

# Table of Contents

<b>WELCOME TO PHARMASUG 2006!</b> .....	<b>2</b>
<b>PHARMASUG 2006 CONFERENCE COMMITTEE</b> .....	<b>3</b>
<b>PHARMASUG 2006 SECTION CO-CHAIRS</b> .....	<b>4</b>
<b>HOTEL INFORMATION</b> .....	<b>5</b>
<b>HELP WANTED! VOLUNTEER NOW!</b> .....	<b>6</b>
<b>CONFERENCE OVERVIEW</b> .....	<b>7</b>
<b>TENTATIVE CONFERENCE SCHEDULE OVERVIEW</b> .....	<b>8</b>
<b>TENTATIVE CONFERENCE SCHEDULE OVERVIEW (CONT.)</b> .....	<b>9</b>
<b>THINGS TO DO WHILE IN BONITA SPRINGS AT PHARMASUG</b> .....	<b>9</b>
<b>PRE/POST-CONFERENCE SEMINARS</b> .....	<b>10</b>
<b>2<sup>ND</sup> ANNUAL PHARMASUG GAMES</b> .....	<b>18</b>
<b>HANDS-ON WORKSHOPS</b> .....	<b>19</b>
<b>OVERVIEW OF PAPER PRESENTATIONS</b> .....	<b>19</b>
<b>GETTING TO AND FROM SOUTHWEST FLORIDA INTERNATIONAL AIRPORT (RSW)</b> .....	<b>24</b>
<b>REGISTRATION FORM (PAGE 1 OF 3)</b> .....	<b>25</b>
<b>REGISTRATION FORM (PAGE 2 OF 3)</b> .....	<b>26</b>
<b>REGISTRATION FORM (PAGE 3 OF 3)</b> .....	<b>27</b>

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PharmaSUG is the Pharmaceutical Industry SAS® Users Group, consisting of professionals worldwide that 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 the use of SAS software as it relates to quantitative health sciences including epidemiology, health economics, health management, outcomes research, biostatistics, 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 website at [www.pharmasug.org](http://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 2006!

PharmaSUG 2006, the annual meeting of the Pharmaceutical Industry SAS® Users Group, will be held at the Hyatt Regency Coconut Point Resort & Spa in Bonita Springs, Florida from Sunday, May 21 through Wednesday, May 24, 2006.

The conference formally begins with the Opening Session followed by an excellent dinner on Sunday evening. At the opening session, the conference committee will be introduced and SAS Institute will provide the keynote speaker.

Two and a half days packed with paper presentations and invited Hands-on Workshops will begin on Monday morning and continue through midday Wednesday. Many papers will be presented in an expanded 50-minute time slot. The SAS Exhibit and Demo room will be open all day on Monday and Tuesday, and Wednesday morning, as well. SAS personnel will also be presenting a number of select papers.

Training seminars taught by renowned technical experts will be offered Saturday, Sunday, Wednesday afternoon, and for the first time, all day on Thursday. We are pleased to again offer seminars from beginning to advanced levels in 2006.

The new and improved, but always entertaining and technically challenging, SAS Bowl will be held on Tuesday evening. All are welcome to participate, encourage, cheer, jeer, and generally have a great time and maybe learn a little something too!

Join us Monday evening for the 2<sup>nd</sup> annual Game Night. Courtyard volleyball, water volleyball/polo, and a floating golf hole chip challenge are being planned for Monday evening. In addition, a 'no money exchange' Texas Hold 'Em poker tournament will be held Monday evening. Both the Game Night and Texas Hold 'Em poker tournament are additional fee events.

The PharmaSUG website has more detailed information at <http://www.pharmasug.org/2006>. The website is updated often, as more conference information is available.

We hope you will plan to join us for a very exciting PharmaSUG 2006 and we look forward to seeing you in Bonita Springs!

Mal Foley  
Academic Chair

Matt Becker  
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# PharmaSUG 2006 Conference Committee

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## Hotel Information

### Hyatt Regency Coconut Point Resort & Spa

5001 Coconut Road

Bonita Springs, FL 34134

United States

Phone: 239-444-1234

<http://coconutpoint.hyatt.com/hyatt/hotels/index.jsp>

### PharmaSUG Hotel Reservation toll-free phone number:

800-233-1234 (identify yourself as part of the PharmaSUG conference to get the conference rate)

Individuals will need to make their own reservations directly with the Hyatt Regency Coconut Point Resort & Spa, phone 1-800-233-1234. Upon making a reservation, your credit card will be charged one room night plus tax. This charge is refundable if the reservation is cancelled within 72 hours of arrival.

### Guest Room Rates

The special conference rate for the hotel rooms is **\$180 per night plus applicable taxes**. The PharmaSUG held hotel rooms will be released on Friday, May 5, 2006 at 6:00pm EDT OR upon the room block being sold out. Please note that at previous PharmaSUG conferences, the hotel has sold-out our room block well in advance of the cut-off date so sign up early! After that date, reservations will be accepted only if hotel

space is available, so make your reservations early! Also, the special PharmaSUG room rate is available 3 days prior to and subsequent to the conference dates, so plan an early or extended stay.

The resort fee is included in the conference rate. This fee includes: in room coffee, beach ferry, resort trolley, incoming faxes, local telephone calls, 800/888 surcharges, complimentary self parking, and 24-hours fitness center access.

### Guest Rooms

As a guest of the Hyatt Regency Coconut Point Resort & Spa, you'll enjoy the spacious luxury and comfort of 420 spacious rooms. The rooms provide you with a relaxing retreat from the day's activities and include bedrooms with step-out balconies, 27" televisions, DVD player, 2 telephones (one of which will be a two-line speakerphone with data port and voicemail), in-room safe, and much more. Internet access is available via WIFI and direct cable connect in each room for an additional fee.

### Reservation Cut-off Date

The PharmaSUG room rate is guaranteed if your reservation is made before May 5, 2006 and the PharmaSUG room block has not been sold out. After that date or upon the PharmaSUG room block being sold out, the hotel will accept a reservation based upon availability.

### Check-In/Check-Out

Check-in time is 3:00pm EDT, checkout is noon EDT.

### Time Zones

Bonita Springs, FL is on Eastern Standard Time (EDT).

# Help Wanted! Volunteer Now!

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 want get involved in planning a future PharmaSUG conference. Volunteers are needed for all of the following positions:

**Bag Stuffing** is completed before the conference even starts! A dedicated group of volunteers usually begin on Saturday morning. These volunteers put together all of the goodies that go into each attendee's conference bag. This is always a fun filled event and a great way to meet people involved with the conference. Sometimes lunch is included, so come and help out!

**Poster Set-Up & Tear Down** volunteers assist the Poster Section Co-chairs and poster presenters in setting up and taking down the poster boards. SAS Institute supplies the actual boards for the poster presentation displays. The designated set up and tear down times are usually on Sunday morning/afternoon and Tuesday afternoon/evening, respectively.

**Registration Volunteers** assist the Conference Registrar with checking-in conference attendees and distributing registration materials. Most registration volunteers help out by distributing registration bags on Sunday afternoon.

**Session Coordinators** assist the Section Co-chairs with equipment, audience seating, room lighting, session attendee approximate head-counts, and time keeping to ensure that the paper session runs smoothly. A session is usually a half-day segment of a section. Additional duties may include passing out speaker materials or keeping the conference room doors closing quietly.

Other miscellaneous volunteer positions are also available.

**To volunteer for these and/or other activities:**

Please check the "interested in volunteering" box found on the PharmaSUG registration form and the Volunteer Coordinator will be in touch with you by email.

# Conference Overview

## **SAS Exhibit and Demo Room**

The Exhibit and Demo room will be open all day on Monday and Tuesday, and on Wednesday morning as well. 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, Users Group Support, and SAS Pharmaceutical Research and Development.

You may also register for several valuable giveaways. New SAS documentation is available at the Publications booth, and as usual, books may be ordered at a discount.

Internet Café - Browse the Internet and/or check your email courtesy of SAS.

Many additional corporate sponsors and vendors will be on hand to demonstrate their products and services.

