FROM THE CONFERENCE CHAIRS...

It's time to make your plans for the Western Users of SAS Software Annual Conference, WUSS 2005, September 21–23, 2005, at the Fairmont San Jose. As WUSS 2005 Conference Chairs, we encourage you to take advantage of the best and most exciting conference you'll ever attend.

WUSS 2005 begins Wednesday afternoon with **Paul Kent's** keynote address, **Modern SAS; the semicolon behind the scenes.** WUSS offers tutorials, SAS Essentials Workshop, Hands-on Workshops, presentations and posters on leading-edge topics, demonstrations of new products and procedures, and pre/post-conference classes to update your skills, besides the chance to talk with developers of SAS Software. This is truly a conference you don't want to miss.

You'll have **networking opportunities** mixed in with some fun and relaxation at the SAS Customer Appreciation Reception (following the Opening Session), SAS Savvy (a Jeopardy© style trivia game), and the all-important WUSS Happening Mixer (where you can swap stories with other SAS users).

As you look through this booklet, you'll find registration, hotel, and presentation information. Make your plans now to attend WUSS 2005. Come to San Jose and enjoy the talks, workshops, classes, networking, and the learning!

Be prepared…you're going to learn a lot! We look forward to seeing you in San Jose.

Nikki Carroll	Sally Carson	Diana Suhr
Academic Program	Operations	Operations
Kaiser Permanente	UCLA Dept. of Medicine	University of Northern Colorado

BRING A CHILDREN'S BOOK (OR TWO!!) TO WUSS

WUSS 2005 will be sponsoring a Children's Book Drive to benefit needy children in Northern California. To make this Book Drive a success, **WUSS 2005 needs your help**. Drop off new (or gently used) books at the Registration Area during the conference. The books will be distributed to reading centers in shelters and community centers. Bring your childhood favorite and share it with the next generation!

Save room in your suitcase for cool giveaways by filling space with books for the Drive. If you forget, there will be a list of local bookstores where you can do your shopping. Thanks so much for your help!

**Help every child reach their full potential by participating in the
WUSS 2005 Children's Book Drive!!**

PRELIMINARY CONFERENCE SCHEDULE

MONDAY & TUESDAY, SEPTEMBER 19 & 20, 2005

8:30am	—	4:30pm	Pre-conference (Vendor-sponsored) Full-day Training Classes

WEDNESDAY, SEPTEMBER 21, 2005

7:30am	—	9:00am	Registration for Pre-conference Training Classes
8:30am	—	12 Noon	Pre-conference Half-day Training Classes (Continental Breakfast Included)
9:00am	—	6:00pm	Registration and Information
11:00am	—	11:30am	Section Chair Meeting
11:30am	—	12 Noon	Speakers' Meeting (Speakers, Session Coordinators, & Section Chairs)
12:30pm	—	1:30pm	Opening Session, Keynote Address
1:30pm	—	2:30pm	SAS Customer Appreciation Reception (sponsored by SAS Institute)
1:30pm	—	6:30pm	Exhibit and Demo Area, SAS & Vendor Exhibits
2:30pm	—	5:30pm	Paper Presentations, Hands-on Workshops, Code Doctors, Posters
5:30pm	—	6:30pm	SAS Savvy
6:30pm			WUSS Happening Mixer

THURSDAY, SEPTEMBER 22, 2005

8:00am	—	5:30pm	Registration and Information
8:30am	—	9:00am	Continental Breakfast
8:30am	—	11:00am	Exhibit and Demo Area, SAS & Vendor Exhibits
9:00am	—	12 Noon	Paper Presentations, Hands-on Workshops, Code Doctors, Posters
9:00am	—	12 Noon	SAS Essentials Workshop
12 Noon	—	1:30pm	Lunchtime Activities
12:30pm	—	5:30pm	Exhibit and Demo Area, SAS & Vendor Exhibits
1:30pm	—	5:30pm	Paper Presentations, Hands-on Workshops, Code Doctors, Posters
1:30am	—	5:30pm	SAS Essentials Workshop
3:15pm	—	3:45pm	Snack Break
5:30pm	—	6:30pm	WUSS 2006 Planning BOF
6:30pm			Volunteers' Party (by invitation)

FRIDAY, SEPTEMBER 23, 2005

8:00am	—	12 Noon	Registration and Information
8:30am	—	9:00am	Continental Breakfast
8:30am	—	12 Noon	Exhibit and Demo Area, SAS & Vendor Exhibits
9:00am	—	12 Noon	Paper Presentations, Hands-on Workshops, Code Doctors, Posters
9:00am	—	12 Noon	SAS Essentials Workshop
11:00am	—	12 Noon	SAS Programmers' Challenge
12 Noon	—	1:00pm	Closing Session, Awards, and Prizes
1:30pm	—	5:00pm	Post-conference Half-day Training Classes (Light Lunch Included)

SATURDAY, SEPTEMBER 24, 2005

8:30am	—	4:30pm	Post-conference (Vendor-sponsored) Full-day Training Classes

These times are *tentative*. Check your conference *Program* when you pick up
your registration package at the conference for exact times and locations.

OPENING SESSION AND KEYNOTE ADDRESS

"Modern SAS; The Semicolon Behind the Scenes"

The Opening Session begins at 12:30pm on Wednesday, with a keynote address by **Paul Kent**, Vice President of SAS Platform Research and Development. A strong customer advocate, Paul is widely recognized within the SAS community for his active participation in local and international user conferences. This year, he presents a fun and informative back-stage tour of SAS BI (Business Intelligence) Server and the components that make a successful deployment tick. In particular, he'll show how your existing SAS skills are leveraged by the new architecture, making you more valuable to your organization.

PAPER / POSTER PRESENTATIONS

Coders' Corner (p.16)	*Posters (p. 19)*
Brief presentations on specific topics that illustrate tips, tricks, and coding techniques.	Presents a variety topics in poster board format rather than in a formal lecture.
Data Analysis and Statistics (p.16)	*SAS Solutions (p. 19)*
Examines methods and applications of statistics, data analysis, modeling, and forecasting.	Focuses on the design, development, and implementation of applications (such as programs and systems utilities) and solutions to specific requirements.
Data Presentation (p.17)	*Tutorials (p. 20)*
Focuses on the use of SAS to convey information through various media. Topics include graphics, data visualization, publishing, and reporting applications.	Covers all aspects of the SAS System and are designed to give practical, in-depth "how-to" training on a particular topic presented by recognized experts in the field.
Data Warehousing and Database Management (p. 18)	
Addresses processes involved in the organization, access, and management of data for use in decision making and data exploration. Topics include data integrity and quality, metadata, and data mining.	*SAS Institute Presentations (p. 14)*

CLASSES, WORKSHOPS, AND MORE

Pre/Post-Conference Classes (pp. 6-13)	
Further your SAS education by attending half-day and full-day classes taught by SAS experts before and/or after the conference. Full-day classes are offered Monday, Tuesday, and Saturday; half-day classes are available Wednesday morning and Friday afternoon.	
SAS Essentials Workshop (p. 15)	*Hands-on Workshops (p. 21)*
Introduces the essentials every programmer needs to get started using SAS. Topics include the basics of the SAS language, file structure, and syntax.	SAS software experts present workshop-style tutorials and provide the opportunity to practice using SAS software.
Code Doctors	*Lunchtime Activities -- Thursday*
Is your macro code suffering palpitations? Perhaps your regression models are not converging. Our Code Doctors can help you solve your toughest SAS coding problems! **Bring a printout and/or a disk** containing your code, source data, and error messages for a definitive diagnosis. A **few** of the code doctors at WUSS 2005: • Art Carpenter *CA Occidental Consultants* • Dan Downing *Caremark PCS* • Jimmy Efird *UCSF/JABSOM* • Sunil Gupta *Gupta Programming* • Aleece Hoffman *First Health/Coventry Healthcare* • MaryAnne Hope *Health Services Advisory Group* • Kirk Paul Lafler *Software Intelligence Corp.*	Lunchtime Activities will offer **two** 'Hot Topic' Forums (panel discussions with audience participation): • <u>SAS Business Intelligence</u>: Paul Kent (SAS) and others on issues raised in his Keynote Address • <u>SAS inSchool</u>: Director John Boling (SAS) and local/in-house leaders explore ways to bring this web-based resource and SAS into community schools There will also be opportunities for Roundtable discussions hosted by invited presenters and SAS Press authors, as well as special topic tables (e.g., New to SAS, BioTech Industry, Certification). If you have an idea for a table, contact Sunil Gupta (sunil@guptaprogramming.com) prior to the conference. A final lunchtime activities list will be in the *Conference Program*. Of course, there will also be Quiet Space Tables so you can just stop learning for a little while!

