

International Year of Statistics News

September 23, 2013

You Are Invited to Participate in the "Unconference"

Nearly two weeks before the Future of the Statistical Sciences Workshop, the <u>Unconference on the</u> <u>Future of Statistics</u> will be staged. Organized by two of the authors of the <u>Simply Statistics</u> blog, the Unconference will be a virtual event hosted on Google Hangouts.

"It is a great time to be a statistician and discussing the future of our discipline is of utmost importance to us," say Roger Peng and Jeff Leek, Unconference organizers, referring to the Future of the Statistical Sciences Workshop. "In fact, we liked the idea so much we decided to get in the game ourselves. We are super excited to announce the first ever 'Unconference' hosted by Simply Statistics. Our goal is to compliment and continue the discussion inspired by the Statistics 2013 Workshop."

The Unconference, which will focus on the future of statistics from the perspective of junior statisticians, will be held October 30 from noon to 1 p.m. EST on Google Hangouts and simultaneously live-streamed on YouTube.

The event will feature several of the most exciting and innovative statistical thinkers discussing their views on the future of the field, especially those issues that affect junior statisticians the most: education, new methods, software development, collaborations with natural sciences/social sciences, and the relationship between statistics and industry.

Confirmed presenters are:

- Daniela Witten, assistant professor, Department of Biostatistics, University of Washington
- Hongkai Ji, assistant professor, Department of Biostatistics, Johns Hopkins University
- Joe Blitzstein, Professor of the Practice, Department of Statistics, Harvard University
- Sinan Aral, associate professor, MIT Sloan School of Management
- Hadley Wickham, chief scientist, RStudio
- Hilary Mason, chief data scientist, Accel Partners

You can sign up for the Unconference here. During the lead-up to the conference, organizers ask that you submit your thoughts on the future of statistics via Twitter using the hashtag #futureofstats. They will compile all comments and make these available along with the talks.

A recorded version of the Unconference will be available for viewing on <u>YouTube</u> after the event. Be sure to share the news of the Unconference with your friends and coworkers!

Future of the Statistical Sciences Workshop: We Need Your Input

The <u>Future of the Statistical Sciences Workshop</u>, the capstone event of Statistics2013, will be held November 11 and 12 in London, United Kingdom. The workshop will bring together 100 invited participants from around the world—statisticians, scientists who collaborate with statisticians, science writers and representatives of funding agencies.

One of the major workshop outcomes will be a paper—produced by a professional science writer—that will be targeted to funding agencies. To help us prepare this paper and set the tone for the workshop, we invite you to submit a brief statement describing your perspective on the current and near-term future state of the statistical sciences with which you are most familiar. We will compile all your perspectives to develop a global view.

Also, we want your comments on the questions in the titles of these workshop breakout sessions:

- Core of the Discipline: Does it Exist?
- Large-Scale Statistical Science (Big Data, Data Science, Data Mining, Etc.): What are the Implications?
- Workforce Development, Graduate Education, Online Learning: How Will We Meet the Demand?
- Statistics and Society: Impact on a Global Scale?

Please send your perspectives and comments to Ron Wasserstein, executive director of the American Statistical Association, at <u>ron@amstat.org</u>.

You will be able to view the workshop via the web thanks to Wiley Publishers.

Give it Your Best Shot!: Introducing the Statistics2013 Photo Contest

The International Year of Statistics (Statistics2013) is launching a photo contest! This new competition appropriately called the <u>Statistics2013 Photo Contest</u>—is sponsored by the <u>American Statistical</u> <u>Association/National Council of Teachers of Mathematics Joint Committee</u>.

The contest is for secondary-school students (grades/years 7-12) around the world. The deadline for entries is November 1. Winners will be announced on or about December 16. <u>Click here for complete</u> contest criteria.

The Statistics2013 Photo Contest is organized by continents (excluding Antarctica) to ensure winners are selected in each region of the world.

Please help us spread the word about the Statstics2013 Photo Contest to secondary schools and teachers in your area or country. Send information about the contest to your country's national teacher organizations. Use your education contacts to inform schools and teachers in your country so their students get involved in this exciting photo contest. You can download a promotional article here.

You can learn more about the contest at the <u>Statistics2013 website</u>. For more information, email Jeff Myers at <u>Jeffrey@amstat.org</u>.

