ANNUAL CONFERENCE
of the Pharmaceutical Industry
SAS® Users Group
May 4-7, 2003
Wyndham Miami Beach Resort
Miami, Florida

keynote presentation opening session followed by dinner
paper presentations hands-on workshops
SAS Bowl Exhibit and Demo Room
pre- and post conference seminars

co-chaired by
Jennifer Lester elizabeth.dennis@quintiles.com
jennifer.lester@amgen.com

www.pharmasug.org

Important Dates to Remember

February 1, 2003 Online Registration Open
March 1, 2003 Early Registration Ends
April 10, 2003 Regular Registration Ends
April 10, 2003 Hotel room availability guarantee ends.
April 25, 2003 Online Registration Ends. After this date, attendees must register onsite in Miami.

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PharmaSUG is the Pharmaceutical Industry SAS® Users Group, consisting of professionals worldwide in the pharmaceutical industry who use SAS® software in their work. It is a non-profit organization whose primary purpose is to provide a forum for the exchange of information and the promotion of new ideas concerning SAS® software as it relates to clinical research and the pharmaceutical industry. The group is not affiliated with SAS Institute in any way. PharmaSUG holds an annual conference in the spring of each year. The conference location, in the United States, alternates between the West Coast in the even years and East Coast in the odd numbered years. A volunteer conference committee that consists of officers and varying number of section chairs organizes the conference. Please visit our web site at www.pharmasug.org. Every effort has been made to ensure the accuracy of information provided herein but PharmaSUG cannot be held liable for inaccuracies.

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Welcome to PharmaSUG 2003!

PharmaSUG 2003, the annual meeting of the Pharmaceutical SAS® Users Group, will be held at the Wyndham Miami Beach Resort in Miami, Florida from Sunday, May 4 through Wednesday, May 7, 2003.

The PharmaSUG 2003 conference formally begins at the Opening Session and dinner on Sunday evening. At the opening session, the conference committee will be introduced, and SAS® will provide the keynote speaker. A traditional dinner surrounded by the conference attendees, presenters, and instructors will follow.

Two and a half days packed with paper presentations will begin on Monday morning and continue through midday Wednesday. Many papers will be presented in an expanded 50-minute length. The SAS® Institute Exhibit and Demo room will be open Monday and Tuesday. Hand-on demonstrations will be offered. SAS® Institute speakers will also be presenting.

Training seminars taught by renowned technical experts will be offered Saturday, Sunday, and Wednesday afternoon.

The always entertaining and technically challenging SAS Bowl will be held on Tuesday evening.

Several tours and excursions will be offered through an arrangement with USA Hosts.

The PharmaSUG 2003 web site includes more detailed information at www.pharmasug.org. The web site will be updated often as more conference information is available.

We hope you can join us at PharmaSUG 2003 and we look forward to seeing you in Miami!

Jennifer Lester
Academic Chair

Elizabeth Dennis
Operations Chair
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E-Mail: cindy_song@merck.com
Hotel Information

The Wyndham Miami Beach Resort
4833 Collins Avenue
Miami Beach, FL  33140
1-800-203-8368

Accommodations

The hotel is located on a stretch of white sandy beach along the Atlantic Ocean, and across from the Intercoastal Waterway. Traditional pool and beach activities are on hand. More adventurous equipment is available for rental: wave runners, kayaks, parasailing, snorkeling, scuba diving, and more. Tennis and tee times can be arranged at nearby courses. Fine shopping is minutes away at the Bal Harbor shops.

Well-appointed guest rooms provide plenty of comforts and thoughtful amenities like high-speed Internet access and floor-to-ceiling windows offering spectacular seaside views.

When the sun goes down neon lights go on and South Beach heats up. This trendy Art Deco district of Miami Beach is filled with sounds of music and laughter, and is only minutes away from the Wyndham Miami Beach Resort. Whether you like listening to jazz, dancing the night away in one of the many famous clubs, or just sitting at a sidewalk café and people watching -- there is something for everyone in South Beach.

Hotel web site

http://www.wyndham.com/hotels/MIAMB/main.wnt

Guest Room Rate

The special conference rate for the hotel rooms is $165 per night plus applicable taxes. This rate includes the resort service fee. Please identify yourself as a member of PharmaSUG to receive the special group rate.
Resort Services

- Poolside Concierge service
- Unlimited use of pool and beach lounge chairs, towels, and umbrellas
- Daily organized activities
- Complimentary compact disc players, radios, and reading material poolside
- Complimentary in-room coffee, “USA Today” newspapers
- Admission to the Wyndham Spa and Fitness center, including steam and sauna facilities

Reservations

Individuals will make their own reservations directly with the Wyndham Miami Beach Resort.

Phone: 1-800-203-8368.

Upon making a reservation, the credit card will be charged one room night plus tax. This charge is refundable if the reservation is cancelled within 72 hours of arrival.

Early Departure

At the time of check-in, each guest will sign a reservation card, verifying the room nights reserved. At this time, the reservation departure day may be changed. After signing the reservation card, a $50 charge, plus tax, will apply to all guests who depart one or more days prior to their scheduled departure date. Please check with the reservation desk for more details.

Check-In/Check-Out

Check-in time is 4:00pm, check-out is 11:00am.
Help Wanted!

Volunteers:
The PharmaSUG conference is run entirely by volunteers and everyone is invited to help! Volunteering is fun and enables you to meet more of your fellow conference attendees. You may even get involved in planning a future PharmaSUG conference. Volunteers are needed for the following positions:

Bag stuffing:
Organize registration materials and giveaway items on Saturday morning.

Judges:
Attend and judge papers in a section as they are presented to determine the Best Paper award winners.

Poster Setup and Tear Down:
Assist authors in setting up and taking down their poster displays.

Registration:
Assist in registering conference attendees and handing out registration materials.

Session Coordinator:
Assist the section chairs with equipment, room lighting, and time keeping in a morning or afternoon session to ensure that presentation sessions run smoothly.

Other miscellaneous volunteer positions will also be available.

To volunteer, contact:
Peter Skalski at (800) 989-5627, pskalski@smithhanley.com
Conference Overview

SAS Demo and Exhibit Room
The Demo and Exhibit room will be open all day on Monday and Tuesday. Stop by the demonstration stations to meet SAS developers, see demonstrations, and ask questions about SAS software. Talk with representatives from SAS service areas such as Publications, Technical Support, Executive and User Events, and SAS’ dedicated Pharmaceutical Practice.

You may register for valuable giveaways.

New SAS documentation is available at the Publications booth. Books may be ordered at a special discount.

Additional corporate sponsors and vendors will be on hand to demonstrate their products.

Meals
Your conference registration fee includes the following meals: Sunday night dinner reception, lunch on Monday, Tuesday, and Wednesday, and a light breakfast on Monday, Tuesday, and Wednesday. There will also be morning and afternoon snacks. The Monday evening dinner at Laredo’s Restaurant is not included, and requires an additional fee. If you have special dietary needs, contact Ellen Brookstein at ellen.brookstein@covance.com.

Corporate Sponsorship and Vendors
You company will benefit from the exposure while helping PharmaSUG maintain its high quality conference. Contact Jennifer Price for more information at jprice@cephalon.com.

Advertisements
Advertisements will be accepted for publication in the conference program. They may be announcements of products and services, job postings or recruitment opportunities, and must be related to the use of the SAS system. Contact Jennifer Price for more information at jprice@cephalon.com.

Closing Session
This concludes the conference, and includes the announcements of Best Paper Awards, door prizes, and plans for the next PharmaSUG conference.

Conference Proceedings
Each attendee will receive a hard copy and CD-ROM of the proceedings containing all presentations. Additional copies may be available for purchase.

Conference Registration
All attendees, including sponsors, vendors, and speakers, must be properly registered for the conference.

Guests
Guests may attend any of the meals for an additional fee.

Message Board
A message board will be available for attendees to leave messages for each other.

