



Newsletter

A Newsletter of the ASA's Section for Statistical Programmers and Analysts

Summer 2016

A Word from the Section 2016 Chair

Pandu Kulkarni
Eli Lilly and Company



SSPA is a growing section and we for the first time:

- Conducted a Successful face-to-face meeting of the officers
- Developed a Mission Statement for SSPA: "SSPA Leads the Advancement of Statistical Programming through Innovative, Scientific & Technological Advocacy to Enable Solutions to Complex Problems"
- Developed a draft of transformation map to achieve the mission

So, please join us, volunteer, and invite your friends to do the same to make the mission come true.

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A Word from the 2016 Program Chair (Elect)

Michael Messner
US Environmental Protection Agency



I'm a mathematical statistician in EPA's Office of Ground Water and Drinking Water, where I model microbial and chemical contaminant occurrence in drinking water and estimate the risks those contaminants pose to consumers.

An "isolated statistician", I probably work harder than most to double-check and thoroughly document my work. I may also work harder than most to build and maintain connections with other statisticians inside and outside EPA.

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The SSPA In Action- SSPA executives

Aligning to the newly established mission of the section and building/learning from past experiences, SSPA is sponsoring four more web-based lectures (webinars) in 2016 over the next several months on topics of interest to statistical programmers. These webinars provide innovative ideas and emerging technological advancement that matters to the SSPA community and beyond to solve advanced problems. We hope there will be quite a bit of positive feedback on these webinars from SSPA community members:

- Tuesday, July 7, 11AM to 12:30 PM Eastern Time – “Pushing the Frontier of Automation and Dynamic Visualization with R/Shiny” will be presented by Danni Yu, Eli Lilly and Company and Tuan Nguyen Sr., Eli Lilly and Company.
- Tuesday, July 14, 11AM to 12:30 PM Eastern Time – “Enabling Reproducibility in Statistical Analyses Using R Markdown” will be presented by Eric Nantz, Eli Lilly and Company.
- Monday, September 14, noon to 1:30 PM Eastern Time – “Best Practices in Data Analysis” will be presented by Abhijit Dasgupta.
- Friday, September 27, noon to 1:30 PM Eastern Time – “Parallel and Cluster Computing with R” will be presented by Elizabeth Byerly, Summit Consulting.

Registration links, speaker bios, and additional information can be viewed online at <http://www.amstat.org/education/weblectures/>.

Seeking Nominations for Student Representative Officer- Vipin Arora

- Are you a student who is passionate about Statistical Programming?
- Do you consider summarizing, analyzing and/or visualizing data as “fun!”?
- Are you a member of the Statistical Programmers and Analysts (SSPA) Section of ASA?
As ASA student member, you can join SSPA as a student member at no extra cost - so sign up today!
- Are you a part of a community or a local initiative that involves coaching/shared learning on topics including advancement of statistical programming?
 - Do you want to join hands in bringing innovative solutions with analytical thinking to address complex problems that are being faced by industry, academia and non- profit settings?

If you have responded “**Yes**” to any of the questions above, please consider to be nominated as a Student Representative Officer to SSPA!

Please send an email with the above information to Vipin Arora at varora@lilly.com or Jyoti Rayamajhi at Rayamajhi_jyoti@lilly.com or Natalie Rotelli at hall_natalie_cheung@lilly.com or connect with us at Joint Statistical Meetings (in Chicago).

Showcase SSPA at JSM, 2016 - Mike Messner

JSM 2016 is a HUGE meeting. At any time, there can be more than 50 parallel sessions. It can be really difficult to find that one session that best meets your needs. To assist, SSPA identified sessions of general interest to programmers and analysts. Check your program to be sure the times and dates haven't changed and to view information on the session-specific agendas.