2013 Will Come to an End (Eventually), But Statistics Rides On!

Now that we are into the second half of the International Year of Statistics, most of you likely already are planning activities for 2014. If so, please send us information about the events so we can post these to the <u>Statistics2013 Activities Calendar</u>. Scroll to page 10 to learn how to submit your event info.

Participation Experiences Two-Week Surge

In just two weeks, Statistics2013 participation jumped by 34 participants and now stands at 2,146 organizations. Meanwhile, the country count has risen as well with the additions of Iceland and Somalia and is now at 126. To check out the current participant and country lists, go to the <u>Statistics2013</u> website.

There are still many more groups that should participate in the International Year of Statistics. Please encourage other organizations, secondary schools, universities and businesses in your area to join this worldwide celebration. It's easy for them to join. Simply tell representatives of these groups to go to <u>www.statistics2013.org</u> and click on the "Join Statistics2013" icon on the top right-hand side of the homepage to become an official International Year of Statistics participating organization.

Nominate a Statistician of the Week

Do you know an outstanding statistician deserving of recognition for his or her work? If so, nominate the person for the Statistics2013 Statistician Job of the Week. To do so, simply send us a 250-to-300-word article about your colleague along with a photograph. In the article, explain the person's job and his or her contributions to the mission of their organization. We'll feature the profile on the Statistics2013 website homepage for a week. Send your nominating submission to Jeff Myers at Jeffrey@amstat.org.

Participating Organization: News & Events

Following is the latest news about upcoming and recently concluded events hosted by Statistics2013 participating organizations:

Canada—The <u>Fields Institute for Research in Mathematical Sciences</u> at the University of Toronto is sponsoring a Twitter contest called "The Normal Curve". The contest is being held in recognition of the Institute's 20th anniversary and the International Year of Statistics. In this unique contest, the Institute poses this question to the world: "What would the world be like if the normal curve was not discovered?" To enter, tweet your answer to the question using the hashtag #WithoutTheCurve for a chance to win one of three autographed copies of Jeffrey Rosenthal's bestselling book, *Struck by Lightning*. Submissions for The Normal Curve contest will be accepted beginning September 25 at 12:01 a.m. EST. To be eligible for the contest, submissions must be submitted by Twitter, tagged as #WithoutTheCurve and address the contest question. The entry deadline is 11:59 p.m. EST October 15.

The top entries selected by volunteers at the Fields Institute's MathEd forum will be entered into a pool for the drawing the prizes. Winners will be randomly selected for the three prizes. Winners will be announced by the end of October. The contest is open to users internationally. Submissions not in English may be translated using Google Translate if there is no one on the judging panel who can translate the tweet.

Cuba—The 10th International Workshop on Operations Research: Making Decisions Under Uncertainty, Modeling Uncertainty was held in Havana in early March. The event was dedicated to the International Year of Statistics. Meeting attendees discussed recent results and experiences in the use of operations research. The workshop's purpose was to foster the applications of models and methods of optimization, statistical, probability, numerical analysis and algorithms for modeling systems where randomness, imprecision or changes in systems conditions which cause uncertainty, i.e., structuring methodology, stochastic models, randomized algorithms, fuzzy models and soft computing approaches. Sponsors were the Oficina del Historiador de La Ciudad, Sociedad Cubana de Matemática y Computación and Asociación Latino Iberoamericana de Investigación Operativa.

Italy—An international workshop titled "Frontiers in Time Series Analysis with Applications to Economics and Finance" was held September 19 in Fisciano. The workshop was sponsored by the Department of Economics and Statistics of the University of Salerno and the Department of Political Sciences at the University of Naples Federico II. Its aim was to bring together contributions from researchers working on the analysis of financial and economic time series in order to give an overview of the most recent developments in this field. <u>The scientific program</u> included five seminar-style presentations by wellknown researchers and a lunchtime poster session. The invited speakers were:

- Luc Bauwens, Université Catholique de Louvain. "Bayesian inference for a state space model on the Stiefel manifold"
- Giampiero Gallo, Università di Firenze. "Regimes and Components in Volatility Modeling"
- Wolfgang Haerdle, Humboldt-Universitat zu Berlin. "CoVar with very high dimensional risk factor"
- Christian Hafner, Université Catholique de Louvain. "A new approach to multivariate volatility modelling"
- Soren Johansen, University of Copenhagen and CREATES. "Likelihood inference for a vector autoregressive model for fractional and cofractional processes"

United States—The Department Statistics and Probability of the Michigan State University in East Lansing, Michigan is hosting "Statistics in Applications Forum", an International Year of Statistics dedicated event, October 1. The forum will showcase applications in high throughput data technologies, health sciences research, and biological sciences where statistical methods play an important role. The purpose of the event is to promote awareness of the breadth of statistical applications and promote interactions between researchers from different fields. Dr. Trivellore Raghunathan of the University of Michigan will present the keynote address and students will present posters during the forum. Learn more. **Russia**—As part of its "Week of Statistics", to be celebrated late next month, the Department of Macroeconomics, Economic Informatics and Statistics at the East Siberia State University of Technology and Management in Ulan-Ude, Buryatia is hosting an international scientific-practical conference. Titled "Economical-Statistical Researches of Territorial Potential in Modern Information Society", the conference will take place October 29 and 30 at the university campus. The deadline for submitting articles and proposals of participation is October 10. Learn more.

Portugal—PORDATA and the Francisco Manuel dos Santos Foundation, both Statistics2013 participants, continue working to foster public understanding of statistics and its contribution to the knowledge of society. PORDATA now displays a summary table for each European Union (EU) country with a selection of key indicators and a comparison with the aggregate EU figures. <u>Users get a portrait of each of those countries with just one click</u>. This functionality will soon be available for each of Portugal's municipalities. The summary table also is an invitation to explore the <u>PORDATA database</u>, which includes hundreds of tables and thousands of figures for EU countries as well as several other countries.

Mexico—The former president of the National Institute of Statistics and Geography of Mexico (INEGI), Gilberto Calvillo Vives, delivered a speech at the Quixote Iconographic Museum in Guanajuato on September 6. Gilberto Calvillo, who was head of the INEGI when the institution became autonomous, explained the process of making official statistics and several economic indicators for the Mexican government in his lecture "Statistics on Employment". The statistician has a PhD in Operations Research from the University of Waterloo and has worked in organizations such as the Mexico's central bank, Pemex, and the committee that was responsible for fixing the Millennium bug in 2000.



Gilberto Calvillo Vives speaks at the Quixote Iconographic Museum.

Switzerland—Statistik Stadt Zürich is sponsoring several activities to commemorate the International Year of Statistics. Those are:

• It is sponsoring a <u>Statistikforum to discuss the population growth of Zurich</u>

- It has organized an <u>exhibition Dada x Statistik at the Cabaret Voltaire</u> that is a journey through the last 100 years of the city of Zurich
- And, it has digitized <u>all the statistical Yearbooks of the city of Zurich since 1905</u>

South Africa—The University of Pretoria's Department of Statistics wants all Statistics2013 participating organizations to know it is building a thriving community of statisticians and anxiously and eagerly promoting the profession in their country. Here are some of the activities it has organized to mark the International Year of Statistics:

- 1. A competition was hosted from May to September in which university students could enter by representing statistics in a visual way (i.e., paintings, drawings, videos, sculptures, etc.). The first prize of the competition was R 15,000, equivalent to \$1,200 (U.S.). The winners have been selected and will be announced soon.
- 2. A gala event is being organized for October 3. The university rector and other illustrious guests within the university community will be present. At this event, the department will promote awareness of the use and importance of statistics within the university, but also within business. Representative of businesses, including ABSA Bank and ESKOM, will be present. The evening will be similar to the television show "Who Wants to be a Millionaire?" especially the "Ask the Audience" part. Questions will be asked and each audience member will have time to respond with their answer via a clicker system. This data will be captured by SAS Visual Analytics software and presented to the audience to showcase fun and innovative uses of statistics in daily life. SAS Institute in South Africa is the sponsor for this event.
- 3. The guest speaker for the gala is Professor Michael Greenacre of the Universitat Pompeu Fabra in Barcelona. He is the primary founder of the field of Correspondence Analysis. He will be illustrating statistical measures in a fun way with the use of a piano and more. <u>Check out this YouTube clip</u> for a taste of what it's going to be like!

In addition, Professor Greenacre will be presenting several workshops during the week on multivariate analysis of ecological data and a postgraduate student talk titled "Why you are studying the right degree".

National Statistical Organization: News & Events

Following is the latest news about upcoming and recently concluded events hosted by national statistical organizations (NSOs) participating in Statistics2013:

Iran—The 35th Annual Conference of Economic Statistics was held June 22 through 27 in Nowshahr by the General Directorate of Economic Statistics of the Central Bank of IRI. The event was dedicated to the celebration of International Year of Statistics. During the conference, statistics and economics experts and scholars presented articles and discussed the benefits of statistical literacy. The topics of the presented articles included:

- Imputing Methods
- The Application of Entropy in Calculation of Price Index

- Small Area Estimation
- Comparing Several Models of Inflation Prediction
- Application of Threshold Semi-Parametric Non-Linear Models in Economic Statistics
- The Analysis of Price Index Difference, Based on Deferent Base Year



The International Year of Statistics logo is prominently displayed on the event banner.

Iran—The Central Bank of IRI added the Statistics2013 logo to its official calendars and other gifts given to its information sources. The organization also placed the Statistics2013 logo on its football team shirts! Team members are happy to report that in the annual football matches with the Central Bank General Offices, they won the final match and were awarded the big trophy!



Central Bank of IRI football team members show off their sporty Statistics2013 jerseys.

Spain—The Statistical Institute of Catalonia (IDESCAT) is incorporating the theme "Statistical Taste" in its e2013 blog. The blog will look in greater detail at the relation between statistics and the food industry, climatology and the volatility of prices, and food safety and quality control. IDESCAT also will reveal how much people spend on food, the importance of marginal foods (wine, cakes, chocolate, etc.), data on eating disorders and the relationship between statistics and food design. IDESCAT —in conjunction with the Catalan Statistical Society—established the <u>e2013 blog</u> earlier this year to promote a statistical way of looking at everyday things. The blog forms part of its observance of the International Year of Statistics 2013. The blog periodically examines issues of a demographic, economic and social nature as proposed by members of the Catalan Statistical Society or persons involved in the field of official statistics.

United Arab Emirates—Statistics2013 Steering Committee members raise three hearty cheers in tribute of Statistics Centre-Abu Dhabi for promoting the Statistics2013 Photo Contest in the country. SCAD is cooperating with the Abu Dhabi Education Council by providing the Council with materials to announce the contest to all government and private schools. SCAD also designed an awareness email and is planning to arrange a workshop to teach students quick tips in photographs. <u>Check out the incredible poster SCAD created to promote the contest to students in the Emirate</u>. Kudos to SCAD's Zahra Salem Omar Al braiki for being a strong supporter of the International Year of Statistics.

Malta—The National Statistical Office has developed the <u>Bilingual Glossary of Statistical Terms</u>. The glossary represents one of Malta's contributions to the International Year of Statistics. The glossary comprises a set of terminology that will help promote and improve statistical literacy among a wide range of users. It can be a working tool for operators in the public and private sectors as well as an educational document for future generations.



The Bilingual Glossary of Statistical Terms developed by Malta's National Statistical Office.

China—Chinese and foreign media reporters, friends of the National Bureau of Statistics, businesses and grassroots statisticians, foreign experts, U.S. and South Korean embassy officials, and 100 representatives invited by the central party's mass-line educational practice Steering Group participated in the fourth "China Statistics Open Day" activities at the Bureau's headquarters in Beijing. During the event speakers talked about the importance of developing statistics for the benefit of society and the construction of a modern service-oriented statistics. Themed "Statistics for You", the event featured graphic displays, videos, operation and demonstration, live Q & A, networking and other forms of

interaction. The event highlight was a speech by National Bureau Party Secretary Ma Jian Tong, who said his agency is vigorously promoting reform and innovation, standardized and unified, open and transparent efforts to create "user-oriented statistics, survey-oriented, object-oriented statistical grassroots" of modern service-oriented statistics. <u>Learn more</u>.

Elsevier Celebrating the International Year of Statistics in 2013

All through 2013, Elsevier is participating in the worldwide celebrations of the International Year of Statistics 2013. Its initiatives to support the statistics and probability communities include:

Open Archives

Elsevier has opened the archives of its statistics and probability journal titles in 2013. These opened archives date back to the first available issue, from four years after publication and are freely available for access. You can search for and read the archives from Elsevier's online platform <u>ScienceDirect</u> at your leisure as they will remain open during the entire year.