Hands-on Workshops
Destiny Corporation will provide Hands-on Workshops on Monday and Tuesday. There are a limited number of seats available on a first come, best seat basis. In addition, there will be some non-computer seats in the back of the room.
Preliminary Conference Schedule

Saturday, May 3
07:30AM-08:00AM  Registration – Morning seminar attendees only
08:00AM-12:00PM  Morning seminar sessions
12:00PM-01:00PM  Lunch – on your own
12:30PM-01:00PM  Registration – Afternoon seminar attendees only
01:00PM-05:00PM  Afternoon seminar sessions

Sunday, May 4
07:30AM-08:00AM  Registration – Morning seminar attendees only
08:00AM-12:00PM  Morning seminar sessions
12:00PM-01:00PM  Lunch – on your own
12:15PM-05:00PM  USA Hosts – Miami Gateway to the Americas*
12:15PM-05:00PM  USA Hosts – Art Deco Walking Tour*
12:30PM-01:00PM  Registration – Afternoon seminar attendees only
01:00PM-05:00PM  Afternoon seminar sessions
01:00PM-05:00PM  Conference registration desk open
05:15PM-05:45PM  Presenter and volunteer meeting
06:00PM-07:00PM  Opening session
07:00PM-10:00PM  Dinner reception

Monday, May 5
07:30AM-09:00AM  Breakfast
08:00AM-12:00AM  Conference registration desk open
08:00AM-12:00PM  Paper presentations and hands on workshops
09:00AM-12:00PM  SAS Demo and Vendor Exhibit area open
09:45PM-10:15PM  Snacks
12:00PM-01:30PM  Lunch
01:30PM-05:30PM  Paper presentations and hands on workshops
01:30PM-05:00PM  SAS Demo and Vendor Exhibit area open
02:45PM-03:15PM  Snacks
05:00PM-06:00PM  SAS Mixer
06:15PM  USA Hosts – Dinner at Larios on the Beach*

Tuesday, May 6
07:30AM-09:00AM  Breakfast
08:00AM-12:00PM  Paper presentations and hands on workshops
09:00AM-12:00PM  SAS Demo and Vendor Exhibit area open
09:45PM-10:15PM  Snacks
12:00PM-01:30PM  Lunch
12:00PM-01:30PM  Planning session for PharmaSUG 2004
01:30PM-05:30PM  Paper presentations and hands on workshops
01:30PM-05:00PM  SAS Demo and Vendor Exhibit area open
02:45PM-03:15PM  Snacks
05:45PM-07:00PM  SAS Bowl
06:45PM-10:45PM  USA Hosts – Island Queen Evening Cruise*
07:00PM-09:00PM  Volunteer party

Wednesday, May 7
07:30AM-09:00AM  Breakfast
08:00AM-12:00PM  Paper presentations
12:00PM-01:00PM  Lunch
12:00PM-01:00PM  Closing session
12:30PM-01:00PM  Registration – afternoon seminar attendees only
01:00PM-05:00PM  Afternoon seminars
01:30PM-06:15PM  USA Hosts – Everglades Safari
01:30PM-06:15PM  USA Hosts – Miami Gateway to the Americas*

*The cost for these events is not included in the registration fee.
Pre/Post-Conference Seminars

The affordable conference seminars are back! There will be three seminars on Saturday, six on Sunday and two on Wednesday. All are ½ day seminars and the tuition is $95 each. The seminar fee is in addition to the conference registration fee. **You must register for the conference to attend these seminars.** Each seminar attendee will receive course material and a completion certificate.

**Seats are limited; sign up early for the seminar(s) of your choice on the conference registration form in this booklet. Please read the seminar description before you sign up.** A more detailed description is available on the web site at www.pharmasug.org.

**Make a copy of the conference registration for your record.**

*Sign Up, Attendance and Cancellation Policy*

1. You must register for the conference in order to attend any of the seminars.
2. You must sign up to take any of the seminars via PharmaSUG 2003 conference registration. (Refer to Conference Registration policy.)
3. If you cannot attend a seminar, you can ask someone to take your place as long as you notify the Conference Registrar (Diana Williams) and the Seminar Coordinator (Margaret Hung) in advance.
4. You can cancel a seminar prior to April 1, 2003 for a full refund minus a $25 administration fee.
5. Prior to April 1, 2003, you can switch to another seminar; however, this switch is considered a change in conference registration and therefore there will be a charge of $25. (Refer to Conference Registration policy)
6. After April 1, 2003, you can cancel a seminar but you will NOT get a refund; however, we can mail you the seminar material.
7. After April 1, 2003, you CANNOT switch from one seminar to another; however, you can add another seminar if it is still available.
8. Onsite registration is permitted as long as there are seats available.

For questions about seminar policy, availability and sign-up confirmation, contact Margaret Hung at mh34102@gsk.com or (919) 483-1345.

**SEMINAR SCHEDULE**

<table>
<thead>
<tr>
<th>Saturday May 3, 2003</th>
<th>#</th>
<th>Event/Seminar</th>
<th>Comment</th>
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<tbody>
<tr>
<td>07:30-08:00AM</td>
<td></td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>08:00-12:00</td>
<td>1</td>
<td>Introduction to JAVA, Part 1 (Greg Barnes Nelson)</td>
<td>½ day</td>
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<td></td>
<td>2</td>
<td>The Drug Development Process (Susan Fehrer)</td>
<td>½ day</td>
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<tr>
<td>12:00-1:00 PM</td>
<td></td>
<td>Lunch – On Your Own</td>
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</tr>
<tr>
<td>12:30-1:00 PM</td>
<td></td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>01:00-05:00</td>
<td>3</td>
<td>Developing JAVA Applications: Part II (Greg Barnes Nelson)</td>
<td>½ day</td>
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<tr>
<td></td>
<td>4</td>
<td>SAS® Programming for the Pharmaceutical Industry (Carol Matthews &amp; Brian Shilling)</td>
<td>½ day</td>
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<tr>
<th>Sunday May 4, 2003</th>
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<tbody>
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<td></td>
<td>Registration</td>
<td></td>
</tr>
<tr>
<td>08:00-12:00</td>
<td>5</td>
<td>XML for Data Exchange Between SAS &amp; Other Platforms (Miriam Cisternas)</td>
<td>½ day</td>
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<tr>
<td></td>
<td>6</td>
<td>Proc Report (Thiru Satchi)</td>
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<td>Cleaning Clinical Data (Bob Virgile)</td>
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<td>Microsoft Office + SAS = High Impact SAS Output for Application (Bernadette Johnson)</td>
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<td>Accurate Manipulation of Clinical Trial Data (Mal Foley)</td>
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<td>10</td>
<td>SAS Tips &amp; Techniques (Phil Mason)</td>
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<td>ODS: From Introduction to Practical Application (Art Carpenter)</td>
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<td>12</td>
<td>CDISC Lab Data Model &amp; XML Conversion (Phil Pochon)</td>
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1. Introduction to Java for SAS Programmers: Part I

Instructor: Greg Barnes Nelson
Affiliation: ThotWaveTechnologies, LLC
E-Mail: greg@thotwave.com

Biography:
As President and CTO of ThotWave Technologies, Mr. Barnes Nelson leads software development activities and oversees the design, testing, and implementation of application development services. Mr. Barnes Nelson joined ThotWave with over 18 years of experience in market research, database marketing, systems development and project management. Currently, Greg is responsible for overseeing development of data warehouse and web-based decision support systems in the BioPharma, Energy and HealthCare industries.

Pre-requisite: Exposure to web browsers, HTML and SAS
Intended audience: For SAS programmers wishing to understand what Java has to offer as a programming language.
Course material: Participants will be provided with a course handout, which will include all of the presentation materials, as well as take-home exercises for hands-on experience with the Java language. In addition, each participant will have the opportunity to download all of the examples provided in the course.

Course description and outline:
Java is one of the hottest programming languages around and promises to be even more exciting as the SAS System migrates away from its proprietary SCL language to the standards-based Java language. Today, SAS programmers can take advantage of Java applications – both client and server-side - for exploiting SAS data and analytic services. This course is designed for SAS programmers who want to understand not only the fundamentals, but also its importance, uses, strengths and weaknesses.

Part I:
In the first part, we will lay the groundwork for Java by writing practical programs that build on some fundamental concepts. Here, participants will learn the basics of the Java language and how it relates to OO programming and the Object Model. This course has been carefully designed with SAS programmers in mind and should provide a framework for further study for those wishing to move on to professional Java programming environments.