Logistics Overview

Register Online

Online registration is the way to go – it is available 24/7, and saves our precious trees. Please visit www.wuss.org, anytime, day or night. Use the Registration Worksheet on pages 22-23 to plan your registration. Payment options include credit card, checks, and POs.

Save money by registering early! Register no later than Aug. 19, 2005 to secure the early registration price ($275, student $125). The cutoff date for regular registration is Sept. 9, 2005 ($350, student $175). To secure these rates, you must provide full payment and complete registration by the deadline date. After Sept. 9, onsite registration fees apply ($450, student $300).

You'll save time and money by registering early, but of course you can still attend if you miss the cutoff dates! Just come to the conference and register onsite.

Registration is transferable. Written requests for a full refund will be honored if postmarked by Sept. 9, 2005.

Important Dates

Last day for:

Early Registration Rate **AND** Room Block Release	August 19
Regular Registration Rate	Sept. 9

Accommodations

The Fairmont San Jose is Silicon Valley's only full-service luxury hotel, combining technological innovation with timeless elegance. The hotel has reserved a block of rooms for WUSS participants through August 19th, 2005. However, rooms may be sold out prior to that date, so make your reservations early.

Room Prices per Night

Single/Double Occupancy $179.00

Block room rates are valid for 3 days before and after the conference, subject to availability.

**So plan to spend a few extra days
exploring the San Jose area!**

Taxes and Services Charges: Rates are subject to an Occupancy Tax of 10%. (All fees subject to change without notice.)

**SEE HOTEL RESERVATION WORKSHEET
on PAGE 24.**

Transportation

Getting to the Fairmont San Jose couldn't be easier. For more information, see page 25.

Volunteers Needed!!!

WUSS conferences are run entirely by volunteers — energetic people like YOU who get involved. Choose from a variety of tasks, according to your interests:

- **Session Coordinators** Attend a full morning or afternoon session in your favorite paper section. Assist the section chair with equipment, lighting, speaker introductions, and time keeping. (4 hrs.)
- **Hands-on Workshop Facilitators** Attend a full session of Hands-on Workshops, be familiar with presentations and assist attendees. (4 - 8 hrs.)
- **Best Paper Judges** Attend and evaluate the contributed paper presentations in your favorite section to determine Best Paper winners. (4 - 8 hrs.)
- **Registration and Information Desk Staff**
- **Operations Support**

For questions contact: volunteer@wuss.org

SAS Customer Appreciation Reception

Immediately following the Opening Session, SAS is sponsoring a customer-appreciation reception in the Exhibit and Demo Area. Don't miss this opportunity to mingle with SAS staff and other WUSS attendees while enjoying food, drink and live entertainment.

Meet the SAS Savvy Challenge!

There is no better way to test your SAS knowledge than the trivia game, SAS Savvy, created by Phil Weiss and Mike Kirksey of the Valley of the Sun SAS Users' Group in Phoenix, AZ.

On Wednesday from 5:30 to 6:30pm, watch four teams test their SAS knowledge by answering SAS trivia questions. All members of the winning team receive prizes. Even if you don't consider yourself SAS savvy, stop by and watch the event. It's fun … and you might even learn something! If you'd like to join a SAS Savvy team, sign up at the Registration Desk.

LOGISTICS OVERVIEW (CONTINUED)

WUSS Happening Mixer

Join us for the WUSS Happening Mixer, Wednesday, Sept. 21, at 6:30pm. It's a great way to network, and meet other SAS users. Guest tickets are available for purchase through the online registration system. Plan to make an evening of it!

SAS in the Exhibit and Demo Area

The Exhibit and Demo room will be open Wednesday afternoon, all day Thursday, and Friday morning.

- 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 others.
- Visit with members of the SAS Education and Certification team to discuss the many exciting learning opportunities available to you.
- Learn about the latest SAS technology and how to prepare for and acquire a SAS certification.
- Browse through SAS documentation at the Publications booth, and as usual, books may be ordered at a 20% discount (certain restrictions apply).

Be sure to visit the General Customer Support Booth to explore ways you can put the full range of SAS services and support to work for you. We can make sure you are getting the ultimate benefit from all of the services available to you and that you are deriving maximum value from your SAS investment.

   You may also register for several valuable giveaways!

Conference Proceedings

The WUSS 2005 Conference *Proceedings* will be available on CD only. You'll receive your copy when you pick up your registration packet.

Position Referral Notebooks

Companies can list available positions and individuals can include their resumes in the Position Referral Notebooks in the Registration Area. Bring positions and resumes to be included in the notebooks to the conference.

Consultants' Registry

You can review the qualifications of many consultants in the WUSS Consultants' Registry, in the Registration Area. If you are a SAS software consultant or consulting company and want to be included in the Registry, complete the form, found on the WUSS Web site at www.wuss.org/Conference/ConsultantRegistry.pdf, and bring the form to the conference.

Mixing R&R with R&D…

Spend a few days before or after the conference enjoying the attractions of the San Jose area:
- Stroll through world-class shopping malls that are within driving distance.
- Sample tastings from 30 local wineries in the oldest continuously producing wine region in California.
- Reserve your tee time ahead of time to ensure a spot on the green at renowned San Jose area golf courses.
- Explore the many gardens, libraries, cultural parks, and museums, including the Tech Museum of Innovation right across the Plaza Park.
- Treat yourself to a night full of entertainment at the Opera or the Improv or even attend a Broadway production!
- Visit captivating Winchester Mystery House and learn the history behind one of America's most unusual homes and the heiress to the Winchester fortune.
- And remember – San Francisco is less than an hour's drive away.

CORPORATE SPONSORSHIP AND VENDOR OPPORTUNITIES

Gain invaluable exposure for your company!

Information is available at www.wuss.org, or contact:

Miriam Cisternas / Michael Sperling
sponsor@wuss.org

Take this opportunity to further your SAS education by attending one or more of the following classes Wednesday morning and Friday afternoon. Class instructors are recognized experts in the SAS community, including several SAS Press (Books by Users) authors, Quality Partners™, and past conference chairs.

Use the worksheet on pages 22-23 to plan your registration, then register online at www.wuss.org. Half-day classes are $125 each if you register by September 9, 2005 and $150 each after September 9th. Class attendees receive class notes or a book authored by the instructor. **Note:** The use of laptops and all recording devices is not permitted without the instructor's prior approval.

Wednesday Classes 8:30am - noon	Friday Classes 1:30 – 5:00pm
• An Animated Guide to Basic Statistics (Russ Lavery)	• Advanced SAS Programming Techniques (Kirk Lafler)
• An Expert's Guide to Data Cleaning (Ron Cody)	• An Introduction to Parallel Processing and SAS Software (John Bentley)
• Introduction to Mixed Models for Pharmaceutical Applications (Catherine Truxillo – SAS Institute)	• Nonparametric Statistics Using SAS (Gerry Hobbs)
• Sharpening Your SAS Skills: Preparing for SAS Base Certification (Sunil Gupta)	• Powerful, Yet Less Commonly Used: Procedures and Techniques That You Should Know (Art Carpenter)
• Using SAS Enterprise Guide® (Helen Carey, Ginger Carey)	• The Importance of Testing and Validating SAS Programs (Neil Howard)
• SAS and SQL: The Basics (Pete Lund)	
Come early to enjoy the complimentary continental breakfast.	**Come early to enjoy the complimentary light lunch.**

WEDNESDAY MORNING HALF-DAY CLASSES (ALPHABETICALLY BY TITLE)

An Animated Guide to Basic Statistics

INSTRUCTOR: Russ Lavery

ABSTRACT: This course presents the logic of statistical tests, and does not emphasize computations. The goal is to have attendees understand why things work and to be able to follow discussions of which technique is appropriate. Much of the logic of statistics is very understandable ….if the material is presented using examples that are familiar to the student, allowing them to bring their life experience to bear on understanding the material. Animations allow the material to be presented in pictures, as well as formulas and words. Material is presented in such a way that all the different student learning styles are engaged and learning is faster. Group exercises review and reinforce presented material. Topics include hypothesis testing, one- and two-way analysis of variance, regression, and the logic of statistical power.

INSTRUCTOR PROFILE: **Russ Lavery** is the creator of the "Animated Guide" series of talks on SAS and statistical topics. He started using SAS in 1985 and is a independent contractor.

An Expert's Guide to Data Cleaning

INSTRUCTOR: Ron Cody

ABSTRACT: Explore ways to look for data errors using both DATA step programming and Base SAS procedures. Functions such as VERIFY and several of the new SAS 9 character functions make SAS especially well suited to this task. In addition, we'll briefly touch on the use of Perl regular expressions for data cleaning applications.