Editor's Choice Articles

A series of freely available articles have been selected for your reading pleasure by the editors of Elsevier's statistics and probability journals. These articles are freely accessible until the end of 2013. Find out how to access these articles here.

Special Invited Papers in the Journal of Statistical Planning and Inference

Original research papers, the accompanying discussion and rejoinder articles of the specially invited papers listed below are freely accessible until the end of 2013:

- <u>Generic chaining and the I₁-penalty, Sara van de Geer</u>, Volume 143, Issue 6, 2013
- <u>Local quantile regression</u>, Vladimir Spokoiny, Weining Wang, Wolfgang Karl Härdle Volume 143, Issue 7, 2013
- <u>Energy statistics: A class of statistics based on distances</u> by Gábor J. Székely, Maria L. Rizzo Volume 143, Issue 8, 2013
- <u>Grouping strategies and thresholding for high dimensional linear models</u> by Mathilde Mougeot, Dominique Picard, Karine Tribouley Volume 143, Issue 9, 2013
- <u>Bayesian inference with misspecified models</u> by Stephen G. Walker Volume 143, Issue 10, 2013
- <u>Correlated variables in regression: Clustering and sparse estimation</u> by Peter Bühlmann, Philipp Rütimann, Sara van de Geer, Cun-Hui Zhang Volume 143, Issue 11, 2013

Special Issue of Stochastic Processes and their Applications

<u>A Special Issue on the Occasion of the 2013 International Year of Statistics</u> published in the journal *Stochastic Processes and their Applications* provides an overview of recent and future development of statistics for stochastic processes. Rainer Dahlhaus, Jean Jacod, Per Mykland and Nakahiro Yoshida are guest editors of this freely available issue.

To find out more about these activities, visit: <u>www.elsevier.com/statistics</u>.

Attention All Participating Organizations

If you want to share news about your organization's activities to celebrate Statistics2013, we invite you to provide a blog entry or article that we will highlight on the Statistics2013 website. Many Statistics2013 organizations have done so already and your group could be the latest to be featured in the <u>Statistics2013 Blog</u> on the homepage or on the <u>Around the World in Statistics</u> page. To submit your article or blog, follow these guidelines:

- 1. *Statistics2013 Blog*—A blog entry up to 500 words. Since the Statistics2013 website is oriented to the public, all blog entries must be written in layman's language (no statistical terminology) and tie into the International Year of Statistics in some fashion (be creative!). Submit all blog entries via email and include as attachments to the email any images and graphics, including the author's headshot photo, to be used in the blog entry.
- 2. Around the World in Statistics Article—A 250-to-500-word article about how statistics makes life better for the people of your country or about an initiative your organization is undertaking to promote statistical awareness among your constituency or audiences.

Submit your blog or article to Jeff Myers at <u>Jeffrey@amstat.org</u>.

Calling All National Statistical Organizations

Statistics2013 is seeking informative, educational and insightful statistics about your country to feature in the "Statistic of the Day" area of the <u>Statistics2013 website homepage</u>. These can be a series of four or five brief statistical facts about your country's population, economy and education systems; the health of its citizens; and similar social, economic, government and other relevant topics. Send your submissions along with a link to your organization's website to Jeff Myers at <u>Jeffrey@amstat.org</u>.

Event Submission Forms on Website

Two web-based forms make it easy for you to submit your organization's Statistics2013 events as well as a summary and photos after the event is over.

The first form—called the "Event Submission Form for the Statistics2013 Activities Calendar"—provides you a quick and simple way to submit information about your organization's planned Statistics2013 events. All you have to do is input into the form the requested information and press the "Submit" button. We'll then take your information and post it to the Statistics2013 Activities Calendar. <u>You can access this form here</u>.

The second form—titled "Statistics2013 Post-Event Information & Photo Submission Form"—enables you to let us know about the success of your completed event and to submit up to two photos. On this form, you are prompted for information about your event and you also can input a brief summary (up to 1,750 characters). After you submit information about your organization's event, we'll run your photos and stories in this newsletter so others can see the creative and fun ways that your organization is promoting the International Year of Statistics. <u>Click here to access this form</u>.