2. The Drug Development Process

Instructor: Susan M. Fehrer
Affiliation: BioClin, Inc.
E-Mail: smfehrer@worldnet.att.net

Biography:
Susan Fehrer is the President of BioClin, Inc, a consulting firm specializing in clinical SAS programming. Susan has over twenty years of pharmaceutical industry experience at Bristol-Myers Squibb, Ethicon, Inc., and Schering Plough Research Institute, as well as at CROs. She was a director of a clinical programming group at Covance and is an instructor at Covance Institute, teaching SAS programming applications to new programmers in the industry. She has been programming in The SAS System for over 20 years and has experience in many of the SAS products.

Pre-requisite: None
Intended audience: Those SAS programmers new to the pharmaceutical industry or those wishing to learn more of the whole picture; anyone who wants to know the process of a clinical trial
Course material: Presentation binder

Course description:
This course follows the process of drug development, from pre-clinical through Phase IV, including some history of the regulations, the process from study start through reporting.

Outline:
3. Developing JAVA Applications – Part II

Instructor: Greg Barnes Nelson

Pre-requisite: Exposure to web browsers, HTML and SAS
Intended audience: This course is designed for SAS programmers wishing to understand what Java has to offer as a programming language. Experience with a programming language is essential. Some exposure to object oriented concepts is a plus.

Course material: Participants will be provided with a course handout, which will include all of the presentation materials, as well as take-home exercises for hands-on experience with the Java language. In addition, each participant will have the opportunity to download all of the examples provided in the course.

Course description:
Part II: This is the second of a two-part course in Java for SAS Programmers. In this section, participants will apply what they learned about the Java language, Object Oriented Programming and Web technologies to actually design and build a functional application using AppDev Studio (SAS’ Development environment for Java applications). Here, we will develop a series of reusable objects that can be used to access SAS datasets, submit SAS programs, display results in both graphical and textual formats and even create a data entry screen using WebAF. In addition, some attention will be given to issues of security and architectures and choices of technologies when implementing Java applications.

Note: Part I of this seminar is *highly* recommended as we will build on the programs developed in the first section to help develop the application that will be written in the second part.

4. SAS Programming for the Pharmaceutical Industry

Instructors: Carol Matthews from BioCor and Brian Shilling from AstraZeneca Pharmaceuticals
E-Mail: cmatthews@biocor.com  brian.shilling@astrazeneca.com

Biography:
Carol Matthews is currently the Manager of Clinical Programming at BioCor, a CRO located in Yardley, Pennsylvania. She has been programming in SAS® for ten years with the last five years having been with CROs. Carol has taught classes in Philadelphia University’s SAS Programming Certification program since it’s inception in 1998. The classes have covered topics including clinical data set concepts, reporting with Data _NULL_, and the efficient use of macros in clinical programming.

Brian Shilling is currently employed at AstraZeneca LP, in Wilmington, Delaware as a Principal Statistical SAS® Programmer/Analyst. He began working in the pharmaceutical industry in 1984 and has been in the industry intermittently since that year, working for CROs and large pharmaceutical companies. He has been a SAS programmer for 7 years. Brian has been a member of the Pharmaceutical Industry SAS User Group Executive Committee for 5 years, has been a presenter for PharmaSUG and Barnett International, and currently holds adjunct faculty status at Philadelphia University where he teaches the SAS Programming Certification Course. He is also in the process of authoring a book for SAS Institute’s Books by Users program.

Pre-requisites: Basic understanding of SAS, including basic statistical procedures (PROC FREQ, MEANS, etc) and reporting methods.
Intended audience: Programmers new to the pharmaceutical industry.
Course material: Course notes.

Course description:
To educate the participants with respect to the similarities and differences of SAS programming between the pharmaceutical industry and other industries that utilize SAS. Since the pharmaceutical industry is a governmentally regulated industry, SAS programmers must adopt many unique philosophies and techniques in order to meet the requirements. This course will offer instruction in the following areas: validation, code requirements, documentation, data collection and manipulation, and rules and regulations used for statistical analyses and presentation.
5. Introduction to XML for Data Exchange Between SAS and Other Platforms

Instructor: Miriam Cisternas and Ricardo Cisternas
Affiliation: MGC Data Services
E-Mail: miriam@mgcdata.com

Biography:
Miriam and Ricardo Cisternas provide analysis and web-related services to the research and pharmaceutical industries. Ricardo Cisternas has designed and built multiple database and web systems using Java and XML technologies, and has taught computer programming at the university level. Miriam Cisternas is a SAS Certified Professional who has been using the SAS system for over a decade to analyze and manage a variety of primary and secondary data. Ms. Cisternas has presented at WUSS conferences and SUGI, and has been an instructor for the University of California, Berkeley, Extension Division. She was also the chair of the Internet section at WUSS 2002.

Pre-requisite: Experience with HTML and Base SAS.
Intended audience: If you are interested in XML but could use some help getting started in reading and writing XML files from SAS, then this class is for you.
Course material: Overheads and handouts will be provided.

Course description:
XML is well on its way to becoming the standard of data exchange between various platforms. In this seminar, we will teach SAS programmers how to understand, as well as read, write and validate XML data files, DTDs, and schema. We will cover the following topics:

1. What is XML?
2. How does XML work? (DTD, Schema, Tag names, XNL namespaces)
3. General Applications of XML
4. How to read/write XML files using SAS (XML Libname statement, XMLMAP, TAGSET, and XMLTYPE options)
5. XML Applications for SAS Users (code review and demonstrations):
   a. Utility for validation of data from various non-SAS systems by third parties
   b. Interfacing SAS with an existing third-party enterprise application
   c. Interfacing with a web service
6. XML standards for the Pharmaceutical Industry: CDISC
   a. ODM and SDM described
   b. Overview of tools currently available
7. Programmer Resources for using XML with SAS

6. Proc Report

Instructor: Thiru Satchi
Affiliation: The Data Agency
E-Mail: thiru.satchi@bcbsma.com

Biography:
Thiru Satchi has been developing and teaching SAS courses for the past 5 years. He has primarily assisted health care and pharmaceutical industries with their SAS programming needs. Thiru has actively presented at SUGI, NESUG, PHARMASUG, and BASUG. He is a past PharmaSUG conference co-chair (2002) and past SUGI, NESUG and PharmaSUG section chair.

Pre-requisite: Students should have at least six months of programming experience in the SAS language.
Intended audience: This seminar is intended for SAS programmers who wish to generate reports using SAS statements.
Course material: Class notes will be circulated on the day of the seminar.

Course description:
This course introduces REPORT procedure: the powerful SAS report writer that adds many new features and flexibility to report formatting. It will also demonstrate how to produce reports using the FORMAT and MEANS procedures, as well as the macro facility. The course will cover how to create detail and summary reports, tabular reports, and how to incorporate the Output Delivery System (ODS) to create HTML output. Outline:

- Overview: features, prompt mode, non-windowing
- Basic Report: syntax, COLUMN, HEADERS
- DEFINE and COMPUTE statements
7. **Cleaning Clinical Data**

**Instructor:** Robert Virgile  
**Affiliation:** Robert Virgile Associates, Inc.  
**E-Mail:** virgile@rcn.com

**Biography:**
Bob Virgile is a SAS veteran, with over 20 years of SAS experience. He has participated in every NESUG and many SUGI, MWSUG, SESUG, and PharmaSUG conferences. Besides presenting papers, Bob creates the problem-solving contests for SUGI and NESUG, and has published two books through SAS Institute. Bob has been developing and teaching SAS classes since 1983.

**Pre-requisites:** This is an intermediate level SAS course. To fully comprehend a couple of more advanced topics, it would be helpful to be familiar with proc format (including cntlin= and cntlout= data sets), the basics of macro language, and the out= option of proc contents.

**Intended audience:** SAS programmers who work with clinical data.

**Course material:** Each student receives a binder with a copy of all course materials.

**Course description:**
Cleaning clinical data goes a lot further than running proc freq. For example, programs can check ranges of valid values, consistency over time, and proper sequencing of dates. Programs can compare one data set to another to verify such items as completeness of the data and assignment of medical events to the proper patient. This course examines the types of data checks and the programming techniques needed to perform those checks on clinical data.

8. **Microsoft Office + SAS = High Impact SAS Output for Application**

**Instructor:** Bernadette Johnson  
**Affiliation:** The Blaze Group, Inc.  
**E-Mail:** BJohnson@blazegroup.com

**Biography:**
Ms. Johnson combines over 16 years of real-world SAS experience with an MBA to provide a unique insight on not only how to program using SAS, but how to turn your data into information your business can use. Her background includes over 8 years of service to SAS Institute in various technical-consulting roles, and currently as an outside consultant in a variety of industry sectors. Her forthcoming SAS Books-by-Users publication, *Instant ODS!* is a CD of ready-to-use Output Delivery System(ODS) templates that provide instant access to the power of ODS without the learning curve.

**Pre-requisite:** Learners having basic experience with Microsoft Office tools and base SAS software will find this course most beneficial.

**Intended audience:** Learners having basic experience with Microsoft Office tools and base SAS software will find this course most beneficial.

**Course material:** Participants will receive a copy of the course materials

**Course Description:**
Let’s face it, none of us have extra time in our schedules to reinvent the wheel. Now, more than ever, it’s important to maximize your software investment and minimize your development time by using the tools best suited for the task at hand. Microsoft Office applications such as PowerPoint®, Word, Excel, FrontPage® and Publisher have raised the bar on our visual expectations of business reports. Learn how to combine some Microsoft Office built-in formatting templates, styles, or schemes into your SAS programs to move your output from default to dynamic. This half-day lecture course is designed to further develop your reporting skills by combining the power of SAS with many of the Microsoft Office productivity tools to create high-impact, presentation-quality output.
9. **Accurate Manipulation of Clinical Trial Data (Tricks, Traps, and Techniques).**

**Instructor:** Mal Foley  
**Affiliation:** UNC-Chapel Hill  
**E-Mail:** foley@unc.edu

**Biography:**  
Malachy J. Foley is a Senior SAS Programmer/Analyst in the Department of Biostatistics at the University of North Carolina at Chapel Hill (UNC). Mal has worked with clinical trial data for over 15 years and research data for more than 30 years. His career in computing includes being an international consultant, a department manager, a university professor, and a CEO. He has taught dozens of computing courses at the undergraduate, graduate, and professional levels. He frequently presents papers and gives seminars at local, regional, national, and international SAS users’ groups.

**Pre-requisite:** Working knowledge of SAS DATA Step  
**Intended audience:** Anyone who merges, combines, or otherwise manipulates SAS data sets.  
**Course material:** 70-page book and diskette

**Course description:**  
The most overlooked source of data error in clinical trials is the area of combining and manipulating SAS data sets. This seminar discusses over 30 common errors in merging data from labs and case report forms. All of these errors result in erroneous data. Many of them occur with no SAS message or warning! In addition to examining errors, the seminar covers a wide range of topics needed to accurately obtain data for statistical analysis. These topics include interleaving, subsetting, concatenation, check digits, BY-variable processing, the IN=data set option, FIRST.variable, program data vectors (PDV), Cartesain products, one-to-one merges, match merges, and fuzzy merges.

The seminar starts with the basics and continues to build to complex and tricky examples of data set manipulation. During the seminar, questions are encouraged. The only prerequisite for the course is a working knowledge of the SAS DATA Step. Yet, this seminar will give intermediate and advanced programmers a great review and some surprises. Come see what mysteries lurk in manipulating SAS files!

10. **SAS Tips & Techniques**

**Instructor:** Philip Mason  
**Affiliation:** WoodStreet Consultants  
**E-Mail:** phil@woodstreet.org.uk

**Biography:**  
Philip Mason has been using SAS extensively for over 18 years. He is author of “In the know: SAS Tips & Techniques from around the globe”. He has worked in many industry sectors but currently works in the Pharmaceutical industry training people in SAS and the Pharmaceutical Industry.

**Pre-requisite:** Base SAS  
**Intended audience:** Beginners to Advanced users  
**Course material:** Each participant will receive a bound course manual and resource disk.

**Course description and outline:**  
This course will cover tips & techniques from a broad range of topics including: data step tips, procedure tips, ways to save space, macro tips, SQL tips, SAS/AF tips, interview Q&A, windows configuration, windows programming, SAS/graph, display manager, internet, ODS & more. The instructor is also willing to answer questions along the way.

Everyone who has attended one of these seminars should come away with a collection of useful programming tips & techniques, which are practical and can be put into practice in day to day programming. Even the very experienced should pick up a few new things that will make the cost of the day well worthwhile.
11. **ODS: From Introduction to Practical Application**

**Instructor:** Art Carpenter  
**Affiliation:** California Occidental Consultants  
**E-Mail:** art@caloxy.com

**Biography:**
Art Carpenter’s publications list includes two chapters in Reporting from the Field, the three books Quick Results with SAS/GRAPH® Software, Annotate: Simply the Basics, and Carpenter's Complete Guide to the SAS® Macro Language, and over three dozen papers and posters presented at SUGI, PharmaSUG, and WUSS. Art has been using SAS since 1976 and has served as a steering committee chairperson of both the Southern California SAS User's Group, SoCalSUG, and the San Diego SAS Users Group, SANDS; a conference cochair of the Western Users of SAS Software regional conference, WUSS; and Section Chair at the SAS User’s Group International conference, SUGI. Art is a SAS Quality Partner™ and SAS Certified Professional™. Through California Occidental Consultants he teaches SAS courses and provides contract SAS programming support nationwide.

**Pre-requisite:** Base SAS  
**Intended audience:** Intermediate  
**Course material:** Author supplied Notes

**Course description:**
Since its introduction in Version 7, the Output Delivery System, ODS, has significantly altered how we utilize and view output generated by SAS procedures. We now have the ability to route our output to a variety of file types, we can capture output as data, and we can control fonts, colors, and destinations. ODS gives the programmer vast powers of control. All we need to do is step up and take that control.

This course introduces ODS and shows the programmer how to take advantage of its many capabilities. The course concentrates on the many options and features of the ODS statement, but also covers related topics that make use of ODS capabilities. We will cover the techniques needed to create traffic lighting in TABULATE reports, changing fonts and colors in PROC REPORT output, creation of clickable (drill down) graphs and charts through SAS/GRAPH, and the capture and customization of data from procedure output.

ODS is here to stay and as its features become even more embedded within the SAS System it will be even more important for you to know how to make it work for you. Join us. Learn ODS now.

12. **The CDISC Laboratory Data Model: XML Approaches to Clinical Trials Data**

**Instructor:** Philip M. Pochon  
**Affiliation:** CDISC Lab Team Member; Covance Central Laboratories Services  
**Email:** phil.pochon@covance.com

**Biography:**
Philip Pochon is the Global Data Architect for Covance Central Laboratories. He is an active member of the CDISC Lab Team, the HL7 Microbiology Orders and Observations sub-team and the I3C Pharmacogenomics Data Modeling group. A SAS user for over 20 years, Philip is a past president of the Indianapolis Area SAS User’s Group, and has contributed numerous papers to PharmaSUG, the MidWest SAS User’s Group, SUGI and the DIA. His current interests are in Microbiology and Genomic Data Modeling, Data Warehousing and XML.

**Pre-requisite:** Basic understanding of XML useful, but not required  
**Intended audience:** Data managers and analysts who work with clinical trials laboratory data  
**Course material:** PowerPoint Presentation, CDISC Lab Model Description, CDISC Lab Model XML schemas, Sample XML data files, SAS XPATH Maps, XML/Lab Data Modeling Exercises

**Course description:**
This course first provides a review of the CDISC Lab base model and its microbiology extension, discussing the basic structure, data fields and constraints of the model. A brief overview of XML (and in particular the features of XML schemas) then leads into an examination of the two XML implementations of the CDISC Lab model. The hierarchical XML schema implementation of the CDISC Lab model is presented first, with hands-on modeling exercises for key components of this schema. Reading XML data into SAS is also demonstrated using this schema. The CDISC Lab HL7 message implementation is then presented with a discussion of the underlying HL7 message model and examples of the message with several laboratory data structures. A final discussion presents the current and future directions of the CDISC Lab Team.
Overview of Paper Presentations

SAS Presentations
There will be 8-10 SAS presentations sprinkled among the other conference presentations. The presentations will be posted on the PharmaSUG web site at www.pharmasug.org once they have been finalized.

Applications Development

A Programming Development Environment for SAS Programs
Tim Williams, PRA International

Overview of a Browser-Based Clinical Report Generation Tool
Paul Gilbert, DataCeutics; Greg Weber, DataCeutics

Using SAS Drug Development as a Report Management Application
Barry R. Cohen, Planning Data Systems, Inc.

A Modular Approach to Develop Patient Profile Applications
Fuping Peng, Eisai Medical Research; Carlos Perdomo, Eisai Medical Research

Implementing a Quarterly Contract Payments System for Clinical Trials
Mark McLaughlin, Independent Contractor; Elizabeth Li, Dien Computing Services, Inc.

XPDL - An Extensible Project Database Loading and Table Translation Program
John Adams, Boehringer Ingelheim Pharmaceutical

Using AppDev Studio and Integration Technologies for an Easy and Seamless Interface Between Java and Server-Side SAS
Barry R. Cohen, Planning Data Systems, Inc.

StARScope: A Web-based SAS Prototype for Clinical Data Visualization
T. Scott Pivirotto, Pfizer Global Research and Development; Fang Dong, Pfizer Global Research and Development; Subrahmanyam Pilli, Pfizer Global Research and Development

A Standard SAS Programming Toolbar: A Step Forward for GPP/SOP Compliant SAS Program Development
Frederic Coppin, Merck Sharp & Dohme (Europe), Inc.; Carl Herremans, SPSInfoquest (Groupe Buisness & Decision)

SAS and MedDRA – A Winning Combination
Elaine Dempsey, Rho, Inc.

Innovative Graphs for Comparing Central Tendencies and Spread at a Glance
Varsha Shah, CSCC, Dept. of Biostat, Univ. of North Carolina; Ravi Mathew, CSCC, Dept. of Biostat., Univ. of North Carolina

Chikuma Hamada, Tokyo University of Science; Noriko Yamamoto, Arm Corporation; Mari Kuremoto, Arm Corporation

Datamapper: A Documentation Generator for SAS Metadata
Lei Zhang, Merck & Co. Inc.

Capabilities of a Flexible SAS Macro for Generating Clinical Datasets and Summary Reports in Different Formats
James Decker, Procter and Gamble Pharmaceuticals; Jun Wang, Procter and Gamble Pharmaceuticals

Coder's Corner

A One-Step Method for Finding the Closest Match
Erin Christen, STATPROBE, Inc.

Reading Data from A Large Number of External Files: How to Do It Efficiently?
Chang-Min Chen, Merck

Counting the Number of Episodes of a Given Disease from Diary
Jose F Diaz, Glaxo Smith Kline

Tired of Defining Axis Scales for SAS Graphs? A Solution with Automatic Optimizing Approach
Don Li, National Cancer Institute of Canada - CTG

Creating Display Manager Abbreviations and Keyboard Macros for the Enhanced Editor
Arthur L. Carpenter, California Occidental Consultants

Cross-referencing Data Contents and Case Report Form
Sam Mao, Quintiles, Inc

Macros for Summary Statistics of Neurotoxicity Scores and Their Changes from Baseline
Jonsh Jiang, Inex Pharmaceutical Corporation

To Wrap up an Extremely Long Comments Variable -- Take the Advantage of SAS ODS Template, ODS Listing
Peter Jiang, Venturi Technology Partners

A SAS Annotate System for Figure Generation
Brian Fairfield-Carter, PRA International

Queries by ODS beginners
Varsha Shah, CSCC, Dept. of Biostat, Univ. of North Carolina
Adjusting Dates in a New Century  
Malachy J. Foley

A Method To Create Descriptive Statistics Using The CLASS Statement  
Jihong Jin, Joint Commission on Accreditation of Healthcare

The SAS Data Step/Macro Interface  
Lawrence Heaton-Wright, Quintiles Limited

You be Your Own QC Cop - Check your .SAS, .LOG and .LST dates from Within SAS using Operating System Commands  
Venky Chakravarthy

A Useful Chart of the Global Assessment in Clinical Trials  
Zhongwei Zhou, Novartis; Jay Hsu, Novartis; Mike Hardin, University of Alabama

Using Compute Blocks in Proc Report  
Sharon Gonzalez, Biogen

Version Control : Powerful, Flexible and Easy Method  
Vineet Mathur, Savant Consulting Group Inc.

Using CALL EXECUTE in the Production of Investigator Specific Reports  
Julie Priest, Inveresk Research

Automatically Obtaining and Using Data Creation Dates  
Varsha Shah, CSCC, Dept. of Biostat, Univ. of North Carolina; Kathy Roggenkamp, CSCC, Dept. of Biostat, Univ. of North Carolina

Some Thoughts and Codes in Data Migrations  
Yajie Wang, VA Medical Center in Palo Alto

Data Management

Why SAS is the Best Place to Put Your Clinical Data  
Steven Wilson, MAJARO InfoSystems, Inc.

You've Got Data!  
Phil Vecchione, Cognigen Corp.

SAS to Oracle Clinical Interfaces  
M. Jennifer Savage, Takeda Pharmaceuticals North America, Inc.

Duplicates: Any Database, Any Client, Any Time  
Adel Fahmy, Ingenix

Application of Some Advanced PROC SQL Features in Clinical Trial Programming  
Changhong Shi, Merck & Co., Inc.; Sylvianne Roberge, Merck & Co., Inc.

MedDRA Implementation A Real Example  
Ala Sweidan, Nabi Biopharmaceuticals

Producing Structured Reports in a Regulated Environment Using SAS – Meeting 21 CFR Part 11  
William Lawton, Boehringer Ingelheim (UK) Ltd; Michael Pearce, Boehringer Ingelheim (UK) Ltd

The Behind the Scenes of Extracting SAS Data Sets from Oracle Clinical  
Angela Ringelberg, PharmaNet, Inc

FDA Compliance - Electronic Submission and Validation

CDISC, ADaM, and TTE: What Are These Acronyms and How Can They Help Me With My Filing?  
Sandra Minjoe, Genentech, Inc; Judy Phelps

Testing CDISC’s Operational Data Model in SAS  
Michael Palmer, Zurich Biostatistics, Inc.; Julie Evans, CDISC

Standardizing Data Processing and ePublishing in Pharmaceutical Industry  
Shawn Wang, Medxview Inc

Automating the Creation of Data Definition Tables (Define.pdf) using SAS Version 8.2  
Eugene Yeh, PharmaNet Inc.; Syamala Kasichainula, PharmaNet Inc.; Katie Lanier, PharmaNet Inc.

A Validation Reporting System Solution  
Karen Walker, Walker Consulting LLC

Clinical Data Model and FDA/CDISC Submissions  
Mark Edwards, Boston Scientific; Gajanan Bhat, Boston Scientific

CDISC: Why SAS® Programmers Need to Know  
Victor Sun, Novartis Pharmaceuticals Corp.

Defining a Validation Process for End-user (Data Manager/Statisticians) SAS Programs  
William Lawton, Boehringer Ingelheim (UK) Ltd

Automatically Output Rich Text Format Tables Using Dynamic Table Definitions in DATA _NULL_ Step  
Mei Tang, Ventana Clinical Research Corporation

Electronic Submission of SAS Data and Catalogs Simplified  
Adel Fahmy, Ingenix
Using RTF, EPS and PDFMARK to Automate the Creation of Your DEFINE.PDF Document for Electronic Submissions
Dirk Spruck, Aventis Behring

Error Checking and Version Control of SAS Programs
Christopher Kania, Biogen

Progress Toward Standardization of Submissions with the Electronic Common Technical Document and the Evolving Standardization of Clinical Data
Susan Bairnsfather, PharmaNet, Inc.

Generating Data Definition Tables for Electronic NDA Submissions
Robert Abelson, KAI

Clinical Data Standards – An eSubmissions Perspective
Shyendra Kumar, Datafarm, Inc.; Gajanan Bhat, Boston Scientific Corporation

Coordinated Efforts for Preparing Statistical Review Aids
Jian (James) Wu, Merck; Snow Fu, Merck; Eric Zhang, Merck & Co., Inc.

10 Things Every Programmer Should Know About Electronic Submissions
Greg Silva, Biogen

Posters
Sensitivity of DISCRIM PROC for Different List of Variables to Separate a Study Population by Treatment Subgroups in Clinical Trial with a New Antidepressant
Lev Sverdllov, Innapharma, Inc.

Tips to Enhance Your SAS® Statistical Graphics Output
Shi-Tao Yeh, GlaxoSmithKline

Using SAS Software and Visual Basic for Applications to Produce Microsoft Graph Charts
Lori Parsons, Ovation Research Group

Performance Tuning of Java-based Application Development for Clinical Pharmacogenomics Associations
Zongwei Shen, Genaissance Pharmaceuticals, Inc.; Richard Judson, Genaissance Pharmaceuticals, Inc; Robert Tracy, Genaissance Pharmaceuticals, Inc.

The confidence in the 95%Confidence Interval of Mean
Bhargavi Raghavan, Ingenix

Use of Text Miner to Automatically Abstract Patient Information from the Pharmacy Order Database
John Cerrito, Professional Pharmacy Consultants; Patricia Cerrito, Jewish Hospital Center for Advanced Medicine

An Application of Dummy Variable and Place Holder Macro Parameter in Programming for Clinical Trial Data Quality Monitoring
Sijian Zhang, University of Alabama at Birmingham; Mark Carpenter, University of Alabama at Birmingham

Descriptive Statistics: Turning the very MEAN into very CUTE
Adel Fahmy, Ingenix

Using symbol plots to represent symptom severity over time
Elisa Knutsen, Statistics Collaborative, Inc.

A SAS Macro for Simple Statistical Summary
Michael Gunshenan, GlaxoSmithKline

Sneak Peek: Previewing Blinded Study Results
Amy Underwood, PRA International; Janet Cain, PRA International; Kent Letourneau, PRA International

Baseline Characteristics and Demographics Made Easy
Craig Wesselman, Ingenix

A SAS Macro for Producing Clinical Laboratory Shift Tables
Shi-Tao Yeh, GlaxoSmithKline

Enhancement of Survival Graphs
Joanne Zhou, GlaxoSmithKline Pharmaceuticals

Another Way to Create Data Definition Files
David Jemiolo, DataCeutics, Inc.; Han Zou, AstraZeneca

Statistics and Pharmacokinetics
Statistical Processing And Analysis of Proteomic and Genomic Data
Mark Carpenter, University of Alabama - Birmingham; Richard Zhang, University of Alabama - Birmingham

Implementing Constrained or Balanced-Across-the-Centers Randomization with SAS V8 Procedure PLAN
Cindy Song, Merck & Co., Inc; Olga Kuznetsova, Merck & Co., Inc.

A SAS Macro to Automate the Covariance Structure Determination in Repeated Measures Data Analysis
Don Li, National Cancer Institute of Canada - CTG

Using SAS® to Perform a Single-Stage Multiple Comparison Procedure for All Pair-wise Comparisons in a One-Way Layout with Unequal Variances
Paul Juneau, Pfizer Global Research & Development
Benchmarks Forecasting Practices in Pharmaceuticals
Chaman Jain, St. John's University, Department of Economics

Using SAS to Evaluate the Integrals for Sample Size and Power Analysis Calculations
Xingshu Zhu, Merck & Co., Inc; Shuping Zhang, Merck & Co., Inc

SAS Macro to Create ADDL Records To Estimate Dosing Not Represented in the Collected Data, In a NONMEM Population
Pharmacokinetic Analysis Dataset
Richard Schneck, Eli Lilly and Company; Mike Heathman, Eli Lilly and Company; Lynn Reynolds, Eli Lilly and Company

Likelihood Approach in Estimation and Testing Problems Involving Overlapping Grouped Data
Daniel Bonzo, InfoVision Consultants, Inc.

Using SAS software for Multilevel Models in Survival Analysis
Gisela Silva, University of São Paulo; Antonio Lima, University of São Paulo

Confidence Intervals in Analysis and Reporting of Clinical Trials
Guangbin Peng, Eli Lilly and Company; Mike Heathman, Eli Lilly and Company

Single Dose Bioassay - A SAS Approach
John Sparkes, Biostat Consulting; May Tang, Aventis Pasteur Limited

Using Model Fitting Information and PROC PLOT to Select the Type of Variance-Covariance Structure
Radhi Abdulnabi, Pfizer

Selecting Balanced Cohorts for Comparison in Observational Research
Craig Roberts, NDCHealth; John Gerlach, TekSystems

Parameter Estimation for Incomplete Bivariate Longitudinal Data in Clinical Trials
Naum Khutoryansky, Novo Nordisk Pharmaceuticals, Inc.

Using SAS Software for a Numerical Approximation and the Area Under a Curve Calculation
Shi-Tao Yeh, GlaxoSmithKline; Ellen Forman, GlaxoSmithKline

Technical Techniques
ODS and Web Enabled Device Drivers: Displaying and Controlling Large Numbers of Graphs
Arthur L. Carpenter, Data Explorations; Richard O. Smith, Data Explorations

Integrating SAS and Microsoft Office for Analysis and Reporting of Hearing Loss in Occupational Health Management
George Bukhinder, Palisades Research, Inc.; Michael Krumenaker, Palisades Research, Inc.

The Use and Abuse of the Program Data Vector
Jim Johnson, Covance

Automating the Creation of a Single Bookmarked PDF Document from Multiple SAS ASCII and PostScript Output Files
Donovan Verrill, PharmaNet Inc.; Eugene Yeh, PharmaNet Inc.; Syamala Kasichainula, PharmaNet Inc.

A Reporting Macro to Create Descriptive Statistical Summary Tables
Ellen Forman, GlaxoSmithKline

%RTFTable - A Useful SAS Tool to Produce Rich Text Format Tables
Eric Qi, Merck & Company, Inc.; Liping Zhang, Merck & Company, Inc.

Macro Specializing in Adverse Events Reporting
Tony Salehi, Quintiles, Inc.; Doug Moore, Quintiles, Inc.

Generate PDF Files from Outputs by DATA _NULL_
Eric Zhang, Merck & Co.; Snow Fu, Merck & Co., Inc.; Jian (James) Wu, Merck & Co., Inc.

More Than Style--Adding New Variables to Output through ODS
Guochen Song, Collaborative Studies Coordinating Center, UNC-C

Invisible Environmental Awareness Techniques
John Troxell, Merck & Co., Inc.; Chang-Min Chen, Merck & Co., Inc.

Techniques to Create a Standard Folder Structure in a Windows NT/XP Share Area for Submission Projects and Their Protocols
Xiaohui Wang, Merck & Co., Inc.

The Electronic Data Monitoring Committee
Mike Bodenstab, PRA International; Kerry Hafner, PRA International

Data Extraction & MedDRA: A SAS Coding Shortcut
Fang Dong, Pfizer, Inc; Saket Badola, STATPROBE

How to LOCF without RETAIN and REINITIALIZING for FIRST.PATIENT
Venky Chakravarthy

Automated Page Breaking and Numbering For Output
Lara Guttadauro, Kendle International Inc.
Tutorials

SQL for People Who Don't Think They Need SQL
Erin Christen, STATPROBE, Inc.

SAS Statements Used Anywhere
Karin LaPann, Main Line Contract Services

Java Servlets and Java Server Pages for SAS Programmers: An Introduction
Miriam Cisternas, MGC Data Services; Ricardo Cisternas, MGC Data Services

Practical Tips to Customize a SAS® Session
Xiaohui Wang, Merck & Co., Inc.; Beilei Xu, Merck &Co., Inc

Danger: MERGE Ahead! Warning: BY Variable with Multiple Lengths!
Robert Virgile, Robert Virgile Associates, Inc.