SUNDAY, JULY 31

2:00 – 3:50 PM – Open Source Statistical Software for Data Science (#6)

4:00 – 5:50 PM – Making the Most of R Tools (#47)

4:00 – 5:50 PM – The World of Statistical Analysis Professionals (#64)

6:00 – 8:00 PM – The Extraordinary Power of Data (Poster Presentations) (#88)

MONDAY, AUGUST 1

7:00 – 8:15 AM (breakfast) – SSPA AM Roundtable Discussion (#95)

8:30 – 10:20 AM – Applied Data Visualization in Industry and Journalism (#106)

2:00 – 3:50 PM – Toward Better Communication of Information with Statistical Graphics (#246)

TUESDAY, AUGUST 2

8:30 – 10:20 AM – Introductory Overview Lecture: Data Science (#279)

8:30 – 10:20 AM – What to do with Messy Data? Four Case Studies (#289)

10:30 AM – 12:20 PM – Applications of Statistical Computing (#357)

WEDNESDAY, AUGUST 3

8:30 – 10:20 AM – Model Selection (#466)

8:30 – 10:20 AM – Statistical Inference (#507)

10:30 AM – 12:20 PM – Contributed Poster Presentations (#555)

12:30 – 1:50 PM (lunch) – SSPA Roundtable Discussion (#575)

THURSDAY, AUGUST 4

8:30 – 10:20 AM – My life as a statistical consultant (#637)

10:30 AM – 12:20 PM – Methods and Applications of Statistical Graphics (#695)

10:30 AM – 12:20 PM – General Methodology and Applications in Biostatistics (#699)

More details on each of the session topic and various presentations within the topics can be found in the link <http://www.amstat.org/meetings/jsm/2016/onlineprogram/index.cfm>

SSPA Booth at JSM 2016 - Bala Dhungana

SSPA offers the topics that matters to statistical programmers. It is run by volunteers like you. You all can volunteer at the time of your choice and even serve as an SSPA officer. By volunteering with SSPA, we learn a lot and meet many great friends. Do you want to volunteer? If the answer is yes, here it is how you can be involved

-Please visit the [member link](#) and look for "Add additional chapter or section" tab on left side of the panel.

-sign up using the following link if you want to volunteer at the SSPA 2016 booth [Doodle Schedule](#).

(SSPA Information Table will be located around outsides of room 183A (level one of West Building, McCormick Place)

-Also visit [the SSPA web site](#) for the most current announcements and updates.

SSPA Student Connection - Vipin Arora and Bala Dhungana

Every year, SSPA organizes the manuscript/poster competition for its student members. The goal of this contest is to encourage SSPA student members to foster shared learning by submitting manuscripts/posters to JSM. Three winners will be selected for an award of \$500 each. This grant must be used for the winner's JSM-related participation (travel, lodging etc.).

In order to submit a proposal for the award, the candidate must maintain a full-time student status and also be an active SSPA member. If a manuscript/poster already was presented at JSM in previous years, it is not eligible for this award. The criteria of the manuscript/poster judging are expected to be focused on overall research objective/problem being addressed, technical challenges and innovative ways to utilize existing or new statistical programming skills in the manuscripts/posters submitted.

The SSPA 2016 Student Award Winners are:



Lixuan Yin, George Mason University
lyin3@masonlive.gmu.edu
Winner of Monsanto \$500 Grant



Pratheepa Jeganathan, Texas Tech University
pratheepa.jeganathan@ttu.edu
Winner of Monsanto \$500 Grant



Sarah Tan, Cornell University
ht395@cornell.edu
Winner of Axio \$500 Grant

Our sincere thanks to Monsanto and Axio for providing the award money to encourage young and energetic students to attend and participate at JSM2016 in Chicago.

Please stop by SSPA Mixer at JSM 2016 on Monday, August 1 during 5:00 PM - 6:30 PM, Hilton-Williford A (at Hilton Chicago Hotel) and congratulate these student members, enjoy the good food, drinks and network with SSPA members and share your ideas on how you (or someone you may know) can take SSPA to the next level.