## **Meals**

Your conference registration fee includes the following meals: Sunday night opening session and dinner, breakfast and lunch on Monday and Tuesday, and breakfast on Wednesday. There will also be morning and afternoon refreshment breaks. If you have special dietary needs, please check the appropriate box on the registration form.

## **Closing Session**

This one-hour session concludes the conference, and includes the announcements

of Best Paper Awards, exciting door prizes, and plans for the next PharmaSUG conference. So, plan to stay around Wednesday for closing session.

## **Conference Proceedings**

Each attendee will receive a CD-ROM of the proceedings containing all presentations. Additional copies may be available for purchase after the conference concludes.

## **Conference Registration**

All conference attendees, including sponsors, vendors, presenters, and instructors 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.

## **Hands-on Workshops**

Seven industry professionals have been invited to conduct Hands-on Workshops during the conference on Monday and Tuesday. Hands-On Seating will be limited and available on a first come, best seat basis. In addition, there will be some non-computer seats available for those just wanting to sit in. Review the conference schedule for a list of available topics and the times that they will be offered.

# Tentative Conference Schedule Overview

## Saturday, May 20

07:30AM-08:00AM	Registration for morning seminar attendees only
08:00AM-12:00PM	Morning Seminars
10:00AM-02:00PM	Bag Stuffing (lunch may be provided!)
12:00PM-01:00PM	Lunch is on your own
12:30PM-01:00PM	Registration for afternoon seminar attendees only
01:00PM-05:00PM	Afternoon Seminars

## Sunday, May 21

07:30AM-08:00AM	Registration for morning seminar attendees only
08:00AM-12:00PM	Morning Seminars*
12:00PM-01:00PM	Lunch is on your own
12:30PM-01:00PM	Registration for afternoon seminar attendees only
01:00PM-05:00PM	Afternoon Seminars*
01:00PM-05:00PM	Conference Registration Desk Open
05:15PM-05:45PM	Presenter and Volunteer Meeting
06:00PM-07:30PM	Opening Session
07:30PM-11:00PM	Reception and Dinner

## Monday, May 22

07:30AM-09:00AM	Breakfast
07:30AM-11:00AM	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	Morning Break with refreshments
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	Afternoon Break with refreshments
05:00PM-06:00PM	SAS Mixer
06:30PM-09:00PM	Game Night*
08:00PM-11:00PM	Texas Hold 'Em Poker Tournament*

## Tuesday, May 23

07:30AM-09:00AM	Breakfast
07:30AM-10:00AM	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	Morning Break with refreshments
12:00PM-01:30PM	Lunch
12:00PM-01:30PM	Planning Session for PharmaSUG 2007
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	Afternoon Break with refreshments
05:45PM-07:00PM	SAS Bowl
07:00PM-09:00PM	Volunteer Party

\* The cost for these events is NOT included in the conference registration fee.

# Tentative Conference Schedule Overview (cont.)

## Wednesday, May 24

07:30AM-09:00AM	Breakfast
08:00AM-11:30PM	Paper Presentations
09:00AM-11:00PM	SAS Demo and Vendor Exhibit area open
11:30PM-12:30PM	Closing Session
12:30PM-01:00PM	Registration for afternoon seminar attendees
01:00PM-05:00PM	Afternoon Seminars (lunch included)*

## Thursday, May 25

07:30AM-08:00AM	Registration for seminar attendees only
08:00AM-05:00PM	Full-day Seminar*
09:45PM-10:15PM	Morning Break with refreshments (seminar attendees only)
02:45PM-03:15PM	Afternoon Break with refreshments (seminar attendees only)

\* The cost for these events is NOT included in the conference registration fee.



## Things to Do While in Bonita Springs at PharmaSUG

### Places to Explore on Your Own!

***Naples Museum of Art*** - Explore a wonderful museum with 15 galleries, a glass dome conservatory, spectacular chandeliers and a Persian ceiling by artist Dale Chihuly.

***Historic Naples Shopping*** - Enjoy unique shopping and dining excursions on 3<sup>rd</sup> Street South and 5<sup>th</sup> Avenue South. Experience the blend of Mediterranean, European and Caribbean influences in award winning restaurants and outdoor cafes while shopping in upscale, chic and original boutiques.

***Thomas Edison and Henry Ford Winder Estates*** - Fort Meyers, FL. <http://edison-ford-estate.com>

***Miromar Outlets*** - Over 120 manufacturer outlets.

***Corkscrew Swamp Sanctuary*** - Naples, FL. <http://www.corkscrew.audubon.com>

***So many ways to take advantage of beautiful Bonita Springs:*** championship golf courses, pristine beaches, parasailing, snorkeling or visiting a swamp sanctuary.

# Pre/Post-Conference Seminars

## A Total of 14 Seminars covering a variety of topics!

Again we are offering a variety of affordable conference seminars! There will be four seminars on Saturday, seven on Sunday, two on Wednesday, and one on Thursday. A boxed lunch will be included for the Wednesday attendees, and coffee/snack breaks are provided for all other seminars. Thursday's seminar is a full day and costs \$198; all the rest are ½ day and the tuition is \$99 each. The seminar fee is in addition to the conference registration fee. Each seminar attendee will receive course material and a completion certificate. ***Space is limited, so sign up early using the conference registration form in this booklet or online as you register for the conference. Please read the seminar description before you sign up and make a copy of the conference registration form for your records.***

### 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 2006 conference registration either by form, fax or online.
3. If you cannot attend a seminar, you can ask another conference attendee to take your place as long as you notify the Conference Registrar (Richard Allen) and the Seminar Coordinators (Sandra Minjoe and Margaret Hung) in advance.
4. You can cancel a seminar prior to April 14, 2006 with a full refund minus a \$25 administration fee.
5. Prior to April 14, 2006, 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 14, 2006, you **CAN NOT** switch seminars; however, you can add a new seminar if there is still availability.
7. **No refunds will be given after April 14, 2006.** However, the seminar material can be mailed to you without charge.
8. Onsite registration is permitted based on availability.

For questions about the seminar policy above, availability, and/or sign up confirmation, please contact Sandra Minjoe at [sminjoe@gene.com](mailto:sminjoe@gene.com) or (650) 225-4733 or Margaret Hung at [mh34102@gsk.com](mailto:mh34102@gsk.com) or (919) 483-1345.

### Seminar Schedule

SATURDAY-May 20		
7:30AM - 8:00AM		Morning Registration
8:00AM - noon	1	The Drug Development Process (Susan Fehrer)
	2	Testing and Validating SAS® Programs in an FDA Regulated Environment (Neil Howard)
Noon - 1:00PM		<b>LUNCH on your own</b>
12:30PM – 1:00PM		Afternoon Registration
1:00PM - 5:00PM	3	SAS Programming for the Pharmaceutical Industry (Brian C. Shilling)
	4	Using ETL Studio for Clinical Research (Gregory S. Nelson)
SUNDAY-May 21		
7:30AM - 8:00AM		Morning Registration
8:00AM – noon	5	Using BI Tools from SAS for Clinical Reporting (Gregory S. Nelson)
	6	Regulatory Submission Datasets in the World of Continually Evolving Standards (Dave Christiansen, DrPH)
	7	Cross-Platform Techniques for Moving Data and Analytical Results between SAS and Microsoft Office (Vince DelGobbo)
	8	An Introduction to Mixed Models for Pharmaceutical Applications (Catherine Truxillo)
Noon - 1:00PM		<b>LUNCH on your own</b>
12:30PM – 1:00PM		Afternoon Registration
1:00PM - 5:00PM	9	Using SAS ETL Studio to Convert Clinical Trials Data to the CDISC SDTM (Barry R. Cohen and Tom Guinter)
	10	An Animated Guide: Proc Transpose Made Simple (Russ Lavery)
	11	Advanced ODS (Chris Olinger)
WEDNESDAY-May 24		
after closing session		Afternoon Registration
1:00PM - 5:00PM	12	XML for SAS Programmers (Frederick Pratter)
	13	Getting Started with SAS Macro Language Basics (Art Carpenter)
THURSDAY – May 25		
7:30AM – 8:00AM		Registration
8:00AM – 5:00PM	14	Intermediate and Advanced Topics in the SAS Macro Language (Art Carpenter)
		<b>LUNCH on your own</b>



## 1. *The Drug Development Process*

**Instructor:** Susan Fehrer  
**Affiliation:** BioClin, Inc  
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**Biography:**

Susan Fehrer is President of BioClin, Inc., a consulting firm specializing in clinical SAS® applications. Susan has over twenty years of pharmaceutical industry experience at major pharmaceutical companies, biotech companies, and CROs. She was a director of a clinical programming group at Covance and she is an adjunct instructor at Philadelphia University for the clinical SAS programming program. She has been programming in The SAS System for over 20 years. Susan has an MBA in Quantitative Analysis from Seton Hall University and a BS in Commerce with majors in Marketing and Decision Sciences & Computers from Rider University.