Using Indexes to Perform Table Look-up
Sandra Aker, TAP Pharmaceutical Products.

Proc Compare to Validate Datasets
A. Cecilia Casas, PPD Development

Creating "That other" laboratory listing: Let PROC TRANSPOSE, CONTENTS and REPORT do the job for you
Luis Albarran, Ingenix
Hands-On Workshops PharmaSUG 2003

Presented by

Destiny Corporation

Providers of SAS Software Training and Consulting all over the United States

May 4 - 7, 2003 Miami, FL

Topics Include:

Monday, May 5th Workshops

Version 9 ODS (Output Delivery System).................................9:00-10:20 a.m.
This workshop will show users how ODS works. Creation of HTML, RTF, PDF, Java and ActiveX applications will be presented.

SQL Processing on Clinical Data........................................10:40-12:00 p.m.
Attendees will get hands on experience writing Proc SQL code, typically used to simplify extraction and summarization of data. SQL code will be built from simple selects to complex joins.

Reporting Writing – Data_Null_Data Step Logic, Proc Report........1:30-2:50 p.m.
Learn how to write reports using a data_null_and data step logic. Learn to create subtotals, grand totals, calculations and work with the first. And last. processing.

Version 9 – Changes & Enhancements....................................3:10-4:30 p.m.
This workshop provides a look at the new release of SAS, Version 9. During this workshop you will be introduced to many new and improved features.

Tuesday, May 6th Workshops

Macros – Basic Processing for Clinical Information......................9:00-10:20 a.m.
Attendees will learn simple, compile-time uses of macros against clinical data to make processing easier.

Macros II, Intermediate Processing for Clinical Information...........10:40-12:00 p.m.
Participants will learn about advanced, execution-time use of macros and how they can be applied to clinical data.

Statistics – Basics for Clinical Data ....................................1:30-2:50 p.m.
This workshop will give attendees a basic understanding of descriptive statistics used to analyze data and create statistical output.

Data Manipulation and Transposition in SAS Software..................3:10-4:30 p.m.
This workshop discusses the different styles of loop and array processing available in the data step.

Seating is limited and is on a first come, first served basis ● See your conference packet for details.

Destiny Corporation is a provider of SAS Software training and consulting to Fortune 500 companies, small businesses, and government organizations across the United States. Our mission is to enable our clients to achieve their goals through technology.
Registration Form (Page 1 of 2)

- Registration forms with incomplete or illegible information will NOT be processed.
- Please complete both sides.
- Only one person may be registered per form; make copies if necessary.
- Payment must accompany the form.
- If you are paying by credit card, all information must be complete, and you must give your signature.

Note: There will be a $25 administrative fee for any changes to the registration. After April 1, 2003, all payment is nonrefundable.

Visit our web site at www.pharmasug.org to register on-line!

Send completed form with payment to: PharmaSUG 2003
c/o Diana Williams (816) 767-7372 Attn PharmaSUG 2003
1411 Inlet Street
Sunset Beach, NC 28468

If you have any questions, please contact the Conference Registrar: Diana Williams at (910) 579-2507 or dianasunset@earthlink.net

COMPLETE BOTH SIDES OF THIS FORM. SUBMIT ONLY ONCE. DO NOT FAX THIS FORM IF YOU SUBMITTED ON-LINE

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Email address

Registration fees (Check one):

- Presenter Registration (Postmarked by March 1, 2003) .............................................. $250.00
- Early registration (Postmarked by March 1, 2003) ...................................................... $325.00
- Reduced registration (Postmarked by April 10, 2003) ................................................ $375.00
- Regular registration (Postmarked by April 25, 2003) .................................................. $400.00
- On site registration ................................................................. $425.00

PharmaSUG’s Tax ID number is: 56-1979831
Registration Form (Page 2 of 2)

Seminar Registration:

Saturday, May 3, 2003  8:00AM – 12:00PM
☐ 1. Introduction to JAVA ................................................................. $95
☐ 2. The Drug Development Process ................................................. $95

Saturday, May 3, 2003  1:00PM – 5:00PM
☐ 3. Developing JAVA Applications ................................................ $95
☐ 4. SAS Programming for the Pharmaceutical Industry .................. $95

Sunday, May 4, 2003  8:00AM – 12:00PM
☐ 5. XML for Data Exchange Between SAS & Other Platforms .......... $95
☐ 6. Proc Report ................................................................................. $95
☐ 7. Cleaning Clinical Data ................................................................. $95

Sunday, May 4, 2003  1:00PM – 5:00PM
☐ 8. Microsoft Office + SAS = High Impact SAS Output for Application $95
☐ 9. Accurate Manipulation of Clinical Trial Data ............................ $95
☐10. SAS Tips & Techniques .............................................................. $95

Wednesday, May 7, 2003 1:00PM – 5:00 PM
☐11. ODS: From Introduction to Practical Application ...................... $95
☐12. CDISC Lab Model & XML Conversion .................................. $95

Conference Dining:
Registration fee includes Sunday dinner, and breakfast and lunch on Monday, Tuesday, and Wednesday.

To help plan the meals, please check which meals you think you will attend:
☐  Sunday night dinner ........................................................................ $0
☐  Monday lunch .................................................................................. $0
☐  Tuesday lunch .................................................................................. $0
☐  Wednesday lunch ............................................................................. $0

☐  Vegetarian meals (for special dietary requests, contact Ellen Brookstein at ellen.brookstein@covance.com)

Guest Registration:
If your guest would like to attend a meal, please fill out:

Guest Name: _______________________________________________________
☐  Sunday evening dinner ................................................................. $50
☐  Monday lunch ............................................................................... $30
☐  Tuesday lunch ............................................................................... $30
☐  Wednesday lunch ......................................................................... $30

TOTAL AMOUNT ENCLOSED After April 1, 2003, all payment is nonrefundable. $___________

Payment options
☐  Visa  ☐  Mastercard
☐  American Express  ☐  Discover/NOVUS
☐  Check (payable to PharmaSUG)

Credit card:

Number: ________________________________  Expiration Date: __________

Signature: ________________________________
Miami Area Activities offered through USA Hosts for PharmaSUG

Join us for Dinner on Monday Night at LARIOS ON THE BEACH!
Monday May 5, 2003 at 6:15 p.m.

Lario’s is an authentic Cuban cuisine cafe. Gloria Estefan is the owner of this gorgeous Deco diner. Enjoy a fun, lively atmosphere. "People will go the first time because of the famous name, the second time, they come back for the food and service.” While in Miami this is a must, otherwise you haven’t visited South Beach!

Enjoy the following:

Appetizer: House Salad
Choice Of Entrée:
- POLLO A LA BARBACOA Bongos seasoned and marinated roasted half chicken
- ROPA VIEJA Shredded beef in a light tomato sauce with onions & peppers
- PESCADO ENCHILADO White fish filet in our homemade Creole sauce

VEGETARIAN OPTION (Chef’s selection of fresh garden grown vegetables)

Sides:
- ARROZ BLANCO White Rice
- ARROZ MORO Moro Rice
- MADUROS Fried Sweet Plantains

Choice of Dessert: FLAN DE QUESO Cream Cheese Based Flan or PUDIN DE PAN Bread Pudding
Beverages: Unlimited Soft Drinks, American Coffee, or Iced Tea

$67.50 dinner includes the above plus tax, gratuity, and transportation from the Wyndham Hotel to Lario’s.

You are encouraged to experience the nightlife in South Beach with your PharmaSUG friends after dinner, and return transportation is on your own. Cab fare from the area returning to the hotel is $10-15, and bus fare is $1.50.

Pre-sale of alcoholic beverages tickets for Lario’s will be available only at the USA Hosts hospitality desk*. Prices per ticket are $11.00 for Beer, Wine, Mojitos (official Lario’s drink with rum) & Well Drinks, and includes tax and gratuity.

Minimum of 60 guests. Maximum of 80 guests.

* USA Hosts will be available at a hospitality desk in the Wyndham near the PharmaSUG registration area on Sunday, May 4th 9:00 AM - 1:00 PM and Monday, May 5th 1:00 PM - 6:00 PM. At these times you can purchase Larios dinner drink tickets, pick up your pre-paid tickets, purchase last-minute tour tickets (if available) and get general information about the Miami area.