INSTRUCTOR PROFILE: **Dr. Ron Cody** was a Professor at the Robert Wood Johnson Medical School (NJ) for 26 years and is now a private consultant and writer. He has used SAS since the late 70s and is the author or co-author of the following books: *Applied Statistics and the SAS Programming Language* (5th Ed.), *SAS Functions by Example*, *The SAS Workbook*, *SAS Programming by Example*, *Cody's Data Cleaning Techniques*, and *Longitudinal Data and SAS: A Programmer's Guide*. Ron has presented invited papers for many local, regional, and national SAS conferences.

Introduction to Mixed Models for Pharmaceutical Applications

INSTRUCTOR: Catherine Truxillo (SAS Institute)

ABSTRACT: 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. The recommended audience for this course has a firm background in linear models and hypothesis testing. Familiarity with mixed models theory is helpful but is not required.

INSTRUCTOR PROFILE: Dr. Catherine Truxillo has been a Statistical Training Specialist at SAS for over five 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.

SAS and SQL: The Basics

INSTRUCTOR: Pete Lund

ABSTRACT: This course covers both SQL as a language and its implementation in SAS via PROC SQL. Topics include creating tables and views, inner and outer joins and unions. Also included are subsetting data with WHERE and HAVING statements and aggregating and summarizing data. Examples of using PROC SQL to interface with other DBMS, directly and via ODBC, are covered. Comparisons of the efficiency of PROC SQL and other methods of manipulating data in SAS, via procedures or DATA step, are given. Students receive bound course notes, containing an annotated version of the presentation.

INSTRUCTOR PROFILE: Pete Lund is a SAS Certified Professional™ who has used the SAS System for over 16 years. He works for Looking Glass Analytics in Olympia, WA as Information Systems Manager. Pete has extensive experience with the DATA step and SAS macro language, SQL, SAS/GRAPH® and SAS/IntrNet® and has presented over 40 papers at local and regional SAS Users' Groups as well as at SUGI, where he won the "Best Contributed Paper" Award in 2000-2002. He is President of the Pacific Northwest SAS Users' Group.

Sharpening Your SAS Skills: Preparing for the SAS Base Certification Exam

INSTRUCTOR: Sunil Gupta

ABSTRACT: Looking to advance your career by taking the SAS Base Programming Exam? This course helps prepare you by reviewing the key concepts and techniques required for understanding and passing the exam. All major topics are covered including accessing data, creating data structures, managing data, generating reports, handling errors, SQL, and ODS. Students improve their proficiency in SAS syntax through simple task-oriented examples. The class also includes a review of sample test questions to reinforce your knowledge and understanding of the SAS programming language. Students receive course notes.

INSTRUCTOR PROFILE: Sunil Gupta is the principal consultant and trainer at Gupta Programming. He has used SAS software for over 12 years, is a SAS Base Certified Professional and was the program chair for WUSS 1998. He has also been an invited speaker at numerous SUGI conferences. He has over 41 presentations and publications, is the author of *Quick Results with the Output Delivery System*, and was a SAS Institute Quality Partner for over five years. He is writing a new book, *Analysis and Reporting Made Easier Using SAS Learning Edition*, and is co-authoring *Sharpening Your SAS Skills*.

Using SAS Enterprise Guide

INSTRUCTOR: Ginger Carey and Helen Carey

ABSTRACT: SAS Enterprise Guide is a point-and-click interface to the SAS System and is used by business analysts, statisticians, researchers and programmers. This course shows how to use SAS Enterprise Guide to retrieve information from various sources, analyze the data and present the results. Topics include navigating the menus, managing and manipulating the data, performing exploratory data analysis, reviewing the generated code, creating graphs and using the Document Builder. This course is appropriate for both new and experienced SAS users who want to learn to use Enterprise Guide. **Students may bring their own laptops with SAS 9 and Enterprise Guide 3 installed if they would like to have hands-on experience with examples demonstrated in class.** Students will receive course notes.

INSTRUCTOR PROFILE: Ginger Carey works in the Information Technology department at the University of Hawaii where she provides technical support and classes for SAS users. Ginger co-chaired WUSS '95 and was on the WUSS executive committee. **Helen Carey** works in the insurance industry providing SAS and SQL programming and is an independent computing and training consultant. Both are experienced programmers using a variety of features and products of the SAS System for 29 years. Helen and Ginger have given invited and contributed papers at WUSS and SUGI conferences and local users' groups. They have provided training classes for WUSS for the past few years. For WUSS 2005, Helen is co-chairing the Tutorials section and Ginger is co-chairing the Data Warehousing and Database Management section. They have also served as Section Chairs at numerous SUGIs. Helen and Ginger co-authored a BBU book: *SAS Today! A Year of Terrific Tips*. They believe in the need for constant learning and their philosophy is to have fun while learning.

Advanced SAS Programming Techniques
INSTRUCTOR: Kirk Paul Lafler

ABSTRACT: This course is designed for SAS users who have acquired basic skills presented in a SAS Software Basics course and want to expand their knowledge with the DATA step as a programming language. Attendees learn advanced programming topics and techniques in the areas of data access, data manipulation, data management, data presentation, and more. Topics include DATA step programming techniques including reading a variety of file formats; using column and line pointers; specifying system and language options; coding loops, ranges, and arrays; using operators and modifiers; testing and debugging; reshaping columns of data; managing data; custom report writing; and integrating ODS for improved output. Students receive course notes. Intended Audience: All SAS users. Prerequisites: Minimum 1-year Base SAS programming experience.

INSTRUCTOR PROFILE: **Kirk Paul Lafler** is senior consultant and founder of Software Intelligence Corporation with 27 years of SAS programming experience. As a SAS Certified Professional and former SAS Institute Alliance Member (1996 – 2002), Kirk provides IT consulting services and training to SAS users around the world. He has written four books including *PROC SQL: Beyond the Basics Using SAS*, *Power SAS*, and *Power AOL*, and more than 100 peer-reviewed articles. Kirk is a frequent speaker at international, regional, and local SAS users' groups. He also writes a popular SAS Tips column, Kirk's Korner, that appears regularly in the BASAS, HASUG, SANDS, SAS, SESUG, and WUSS newsletters and web sites.

An Introduction to Parallel Processing and SAS Software
INSTRUCTOR: John Bentley

ABSTRACT: Scale up, scale out, SMP, clustered SMP, MPP, NUMA, data partitioning, pipeline parallelism, shared-nothing and shared-everything architectures. Do you understand these terms? You should, because they're all related to parallel processing and SAS 9 introduces the SAS Scalable Architecture (SSA) that provides powerful parallel processing capabilities. To take advantage of these capabilities, however, SAS users must have a basic understanding of parallel computing concepts, terminology, and architectures. This class provides that basic understanding and also introduces attendees to how SAS gets significant performance increases by using techniques that include partitioned input/output, multi-threaded input output, and parallel multi-threaded computation. The class is oriented towards the UNIX environment but the content applies to all computing environments. A solid understanding of basic SAS concepts such as data sets, libnames, and how the DATA step works is recommended.

INSTRUCTOR PROFILE: Since 1987, **John Bentley** has used SAS Software in the healthcare, insurance, and banking industries. He is currently an Assistant Vice President with Wachovia Bank's Corporate Data Management and Governance Group where he supports data warehouse and data mart users. John is a SAS Certified Advanced Programmer and has presented numerous papers and classes related to SAS' parallel processing capabilities. He is active in SAS users' groups at all levels. In addition to being an invited speaker on many subjects, he has chaired sections at both SUGI and SESUG and was Program Chair of the 2000 and 2001 SAS Data Mining Users' Group Conferences. John is leading the SUGI 31 Financial Industry section, is co-chairing the ETL section at SESUG 2005, and is Co-chair of SESUG 2007. He is currently working toward a Masters of Information Systems program and his current professional interests are in automating SAS programs and program performance and efficiency.

Nonparametric Statistics Using SAS
INSTRUCTOR: Gerry Hobbs

ABSTRACT: Despite the evident popularity of non-parametric statistical methods in many subject areas, including medicine, SAS does not do as complete of a job covering the classical non-parametric methods documented in texts such as Lehman, Conover, or Hollander & Wolfe as it does more familiar parametric methods. In fact, the situation has deteriorated a little bit with the disappearance of PROC MRANK, a procedure that SAS no longer distributes. A few of the capabilities of that procedure have been incorporated into other procedures such as PROC FREQ. Conover and Iman popularized a general class of methods known collectively as the rank transform. In that approach, the data are ranked (in various ways) and the usual parametric methods are applied to the ranks. In this course we will explain what SAS does make available directly and what can be achieved using other SAS procedures either individually or in combination. Students will receive course notes.

INSTRUCTOR PROFILE: **Gerry Hobbs** is an Associate Professor of Statistics and Adjunct Associate Professor of Community Medicine at West Virginia University. He is also a Consultant to SAS Institute. He has published numerous articles on statistical topics, and presented papers at a variety of conferences. He has been a member of the SUGI Executive Committee since 1986 and has been SUGI chair.