SSPA CSP Connection - Jyoti Rayamajhi



Nancy Wang (SSPA) and Jyoti Rayamajhi (SSPA) at CSP

Jessica Colson (Student, SSPA) and Steve Kirby at MBSW

For the first time, the Conference on Statistical Practice (CSP) expanded its regional boundaries by holding the 5th conference on the West Coast in 2016. The ASA's winter meeting for statistical practitioners was the biggest yet, with more than 550 attendees at the Westin, San Diego February 18–20, 2016. Several SSPA participants attended the conference and also did the membership drive. The SSPA brochure was allowed to be placed on the ASA table at the conference. The conference consisted of an opening mixer, poster sessions, continental breakfasts, and shared sessions. SSPA participant Jyoti Rayamajhi also participated in CSP as a mentor to Marissa (Baylee) Moore.

SSPA MBSW Connection - Cindy Lee Wilson

MBSW (Midwest Biopharmaceutical Statistical Workshop) was held in Muncie, IN from May 16 – 18. Twenty four students attended the conference. 11 of 24 students presented posters. Two posters were from students who are SSPA members. One student travelled all the way from U. of Southern California to Muncie, IN. SSPA Officer Cindy Lee Wilson coordinated the MBSW 2016 conference in a capacity as the Registrar. Vipin Arora and Cindy Lee Wilson were successful in implementing and organizing a new track at MBSW 2016. This track titled "Statistical Programming and Data Visualization" attracted very good attendance (to continue in 2017).

Have Pictures to Share?

Do you love taking pictures? Do you have pictures from the recent JSM or another ASA-sponsored event? The SSPA would love to feature members in future newsletters. We can also post images on [the SSPA web site](#). In fact, the site contains several images from the 2015 JSM. Click on the "Library" link (login required) from the SSPA web site to see if you are in one of them!

If you have pictures you want to share, please contact [Mike Messner](#).

A Word from the Section Chair (Continued from p. 1)

ASA has an array of opportunities for you to expand your leadership skills and increase your network of colleagues. I encourage you to read these testimonials:

- [Saying 'Yes' to ASA Enhances Career](#)
- [Turn Off the TV and Volunteer at the ASA](#)
- [How to Get Involved in ASA Volunteer Activities](#)

Contact an SSPA officer to become involved within the Section, or get in touch with ASA for other chances to volunteer. I assure you that you will gain so much from the experience, whether you are a student, a recent graduate, or a seasoned professional.

A Word from the Program Chair elect (Continued from p. 1)

I'm involved with local universities (e.g., [UMBC's Probability and Statistics Day](#)), [Data Community DC](#) (planning to give a talk on hierarchical modeling sometime soon), and the [Statipedia wiki](#) (a collaborative environment for government statisticians and economists).

I use R not only at work, but also at home...a lot! I built a CNC machine and use R to:

- Model 3-D sculptures using stacked polygons ([patent application](#))
- Model the inside & outside surface of a violin, then produce machine code to command the machine
- Produce machine code for creating music with the three stepper motors – [they sing "Summertime" in 3-part harmony](#).

Here are the first lines of G-code for "Summertime":

```
G1 X0 Y3.5355 Z2.1022 f164.5309
G1 X0 Y7.504 Z4.2044 f179.6362
G1 X0 Y11.0395 Z6.3066 f164.5309
G1 X3.1498 Y13.0238 Z7.3577 f309.4614
G1 X5.6498 Y15.0081 Z8.4088 f268.8316
G1 X11.9494 Y18.5436 Z10.511 f300.9424
```

2016 SSPA Executive Committee

Chair: [Pandurang Kulkarni](#)

Chair-Elect: [Michael Carniello](#)

Past Chair: [Nancy Petersen](#)

Program Chair: [Taylor Arnold](#)

Program Chair Elect: [Michael J. Messner](#)

Secretary: [Dominique Williams](#)

Treasurer: [Nakisha Boulware Reid](#)

Publications Officer: [Mark Matthews](#)

Section Representative: [Bala Krishna Dhungana](#)

Council of Sections Representative: [Cindy Lee Wilson](#)

Newsletter Editor: [Bala Krishna Dhungana](#)

Section web page:

<http://community.amstat.org/SSPA/home/>

Congratulations to 2016 ASA Election Winners – Vipin Arora

SSPA Chair Elect, 2017 - Melvin Munsaka, Takeda

SSPA Program Chair Elect, 2017 - Kuolung Hu, Amgen