Registration for dinner and all other activities is through USA Hosts using the registration form that follows. You can contact the USA Hosts South Florida office at (954) 467-1211 or Fax (954) 467-1241. USA Hosts E-mail is: florida@usahosts.com.

OTHER OPTIONAL TOURS AND ACTIVITIES

MIAMI - GATEWAY TO THE AMERICAS

This tour makes an excellent introduction to Miami, where you will experience the fascinating combination of cultures, architecture and people that make up the area. The tour begins with a drive through the neighborhoods of the “beautiful people”...Miami Beach and adjacent South Beach (or SoBe as it is affectionately known to the locals). From there it continues into the modern downtown area with its towering skyscrapers. The tour will pause for a forty-five minute stop as participants visit Bayside Marketplace, a unique shopping and entertainment complex overlooking Biscayne Bay in the heart of downtown Miami, where participants may shop in over 200 shops or be entertained by the lively street performers and artisans in this exciting 16-acre waterfront complex. Leaving the commercial center, you will visit the artists’ colony of Coconut Grove, the Island of Key Biscayne and Coral Gables, the “City Beautiful.” You will have the opportunity to see the vibrant ethnic neighborhoods of Little Havana and Calle Ocho, home to a large portion of Miami’s Cuban-American population.

$33.00 Gateway tour includes all transportation, taxes and gratuities. No food is included.

Choose the pre- or post-conference tour:
- Sunday, May 4, 2003 - 12:15 p.m. - 5:00 p.m.
- Wednesday, May 7, 2003 - 1:30 p.m. - 6:15 p.m.

Minimum of 20 guests. Maximum of 100 guests.
Miami Area Activities offered through USA HOSTS for PharmaSUG

ART DECO WALKING TOUR, MIAMI’S SOUTH BEACH

South Beach (“SoBe”) is Miami’s Soho, the American Riviera, an international tourist destination, and the city’s favorite playground all rolled into one. It’s packed with trendy restaurants, nightclubs, funky shops, and artists’ studios. The candy-colored historic Art Deco District provides the background for this square mile encompassing more than 800 buildings that reflect the Art Deco architecture of the 1930’s and the Mediterranean Revival style of the 1920’s. This 90-minute walking tour provides a unique opportunity to explore deco-age arts and architecture, examine historic preservation efforts and experience the excitement of South Beach. Ocean Drive and Collins Avenue are the focal points on the tour.

$35.00 Art Deco tour includes all transportation, taxes and gratuities. No food is included.

This tour takes place Sunday, May 4, 2003 - 12:15 p.m. - 5:00 p.m. Comfortable walking shoes are suggested.

Minimum of 20 guests. Maximum of 100 guests.

ISLAND QUEEN EVENING CRUISE

Gaze into the backyards of the rich and famous by taking a quick jaunt on the Island Queen. The leisurely one-and-a-half hour cruise takes you alongside the Port of Miami, past towering cruise ships and international freight carriers. The boat then heads to Fisher Island for a closer look at the $500,000 and up condominiums owned by the likes of Oprah Winfrey, Boris Becker, Mel Brooks, Ann Bancroft, Paul Newman and Florida Governor Jeb Bush. Cruising by Star Island, you can peek into the backyards of Rosie O’Donnell and Gloria Estefan’s estates. Other properties of interest include the honeymoon cottage of Elizabeth Taylor and Eddie Fisher and the house used in the film "The Specialist" starring Sharon Stone and Sylvester Stallone. On Palm Island you can practically peer into the guardhouse at Al Capone’s old abode.

$41.00 sunset cruise includes all transportation, taxes and gratuities. No food is included.

This tour takes place Tuesday, May 6, 2003 - 6:45 p.m. - 10:45 p.m. The cruise sets sail at 7:30 p.m.

Minimum of 20 guests. Maximum of 140 guests.

EVERGLADES SAFARI

Recovering rapidly from the ravages of man, industry, and farming, the Everglades provide a unique - and nearby - opportunity to see the beauty of nature at its finest. It is a mixture of three individual ecosystem including saw grass prairies, pinelands and mangrove estuaries. Over 600 kinds of fish, nearly 300 varieties of birds and countless mammals and reptiles, including the infamous alligator, call the Everglades home.

Get set for a thrill-a-minute on the ‘Glades’ longest airboat ride (30 minutes minimum)...a fleet of modern, safe boats...a cadre of professional tour guides leading and narrating the way through winding trails, past the home of ‘Gators and birds galore to an ancient Seminole Island. Naturally, it’s a picture taking paradise. The Jungle Trail is a mini-adventure all by itself! You’ll meander through dense foliage, enjoy a panoramic view of the area from our Lookout Platform and walk past alligators by the dozen around a hidden lake to your final stop on the trail - Alligator Island.

$45.00 safari tour includes all transportation, taxes and gratuities. No food is included.

This tour takes place Wednesday, May 7, 2003 - 1:30 p.m. – 6:15 p.m.

Minimum of 20 guests. Maximum of 100 guests.

All tours depart from the Wyndham at the start time specified. It is recommended that you arrive 15 minutes before departure time so as not to delay the trip. Buses will not wait for stragglers, and your money will not be refunded if you miss the bus.

Please note that with the exception of Monday night’s dinner, meals are not included on these tours.
Miami Area Activities offered through USA HOSTS for PharmaSUG
MAY 4 – 7, 2003
ON-LINE, FAX, AND ON-SITE TOUR ORDER FORM – Send to:
USA Hosts South Florida office at (954) 467-1211 or Fax (954) 467-1241. USA Hosts E-mail is: florida@usahosts.com

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<th>PRICE PER PERSON</th>
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<td>Art Deco Walking Tour</td>
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<td>Monday, May 5, 2003</td>
<td>Dinner at Lario's – Cuban Cuisine</td>
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<td>Everglades Safari</td>
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TOTAL AMOUNT DUE: $__________

☐ Check here if you have any special access needs (transportation, visual, hearing, etc.). Please let us know in detail so that we can be sure that our pre-planning allows you to participate in tours where possible.

Payment Type: ☐ American Express ☐ Visa ☐ MasterCard ☐ Discover ☐ Cash

Credit Card Number: ____________________________ Expiration Date: ____________

Guest Name: ___________________________________________ (PLEASE PRINT)

Hotel Name: ___________________________________________ Room #: ____________

Home Address: __________________________________________

Home Phone: (________) ___________________________ Work Phone: (________) ___________________________

Email: ______________________________________________ Fax #: (_______) ___________________________

Signature: ____________________________________________ (PLEASE SIGN)

☆ All tours depart from and return to the Wyndham Hotel (except the Monday dinner return to the Wyndham which is on your own). Please arrive 15 minutes prior to scheduled departure time.

☆ All events will operate regardless of weather conditions except during severe weather. The venue will reserve the right to make a final decision regarding inclement weather.

☆ USA Hosts reserves the right to cancel any event if the minimum number of participants per vehicle is not met. In this case full refunds will be processed within 7-10 days following the completion of the conference.

☆ Deadline for pre-registration is April 7, 2003. Tour requests received after April 21, 2003 will be on a space available basis.

☆ No refunds will be made through USA Hosts if you cancel after April 21, 2003. (If you need to cancel after this date, you might advertise to sell your tickets using the PharmaSUG bulletin board at the conference.)
Important Dates to Remember

February 1, 2003  Online Registration Open
March 1, 2003  Early Registration Ends
April 10, 2003  Regular Registration Ends
April 10, 2003  Hotel room availability guarantee ends.
April 25, 2003  Online Registration Ends. After this date, attendees must register onsite in Miami.

Annual Conference of the Pharmaceutical Industry
SAS® Users Group

May 4-7, 2003
Wyndham Miami Beach Resort
Miami, Florida

keynote presentation opening session followed by dinner
paper presentations  hands-on workshops
SAS Bowl  Exhibit and Demo Room
pre- and post conference seminars

coaired by

Jennifer Lester
jennifer.lester@amgen.com

Elizabeth Dennis
elizabeth.dennis@quintiles.com