**Pre-requisites:** none

**Intended audience:** Those SAS programmers new to the clinical trials / biopharma industry, those wishing to learn more of the “big picture”, and recruiters wishing to learn some of the pharmaceutical terminology.

**Course material:** Presentation binder

**Course description and outline:**

This course follows the process of drug development, from Phase I through Phase IV, including some history of the regulations, the process from study start through reporting.

Outline:

- Pre Clinical Development
- IND Submission
- NDA/BLA Submission
- Key Definitions



## 2. *Testing and Validating SAS Programs in an FDA Regulated Environment*

**Instructor:** Neil Howard  
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**E-Mail:** neilhowardinc@aol.com

**Biography:**

Neil Howard has been a SAS user and trainer for more than twenty years; she has a background as manager of statistical programmers in both CRO and big pharma environments. She’s been an invited speaker since 1983 on such topics as: efficiency techniques, DATA step processing and internals, advanced DATA step techniques, testing and validation, graphics, effective presentations, and interviewing/hiring SAS programmers. She was a contract instructor for SAS Institute for seven years teaching fundamentals, programming, macro, report writing, graphics and the annotate facility. She has been a member of the SUGI Executive Committee since 1993 and was proud to chair SUGI 20 in Orlando.

**Pre-requisites:** basic knowledge of SAS

**Intended audience:** managers, programmers, statisticians who program or oversee programmers, database programmers

**Course material:** binder w/ copies of slides and worksheets

**Course description:**

This seminar will focus on testing and validating SAS programs, particularly in the context of an FDA regulated environment, with special emphasis on SAS tips and techniques to facilitate this process:

- **WHY:** examination of FDA regulations and guidances; exploration of reviewers’ expectations (processes and accountability); implications of audits; and discussion of client requirements and specifications
- **WHAT:** interpretation of the guidances; definition of the terms testing, debugging, verification and validation; test plans; and discussion of the types of things that must be validated
- **WHO:** accountability in pharmaceutical companies and CROs
- **WHEN:** planning and timing of testing and validation
- **WHERE:** documentation specifics and tips
- **HOW:** SAS and programming tips and techniques (for programmers and statisticians) for debugging, testing, and validation of production and ad hoc code for tables, listings, figures and graphs, and derived data sets; syntax, logic, requirements checking; error handling

The SAS system is easy to use and the learning curve to productivity is relatively short. But SAS is easy to abuse. Indisputable facts remain: data is seldom clean, logic is too often faulty, and fingers walk clumsily over keyboards. Condition codes and a ‘clean log’ are not accurate indicators of successful programs. Since as much as 80% of a programmer’s time is invested in testing and validation, it’s important to focus on tools that facilitate correction of different types of errors in SAS programs. The workshop focuses on a variety of SAS features, tips, techniques, tricks, and system tools that can become part of your routine testing methodology consistent with 21 CFR Part 11 and other FDA guidances.



### 3. *SAS® Programming for the Pharmaceutical Industry*

**Instructor:** Brian C. Shilling  
**Affiliation:** BioCor  
**E-Mail:** bshilling@biocor.com

**Biography:**

Brian Shilling is currently employed at BioCor LLC, in Yardley, Pennsylvania as a Manager of Clinical Programming. He began working in the pharmaceutical industry in 1984 and has been in the industry intermittently since that year, working for CRO's and large pharmaceutical companies. He has been a SAS programmer for 10 years. Brian has been a member of the Pharmaceutical Industry SAS User Group Executive Committee for 9 years, has been a presenter and seminar instructor for PharmaSUG, PhilaSUG and Barnett International, and currently holds adjunct faculty status at Philadelphia University where he teaches the SAS Programming Certification Course.

**Pre-requisites:** None  
**Intended audience:** New to the Pharmaceutical Industry  
**Course material:** Power Point Presentation Hand Out

**Course description:**

SAS, as a programming language, has been in existence for 30 years and its uses and applications are utilized in many different industries. One of these industries is the pharmaceutical industry. The pharmaceutical industry (including but not limited to pharmaceutical and bio-tech companies, contract research organizations (CRO's) and a multitude of small, special interest companies) is a major and rapidly increasing user of SAS. The discipline of Clinical Trials within the industry is one of the largest users of SAS, by virtue of its' need for intricate statistical analyses, reporting and summarization requirements, and the need for high quality output. So what makes programming in the pharmaceutical industry different from other industries? The FDA regulates the pharmaceutical industry.

The purpose of this half-day course is 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.



### 4. *Using ETL Studio for Clinical Research*

**Instructor:** Gregory S. Nelson  
**Affiliation:** ThotWave Technologies, LLC.  
**E-Mail:** greg@thotwave.com

**Biography:**

Greg has just celebrated his 20th year in the SAS eco-system. Starting out as a Social Psychology student doing statistical analysis then quickly moving into applications development, Greg is the President and CEO of ThotWave Technologies where he supports an entire organization focused on helping customers leverage their investment in SAS.

**Pre-requisites:** None required. Knowledge of SAS Base would be highly suggested.  
**Intended audience:** Programmers and their managers along with others wanting to understand the capabilities of SAS for ETL processing.  
**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 ETL Studio. In addition, each participant will have the opportunity to download all of the examples provided in the course.

**Course description:**

Preparing data for use in clinical research has traditionally been relegated to the BASE SAS programmer. With advances in standards like CDISC, FDA Guidance documents (e.g., Item 11), ICH, HL7 and others along with the convergence on clinical data management systems and modernization strategies, could ETL Studio really be used as a tool to help read data from data management to prepare derived datasets and analysis tables? This workshop is designed to give the programmer and manager a look at using ETL Studio for clinical research. In this workshop, we will focus on using ETL Studio to support the business process of reading from data management systems to prepare derived datasets and analysis tables (to any standard, internal or external) or more generally, how to use ETL Studio to support the processes of clinical research.

In this workshop, we will touch on how ETL Studio could be used to read and write to some of the aforementioned standards. In a related workshop, Barry Cohen and Tom Guintier will build on one of the topics presented here (building datasets) to show in detail how to build datasets according to the SDTM structure. (see Using SAS ETL Studio to Convert Clinical Trials Data to the CDISC SDTM Structure)



## 5. *Using BI Tools from SAS for Clinical Reporting*

**Instructor:** Gregory S. Nelson  
**Affiliation:** ThotWave Technologies, LLC.  
**E-Mail:** greg@thotwave.com

**Biography:**

Greg has just celebrated his 20th year in the SAS eco-system. Starting out as a Social Psychology student doing statistical analysis then quickly moving into applications development, Greg is the President and CEO of ThotWave Technologies where he supports an entire organization focused on helping customers leverage their investment in SAS.

**Pre-requisites:** None required. Knowledge of SAS Base would be highly suggested (ODS, PROCs and Macro).

**Intended audience:** Programmers and their managers along with others wanting to understand the capabilities of SAS for Business Intelligence – including SAS Add-in for Microsoft Office, Stored Processes, Enterprise Guide, Web Report Studio and the SAS Information Delivery Portal.

**Course material:** Participants will be provided with a course handout, which will include all of the presentation materials. In addition, each participant will have the opportunity to download all of the examples provided in the course.

**Course description:**

Tables, figures and listings in the clinical world have always been treated like an artisan's affair – each program has to be carefully crafted to fit the requirements of the protocol and while standard macro libraries, program templates and coding standards have been adopted to varying degrees, the convergence on a standard approach to the generation of tables, figures and listings has been fairly elusive. In this workshop, we will let you decide by understanding just what the Enterprise BI Server offers you and will include a tutorial on the creation of Stored Processes for use in SAS Web Report Studio and the SAS Add-in for Microsoft Office. In addition, we'll cover the use of SAS' Information Delivery Portal and how all of these technologies fit together.