Check out Website for Activities & Ideas

On an almost daily basis, we are adding new items to the <u>Activities Calendar</u> on the <u>Statistics2013</u> website. This list is an excellent place for finding activities in which you and your organization can participate to celebrate Statistics2013. It also is a great place to see what other organizations around the world are doing to mark the celebration and use those ideas as the starting point for your group to brainstorm ideas of its own. Check out the Activities Calendar today and start planning your organization's event!

The <u>Statistics2013 website</u> is filled with information and resources—particularly the <u>posters</u> and the <u>downloadable flyer</u>—to educate the public about how statistics improves their lives, the work of statisticians as well as careers in the statistical sciences. We invite and encourage all International Year of Statistics participating organizations to make use of these resources, including these helpful resource areas:

- What is Statistics?—An explanation in layman's language
- *Statistics2013 Video*—The informative two-and-a-half-minute video: <u>Why Statistics is Important</u> to You
- Statistics as a Career—Information about the work of statisticians and careers in statistics
- *Teacher Resources*—Primary and secondary school resources, a downloadable flyer and posters

There also is a section dedicated to participating organizations, titled "Statistics2013 Global Supporters", where you can access the roster of participating organizations, a comprehensive list of Statistics2013 activities, and the official Statistics2013 logos in various languages.

Use the Statistics2013 Video

We encourage your organization and its members to use and share the International Year of Statistics video. Created by <u>SAS Institute</u>, the video relates the many and varied ways that statistics impacts our lives. The video is accessible at <u>www.statistics2013.org</u>.

You can:

- view the video
- post the video to your organization's website
- e-mail the link to your members/employees
- share it with your organization's stakeholders
- promote it to the public, media and other external audiences in your area or country
- show it at your meetings and other events

The video narration is in English. However, thanks to SAS and many Statistics2013 participants who are providing translations, subtitles are being added in other languages. Currently available languages are:

• Catalan

Czech

- Dutch
- Euskara (Basque)
- English
- French
- German
- Indonesian

To access these subtitles, follow these easy instructions:

- Italian
- Portuguese (Portugal)
- Russian
- Spanish (Mexico)
- Swedish
- Turkish

- Press "Play" on the video
- Click the "CC" button to see the list of subtitle options
- Click on the desired language (the subtitles will appear onscreen)

We will be adding other subtitled languages soon, so check the video frequently to see if your language is available.

If you want the video subtitled in your country's language, please e-mail <u>Jeffrey@amstat.org</u> to request a copy of the script that you can translate.

Get the Official Statistics2013 Logo

With the move to the new public website, the link to the Statistics2013 logo and the various language-specific versions has changed. That new direct link is:

http://www.statistics2013.org/iyos/logos.cfm

Be sure to save the link in your web favorites.

You also can access the logos page by going to the "<u>Statistics2013 Global Supporters</u>" area of <u>www.statistics2013.org</u> and then clicking on "<u>Resources</u>" in the pull-down menu. The link to the logos is listed first on the page.

Language-Specific Logos Available

The Statistics2013 logo is available in <u>37 languages</u> and we are ready create new ones for you. To have a version of the logo created in your language, please e-mail the following to <u>Jeffrey@amstat.org</u>:

- The interpretation of the phrase "International Year of Statistics" in the appropriate font in this format: International Year of Statistics="The interpreted phrase"
- The interpretation of the phrase "Participating Organization" in the appropriate font in this format: Participating Organization="The interpreted phrase"
- A high-resolution PDF document or a tif file of the interpretations of the phrases "International Year of Statistics" and "Participating Organization". (This file will be used to compare against the font to ensure it was transmitted properly. If it doesn't compare accurately, we will use the image of the interpretations from the PDF or tif in the logo instead. This step will ensure accuracy of your logo.)

Once your language-specific logo is created, it will be posted to the Statistics2013 website <u>here</u> and we will send you an email to let you know the logo is available for download.

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Get the latest International Year of Statistics news and updates by following us on Twitter at @Statistics2013. Also, when you use Twitter to spread the word about Statistics2013, be sure to use the hashtag "#STATS2013". You also can become a "friend" of Statistics2013 on our <u>Facebook</u> page.