Powerful, Yet Less Commonly Used: Procedures and Techniques That You Should Know

INSTRUCTOR: Art Carpenter

ABSTRACT: The SAS System includes a vast array of tools that provide the programmer with a vast amount of power to do all sorts of things. Just in the Base system alone there are over 50 procedures and more are being added with each new release of the software. Some of these procedures and techniques you will probably never use, and some although very useful are very underutilized. A few of these underutilized procedures are new, some of the techniques are perceived to be difficult to learn. All offer huge benefits to the programmers that can make use of them. This workshop covers a number of these underutilized, but often extremely powerful and useful procedures and techniques. Students receive a workbook with course notes.

INSTRUCTOR PROFILE: Art Carpenter's publications list includes three books, and numerous papers and posters presented at SUGI and other user group conferences. Art has been using SAS since 1976 and has served in various leadership positions in local, regional, national, and international user groups. He is a SAS Certified Professional and through California Occidental Consultants he teaches SAS courses and provides contract SAS programming support nationwide.

The Importance of Testing and Validating SAS Programs

INSTRUCTOR: Neil Howard

ABSTRACT: This seminar focuses on the five Ws of testing and validating SAS programs, with highlights indicating the relevance to programming in an FDA regulated environment. Special emphasis is placed on the HOW, with design suggestions and many SAS programming tips and techniques:

- WHY: the benefits/need for testing and validation (including 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 for testing; definition of the terms testing, debugging, verification and validation, QA and QC; and discussion of the types of things that must be validated; test plans
- WHO: accountability in all industries, pharmaceutical companies and CROs
- WHEN: planning and timing of testing and validation
- WHERE: documentation specifics and tips; sample QC and validation forms
- **And especially HOW**: SAS tools and programming "tips and techniques" (for programmers and statisticians) for debugging, testing, and validation of production and ad hoc code for derived data sets, tables, listings, figures and graphs; syntax, data, logic, requirements checking; error detection and handling; and LOG checking.

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 are not an accurate indicator 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. The instructor will also relate how these techniques are most applicable in the pharmaceutical industry and consistent with 21 CFR Part 11 and other FDA guidances.

Pre-requisites are a knowledge of Base SAS DATA step programming. The intended audience is beginning/intermediate/ advanced SAS programmers; statisticians who program; QC, QA staff; and programming/stat managers.

INSTRUCTOR PROFILE: Neil Howard has been a SAS user for more than twenty years She has been an invited speaker since 1983 on such topics as: efficiency techniques, advanced DATA step processing, testing, 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. A member of the SUGI Executive Committee since 1993, she chaired SUGI 20 in Orlando and SESUG '04 in Nashville.

WUSS THANKS SAS
for graciously printing, assembling, and mailing
these registration materials.

PRE/POST-CONFERENCE FULL-DAY CLASSES

Pre/Post Full-day classes offer even more opportunity to expand your SAS knowledge. Use the worksheet on pages 22-23 to plan your registration, then register online at www.wuss.org. Full-day classes are $250 each if you register by September 9, 2005 and $300 each after September 9th. Class attendees may receive class notes. In some classes, attendees receive a textbook and/or disk with sample programs. In other classes, attendees may purchase a textbook for an additional fee. **Note:** The use of laptops and all recording devices is not permitted without the instructor's prior approval. See page 13 for instructor profiles.

Note: WUSS, Inc. reserves the right to cancel any pre/post-conference class(es), and if said occurs, then WUSS' liability is limited to the refund of any registration fee(s) paid for the canceled class(es).

Monday Full-day Classes 8:30am – 4:30pm (lunch on your own)

- Ins and Outs of PROC FORMAT (Pete Lund)

- Using SAS/GRAPH Software (Art Carpenter)

Tuesday Full-day Classes 8:30am – 4:30pm (lunch on your own)

- Data Exploration and Graphical Data Analysis in Model Building, Prediction and Classification (George Fernandez Ph.D.)

- From %Macro to %MEND: An Introduction to the SAS Macro Language (Art Carpenter)
  (additional $35 book fee - *Carpenter's Complete Guide to Macro Language*)

- Output Delivery System – The Basics (and a Bit More) (Pete Lund)
  (additional $30 book fee – *Output Delivery System: The Basics* by Lauren Haworth)

- The Nitty-gritty of PROC REPORT (Mal Foley)

Saturday Full-day Classes 8:30am – 4:30pm (lunch on your own)

- Advanced Techniques in the SAS Macro Language (Art Carpenter)
  (additional $35 book fee - *Carpenter's Complete Guide to Macro Language*)

- Merging, Combining and Subsetting SAS Data Sets (Tricks, Traps, and Techniques) (Mal Foley)

- PROC SQL Programming: Beyond the Basics (Kirk Lafler)
  (additional $30 book fee – *PROC SQL: Beyond the Basics Using SAS*)

MONDAY FULL-DAY CLASSES (ALPHABETICALLY BY TITLE)

Ins and Outs of PROC FORMAT
Instructor: Pete Lund

An understanding of SAS-supplied formats and informats, as well as the ability to create user-defined formats and informats, is invaluable to programmers who use SAS to manage or display data. This course provides an overview on the application of SAS formats and informats and then delves into the many features of PROC FORMAT. Students learn how to create their own formats with PROC FORMAT and learn many tricks and tips for making use of them. Covered topics include nested formats, multi-level formats, format data sets and controlling the sort order of formatted values. We also uncover the mystery of the ever-dreaded PICTURE statement and new format features in Version 9 of SAS. Students receive annotated course notes.

See instructor profile on page 13.

Using SAS/GRAPH Software
Instructor: Art Carpenter

This seminar is designed for students who are familiar with the DATA and PROC steps of base SAS and who want to learn how to use SAS/GRAPH software to produce presentation quality graphs. The course will discuss various aspects of the construction of graphs and will include discussion of plotting and graphing procedures. Text statements and options used to enhance the appearance of the graphs will be presented. Presentation topics will include the use of graphics options, text manipulations, the production of scatter plots and charts using AXIS, PATTERN, and SYMBOL statements. The attendee will learn graphics customization techniques, the basics of the ANNOTATE facility, as well as how to replay and redisplay graphs. The course contains examples of the creation of "drill-down" and other forms of graphics that can be published to the web using tools that interface with the Output Delivery System. Students will receive course notes.

See instructor profile on page 13.

Data Exploration and Graphical Data Analysis in Model Building, Prediction, and Classification
Instructor: George Fernandez Ph.D.

Data exploration and graphical data analysis methods stress visualization to thoroughly study the structure of data and to check the validity of statistical model fit to the data. This course covers fundamental concepts for understanding and successfully applying data exploration and graphical data analysis methods by using the powerful user-friendly SAS macro applications. These concepts will be illustrated via downloadable SAS macro-call files. The participants learn data exploration and graphical data analysis methods used in exploratory factor analysis, k-mean cluster analysis, multiple and logistic regression, and discriminant analysis.

This workshop is intended for data analysts, predictive modelers, statistical consultants, and bio-statisticians, in advanced training in data exploration and graphical data analysis methods for increasing the effectiveness, efficiency, and productivity of research and development. Participants are required to have an understanding in basic statistical methods and an introductory working knowledge in SAS systems. Course book included ($80 retail), *Data Mining Using SAS Applications* (Fernandez, G., 2002).

See instructor profile on page 13.

From %MACRO to %MEND: An Introduction to the SAS Macro Language　　**Instructor:** Art Carpenter

This course is designed for SAS programmer who are new to the Macro Language. We start at the basics and cover the fundamentals necessary to start applying SAS macros in your programs. By the end of the day you'll understand how the Macro Language works, what the Macro Symbol Table is and how to access values stored in it, how the SAS System uses Macro Variables, key Macro Language concepts, important SAS Macro Language Functions, and how to invoke Macros in your programs. The example Macros 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.

This session is suited for the SAS user who already has a basic understanding of DATA and procedure steps, but who is new to the SAS Macro Language. 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 they have "inherited" from other programmers. Optional: *Carpenter's Complete Guide to Macro Language* may be purchased for an additional $35 (30% discount off retail price).

See instructor profile on page 13.

Output Delivery System -- The Basics (and a Bit More)　　**Instructor:** Pete Lund

This course covers ODS styles and destinations and leads the student through the steps needed to enhance the appearance of their SAS output. A new section has been added to the course, focusing on PROC TEMPLATE, particularly table templates, and the ODS ESCAPECHAR option, which allows inline formatting in titles, footnotes and data values. Students receive an ODS Quick Tips Guide that I've prepared, and additional documentation about PROC TEMPLATE. Optional: *Output Delivery System: The Basics* by Lauren Haworth may be purchased for an additional $30 (approximately 30% discount off retail price).

See instructor profile on page 13.

The Nitty-gritty of PROC REPORT　　**Instructor:** Mal Foley

One of the most powerful PROCs in SAS is PROC REPORT. Just this one procedure does the yeoman's work of PROC PRINT, SORT, FREQ, MEANS, and TABULATE, and PUT-statement formatting (DATA _NULL_) combined. This course is for anyone interested in getting started with PROC REPORT. Through examples, it completely examines how to produce listings through the PRINT, SORT and DATA _NULL_ aspects of PROC REPORT. In the afternoon, the course goes on to address the FREQ, MEANS and TABULATE aspects of PROC REPORT. The class briefly looks at ODS, but suggests an alternative way to create DOC files. Come experience what PROC REPORT can do for your SAS programming!

See instructor profile on page 13.

DON'T FORGET TO BRING A
COUPLE OF BOOKS
FOR THE WUSS 2005
CHILDREN'S BOOK DRIVE!!
(SEE PAGE 1 FOR DETAILS)

SATURDAY FULL-DAY CLASSES (ALPHABETICALLY BY TITLE)

Advanced Techniques in the SAS Macro Language   **Instructor:** Art Carpenter

This 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. The course starts with a short review of the macro basics and quickly moves on topics selected to improve your macro language expertise. Several key macro functions are introduced, explained and demonstrated. Course topics include:

- Macro Language Review
- Macro Functions
- Writing Dynamic Code
- Controlling Your Environment
- Working with SAS Data Sets
- SAS Macro Libraries
- Miscellaneous Macro Topics

<u>Optional</u>: *Carpenter's Complete Guide to Macro Language* may be purchased for an additional $35 (30% discount off retail price).

See instructor profile on page 13.

Merging, Combining and Subsetting SAS Data Sets (Tricks, Traps, and Techniques)
Instructor: Mal Foley

This course discusses over 30 common errors in merging, combining, or otherwise manipulating data. All of these errors result in erroneous data. Most of them occur with no SAS message or warning! In addition to examining errors, this course covers a wide range of topics such as interleaving, subsetting, concatenations, the IN= data set option, BY groups, FIRST.variable, program data vectors (PDV), finding duplicate records, collapsing files, overlapping variables, random access, Cartesian products, one-to-one merges, match merges, SQL joins, and fuzzy merges.

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

See instructor profile on page 13.

PROC SQL Programming: Beyond the Basics   **Instructor:** Kirk Lafler

Expand your PROC SQL skills beyond the basics with this popular course. Numerous coding examples are presented to improve mastery of this powerful language while providing a better understanding of the language details to perform more complicated tasks. Topics include constructing case expressions, accessing dictionary tables, interfacing PROC SQL with the Macro facility, implementing table integrity constraints, undocumented and hard-to find PROC SQL features, performing complex queries with joins and set operators, strategies for creating and using views, debugging techniques, and performance tuning strategies. Prerequisites: PROC SQL Programming for Beginners or 6-months SQL experience. Students receive a set of course notes. <u>Optional</u>: *PROC SQL: Beyond the Basics Using SAS* may be purchased for an additional $30 (almost 40% discount off retail price).

See instructor profile on page 13.

Fairmont **SAN JOSE**

PRE/POST-CONFERENCE FULL-DAY CLASS INSTRUCTOR PROFILES

Art Carpenter

Art Carpenter's publications list includes three books, and numerous papers and posters presented at SUGI and other user group conferences. Art has been using SAS since 1976 and has served in various leadership positions in local, regional, national, and international user groups. He is a SAS Certified Professional and through California Occidental Consultants he teaches SAS courses and provides contract SAS programming support nationwide.

George Fernandez Ph.D.

Professor George C.J. Fernandez is the statistician for the Nevada Experimental station and Cooperative Extension. He has more than 18 years of experience in teaching courses such as introductory statistical methods, design and analysis of experiments, linear and non-linear regression, multivariate statistical methods and SAS programming. He is a professional SAS programmer and has over 22 years experience in base SAS, SAS/IML®, SAS/STAT®, SAS/QC®, SAS/ETS®, SAS/INSIGHT®, SAS/ANLALYST®, SAS/LAB®, SAS/ASSIST® and SAS/GRAPH. Accomplishments include winning best paper and poster presentation awards at regional and international conferences; presenting invited full-day workshops on applications of user-friendly statistical methods in data mining; being the keynote speaker at the 16th Conference on Applied Statistics; and organizing WUSS 7 (1999). His book, *Data Mining Using SAS Applications* contains many user-friendly SAS macro-applications.

Mal Foley

Malachy (Mal) 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 all types of 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 consulted to IBM, Dow Chemical, Ford-Rockefeller Foundation, United Nations, GE, Department of Agriculture, Agency for International Development, GSK, Research Triangle Institutes, and many universities. 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.

Kirk Paul Lafler

Kirk is senior consultant and founder of Software Intelligence Corporation with 27 years of SAS programming experience. As a SAS Certified Professional and former SAS Institute Alliance Member (1996 – 2002), Kirk provides IT consulting services and training to SAS users around the world. He has written four books including *PROC SQL: Beyond the Basics Using SAS* by SAS Institute (October 2004), *Power SAS* and *Power AOL* by Apress, and more than one hundred peer-reviewed articles. Kirk is a frequent speaker at international, regional, and local SAS users' groups. He also writes a popular SAS Tips column, Kirk's Korner, that appears regularly in the BASAS, HASUG, SANDS, SAS, SESUG, and WUSS newsletters and web sites.

Pete Lund

Pete is a SAS Certified Professional who has used the SAS System for over 16 years. He currently works for Looking Glass Analytics in Olympia, WA as Information Systems Manager. Pete has extensive experience with the DATA step and SAS macro language, SQL, SAS/GRAPH and SAS/IntrNet and has presented over 40 papers at local and regional SAS Users' Groups as well as at SUGI, where he won the "Best Contributed Paper" Award in 2000, 2001 and 2002. He is currently President of the Pacific Northwest SAS Users' Group.

WESTERN USERS OF SAS SOFTWARE

SAN JOSÉ 2005

SAS Institute Experts will be presenting a total of 14 invited papers during WUSS 2005.

Data Analysis and Statistics	Maura Stokes	Introducing the GLIMMIX Procedure for Generalized Linear Mixed Models
	Catherine Truxillo	Maximum Likelihood Parameter Estimation with Incomplete Data
	Maura Stokes	SAS/STAT Version 9: Progressing into the Future
Data Presentation	David Kelley	Creating Multi-sheet Excel Workbooks with ODS
	SAS Staff	ODS HTML and CSS
	SAS Staff	Introduction to Graphics Using SAS/GRAPH Software
Data Warehousing & Database Management	Bill Oliver	Enhancements to the SAS Data Storage Architecture
	SAS Staff	Business Intelligence
	Michelle Buchecker	Pipeline Parallelism Performance Practicalities
Hands-on Workshops	Vince DelGobbo	Moving Data and Analytical Results between SAS and Microsoft Office
SAS Solutions	Scott Mebust	Getting the Best Performance from V9 Threaded PROC SORT
	Maria Keyser	Migrating to SAS 9: Impact and Opportunity
	Chuck Reap	Regulatory-compliant Process for Developing Reports Based on SAS
Tutorials	Catherine Truxillo	Customizing ODS Statistical Graphs

SAS ESSENTIALS WORKSHOP

Section Chair: Casey Cantrell (Clarion Consulting)

SAS Essentials Workshop has been expanded to a day and a half of presentations and Hands-On Workshops from SAS experts that introduce the essentials that every SAS programmer needs to know. Workshop attendees start learning the basics of the SAS language, file structure and syntax and move into introductory topics on arrays, macros and finding what you need in the SAS System. New as well as experienced SAS programmers benefit from the SAS Essentials Workshop. A selection of some of the Essential topics are listed below:

Diana Suhr **(University of Northern Colorado)**	**Arrays by Example**
Mel Widawski **(UCLA School of Nursing)**	**Get it Together: Combining Data with SAS MERGE, UPDATE, and SET**
Neil Howard **(Independent Consultant)**	**Getting Code and Data in Shape**
Casey Cantrell **(Clarion Consulting)**	**Habits that Help: Developing Good Programming Style**
Neil Howard **(Independent Consultant)**	**How SAS Does Quick Results**
Neil Howard **(Independent Consultant)**	**How SAS Thinks**
Helen Carey **(Carey Consulting)** **Ginger Carey** **(University of Hawaii)**	**How to Find Answers: Using SAS Resources**
Susan Slaughter **(Avocet Solutions)** **Lora Delwiche** **(University of California, Davis)**	**Introduction to Summary Tables in SAS Enterprise Guide** **(Hands-on)**
Art Carpenter **(CA Occidental Consultants)**	**Job Security: Using the SAS Macro Language to Full Advantage**
Art Carpenter **(CA Occidental Consultants)**	**PROC REPORT Basics: Getting Started with the Primary Statements** **(Hands-on)**

STUDENT SCHOLARSHIPS AVAILABLE

The WUSS Executive Committee is providing up to **ten scholarships** to fulltime college students to attend the WUSS 2005 Conference. Scholarships include complimentary conference registration and up to two half-day pre/post-conference classes (Wednesday morning and Friday afternoon).

Who Is Eligible? Only full-time college or graduate students will be considered.

What Documents Do I Need to Provide? Proof of student enrollment must be submitted with application.

How Do I Apply? Go to www.wuss.org to find the application form and instructions.

Applications due August 1, 2005

USER PAPER/POSTER PRESENTATIONS

Scheduled presentations are listed as of the time the registration book was printed. It's possible presentations will be added or modified. Abstracts of all presentations will be in the *Program* and available on the WUSS Web site at www.wuss.org. Invited presentations are listed in bold at the beginning of each of the sections, in alphabetical order by title, followed by contributed presentations listed alphabetically by title.

WUSS 12 Best Contributed Paper presenter (ties possible)

SUGI 30 Best Contributed Paper

CODERS' CORNER
Section Chair: Beth Newsom (Kaiser Permanente)

Kirk Lafler (Software Intelligence Corporation)	Comparing the SAS XML Libname Engine with the ODS MARKUP Statement in the Creation of XML Files
Tianshu Li (Merck & Co., Inc.)	Converting Microsoft Excel Data into SAS Data: A SAS Trap and Ways Out
Alice Cheng (SCIOS, Inc.)	Duration Calculation From a Clinical Programmer's Perspective
Kirk Lafler (Software Intelligence Corporation)	Illustrating Concatenation Operations with PROC APPEND
Jonathan Squire (C2RA) Johnny Tai (Comsys)	It's the Lines per Page that Counts
Rodger Madison (RAND Corporation)	MACRO Bag of Tricks
Patrick Thornton (SRI International)	Macros to Help Organize and Standardize SAS Projects
Louie Huang (Baxter BioScience)	Overcome Programming Problems with SAS Automatic Variable N
Randi Chen & Ka On Fong (Pacific Health Research Institute)	Recoding Discrete Variables - Its General Method and Applications in SAS
Dan Downing (Caremark PCS)	Sign of the Times - Using SAS to Produce Conference Signage
Kirk Lafler (Software Intelligence Corporation)	Understanding WHERE Clause Processing and Indexes

DATA ANALYSIS AND STATISTICS
Section Co-chairs: George Fernandez (University of Nevada Reno) &
Rebecca Ottesen (Cal Poly San Luis Obispo/City of Hope National Medical Center)

Jesse A. Canchola (University of California, San Francisco, Department of Medicine) **Regina Otero-Sabogal & Desiree Owens (California State University, East Bay, Department of Statistics)**	**Analysis of Group-randomized Data: A clinic-based breast cancer re-screening example**
David Cassell (Design Pathways)	**Analyzing Sample Data with the SAS Survey Procs**
Diana Suhr (University of Northern Colorado)	**Principal Component Analysis versus Exploratory Factor Analysis**

DATA ANALYSIS & STATISTICS (CONTINUED)

David Pasta **(Ovation Research Group)**	**Using Statistical Graphics to Understand Your Data (Not Just Present Results)**
MaryAnne Hope & Erin Shannon (Health Services Advisory Group)	A Comparison of Two Procedures to Fit Multi-level Data: PROC GLM versus PROC MIXED
Song Liu (Biogen Idec)	A Macro Mapping Date and Time Variable to CDISC Date and Time Variable
Jim Edgington (Gilead Sciences, Inc.)	A Programmer's Guide to Statistical Procedures
Mable Kong & Julia Zhang (CSU East Bay)	Classification Using Neural Networks: From Human to Machine Learning
Aaron Lai & Howell Kiung (InfoAtlas, Inc.)	Combining Segmentation and Targeting Modeling: A Winning Formula
Jimmy Efird & Kavitha Alimneti	Computing Power and Sample Size for Multivariate Repeated Measures Design
Martha Michel & Lisa Bero (UCSF)	Exploring the Tobacco Industry Documents Using SAS Text Miner
Julia Zhang & Mable Kong (CSU East Bay)	Revisiting the Cross-over: A two-period design using a treatment and a placebo
Mark McDermott & Humberto Cisneros (Arizona Supreme Court)	Using SAS to Calculate Arizona Judicial Salaries
Aaron Lai (InfoAtlas, Inc.)	What Moves Wholesale Electricity Prices in the Pacific Northwest?

DATA PRESENTATION

Section Chair: Patrick Thornton (SRI International)

Bruce Kayton **(consultant)**	**Drill Down into Your SAS Data on the Web While Using XML, JavaScript and HTML**
Andrew Karp **(Sierra Information Systems, Inc.)**	**Using Multilabel Formats**
James Van Campen **(SRI International)**	**Using SAS with XML to Create Custom Formatted Excel Workbooks**
Stephen Trammell (ESRI)	Better Communication, Analysis and Decisions – SAS + GIS
Jennifer Harper (CA Deptartment of Health Services) Lisa Pappas (SAS Institute)	Coding with Compassion – Giving Everyone Access to The Power to Know®
Sunil Gupta (Gupta Programming)	Enterprise Guide for Business Analysts
Gur Hoshen (American Institutes for Research)	Introduction to SAS Maps
Jeremy Morris, Gary Levy, & Ray Dahl (University of Utah, Obia)	Using SAS, MYSQL, and PHP to Empower End-users to Generate Dynamic Descriptive and Analytic Statistical Web Reports

DATA WAREHOUSING & DATABASE MANAGEMENT

Section Co-chairs: Ginger Carey (University of Hawaii)   &   Sandra Minjoe (Genentech Inc.)

Frank Ferriola **(Pacioli Companies)**	**"Database-ics": A Primer for Creating a Usable Database with SAS**
Garth Helf **(Hitachi Global Storage** **Technologies)**	**Extreme Web Access: What to Do When FILENAME URL Is Not Enough**
John Bentley **(Wachovia Bank)**	**Producing Multipurpose Metadata for Data Quality and a Data Dictionary**
Kirk Lafler (Software Intelligence Corporation)	Exploring DICTIONARY Tables and Views
Allison Mercer (CTB/McGraw-Hill)	Looking into Oracle with SAS: Designing a Simple SAS Windows Interface for an Oracle Database
Katharine Misken (Qwest)	Sharing, Not Duplicating, Really Large SAS Data Sets
Russ Lavery & Paul Sherman	SQL OPTIMIZER PROJECT: _method and _tree
Russ Lavery	SQL OPTIMIZER PROJECT: 4 rules to produce fast running code

POSTERS

Section Chair: Gary Levy (University of Utah)

Susan Slaughter (Avocet Solutions) **Lora Delwiche (University of California, Davis)**	**Summary Tables in SAS Enterprise Guide: PROC TABULATE Made Easy**
Joseph Earley (Loyola Marymount University) Archie J Calise (City University of New York)	A Journey to Ellis Island: Profiling Historical Immigration Using SAS and JMP Time Series Methods
Karthikeyan Chidambaram (Cognizant Technology Solutions)	An Overview of SAS Supplied Macros
Keh-Dong Shiang (City of Hope National Medical Center)	Can Matrix Capture Missing Data Values?
Jay Jaffe (Kaiser Permanente)	Comparing Data Across Platforms: SAS/CONNECT with SAS/ACCESS to the Rescue
Lara Hilton (RAND Corporation)	Comparing Macros to Arrays to Simple Code For INPUT Statements
Keh-Dong Shiang (City of Hope National Medical Center)	Deployment of a Data Transfer Application Using PROC SQL and Nested Macros
Raymond Chan & Howell Kiung (InfoAtlas, Inc.)	Identify Customers from Multiple Lists Using Fuzzy-matching Technique
Bryan Fisher (CA State Department of Mental Health)	SAS Application Detects, Quantifies, Prioritizes and Reports Errors in Public Mental Health Data: Impact on quality of data reported
Lara Hilton (RAND Corporation)	The Use of PROC FORMAT versus the CONCATENATE Statement for Reporting on \"Check All That Apply\" Variables
Eric Neri (Department of Psychiatry and Behavorial Science)	Using PROC MIXED to Model Diurnal Cortisol Slopes

SAS SOLUTIONS

Section Co-chairs: Kirk Lafler (Software Intelligence Corp.) & Joe Perry (Perry & Associates Consulting)

Sy Truong (MXI, Meta-Xceed, Inc.)	**Data Integrity through DEFINE.PDF and DEFINE.XML**
Sandra Minjoe (Genentech Inc.)	**How to Get Promoted: Planning for Career Growth**
Wei Cheng (ISIS Pharmaceuticals, Inc.)	**ODS Statistical Graphics for Clinical Research**
David Cassell (Design Pathways)	**The Perks of PRX**
Anthony Dymond (Dymond and Associates, LLC)	**Understand, Document, and Automate Your Programs and Data Tables**
Karthikeyan Chidambaram (Cognizant Technology Solutions)	**UNIX and SAS – A Powerful Combo**
Sunil Gupta (Gupta Programming)	**WHERE vs. IF Statements: Knowing the difference in how and when to apply**
Christine Beck (California State Department of Mental Health)	Building SAS Business Intelligence Applications in the Analytic Work Group: Synergistic Benefits

Art Carpenter (CA Occidental Consultants)	Make 'em %LOCAL: Avoiding Macro Variable Collisions
Kevin Graham (Montura Inc.)	Modular Programming Using AF/SCL
Sarbjit Rai (Genentech Inc.)	SAS Certification: Is it for you?
Richard Bilancia (Computer Guidance and Support)	The Challenges and Rewards of Customer Profitability Initiatives
Sy Truong (MXI, Meta-Xceed, Inc.)	Transforming Data for CDISC and ISS
Sy Truong (MXI, Meta-Xceed, Inc.)	Validating Your SAS System

TUTORIALS

Section Co-chairs: Helen Carey (Carey Consulting) & Michelle Pritchard (Ovation Research Group)

Andrew Karp (Sierra Information Systems, Inc.)	**A Peek at PROC DOCUMENT**
Ron Cody	**An Introduction to SAS Character Functions (Including Some New SAS 9 Functions)**
David Pasta (Ovation Research Group)	**Improving Your Graphics Using the SAS/GRAPH Annotate Facility**
Art Carpenter (CA Occidental Consultants)	**Simple Tests of Hypotheses for the Non-statistician: What They Are and Why They Can Go Bad**
Malachy (Mal) J. Foley (Univ. of North Carolina – Chapel Hill)	MISSING VALUES: Everything You Ever Wanted to Know
Jack Hamilton	Using the COMPUTE Block in PROC REPORT

HANDS-ON WORKSHOPS

Section Co-chairs: Besa Smith (DoD Center for Deployment Health Research) & David Cassell (Design Pathways)

Hands-on Workshops are presented by SAS Experts. At these workshops, you are guided through a series of activities according to presenter directions. You have a "hands-on" opportunity to learn SAS code and programming techniques as they are presented.

Kirk Lafler **(Software Intelligence Corporation)**	**A Hands-on Tour of the 5 Most Exciting Features Found in PROC SQL**
Miriam Cisternas **(Ovation Research Group)** **Art Carpenter** **(CA Occidental Consultants)**	**Extreme Graphics Make Over: Using SAS/GRAPH to Get the Graphical Output You Need**
Besa Smith & Tyler Smith **(DoD Center for Deployment Health Research)**	**Graphing the Probability of Event as a Function of Time Using Survivor Function Estimates and the SAS System's PROC PHREG**
Susan Slaughter **(Avocet Solutions)** **Lora Delwiche** **(University of California, Davis)**	**Introduction to Summary Tables in SAS Enterprise Guide**
Vince DelGobbo **(SAS Institute)**	**Moving Data and Analytical Results between SAS and Microsoft Office**
Art Carpenter **(CA Occidental Consultants)**	**PROC REPORT Basics: Getting Started with the Primary Statements**
David Cassell **(Design Pathways)**	**PRX Functions and Call Routines**
Lauren Haworth **(Genentech, Inc.)**	**SAS with Style: Creating Your Own ODS Style Template for RTF Output**
Dana Rafiee **(Destiny Corp.)**	**Version 9 Changes and Enhancements**
Sunil Gupta **(Gupta Programming)**	**WHERE vs. IF Statements: Examples in usage and differences**

WUSS thanks SAS for providing computers for Hands-on Workshops

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COME JOIN ART CARPENTER, WUSS QUIZMASTER,
at the
SECOND ANNUAL WUSS PROGRAMMERS' CHALLENGE

Lively, informal, fun event features
puzzles, problems, questions

Friday 11:00am – Noon

You will need the following information in order to complete your online registration for WUSS 2005.

How to Register:	online anytime day or night at **www.wuss.org**	**Important Note:** A full refund is allowed if written notice of cancellation is postmarked by 9/09/05. *NO REFUNDS WILL BE ISSUED AFTER THIS DATE!*
Have a question? You can contact the Registrar at (970) 339 -9519 CO1951Valentine@aol.com		

Note: Your name and company/affiliation will be used to produce your conference badge.

First Name:	Day Phone:
Last Name:	Eve. Phone:
Affiliation:	email:
Address:	
City:	State/Province:
Zip code:	Country (if not U.S.A.):

Are you a presenter at WUSS 2005?   YES →   ☐ Invited   ☐ Contributed   Section _____

Please choose your free Thursday box lunch: ☐ Beef or Ham   ☐ Chicken or Turkey   ☐ Vegetarian

Shirt Size (unisex):   ☐ S   ☐ M   ☐ L   ☐ XL   ☐ XXL

Have you attended previous WUSS Conferences?   ☐ Yes   ☐ No

Do you plan to attend WUSS 2006 in Irvine?   ☐ Yes   ☐ No   ☐ Maybe

Do you participate in a local or in-house users' group?   ☐ Yes   ☐ No
   If yes, which group(s)? _____

Would you like to volunteer at WUSS 2005?   ☐ Yes   ☐ No   (See page 4)
   Area of Interest: _____

How to Pay:

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For payment by check or PO, please mail your check to: Linda Schneider, WUSS 2005 Registrar, 4013 27th Ave., Evans, CO 80620 after registering online.

CONFERENCE FEES: September 21-23 at the Fairmont San Jose

	EARLY Paid in full by August 19	REGULAR Paid in full by Sept. 9	After September 9	Registration Amount
Non-Student	$275	$350	$425	
Student*	$125	$175	$300	
				$ _____

*Students must mail a copy of their student ID to Linda Schneider, 4013 27th Avenue, Evans, CO 80620 after registering online.

Guest Ticket(s) for WUSS Happening Mixer $35 each   x ____ (# of tickets) $ _____

Pre/Post-conference Half-day Classes

Wednesday Morning (8:30am - Noon) (Choose One)	Friday Afternoon (1:30pm - 5:00pm) (Choose One)
❑ An Animated Guide to Basic Statistics (Russ Lavery) ❑ An Expert's Guide to Data Cleaning (Ron Cody) ❑ Introduction to Mixed Models for Pharmaceutical Applications (Catherine Truxillo, SAS) ❑ SAS and SQL: The Basics (Pete Lund) ❑ Sharpening Your SAS Skills: Preparing for the SAS Base Certification Exam (Sunil Gupta) ❑ Using SAS Enterprise Guide (Ginger & Helen Carey)	❑ Advanced SAS Programming Techniques (Kirk Lafler) ❑ An Introduction to Parallel Processing and SAS Software (John Bentley) ❑ Nonparametric Statistics Using SAS (Gerry Hobbs) ❑ Powerful, Yet Less Commonly Used: Procedures and Techniques that you Should Know (Art Carpenter) ❑ The Importance of Testing and Validating SAS Programs (Neil Howard)

Fee per half-day class: Paid in full by Sept. 9, 2005: **$125** ◆ Paid in full after Sept. 9, 2005: **$150**

$ _____

Pre/Post-conference Full-day Classes (**Note:** A $50 fee will be charged to change classes after Sept. 9.)

Monday (8:30am - 4:30pm) (Choose One)	Tuesday (8:30am - 4:30pm) (Choose One)	Saturday (8:30am - 4:30pm) (Choose One)
❑ Ins and Outs of PROC FORMAT (Pete Lund) ❑ Using SAS/GRAPH Software (Art Carpenter)	❑ Data Exploration and Graphical Data Analysis in Model Building, Prediction and Classification (George Fernandez) ❑ From %Macro to %MEND: An Introduction to the SAS Macro Language (Art Carpenter) **additional $35 book fee** ❑ Output Delivery System - The Basics (and a Bit More) (Pete Lund) **additional $30 book fee** ❑ The Nitty-gritty of PROC REPORT (Mal Foley)	❑ Advanced Techniques in the SAS Macro Language (Art Carpenter) **additional $35 book fee** ❑ Merging, Combining and Subsetting SAS Data Sets (Tricks, Traps, and Techniques) (Mal Foley) ❑ PROC SQL Programming: Beyond the Basics (Kirk Lafler) **additional $30 book fee**

Fee per full-day class: Paid in full by Sept. 9, 2005: **$250** ◆ Paid in full after Sept. 9, 2005: **$300**

$ _____

TOTAL FEES: $ _____

HOTEL RESERVATION WORKSHEET

Western Users of SAS Software (WUSS) 2005 Conference
September 21-23, 2005
Fairmont Hotel
San Jose, California

WUSS Room Block (rate guarantee) will be released on **August 19.** After August 19th, the Hotel may still honor the conference room rate but the conference room rate is not guaranteed. **Make your reservations early!**

Name _____
  First   Last

Company/Affiliation _____

Address _____
        Street   City   State   Zip

Phone (_____) _____   (_____) _____
        Day   Evening

Length of Stay _____
        Arrival Date   Departure Date

Number of Persons _____

Room rates valid through August 19th based on availability.

		Special Requests
Single/Double Occupancy	$179	❑ Handicapped Facility
1-bedroom suite	$279	❑ Non-Smoking
	$25 for each additional person	❑ Other (specify) _____

To hold your reservation, a credit card is required.

  ❑   Credit Card (Specify Type _____)

Credit Card _____
        Number on Card   Expiration Date   PIN

Name on Credit Card _____
        First   Middle Initial   Last

Card Holder Signature _____

YOU HAVE 2 OPTIONS FOR RESERVING YOUR HOTEL ROOM:

1. **Reservations by Phone**
   877-441-1414 (toll free) (**be sure to mention WUSS 2005!!!**)

2. **Online Reservations**
   Go to www.fairmont.com/sanjose/ and click the "Make a Reservation" button.
   Promotional Code for WUSS 2005: **GRCWU1**

Cancellations must be received 72 hours prior to your scheduled arrival date
to avoid billing – be sure to obtain a cancellation number.

TRANSPORTATION & MAPS

The Norman Y. Mineta International Airport (SJC) is located jut three miles from the Fairmont San Jose. Taxis to and from the Norman Y. Mineta International Airport cost approximately $15.00 - $20.00.

For More Information

- **Door-to-Door Shuttles**: for an extensive list, see www.sjc.org/travelers/d2d.html

- **Bauer's Downtown San Jose Express**: For reservations, call (800) LIMO-OUT $9.00/person, one-way

- **Map of Ground Transportation Services at SJC Airport**: www.sjc.org/travelers/ground_trans.html

- **CalTrain** website: www.caltrain.org/

- **VTA** website: www.vta.org/

- **Parking**: www.sjdowntownparking.com presents all the parking options in the area – click on "parking map"; the Fairmont Hotel is next to #6 (San Jose Museum of Art)

Driving Directions to the Fairmont San Jose: The hotel is located at **170 South Market Street**.

From the North on Highway 101 (San Francisco):	From the North on Highway 280 (San Francisco):
• Take HWY 101 south. • Exit onto Guadalupe Parkway (HWY 87), go three miles. • Take the Park Avenue exit. • Make a left on Park Avenue and continue three blocks. • Make a right turn on S. Market Street. • Make a U-Turn around Plaza de Cesar Chavez Park. • The Hotel will be on the right side between San Carlos Street and San Fernando Street.	• Take the Vine Street/Almaden Boulevard exit. • Turn left at the first signal (Almaden Boulevard). • Take a right at the fourth signal (San Carlos Street). • Take a left at the second signal (Market Street). • The Hotel will be on the right side between San Carlos Street and San Fernando Street.
From the North on Highway 880 (Oakland/Fremont/Hayward):	**From the South on Highway 680 or Highway 280**
• Take the Downtown/First Street exit. • Make a left at the bottom of the off ramp. • Make a right on Julian Street. • Make a left on Market Street. • The Hotel is located between San Fernando St. and San Carlos St. Once you cross San Fernando St., you will need to circle Plaza de Cesar Chavez Park.	• Take HWY 87 North (Guadalupe Parkway), go ¼ mile. • Take the Downtown/Santa Clara Street exit. • Make a right on Santa Clara Street. • Take a right at the fifth signal (Market Street). • Continue on Market Street. • Make a U-Turn around Plaza de Cesar Chavez. • The Hotel will be on the right side between San Carlos Street and San Fernando Street.
From the South on Highway 101 (Los Angeles):	**From Norman Y. Mineta International Airport (SJC):**
• Take HWY 101 North to HWY 85 North. • Exit onto HWY 87 North (Guadalupe Parkway), go ¼ mile. • Take the Downtown/Santa Clara Street exit. • Make a right on Santa Clara Street. Go five lights to Market Street and make a right. • Continue on Market Street for two blocks and circle Plaza de Cesar Chavez Park.	• When exiting the airport, make a right onto Guadalupe Parkway (HWY 87 South). • Take the Park Avenue Exit. • Make a left on Park Avenue and continue three blocks. • Make a right turn on S. Market Street. • Make a U-Turn around Plaza de Cesar Chavez Park. • The Hotel will be on the right side between San Carlos Street and San Fernando Street.

CONFERENCE GUIDELINES

> ### Recruiting: *No direct recruiting may be conducted at the conference.*
>
> A Position Referral Notebook will be available in the Registration Area. This notebook may be used at the conference by companies to list positions available and by individuals to list their resumes. Information on positions and resumes is not accepted prior to the conference.

Attendance and Registration: All users and prospective users of SAS products are invited to attend the Western Users of SAS Software, Inc. (WUSS) Regional Conference. All WUSS attendees, including vendors, conference planners, presenters, guests, and SAS staff, must properly register for the conference.

Handouts and Other Displays: Sales literature or product descriptions of a sales nature may not be displayed on bulletin boards or tables or made publicly available at the conference except by invited vendors in the designated Demo Area. The Conference Chairs are responsible for administering this policy on behalf of the WUSS Executive Committee (EC). Questions regarding this rule as it applies to a publication can be addressed to a Conference Chair, who makes the final decision on this issue. Only vendors that have been invited by the EC or a Conference Chair may have displays and handouts in the Demo Area that were approved before the conference by a Conference Chair.

Invited Papers: Section Chairs are responsible for inviting a limited number of speakers to participate in their sections. Those invited include speakers from SAS. The registration fee for up to two invited speakers per presentation is waived by the EC.

Papers and Speaker Handouts: An abstract of each presentation, except online Demonstrations, must be submitted and approved by the Program Chair. When a presentation is approved, guidelines for submitting a written version of the paper for the *Proceedings* are mailed by the Section Chair to the contact author. The author is required to e-mail electronic copies of their final paper in PDF form to the Program Chair and to the Editor of the *Proceedings* by the deadline given. Papers not received by this deadline are not normally included in the *Proceedings*. The written paper, the presentation, and any handouts may not include price lists, support commitments, promotional data, or other descriptions of a sales nature, but may include the author's name and address for additional information.

Paper Content: Users are urged to present papers describing real world applications using SAS products. Theoretical and general overview papers are very welcome. The subject must pertain to one of the section categories. Papers describing systems used in conjunction with SAS products and papers comparing SAS products with other products are also welcome. Papers describing non-SAS products or products marketed in direct competition with SAS products must be approved by the Program Chair and SAS. These papers must describe how the product works, how the product interfaces or relates to SAS products, how users can benefit from its use, and must not be a direct marketing effort for the product. All papers must give proper trademark recognition when SAS and non-SAS vendor products are mentioned. The names of user-written procedures, functions, interfaces, systems, or other products cannot use any SAS trademarks.

Informal Presentations: Attendees are encouraged to conduct informal meetings (Birds-of-a-Feather sessions, or BOFs) using the designated rooms set aside for BOFs. BOFs are scheduled using the designated sign-up sheets on display in the Registration Area. All handouts must be approved by a Conference Chair before the BOF session.

Demonstrations: SAS and other invited vendors may demonstrate their products in the Demo Area. All invited demonstrations are to be educational and informative. Direct marketing efforts outside of the official vendor Demo Area, such as hospitality suites and handbills that include product pricing, are prohibited. Invited vendors may have product literature available to interested users in the Demo Area only. A Conference Chair must approve all such handouts. SAS may invite publishers to distribute their computer industry trade journals to attendees. Publishers not so invited may not arrange with the conference hotel to distribute any materials.

Vendor Participation: Each vendor must accept these guidelines from the EC before agreeing to participate in the conference. Invited vendors must complete registration forms, pay vendor fees, and receive conference identification from the Registration Desk. Vendors not formally invited to the conference may not engage in any direct marketing effort, including BOFs, handbills, demonstrations, sales presentations, and hospitality suites. This applies but is not limited to vendors of software, hardware, services, training, and publications.

Participant Conduct: All conference participants must conduct themselves and their activities in a manner that is at all times professional and marked by integrity, a spirit of fair play, and respect for other attendees.

Right of Withdrawal: The Conference Chairs on behalf of the EC reserve the right to determine if any activity is in violation of these Conference Guidelines. The EC may, at its option, direct the withdrawal of a presentation or demonstration or the dismissal of individuals from the conference area.

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