## 6. *Regulatory Submission Datasets in the World of Continually Evolving Standards*

**Instructor:** Dave Christiansen, DrPH  
**Affiliation:** Christiansen Consulting  
**E-Mail:** davechristiansen@cableone.net

**Biography:**

Dr. Christiansen is a consultant specializing in pharmaceutical regulatory electronic submissions. He earned Masters and Doctorate degrees in Biostatistics from the University of North Carolina at Chapel Hill. He was Research Assistant Professor of Biostatistics at UNC-CH, specializing in statistical computing and research data management. He is co-founder of CDISC and leader of the Analysis Dataset Modeling (ADaM) Team. As Principal Biostatistician at Genentech, Inc, he developed new technologies and processes for drug development and electronic regulatory submissions. Dr. Christiansen is currently a consultant to the FDA, advising the Division of Biometrics on a guidance for Analysis Datasets and Documentation.

**Pre-requisites:** Familiarity with FDA electronic submissions, clinical trials and SAS datasets

**Intended audience:** SAS programmers, biostatisticians, data managers and IT professionals involved in electronic submissions of NDAs to the FDA.

**Course material:** Handouts will be provided

**Course description:**

The emergence of electronic regulatory submissions for new drugs and therapies has generated a plethora of guidance documents and standards relating to the structure and technology of these electronic submissions. The Common Technical Document (CTD) developed by the International Committee on Harmonisation (ICH) lays out the organization and content for submissions to regulatory agencies worldwide. The FDA has further described the content and structure of electronic CTD submissions with its draft guidance and specifications on electronic submissions (eCTD), including Regulatory Submission Datasets.

The Clinical Data Interchange Standards Consortium (CDISC) has developed dataset standards, models and documentation for two types of these Regulatory Submission Datasets. First are the datasets containing data collected during the study and organized by clinical domain as described by the CDISC Study Data Tabulation Model (SDTM) Version 3.1 standard. Second are the Analysis Datasets used for statistical analysis and reporting by the sponsor. These Analysis Datasets may contain variables from the SDTM datasets (labs, demographics, etc.), as well as derived and imputed variables. The design and documentation of analysis datasets is described by the CDISC Analysis Dataset Model (ADaM) standard. Current efforts are examining the relative roles that each of these models will play in regulatory submissions and other data transfers. The feasibility of developing a single standard is also being explored. This seminar will review the history and current status of these efforts.



## **7. *Cross-Platform Techniques for Moving Data and Analytical Results between SAS and Microsoft Office***

**Instructor:** Vince DelGobbo  
**Affiliation:** SAS Institute Inc.  
**E-Mail:** sasvcd@unx.sas.com

### **Biography:**

Vince DelGobbo is a Senior Systems Developer in the Web Tools group at SAS. This group is responsible for developing the SAS/IntrNet Application Dispatcher and SAS Stored Processes. He is the developer for the HTML Formatting Tools and the SAS Design-Time Controls, and is developing other new Web- and server-based technologies, as well as integrating SAS output with Microsoft Office. He is also involved in the development of the ExcelXP ODS tagset. Vince has been a SAS Software user since 1982, and joined SAS in 1992.

**Pre-requisites:** None  
**Intended audience:** Beginner through Advanced (all skill levels)  
**Course material:** Handout of slides with heavily annotated notes

### **Course description:**

Transferring data between SAS and Microsoft Office can be difficult, especially when SAS is not installed on a Windows platform. This three-part seminar discusses techniques for transferring data and analytical results between SAS and Excel and Word, regardless of the platform on which SAS is installed. In all cases, only Base SAS software is used.

In part 1 you will learn how to create SAS output in such a way that it can be opened with Excel and Word. The creation of multi-sheet Excel workbooks is also discussed. Delivery of dynamically-generated SAS output to Excel and Word via the SAS/IntrNet product will be mentioned briefly. Part 2 covers importing Excel workbooks into SAS using an easy-to-use macro. Bring your Excel workbooks on a USB memory stick, and if time permits, we will demonstrate importing your Excel data to SAS.

Part 3 is subtitled "Cross-Platform Dynamic Data Exchange the Easy Way ... Without DDE!" DDE is an acronym that stands for Dynamic Data Exchange. It is a technology that allows 2 Microsoft Windows applications to communicate with each other. A common application is to use DDE from Windows versions of SAS to incorporate SAS data into an Excel or Word document. But it is an old technology that is neither well-documented nor well-supported. But most importantly, it will not work if SAS is installed on UNIX, OpenVMS or z/OS. In this part of the seminar you will learn how to create a highly customized Excel workbook without using DDE. The technique employed requires only Base SAS, and can be used regardless of the platform on which SAS is installed, including a mainframe! Finally, if you have licensed the SAS/IntrNet product, you will learn how to automate the process with a few easy steps. To see a screen shot of the type of Excel workbook we will be working with, please go to the *Pre/Post conference seminars* link on <http://www.pharmasug.org/2006/index.htm>.



## **8. *An Introduction to Mixed Models for Pharmaceutical Applications***

**Instructor:** Catherine Truxillo  
**Affiliation:** SAS Institute  
**E-Mail:** Catherine.Truxillo@sas.com

### **Biography:**

Dr Catherine Truxillo has been a Statistical Training Specialist at SAS for over 5 years and has written a number of SAS training courses for advanced statistical methods. She teaches SAS courses in mixed model analysis, multivariate statistics, linear models, cluster analysis, structural equation modeling, statistical process control, design and analysis of experiments and multiple imputation methods for missing data.

**Pre-requisites:** The recommended audience for this course has a firm understanding of linear models, such as ANOVA and regression. Familiarity with mixed models theory is helpful but is not required.  
**Intended audience:** Researchers, statisticians and data analysis wanting to learn some basic concepts and techniques for analysis of models with fixed and random effects.  
**Course material:** Handout of course notes, a link to download course data and programs

### **Course Description:**

This class features lecture and demonstrations of mixed model concepts using the MIXED procedure in SAS for several types of analyses common to pharmaceutical and clinical trial research. In addition to basic concepts in mixed model methodology, students will learn to apply mixed models for crossed classification (n-way) designs, nested classification designs, and crossover designs. A combination of lecture and live demonstration format enhance the learning experience.



## 9. *Using SAS ETL Studio to Convert Clinical Trials Data to the CDISC SDTM*

**Instructor:** Barry R. Cohen and Tom Guinter  
**Affiliation:** Octagon Research Solutions, Inc.  
**E-Mail:** bcohen@octagonresearch.com  
 tguinter@octagonresearch.com

**Biography:**

Barry Cohen is Director of the Clinical Data Strategies group at Octagon Research Solutions. In this role, Barry focuses on conversion of clinical trials data to the CDISC SDTM, development of clinical data warehouses based upon the standard, and strategic uses of this data beyond submission to the FDA.

Tom Guinter is Vice President of the Clinical Data Strategies group at Octagon Research Solutions. His group helps clients leverage emerging Clinical data standards. Tom is a co-leader of the CDISC Submission Data Standards (SDS) team that developed the SDTM model, and an acknowledged principal contributor to the SDTM.

**Pre-requisites:** Some knowledge of the various clinical trials data domains; some knowledge of the CDISC SDTM structure, some knowledge of Base SAS programming

**Intended audience:** Management-level staff in Biometrics/Data Management seeking a roadmap for implementing the SDTM and building a clinical data warehouse in their organization, technical staff considering SAS ETL Studio as the technical solution for conversion to SDTM and for clinical data warehouse building.

**Course material:** Copy of presentation slides, SDTM umbrella document and SDS Implementation Guide for SDTM, other handouts as appropriate

**Course description:**

A new industry standard for the interchange of clinical trials data (the CDISC SDTM) has been developed and is quickly being adopted by the pharmaceutical industry. Thus, for future New Drug Applications to the FDA, companies will need to convert their clinical trials data from various legacy structures to the new industry standard SDTM structure. This will be a major undertaking for any organization, and a data warehousing tool can be of significant help in this process. ETL Studio is the new SAS product designed to support a warehouse building process. Octagon Research Solutions uses ETL Studio to manage the complex process of converting its clients' legacy clinical trials data into submission-ready data based upon the CDISC/SDTM standard.

This seminar will cover:

- The evolution of the SDTM
- Overview of the fundamentals of the SDTM
- Basic elements of a data conversion process
- Typical data structure(s) for legacy clinical trials data and how the CDISC SDTM structure differs from legacy structures
- Basic elements of the SAS ETL Studio product and how to use them to build and execute jobs that convert clinical trials data domains from legacy to SDTM structure
- Benefits of using ETL Studio to conduct the legacy to SDTM conversion process
- How ETL Studio fits in a roadmap for implementing the SDTM and building a clinical data warehouse

Note: In a related seminar, Greg Nelson touches upon how ETL Studio could be used to read and write datasets to various standards (see "Using ETL Studio for Clinical Research"). Our seminar builds upon that topic to show in detail how to build datasets according to the CDISC SDTM structure.



## 10. *An Animated Guide: Proc Transpose Made Simple*

**Instructor:** Russ Lavery  
**Affiliation:** Independent Contractor  
**E-Mail:** Russ.lavery@verizon.net

**Biography:**

Russ is a frequent, and award winning, presenter at SAS conferences. He has been using SAS for over 15 years and is the creator of the "an Animated Guide:" series of talks on SAS and statistical topics.

**Pre-requisites:** None

**Intended audience:** Anyone looking to learn PROC TRANSPOSE

**Course material:** Everyone gets a disk containing the SAS code for all the examples in the class.

**Course description:**

This example-rich seminar will provide a unique, and simplifying, structure for thinking about Proc Transpose and it's syntax. There will be in-seminar group exercises to reinforce material in the class. Participants who bring laptops can run the seminar code along with the instructor. The seminar outline is:

- Basic Transpose Examples: to surface issues in using transpose
- Preserving information about pre-transposed data set: saving old variable names and labels
- Creating useful variable names in the new data set:
- The shape of the transpose: using the variable statement and By statements
- The Power Combination: Proc Summary and Proc Transpose
- Transposing with a data step and macros



## 11. *Advanced ODS*

**Instructor:** Chris Olinger  
**Affiliation:** d-Wise Technologies, Inc.  
**E-Mail:** colinger@d-wise.com

**Biography:**

d-Wise Technologies President Chris Olinger has been developing enterprise software for over 17 years. While at SAS Institute he was the manager of the Base SAS reporting group and lead developer of ODS, as well as being involved in the design and development the SAS Drug Development platform. More recently, Mr. Olinger has been involved in the development of SAS and web based applications, and runs his own software consultancy company, d-Wise Technologies.

**Pre-requisite:** Basic ODS Knowledge  
**Intended audience:** Report writers  
**Course material:** Handouts and CD of examples

**Course description:**

This half-day advanced ODS course will cover topics relating to getting the most out of ODS Styles, reporting techniques using the Base SAS® reporting procedures, ODS Tagsets, and using SAS to interface with alternative reporting environments. It will also touch on some of the newer technology coming in 9.2 such as Statistical Graphics, and enhancements to ODS to make your life easier.



## 12. *XML for SAS Programmers*

**Instructor:** Frederick Pratter  
**Affiliation:** Eastern Oregon University  
**E-Mail:** fpratter@eou.edu

**Biography:**

Frederick Pratter teaches Computer Science at Eastern Oregon University in La Grande, OR. He is the author of Introduction to Web Development Using SAS AppDev Studio™. Prior to giving up the East Coast urban lifestyle, he was a Senior Scientist and Information Technology Director for the Business Research Consulting Group at Abt Associates in Cambridge, MA. His presentation "Access to Relational Databases Using SAS®" was honored as Best Paper in the PharmaSUG 2002 Tutorials section. He has been a SAS user since 1975, and has also presented a number of papers and seminars at SUGI, WUSS, NESUG, SESUG and PNWSUG.

**Pre-requisites:** A basic understanding of SAS DATA and PROC steps and a burning interest in XML.  
**Intended audience:** SAS users with an interest in XML, in particular the background for the FDA XML Data Format Requirements Specification.  
**Course material:** Handouts with code examples.

**Course description:**

This seminar is an expanded version of the famous SUGI 27 paper "Beyond HTML: Using the SAS System® Version 8.2 with HTML and XML". In particular, the following topics will be covered:

- What is XML?
- What is the difference between XML and HTML?
- What does XML do?
- What SAS tools are available for XML processing?
- What do they do, and why would you want to use them?

In addition, new topics will include using examples of using XMLMap to parse arbitrary XML documents, using templates to create XML and XHTML, and the use of DTDs (Document Type Definitions) for validating XML data documents.



### 13. *Getting Started with SAS Macro Language Basics*

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

**Biography:**

Art Carpenter's publications list includes three books, and over five dozen papers and posters presented at SUGI, and various regional and local user group meetings. Art has been using SAS since 1976 and is a SAS Certified Professional™. Through California Occidental Consultants he teaches SAS courses and provides contract SAS programming support nationwide.

**Pre-requisites:** Student should have a good grounding in the SAS Base DATA and PROC steps.

**Intended audience:** This seminar is suited for the SAS user who already has a basic understanding of the Data Step and Procedure Steps, but who is new to the Macro Language facility in SAS System software. It is a beginning-level course that assumes no prior understanding of the SAS Macro Language. It is also suitable for SAS users who want to understand the Macros found in programs then have "inherited" from other programmers.

**Course material:** Students will receive a detailed course workbook.

**Course description:**

This half-day seminar is designed for the SAS programmer who is new to the Macro Language. We will start at the basics and cover the fundamentals necessary to start applying SAS macros in your programs. By the end of the day you will understand how the Macro Language works, what the Macro Symbol Table is and how to values stored in it, how the SAS System uses Macro Variables, key Macro Language concepts, important SAS Macro Language statements, and how to invoke Macros in your programs. The examples shown in the course materials demonstrate the power and flexibility of this part of the SAS System and will enable you to apply its functionalities to your own programs right away.



### 14. *Intermediate and Advanced Topics in the SAS Macro Language*

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

**Biography:** See Seminar 13

**Pre-requisites:** This one day course is designed for students with a good understanding of the DATA and PROC steps and who already understand the basic structure and syntax of the SAS Macro Language.

**Intended audience:** This one day course is intended for those who want to build on their existing knowledge of the SAS Macro Language by increasing their understanding of how the macro facility thinks and makes decisions.

**Course material:** Students will receive a copy of *Carpenter's Complete Guide to the SAS Macro Language, Second Edition*.

**Course description:**

The course will start with a short review of the macro basics and quickly move on topics specifically selected to improve your macro language expertise. Key macro functions will be introduced, explained, and demonstrated to the students. You will learn to create your own macro functions, and the essential elements of dynamic programs will be demonstrated. A number of macro utilities that gather information based on the operating environment will be explained.



# 2<sup>nd</sup> Annual PharmaSUG Games

## PharmaSUG Game Night Volleyball / Golf Chipping Contest

For those of you who need to unwind after a day of workshops and presentations we invite you to take advantage of the resort amenities by participating in the *PharmaSUG Game Night!* Courtyard volleyball and a floating hole golf chipping challenge are a few of the games that will be offered Monday evening. You can show off your sporting talent, or just have fun. We can sign you up for a team or you can create your own, mix and mingle with other SAS professionals from 6.30-9.00pm Monday Night.

Date/Time: Monday, 6:30-9:00 PM  
Ticket Charge: \$5 in advance / \$10 on-site

The cost for participation covers the rental of the volleyball equipment, 2 chipping attempts, and refreshments.

## Texas Hold 'Em Poker Tournament

What is a Flop? What is a Turn? Where is the River? Are you on Fourth or Fifth Street? Whether you are a novice or an expert, join us for our first PharmaSUG poker tournament featuring Texas Hold-em! Money will not be exchanged, only chips and a great time. Snacks and non-alcoholic beverages are included in the entrance fee, and a tended cash bar will be available. Instructions and a practice round will be provided for beginners.

Date/Time: Monday, 8:00-11:00 PM  
Place: To be announced – check the message board at registration  
Ticket Charge: \$15.00 in advance / \$20.00 on-site

*Experienced players who want to volunteer to help with the tournament please e-mail Ellen Brookstein at [ellenkb@aol.com](mailto:ellenkb@aol.com)*

Space is limited so sign up now!!!

# Hands-on Workshops

We are once again pleased to offer our own Hands-on Workshop Section. The following excellent presenters were invited to participate this year and SAS Institute will be providing 20-25 computers for our use on Monday and Tuesday during the conference.

## **A Pragmatic Programmers Introduction to ETL Studio: A Hands On Workshop**

Greg Nelson – ThotWave Technologies, LLC

## **Data Driven Annotations: An Introduction to SAS/Graph's Annotate Facility**

Art Carpenter – CA Occidental Consultants

## **ODS Reporting Techniques**

Chris Olinger – d-Wise Technologies, Inc.

## **CDISC Implementation, Real World Applications**

Sy Truong – MXI, Meta-Xceed, Inc.

## **An Animated Guide to the Data Step Debugger**

Russ Lavery – Independent Contractor

## **Latest Features of SAS Drug Development**

Dana Rafiee – Destiny Corp.

## **The Utter “Simplicity” of the Tabulate Procedure**

Dan Bruns - TVA

# Overview of Paper Presentations

## **SAS Presentations**

There will be 8 to 10 SAS presentations sprinkled among the other conference presentations. These presentations will be posted on the PharmaSUG website at [www.pharmasug.org](http://www.pharmasug.org) once they have been finalized.

### **Applications Development**

#### **Developing PDF-Manipulation Macros for eSubmission Automation**

- Lei Zhang - Celgene Corporation

#### **Real Time: What is it and what are we doing about it**

- Greg S Nelson - ThotWave Technologies, LLC.

#### **Zippping Right Along: Push-button SAS® Transfers via Command-line Invocation**

- Stephen Hunt - PRA International / Brain Fairfield-Carter - PRA International

#### **DIFFTREE: A Macro to Compare Corresponding Files under Two Directory Trees**

- Andy E Barnett - PPD Inc.

#### **Utilizing the Stored Compiled Macro Facility in a Multi-user Clinical Trial**

- Mirjana Stojanovic - Duke University Medical Center

#### **SAS & Safety Signal Detection and Analysis**

- Karthikeyan Chidambaram - Cognizant Technology Solutions / Sunandan Banerjee - Cognizant Technology Solutions

#### **Get your SAS in gear - Automate the production of Analysis Datasets**

- Liz R Taylor - Endo Pharmaceuticals, Inc.

## **Applications Development (cont.)**

### **Highly Effective Batch Processing**

- *Haibin Shu - Barr Pharmaceutical/Duramed Research*

### **SAS, GNU & Open Source: MinGW Development Tools and Sample Applications**

- *Brian Fairfield-Carter - PRA International / Stephen Hunt - PRA International / Tracy Sherman - PRA International*

### **Displaying Multiple Graphs to Quickly Assess Patient Data Trends**

- *Hui-Ping Chen - Eli Lilly and Company / Eugene (Bill) E Johnson - Eli Lilly and Company*

### **%SummaryTable: A SAS Macro to Produce a Summary Table in Clinical Trial**

- *Yinmei Zhou - St. Jude Children's research hospital*

### **Large Scale Standard Macros - An approach to development and implementation**

- *Jeremy Gratt - Modular Informatics / John Adams - Boehringer-Ingelheim*

### **Mapping Clinical Data to a Standard Structure: A Table Driven Approach**

- *Nancy Brucken - i3 Statprobe / Paul Slagle - i3 Statprobe*

### **MDMAP - An innovative application used to manage clinical trial metadata**

- *Gregory S Ridge - Sanofi-Aventis*

### **Good Programming Practices in Clinical Trials - a Check Program**

- *John H Adams - Boehringer Ingelheim Pharmaceutical*

### **A Macro to Find the Best Model For Repeated Measures using PROC MIXED**

- *Jingjing Wang - Professional Performance Group, Inc*

### **Client Communication: Transform Specifications into Code with Spreadsheets**

- *John C Cantrell - University of North Carolina*

### **Drawkcab Gnimargorp: Test-Driven Development with FUTS**

- *Jeff Wright - ThotWave Technologies, LLC. / Greg Nelson - ThotWave Technologies, LLC.*

## **Coder's Corner**

### **To Include All the Variables in the Original Dataset If It Is Empty**

- *Wei Xu - Averion Inc.*

### **Building Stronger Axes for Your SAS Graph Wagons**

- *Don (Dongguang) Li - NCIC-CTG*

### **Numeric Precision - an Example**

- *Varsha C Shah - University of North Carolina*

### **Page breaks: simple and effective ways to neatly present data**

- *Suzanne M Humphreys - PRA International*

### **Put Down That Mouse!**

- *Daniel J Boisvert - HCRI*

### **General Methods to Use Special Characters**

- *Dennis Gianneschi - Amgen, Inc.*

### **Back From The Future: Transferring Values From Later To Earlier Visits**

- *Alexander Feigin - Synthes USA*

### **When a shortcut is more than a quick fix**

- *Robby A Diseker - PPD*

### **A New Approach to Display Multiple Graphs in One Page And Individual Patien**

- *Long Zheng - Allergan, Inc.*

### **Using ODS Document with SAS/Graph to Remove Unwanted PDF Bookmarks**

- *John J Reilly - DataCeutics*

### **Just Enough SAS to Identify Yourself in a Networked World**

- *Paul D Sherman - self / Na Li - Pharmacyclics, Inc.*

### **Create Descriptive Documentation with Hyper-links for SAS Database**

- *Don (Dongguang) Li - NCIC-CTG*

### **Quote Me On This: How To Make SAS Talk Database**

- *Paul D Sherman - self*

### **Hidden Data Loss in Manipulation of Data**

- *Tim Tian - Biogen Idec Inc.*

### **Using Multiple SAS Sessions in the PC Environment to Facilitate Programming**

- *Rubin Nan - PPD / Douglas Criger - PPD*

## **Data Management**

### **Searching For The Right Search Tool**

- *Eugene Yeh - ASG Inc. / Angela Ringelberg - PharmaNet Inc.*

## **Data Management (cont.)**

### **Base SAS vs. ETL Studio: Understanding ETL and the SAS tools used to support it**

- Danny Grasse - *ThotWave Technologies, LLC* / Greg S Nelson - *ThotWave Technologies, LLC*

### **Specifications for Derived Data (or Would you Build a Home without prints)**

- Richard A Weisman - *PPD, Inc.*

### **Murphy was an optimist: a realistic approach to clinical trial data**

- Pamela L Reading - *Rho, Inc.*

### **External Data Utility, a SAS Application to Manage Data from Acquisition to Database Release**

- Margaret Hung - *GlaxoSmithKline* / Mohit K Goel - *Analysts International* / Sheila M Moody - *Smith Hanley Consulting Group, Inc.*

### **Arrays Made Easy: An Introduction to Arrays and Array Processing**

- Teresa Schudrowitz - *Systems Seminar Consultants*

### **Effective Ways to Manage Thesaurus Dictionaries**

- Sy J Truong - *MXI, Meta-Xceed, Inc.*

### **Managing Clinical Trials Data using SAS® Software**

- Martin J Rosenberg - *MAJARO InfoSystems, Inc.*

## **FDA Compliance - Electronic Submission & Validation**

### **Cost Effective Ways to Generate Define.PDF & Define.XML**

- Sy J Truong - *MXI, Meta-Xceed, Inc.*

### **Implementing SAS using Microsoft Windows Server and Remote Desktop**

- Paul Gilbert - *DataCeutics Inc* / Steve Light - *DataCeutics Inc*

### **Evolution and Implementation of CDISC Study Data Tabulation Model (SDTM)**

- Tom S Guinter - *Octagon Research Solutions, Inc.* / Fred Wood - *Procter & Gamble Pharmaceuticals*

### **Using SAS ETL Studio to Convert Clinical Trials Data to the CDISC SDTM**

- Barry R Cohen - *Octagon Research Solutions, Inc.*

### **Preparing CTD (Common Technical Document) for FDA Submission**

- Charlie Xu - *AstraZeneca*

### **Imputing ISO8601 Dates From Character Variables Containing Partial Dates**

- John R Gerlach - *MaxisIT, Inc.*

## **Management**

### **Don't Just Tell Us - Show Us!**

- Marc W Vaglio-Laurin - *SAS*

### **Getting and Keeping a Job as a Remote Employee**

- Erin M Christen - *AYW Consulting*

### **How to Get Promoted: Planning for Career Growth**

- Sandra Minjoe - *Genentech, Inc*

### **Identifying the Roles and Responsibilities of Programmers and Statisticians**

- Margaret K James - *Merck & Co.* / Amy Gillespie - *Merck & Co.* / Ying Su - *Merck & Co.*

### **My Experience as a Facilitator between Biostatisticians and SAS Programmers**

- Carey G Smoak - *Roche Molecular Systems, Inc*

### **Guiding Principles of Trusted Leadership**

- Sandy Paternotte - *PPD, Inc.*

### **Transforming Business Requirement into System Solution**

- Yongcun Zhang - *Genentech Inc.*

### **HIRE Power in the Pharmaceutical Industry**

- Neil Howard - *Independent Consultant*

### **Challenges in Managing a Large (20+) SAS Programming Group**

- Paul A La Brec - *i3 Statprobe*

## **Posters**

### **When There Are Too Many Macro Parameters and We Need One More**

- Eric Qi - *Merck* / Eunice Ndungu - *Merck*

### **Using Table-Driven Solution in Clinical Safety Pause Rule Reporting**

- Xiaoming Liang - *FHCRC*

### **A Case of Online Data Processing and Statistical Analysis via SAS/IntrNet**

- Sijian Zhang - *UAB*

### **Enhancing RTF Output with RTF Control Words and In-Line Formatting**

- Lori S Parsons - *Ovation Research Group*

## **Posters (cont.)**

### **Systematic Inductive method for imputing missing date in clinical trial**

- Ping Liu - Novartis Pharmaceuticals Corporation

### **Randomization in Clinical Trial Studies**

- David Shen - WCI, Inc. / Zaizai Lu - Astrazeneca Pharmaceuticals

### **Manipulating Plot Area When Using CALL EXECUTE to Create Multiple Graphs**

- Brandon Graham - PPD, Inc.

### **Macros to create quality control (QC) documents**

- Xiaoyu Liu - ClinForce, Inc. / Hong Xiao - Eli Lilly & Company

### **How to Get Upper (or Lower) Error Bars with INTERPOL=HILOCTJ?**

- Adeline Yeo - Lilly-NUS Centre for Clinical Pharmacology

### **Developing and Managing a SAS Macro Library**

- Margaret K James - Merck & Co. / Carolyn Maass - Merck & Co. / Virginia Redner - Merck & Co.

### **Performing Deconvolution Operations in SAS for Input Rate Computation**

- Steven G Hege - Rho, Inc.

### **Streamlining Specimen/Label Shipment Process**

- Christina Carty - CSPCC / Elizabeth Spence - CSPCC

### **Methods for Generating Excel Files from SAS Datasets**

- Xingshu Zhu - Merck company / Shuping Zhang - Merck company

### **Know Thy Data**

- Richard J Morales - GlaxoSmithKline

### **SAS Supplied Macros - a peek**

- Karthikeyan Chidambaram - Cognizant Technology Solutions

### **Estimate Carryover Effect in Clinical Trial Crossover Designs**

- David Shen - WCI, Inc. / Zaizai Lu - Astrazeneca Pharmaceuticals

### **Designing & Building an Administrative Model for SAS Drug Development Tool**

- Margaret M Coughlin - Merck

### **Approach to Archive Programs in PDF and Retrieve Programs from PDF Files**

- Eric Zhang - Centocor Research & Development, Inc.

### **Patient Profile: A Menu-Driven System**

- Adel Fahmy - Symbiance, Inc.

### **QA your SAS job**

- Jianming He - Solucient

## **Public Health Research**

### **Data Mining Methods to Link Multiple Drug Purchases**

- Patricia B Cerrito - University of Louisville

### **De-Identification of Clinical Trials Data Demystified**

- Jack Shostak - Duke Clinical Research Institute

### **Transformations and Expectations: Determining the Best Method for Cost Estimation**

- Venita M DePuy - Duke Clinical Research Institute

### **The Skinny on Processing Very Large Health Claims Data Sets**

- Gopal Rajagopal - Merck & Co. Inc

### **A Method/ Macro Based on Propensity Score and Mahalanobis Distance to Reduce Bias in Treatment Comparison in Observational Study**

- Wuwei Wayne Feng - Eli Lilly & Company / Jun Yu - MedFocus Ltd / Rong Michelle Xu - Eli Lilly & Company

### **Socio-economic factors to utilization of the emergency department**

- David K Nfodjo - University of Louisville

## **Statistics & Pharmacokinetics**

### **Heuristic Algo: Backward Elimination Process for a Model**

- Varsha C Shah - University of North Carolina

### **Generating Half-normal Plot for Zero-inflated Binomial Regression**

- Zhao Yang - University of South Carolina / Xuezheng Sun - University of South Carolina

### **Sample Size Calculation and Timeline Estimate for Progression-Free Survival**

- Chung-Kuei Chang - Pinnacle Resources Group

### **Analyzing Ordinal Repeated Measures Data Using SAS®**

- Bin Yang - ELI LILLY and Company

### **Bootstrap Methods Using the SURVEYSELECT Procedure**

- Thomas W Tilsch - Bristol Myers Squibb Company

## Technical Techniques

### **Say ‘Hello’ to #BYVAL: Re-introducing a Hot Little #**

- Stephen Hunt - PRA International

### **The New and Improved Symbol Table Generator**

- Jim Johnson - none

### **SQL SAS or Vanilla Flavor**

- Cecilia Mauldin - PPD

### **%StrSrch - A Recursive SAS® Tool to Find and Replace String in Text File**

- Liping Zhang - Merck Co. & Company / Wenyu Hu - Kelly Scientific Services

### **Call Execute for Everyone!**

- Daniel J Boisvert - HCRI

### **Convert Oracle Database to SAS Data Sets, a Novel Approach**

- Fuping Peng - Eisai Medical Research

### **Survival (Kaplan-Meier) Curves Made Easy**

- Carey G Smoak - Roche Molecular Systems, Inc

### **Dynamic drill down based on numeric data**

- Hsiwei Yu - Ming Tech / Dong-Min Shen - Schering-Plough Research Institute

### **SAS Programs from Unix to PC and Beyond**

- Christopher Kania - Biogen Idec

### **The Design And Use Of Metadata: Part Fine Art, Part Black Art**

- Frank C DiIorio - CodeCrafters, Inc. / Jeffrey M Abolafia - Rho, inc.

### **Longitudinal Graphs with Annotate**

- Jasmin Fredette - PRA International

### **Effective Strategy to Set Page Breaks for ODS RTF Outputs**

- Songtao Jiang - Harvard Clinical Research Institute

### **CFB: A Programming Pattern for Creating “Change from Baseline” Datasets**

- Lei Zhang - Celgene Corporation

### **Consistency Check: QC Across Outputs for Inconsistencies**

- John M Morrill - Quintiles / David J Austin - PRA International

### **Using SAS to Manage and Report Long Text Fields in a Clinical DBMS**

- Na Li - Pharmacyclics, Inc.

### **CALL EXECUTE: A Primer**

- Alissa D Ruelle - Pharmanet, Inc. / Kitty Moses - PharmaNet, Inc.

### **Stellar Graphics Using SAS (but not SAS/GRAPH)**

- Chris P Holland - Sucampo Pharmaceuticals

### **“DO NOT EDIT BELOW THIS LINE” (Configuring SAS to work for you)**

- Kim R Truett - KCT Data, Inc.

### **Techniques for Creating Reviewer-Friendly SAS programs**

- Mario Widel - Eli Lilly & Co / Jay Zhou - Amylin Pharmaceuticals

### **Perfecting the Publishing Process with SAS 9.1.3**

- Chris P Holland - Sucampo Pharmaceuticals

### **Hyperlinks and Bookmarks with ODS RTF**

- Scott M Osowski - PPD, Inc. / Thomas J Fritchey - PPD, Inc.

### **A “bit” about Proc Summary: Technique for working with summary output**

- Gregory T Weber - DataCeutics, Inc. / Troy A Ruth - DataCeutics, Inc. / Steve Light - DataCeutics, Inc.

### **An easy, concise way to summarize multiple proc compares using &SYSINFO**

- Lexter S Fennell - PPD

### **Creating a Tagset Template for Use with the XML Libname Engine**

- Cynthia L Zender - SAS Institute

### **SAS And Vmware To Create An Environment For Computer Systems Validation In A Pharmaceutical Company**

- Wayne Woo - Chiron Corporation

### **Meta Data That You (Probably) Didn’t Know That You Had**

- Richard F Pless - Ovation Research Group

## Tutorials

### **A comparison between SQL and data step and some SAS procedures**

- LaTonya Murphy - PPD / Lan Tran - PPD

## **Tutorials (cont.)**

### **Proc Format is Our Friend**

- Erin M Christen - AYW Consulting

### **Simple ways to use PROC SQL and DICTIONARY TABLES to verify data structure**

- Christine S Teng - Merck & Co., Inc. / Wenjie Wang - Merck & Co., Inc.

### **Word to SAS via XML**

- Sandeep R Juneja - ASG Inc.

### **Creating ActiveX Graphs for Presentations using SAS Enterprise Guide®**

- Terek J Peterson - Cephalon, Inc. / Robert Gordon - Cephalon, Inc.

# **Getting to and from Southwest Florida International Airport (RSW) (Fort Meyers, FL)**

## **TAXI RATES**

Service is available 24 hours a day, seven days a week for transportation between Southwest Florida International Airport and local hotels. Zones define taxi rates from Southwest International Airport. The rates are valid for up to 3 passengers; each additional passenger is \$10. As of January 5, 2006, the rate to the hotel (zone 3) is \$35. Rates can be checked online at: [http://flynca.com/rsw/parking/limo\\_db.php](http://flynca.com/rsw/parking/limo_db.php)

## **NT&T DESTINATION SERVICES**

<http://www.nttdestination.com>, click on airport shuttle reservations

Rates\*: \$125 one-way for a private executive van service (up to 8 people), \$75 one-way for a personal sedan, \$39 one-way per person for a shuttle

\* Rates do not include a 20% service charge and 8% fuel surcharge.

## **AIRLINES / CAR RENTAL**

All major airlines and car rental agencies service the airport.

## **DRIVING DIRECTIONS FROM RSW TO HOTEL (18.2 miles)**

Start going towards the AIRPORT EXIT on CHAMBERLIN PKY 0.4 miles. Continue on PAUL J DOHORTY PKY 0.8 miles. Turn Left on DANIELS PKY/DANIELS RD EXT 0.5 miles. Continue on DANIELS PKY/DANIELS RD 2.1 miles. Continue on DANIELS PKY 0.5 miles. Turn Left to take the I-75 SOUTH ramp 0.3 miles. Merge on I-75 SOUTH 7.4 miles. Take the CR-850 exit towards ESTERO, exit #123 0.4 miles. Continue on CORKSCREW RD 1.9 miles. Turn Left on S TAMIAMI TRL 2.3 miles. Turn Right on COCONUT RD 1.7 miles

# Registration Form (Page 1 of 3)

- Registration forms with incomplete or illegible information CANNOT be processed.
- Please complete all pages of this form
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**Note:** There is a \$25 administrative fee for every change to a conference or seminar registration.  
**After April 14, 2006 payment is nonrefundable.**

**Visit our website, <http://www.pharmasug.org/2006/registration.html>, to register online beginning February 6, 2005!**

**COMPLETE ALL PAGES AND SUBMIT THIS FORM ONLY ONCE  
PLEASE DO NOT FAX OR MAIL THIS FORM IF YOU REGISTER ONLINE**

Mail completed form (including payment) to: PharmaSUG 2006 c/o Richard Allen 5691 Northwood Drive Evergreen, CO 80439-5520	For registration paid by credit card ONLY, form may be faxed to:  303-670-5387 ATTN: PharmaSUG 2006
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If you have any registration questions, please contact the Conference Registrar, Richard Allen, by phone at (303) 670-5386 or by email at [rrallen@peakstat.com](mailto:rrallen@peakstat.com).

**Registrant Information (PLEASE PRINT) – required information marked \***

First Name*	MI	Last Name*	
Company / Affiliation*	Job title		
Address*			
City*	State*	Zip*	
Phone*	Fax		
Email address*			

**Registration type (check only applicable one):**

	Online	Paper Registration
<input type="checkbox"/> Complimentary Registration (requires prior approval).....	\$0	\$0
<input type="checkbox"/> Presenter Registration (Postmarked by April 14, 2006).....	\$275.00	\$325.00
<input type="checkbox"/> Early registration (Postmarked by April 14, 2006).....	\$375.00	\$425.00
<input type="checkbox"/> Regular registration (Postmarked by May 12, 2006).....	\$425.00	\$475.00
<input type="checkbox"/> On site registration .....	\$525.00	

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# Registration Form (Page 2 of 3)

**SEMINAR REGISTRATION (requires conference registration):**

**Saturday, May 20, 2005 8:00AM – 12:00PM**

- 1. The Drug Development Process ..... \$99
- 2. Testing and Validating SAS Programs in an FDA Regulated Environment ..... \$99

**Saturday, May 20, 2005 1:00PM – 5:00PM**

- 3. SAS Programming for the Pharmaceutical Industry ..... \$99
- 4. Using ETL Studio for Clinical Research ..... \$99

**Sunday, May 21, 2005 8:00AM – 12:00PM**

- 5. Using BI Tools from SAS for Clinical Reporting ..... \$99
- 6. CDISC Submissions ..... \$99
- 7. Cross-Platform Techniques for Moving Data and Analytical Results Between SAS and Microsoft Office..... \$99
- 8. An Introduction to Mixed Models for Pharmaceutical Applications ..... \$99

**Sunday, May 21, 2005 1:00PM – 5:00PM**

- 9. Using ETL Studio to Convert Clinical Trials Data to the CDISC SDTM ..... \$99
- 10. An Animated Guide: Proc Transpose Made Simple..... \$99
- 11. Advanced ODS ..... \$99

**Wednesday, May 24, 2005 1:00PM – 5:00 PM**

- 12. XML for SAS Programmers ..... \$99
- 13. Getting Started with SAS Macro Language Basics ..... \$99

**Thursday, May 25, 2005 8:00AM – 5:00 PM**

- 14. Intermediate and Advanced Topics in the SAS Macro Language ..... \$198

**CONFERENCE DINING:**

Registration fee includes Sunday dinner, and Monday and Tuesday breakfast/lunch and Wednesday breakfast.

To help us plan the meals, please check which meals you will attend:

- Sunday night dinner ..... \$0
- Monday lunch ..... \$0
- Tuesday lunch ..... \$0

**For special dietary meals, you must check one of the boxes below:**

- Vegetarian meals
- Kosher meals

**Guest Registration** (If your guest(s) would like to attend a meal, complete this section):

- Guest(s) Name: \_\_\_\_\_
- Sunday evening dinner ..... \$70
  - Monday lunch ..... \$30
  - Tuesday lunch ..... \$30

**Volunteer: Are you interested in volunteering to help out at the conference?**

- No, thank you
- Yes

**EXTRA ACTIVITIES (enter number of tickets and include the sum cost in total below)**

- Game Night –Volleyball / Floating hole golf chipping contest (Monday evening, May 22)  
 \_\_\_\_\_ Tickets (includes children 12 and over) ..... \$5
- Texas Hold ‘Em Tournament (Monday evening, May 22)  
 \_\_\_\_\_ Tickets (adults, 18+) ..... \$15

# Registration Form (Page 3 of 3)

**TOTAL AMOUNT DUE (No refunds after April 15, 2005):** \$ \_\_\_\_\_

**Payment Options (check only one):**

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