



Western Users of  
**SAS Software**  
Pasadena 2004

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# Proceedings

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of the

**Western Users of SAS Software  
Twelfth Annual Conference**

**October 13-15, 2004**

**Hilton Pasadena**

**Pasadena, CA**

**Operations Chair**  
**Marian Oshiro**  
*RAND Corporation*

**Program Chair**  
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*Ovation Research Group*

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## Western Users of SAS Software (WUSS) Proceedings of the Twelfth Annual Regional Conference

These Proceedings were prepared by the WUSS 12 Conference Committee, with Jodie Gilmore as the Publications Coordinator. SAS graciously produced this CD-ROM version of the Proceedings as a record of the Conference. Neither SAS nor WUSS can take responsibility for the accuracy or the originality of this material.

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If you would like to provide feedback about this CD, whether positive comments or constructive criticism, we'd love to hear from you. Please send your comments via e-mail to our Publications Coordinator, Jodie Gilmore, at [jgilmore@fulcrumcomm.com](mailto:jgilmore@fulcrumcomm.com).

# From the Conference Chairs...

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Western Users of SAS Software (WUSS) 12<sup>th</sup> annual conference was held October 13-15, 2004 at the Hilton Pasadena in Pasadena, California. SAS users attended from all the WUSS region's states of Arizona, California, Colorado, Hawaii, Nevada, and Utah, as well as many other states outside of the region.

The conference ran from Wednesday at 12:30pm through Friday at 1:00pm including the ever-popular WUSS Happening Mixer on Wednesday evening and lunchtime activities on Thursday. This year's conference included outstanding presentations, demos, and other learning activities in an information-packed format. The learning officially commenced with the keynote address, "What's New in SAS9: 2004 Update", presented by Rick Langston, manager of the Core Systems Department within the Platform R&D Division at SAS Institute.

After the opening session and SAS Institute's "SAS Breakthrough Tour Reception," attendees chose from over 110 paper presentations, Hands-on Workshops, and Demos. Code Doctors diagnosed coding ills in the Code ER, while the WUSS Exhibit and Demo Area let attendees experience the latest innovations from SAS in a hands-on setting. The SAS Essentials section, a day in which beginning SAS programmers can immerse themselves in the basics of SAS, returned this year. Destiny Corporation's Virtual Learning Café also provided attendees with a new learning venue. Attendees also had the opportunity to ponder Art Carpenter's SAS Programmers' Challenge during the conference, and to participate in its solution late Friday morning.

But there was more! The pre- and post-conference half-day classes offered Wednesday morning and Friday afternoon and full-day classes on Monday, Tuesday, and Saturday provided additional opportunities to for attendees to add new tools and knowledge to their SAS toolbox. We also mixed in some more fun and relaxation with SAS Savvy (Jeopardy<sup>®</sup> style trivia game), and attendees also managed to find time to explore the Pasadena area.

WUSS 12 also marked the fourth annual Children's Book Drive at WUSS to benefit needy children in the conference area. WUSS attendees are known for their generosity; many dropped off new or gently used books at the registration area during the conference.

We would like to thank the following people for their dedication and hard work:

- SAS for the support and guidance they always provide. In particular, we would like to thank Patsy Harbour, Users Group Liaison, who was consistently responsive, patient, and helpful as we prepared for WUSS 12. We also thank SAS for producing this Proceedings CD-ROM.
- The Conference Committee, Section Chairs, and the WUSS Executive Committee who worked tirelessly planning WUSS 12 and ensuring its success. Members of both committees are listed on the next page.
- All the volunteers and attendees who put in long hours and contributed to the success of this conference.
- Our employers and colleagues at RAND and Ovation who supported our commitment to this conference.

We hope that you benefited from your conference experience, and that you had the opportunity to expand your SAS expertise.

See you in San Jose for WUSS 13!

Marian Oshiro  
*RAND Corporation*

Miriam Cisternas  
*Ovation Research Group*

# Keynote Address

## What's New in SAS 9: 2004 Update

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by

**Rick Langston, *manager of the Core Systems Department within the Platform R&D Division, SAS Institute Inc.***

### **Biography**

Rick has been a SAS user for 27 years, 24 of which have been with SAS Institute. He has delivered keynotes on various aspects of SAS to many regional and local SAS user group conferences in the past 10 years, including several at WUSS.

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*SAS Institute, Inc.*

# WUSS 11 Best Contributed Paper Awards

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## **Coders' Corner**

*A Better Transpose: %TRANPO Macro Preserves Variable Attributes*  
Ted Clay (Clay Software and Statistics)

## **Data Analysis and Statistics (tie)**

*Adaptive Regression in SAS/IML*  
David Katz (David Katz Consulting)

*Survival Analysis with PHREG Using MI and MIANALYZE to Accommodate Missing Data*  
Christopher Ake (VA San Diego Health Care System) & Art Carpenter (Data Explorations)

## **Data Presentation**

*Is the Legend in Your SAS/GRAPH Output Telling the Right Story?*  
Justina Flavin (Pfizer Global Research & Development) & Art Carpenter (California Occidental Consultants)

## **Data Warehousing and Database Management**

*Undocumented and Hard-to-Find SQL Features*  
Kirk Lafler (Software Intelligence Corporation)

## **Internet, Intranets, and the Web (tie)**

*Macros to Report Missing Data: An HTML Data Collection Guide*  
Patrick Thornton (UCSF)

*Architecting AppDev Studio-Based Web Applications with Object-Oriented Methodologies*  
Dave Hayden & Aimee Basile (Qwest Communications Corporation)

## **Posters**

*GIS Capabilities in Old vs. New SAS Software*  
Richard Smith & Art Carpenter (Data Explorations)

## **SAS Essentials**

*Writing Code That Lasts*  
Sandra Minjoe (Genentech, Inc.)

## **SAS Solutions**

*Principal Component Analysis: A Powerful Scoring Technique*  
George Fernandez (University of Nevada, Reno)

*SAS/AF, Metadata and the National Cancer Institute's Diet History Questionnaire: How to Build a Computer Assisted Interview*

Derek Morgan (Washington University Medical School)



# Upcoming Conferences

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SUGI 30  
Spring, 2005  
Philadelphia, PA

WUSS 13  
Fall, 2005  
San Jose, CA