementing CDISC standards across trials of varying phases.

Christine McNichol is a Principal Statistical Programmer at Chiltern. Christine has 17 years pharmaceutical industry experience and 10 years of CDISC experience and is a volunteer on the CDISC ADaM and integration teams.

LET'S VISIT – "THE VISITS":
SCHEDULED/UNSCHEDULED, WINDOWING &
CLINICAL ENCOUNTERS

Himaja Surapaneni, Rama Kudaravalli,
Chiltern International

To expect the unexpected, a hallmark of modern thinking, requires us to plan for deviations in study protocol compliance. Trial subjects are rarely 100% compliant in following the protocol requirements. We see that the protocol clearly defines the expected visits for a study but what do we do with the unexpected visits? Two common approaches, windowing and clinical encounters are used to handle the unplanned visits. Recognizing, renaming and fitting the unplanned visits into scheduled visits plays a vital role in successful reporting of the data. This poster will explore visit windowing and clinical encounters methods for handling 'Unscheduled' visits.

Himaja Surapaneni has a Master's degree from Texas A&M University-commerce and is working as a senior statistical programmer in biometrics department. Possess good programming expertise, CDISC knowledge and provides subject matter expertise in mapping SDTM domains as per the guidelines in various therapeutic areas, to different clients according to their requirements.

Rama Kudaravalli has a Ph.D., working as a senior analyst in biometrics department. Providing subject matter expertise in mapping SDTM domains and maintaining metadata documentation per CDISC and Eli Lilly standards. Having programming expertise, CDISC knowledge, deliver SDTM data and coordinate in regulatory submissions, in different therapeutic areas.

LIFE BEFORE THE COMPUTER
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* Memory was something that you lost with age
* An application was for employment
* A program was a TV show
* A cursor used profanity
  * A keyboard was a piano
  * A web was a spider's home
  * A virus was the flu
  * A CD was a bank account
  * A hard drive was a long trip on the road
  * A mouse pad was where a mouse lived
  * And if you had a 3 1/2 inch floppy
  ....you just hoped nobody found out
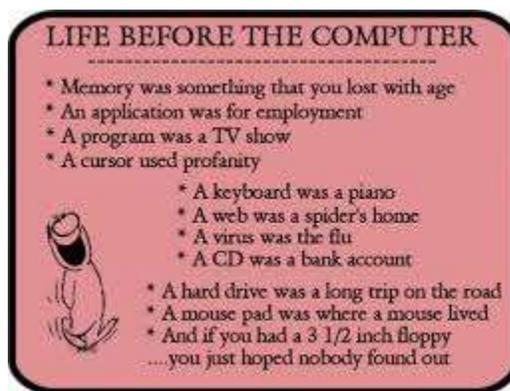
Philadelphia Area SAS User Group (Phila*SUG*)
Membership Form

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 $30. As a courtesy for hosting this meeting, students, faculty, and staff of Philadelphia University are welcome to attend this meeting at no cost. Current full-time students, showing a student ID are also welcome to attend this meeting at no cost. An attached business card helps legibility and is appreciated.

This is a __ new, __ renewal or __ update / correction.

Name: _____

Affiliation: _____

Address: _____

_____

City: _____ STATE: _____ Zip: _____

Day Time Phone Number: (   ) _____ - _____

Privacy Statement - Local SAS User Groups are requested to share their membership/mailing list with SAS Institute on an annual basis. We respect your privacy and will never rent, sell or trade your personal information provided with any other group or individual and the information provided will only be used for PhilaSUG mailings. We will not share your name, address and email address with SAS unless you Opt In below.

☐ Check this box (Opt In) if you agree to allow us to share *your* **name, address and email address** *with SAS*.

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(Be sure to clearly distinguish a dash from an underscore)

For updates / corrections, please list your old / incorrect information below: