

# NISS

# Parameters

WINTER | 2019

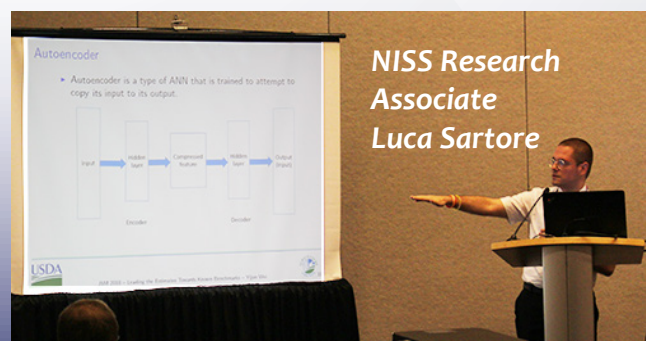
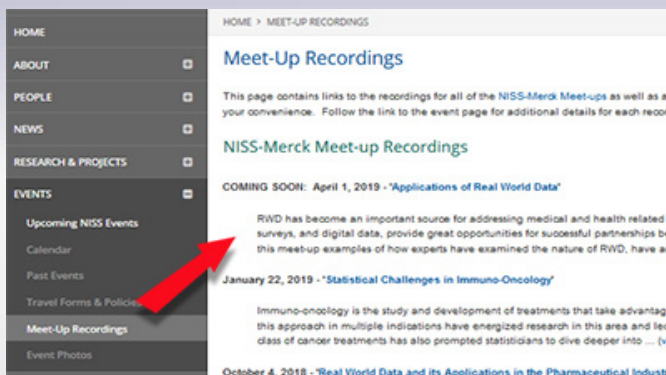
Look for these Upcoming NISS Hosted Events!

R & Spark: Tools for Data Science Workflows

Using Surveys with Nonprobability  
Samples in Epidemiology

NISS-Merck Meet-Up

Academic Affiliate Meet-Up





Welcome to the Winter 2019 edition of the NISS Parameters Newsletter

I have just returned from the AAAS annual meeting in Washington, DC, and was again reminded that Statisticians get to play in everyone's backyard, as John Tukey once said. With the 2020 census approaching, privacy concerns continue to impact how the statistical summaries of the data will be released. The challenge to protect the privacy of an individual's data are ever greater with the growth of other publicly available datasets. Should the question about citizenship be included in the census? A question not included since 1950 since its presence would likely negatively impact the response rate. The Supreme Court just agreed to hear the case to resolve the impasse. Many issues facing society require a careful scientific response including climate change, risks of floods, more hurricanes, sea level rise, and other global risks such as flu pandemics, earthquakes and related tsunamis and other global issues.

As big data sources continue to proliferate and are collected without being designed for a particular purpose, statisticians must address the challenges of how these data can be analyzed and utilized without falling victim to unintended biases. The October 4, 2018 **NISS-Merck Meet-up on Real World Data (RWD)** in the Pharmaceutical Industry describe these challenges and an upcoming Meet-up on April 1, 2019 will explore additional Applications of RWD. These are issues of growing interest to our affiliate members and statisticians can provide insight and contributions to the solutions along with other data scientists. Other NISS-Merck Meetups have covered topics including Estimands, Missing Data, and Immunotherapies.

This year we also initiated an **Academic Meetup series**, organized by Mimi Kim, with assistance from Kevin Lee and Ezra Kurum. The latest event in this series is well worth watching if you want to improve your communication and writing skills -- skills every employer values in a new employee. Pulling from her very successful career, Christy Chuang-Stein leads off with a wonderful collection of wisdom about effective communication -- well worth watching. After fielding questions from the audience, she is followed by Limin Peng, who presents tips and insights on successful writing including issues unique to those whose English is not their first language. On April 23 the next NISS Academic Meet-Ups is "Succeeding as a Statistician in Academia: Things I Wish I Knew at the Start of My Career." This should provide insights and good advice for junior faculty, post-docs and even graduate students aiming for an academic career.

#### Upcoming NISS hosted events in Washington, DC

Please check the website for the [upcoming events](#), the next two being held in Washington, DC. The previously offered course, **R & Spark: Tools for Data Science Workflows**, will be offered again on Feb 25-26 at the Bureau of Labor Statistics near Union Station. This workshop, taught by James Harner, provides the tools needed for efficient analysis of large and distributed databases without the need to move the data into a central computer. On March 11, we are hosting a program organized by Yan Li, University of Maryland, on "Using Surveys to Improve the Representativeness of Nonprobability Samples in Epidemiologic Studies." This should be of interest to anyone analyzing complex data samples in epidemiological research.

#### Nominations invited

Please submit suggestions or a full nomination packet for someone for the [Jerome Sacks Award](#). Also, I want to remind all former NISS postdocs to submit a nomination for the [NISS Distinguished Alumni Award](#), deadline April 30.

#### Regional and National Events

The [events page](#) shows a variety of regional events. Most of these events are available to anyone but with discounts offered to NISS affiliate members. Being a NISS academic affiliate provides opportunities for faculty to network with other affiliate members. When someone from an affiliate organizes a meeting or workshop the NISS Affiliate Award Funds (AAF) can assist in support of speakers, in addition other affiliate members can use funds from their AAF to pay registration and travel expenses to attend. These funds are useful to support young faculty members, postdocs, and/or graduate students to attend NISS sponsored events and regional conferences such as CSP, ENAR, and SDSS. For more information on becoming an affiliate, visit our website: [www.niss.org/affiliateprogram-information](http://www.niss.org/affiliateprogram-information).

We are planning our annual affiliate meeting and another **writing workshop** at the JSM in Denver Colorado this summer. More information will be sent to our affiliates about these events in the next weeks.

## ABOUT NISS

NISS is a national institute that delivers high-impact research in science and in public policy by leveraging the rich expertise of its staff with that of its base of affiliated organizations in academia, industry, and government. NISS works on issues where information and quantitative analysis are keys to solutions and decisions. NISS functions in three ways: as an expert advisor, as a basic researcher, and as a collaborator.

## OUR MISSION

The National Institute of Statistical Sciences (NISS) is an independent research organization that serves as a neutral, objective expert in delivering research in science and public policy to its affiliates in academia, industry and government. NISS identifies, catalyzes and fosters high-impact cross-disciplinary and cross-sector research involving the statistical sciences.

Feb 25 - 26, 2019  
Washington, DC

## COURSE OUTLINE - REGISTER NOW!

R is a flexible, extensible statistical computing environment, but it is limited to single-core execution. Spark is a distributed computing environment which treats R as a first-class programming language. This course introduces data structures in R and their use in functional programming workflows relevant to data science.

The course covers the initial steps in the data science process:

- extracting data from source systems,
- transforming data into a tidy form,
- loading data into distributed file systems, distributed data warehouses, and NoSQL databases, i.e., ETL.

This workflow is illustrated by using the SparkR and sparklyr package frontends to Spark from R.

SparkR and sparklyr are then used as interfaces for modeling big data using regression and classification supervised learning methods. Unsupervised learning methods, such as clustering and dimension reduction, are also covered. Additional methods, such as gradient boosting and deep learning, are illustrated using the h2o and rsparkling R packages. Finally, methods for analyzing streaming data are presented. The course finishes with an in-depth example. The infrastructure and content is containerized for easy download to your laptop using Docker.

## INSTRUCTOR

**E. James Harner** is Professor Emeritus of Statistics at West Virginia University (WVU). He was the Chair of the Department of Statistics for 17 years and the Director of the Cancer Center Bioinformatics Core for 15 years at WVU. The areas of his technical and research expertise include: bioinformatics, high-dimensional modeling, high-performance computing, streaming and big data modeling and statistical machine learning.



*Instructor Jim Harner (right) with students at a previous R & Spark Workshop at SAMSI*

## USING SURVEYS TO IMPROVE THE REPRESENTATIVENESS OF NON-PROBABILITY SAMPLES IN EPIDEMIOLOGIC STUDIES

March 11, 2019 1 – 5 PM  
Washington, DC

The National Institute of Statistical Sciences (NISS) has invited Yan Li of the University of Maryland at College Park to organize a half-day workshop, an expansion of her popular JSM 2018 session with the same title.

The workshop should be of interest to epidemiologists, survey statisticians and others grappling with the theoretical and practical issues of drawing statistical inference from nonrandom epidemiological samples. Input from the attendees is not only welcome but encouraged! Statisticians and epidemiologists from all sectors, government, academia and industry, are encouraged to participate.

National Surveys collect probability samples that are population representative and allow valid inference for finite population parameters. Nonprobability samples are often collected for convenience or cost efficiency. The results drawn from analyzing nonprobability samples, however, can suffer from a lack of external validity, selection bias and noncoverage of a target population, leading to biased estimation of parameters such as prevalence/incidences and associations. In this workshop, we will present a combination of innovative statistical methods and applications on improving the representativeness of nonprobability samples in epidemiologic studies.

A 10 minute overview will be followed by four talks of approximately 30 minutes each with plenty of time allocated for questions and discussion between the speakers and the audience.

## SPEAKERS

**Hormuzd Katki** - Senior Investigator, Biostatistics Branch, Division of Cancer Epidemiology & Genetics National Cancer Institute

“Overview of issues surrounding the role of representative sampling in epidemiologic studies”

**Barry Graubard** - Senior Investigator, Biostatistics Branch, Division of Cancer Epidemiology & Genetics National Cancer Institute

“Population-based disease risk prediction modeling using national survey, clinical, and registry data: Application to risk prediction for oropharyngeal cancer in the US population”

**Michael Elliott** - Professor of Biostatistics Research Professor of Survey Methodology Survey Methodology Program, University of Michigan, Ann Arbor, MI

Combining Probability Non-probability Samples: Theory and Practice

**Yan Li** - Associate Professor, Joint Program for Survey Methodology, University of Maryland, College Park, MD

“A Kernel Weighting Approach to Improve Population Representativeness for Estimating Prevalence of Risk-factors and Diseases”

**REGISTER NOW!**



# "STATISTICAL CHALLENGES IN IMMUNO-ONCOLOGY", THE LATEST IN A SUCCESSFUL SERIES OF MEET-UPS

NISS

Over 250 participants took part in the **fifth NISS-Merck Meet-up**, and the first one of 2019. This meet-up focused on "Statistical Challenges in Immuno-Oncology."

Immuno-oncology is the study and development of treatments that take advantage of the body's immune system to fight cancer. Promising clinical results from this approach in multiple indications have energized research in this area and led to regulatory approvals of multiple immune-therapies. The promise of this class of cancer treatments has also prompted statisticians to dive deeper into important statistical issues associated with the design and evaluation of these therapies. Issues of particular interest include pseudoprogression, dose optimization, combination therapies, and non-proportional hazards. This meet-up focused on some of these statistical issues and the resulting opportunities that have arisen for statisticians.

There were two speakers featured at the meet-up. The first speaker was **Bo Huang**, Director of Biostatistics at **Pfizer** with over 35 publications and is known as an avid supporter of oncology programs. Bo Huang's talk was titled "Quantifying the Long-term Treatment Benefit with Cancer Immunotherapies."

The second speaker was **Cong Chen** the Executive Director and Head of Early Oncology Statistics at **Merck** and ASA fellow who spoke on "Some Adaptive Design Options for Late Stage Development of

Oncology Immunotherapies."

**Andrew Stone** of **Stone Biostatistics** with over 25 years experience in biostatistics and former leader of Astra-Zeneca oncology statistics was then asked to provide comments and help to moderate the discussion that followed.

For those of you that were not able to attend live, you can review the [complete recording of the session](#) the NISS website.



## NISS-MERCK MEET-UP FEATURED IN AMSTAT NEWS

The December NISS-Merck Meet up was featured as a news story in the January 2019 issue of **AMSTAT News**.

From the article:

"Big data, real-world data (RWD), and observational data have become ubiquitous and essential components of the drug development and commercialization process. Researchers, statisticians, and data scientists must generate evidence and gain insights from these massive data. Various types of RWD—such as claims, electronic health records, surveys, and digital data—provide opportunities for successful partnerships between academia and business, industry, and government organizations. This is why RWD and its applications in the pharmaceutical industry was the topic of the fourth virtual meet-up sponsored by the National Institute of Statistical Sciences (NISS) and Merck and co-sponsored by the ASA's Health Policy Statistics Section (HPSS) for the first time this year."

[Read more in AMSTATNEWS...](#)

### About Meet-ups

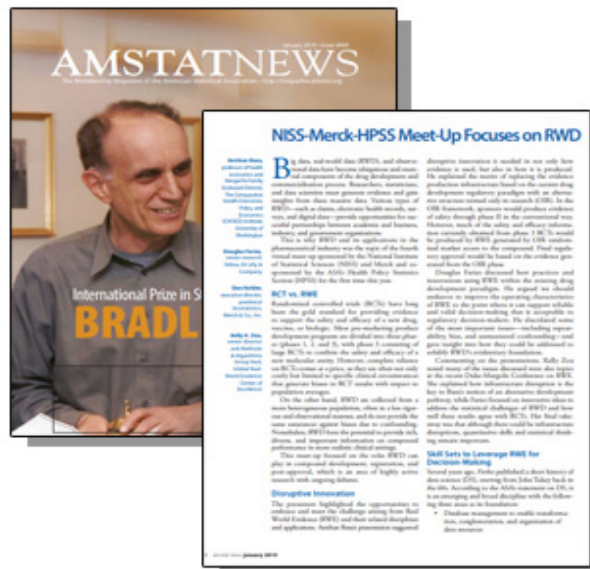
To date there have been four meet-ups averaging nearly 300 attendees calling in per event! The format is usually a short talk by 2 or more invited speakers followed by a panel discussion which includes a moderator's perspective, their questions and questions submitted by the audience. The meet-up lasts for an hour. The talk is recorded and shared on the NISS website for folks that could not connect to the live event.

### Mark your Calendar!

The next meet-up will be a second meet-up that will focus on "[The Applications of Real World Data](#)." It is scheduled for April 1, from 11:00 a.m. to 12:30 p.m. ET.

A huge thank you to Dan Holder for being central to setting up all of the successful NISS-Merck meetups!

If you have any suggestions for future meet-up topics and/or speakers that wouldn't mind spending a lunch hour with 300+ colleagues, please contact **Dan Holder** ([dan\\_holder@merck.com](mailto:dan_holder@merck.com)) with your ideas.



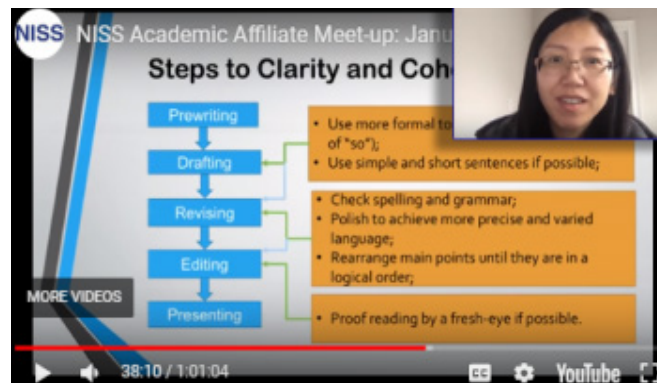
# NISS ACADEMIC AFFILIATES MEET ONLINE TO LEARN ABOUT IMPROVING STATISTICAL COMMUNICATION

NISS

On Tuesday, January 29th NISS Affiliates gathered to listen to two experienced and distinguished individuals talk about their experience and advice about ways to go about improving how they communicate statistical information.

The first speaker was **Christy Chuang-Stein**. Her experience speaks for itself. She is a Fellow of the American Statistical Association (ASA) with more than 160 peer-reviewed scientific publications/book chapters and 3 books. Dr. Chuang-Stein received ASA's Founders' Award in 2012 and the Distinguished Achievement Award of the International Chinese Statistical Association in 2014. She retired from Pfizer as Vice President and Head of the Statistical Research and Consulting Center in July 2015 after 30 years in the pharmaceutical industry and 5 years in academia (University of Rochester) and is now the owner and Principal Consultant of Chuang-Stein Consulting, LLC. Christy currently chairs NISS' Affiliates Committee.

Christy's focus was on oral communication and presentation skills. She started out by getting participants to think about the type of communicator they and their audience is, and use this knowledge to prepare the message. Her optimism and positivity was clearly reflected in her personal remarks. She cautioned listeners to stay away from 'communication traps'. As for presentation skills, Christy pointed out some common characteristics of good presentations. Christy used the "Story of the Two Wolves" to make it clear that the way to good communication and presentation is to "Just Do It." As she stated, "There is no elevator to success - you have to take the stairs!"



And, while a limited vocabulary or a lack of natural sense of language for English might be barriers for some non-native speakers, Limin provided tips for getting around these. Foremost she asked her listeners not to just automatically adopt feedback but to go through these comments carefully to learn and reflect on why these changes should be considered. Limin also listed a number of helpful resources for writers.

Questions were posed by participants and the moderator, Mimi Kim (Albert Einstein University). When Christy was asked for advice on how non-English-speaking individuals could improve their English, she drew from her own experience and shared an approach suggested by one of her past managers – regularly make a list of individuals or colleagues with whom to have a coffee break or lunch.

"Language, the more we use it, the better we get at it!"

Christy Chuang-Stein, Chuang-Stein Consulting, LLC



The second speaker was **Limin Peng** of Emory University. She currently serves as Associate Editor for the Journal of American of Statistical Association and Biometrics. Dr. Peng was elected as a Fellow of the American Statistical Association in 2016 and received the American Public Health Association Mortimer Spiegelman Award in 2017. Her remarks focused on improving writing skills. Reports, papers, applications, grants all fall into this category.

When Limin was asked, "As the editor of a journal, how does the quality of the writing affect the acceptance of the paper? If a paper is innovative and have technical detail but is poorly written, what is your reaction?" Limin responded that "poor writing will give a poor impression and if the paper is 'on the boundary', it will likely be rejected. Furthermore, even if the idea is very creative, poor writing will still have a negative impact. Reviewers often do not read papers line by line but read quickly to get the idea. If you are not clear and organized, so that your ideas are easily understandable, reviewers are likely to reject."

Review the entire conversation by viewing [the recording of this session](#) on the NISS website!

"The most important aspects for all writing are clarity as well as coherence. Adapting your writing to the potential readers and the purpose can help more effectively transform information from your writing to readers."

Limin Peng, Emory University



# UNIVERSITY OF MINNESOTA-TWIN CITIES, SOUTHERN METHODIST UNIVERSITY JOIN NISS AS ACADEMIC AFFILIATES

# NISS

NISS recently welcomed two new academic affiliates!

## University of Minnesota-Twin Cities, School of Statistics

The School of Statistics at the University of Minnesota has established and maintained an international reputation for excellence in teaching and research which dates back to its origins in 1958. In its present state, the School houses theoretical and applied statistical studies under one roof. Degrees offered include a Bachelor of Arts in Statistics, a Bachelor of Science in Statistics, a Master of Science in Statistics, a Master of Science in Data Science, and a Doctor of Philosophy in Statistics.

Courses are taught by internationally distinguished faculty, including many elected fellows of the major statistical organizations such as the American Statistical Association, the Institute of Mathematical Statistics, and the International Statistical Institute. Many faculty members are or have been editors or associate editors of major journals. Several professors are the recipients of awards for excellence in teaching.

The School provides additional opportunities for interdisciplinary collaboration and professional development through the Institute for Research in Statistics and its Applications (IRSA). Students are encouraged to work as research assistants for IRSA's Consulting Center where they receive hands-on experience solving challenges for real-world clients. Furthermore, students gain access to IRSA's conferences, workshops and short courses where their knowledge of statistics and data science is applied across disciplines to address critical challenges of the 21st century.

Graduates pursue successful careers in business, academics, industry, government, medicine, publishing, scientific research, and much more.



University of Minnesota-Twin Cities, Minneapolis, Minnesota

## Southern Methodist University, Department of Statistical Science

The SMU Department of Statistical Science was founded in 1961 by Paul Minton. The first Master's degree was awarded in 1963 and first Ph.D. in 1968. A Ph.D. program in Biostatistics, offered in collaboration with University of Texas Southwestern Medical School, was established in 2014, and students receive their training from faculty in both institutions. Besides the Ph.D. programs, the Department offers a Master's in Applied Statistics and Data Analytics (MASDA) and a rapidly growing undergraduate major. We currently have approximately 70 graduate and 100 undergraduate students in our programs.

The faculty of the Department of Statistical Science consists of researchers with a wide range of interests, including Bayesian methods, order statistics, measurement error, causal modeling, and numerical methods. The application areas are likewise diverse, ranging from genetics and public health to fisheries, reliability and sports. Faculty and student research is funded by federal agencies (e.g., NSF, NIH, NOAA), but also by local industry and government. SMU's location in the 6th largest metropolitan area in the U.S. provides opportunities for research collaboration and employment with leading finance, healthcare, social welfare, and public policy organizations.



Southern Methodist University, Dallas, Texas

Look for the *Affiliates Update* which is distributed monthly between the quarterly NISS Newsletters.



Luca Sartore grew up in a small town in the northeastern countryside of Italy that has spectacular views of the Alps. He earned his undergraduate degree in three separate areas by majoring in statistics, computer science and management at the Ca' Foscari University of Venice. He then earned his Master degree in statistics for business from the same University. From here, he received his Ph.D. in statistical sciences from University of Padua, where he focused on quantile regression and spatio-temporal models. Prior to NISS, he was a research fellow for the European Centre for Living Technology, where acquired new techniques that he is still using today. Recently, Sartore has been working in Washington, DC with National Agricultural Statistics Service (NASS) for the past three and a half years as a Research Associate with NISS. Different views but still his mind focuses on statistics.

### Why statistics? Why data?

"There are a couple of reasons," explains Sartore, "First, I have always liked to deal with numbers. I like to find that story that might not be obvious from the data, and developing methods that help to draw better conclusions from the analysis. Later in my studies, I found it exciting to see the potential in those methods that make more precise predictions. Second, my mother was an accountant, my uncle was a statistician, a cousin is a programmer, and there are other family members involved in mathematics. They guided me towards quantitative studies, so I guess it is something that is in our family."

### Connecting with NISS

Sartore's connection with NISS is something that he helped to bring about himself. After giving a presentation on a collection of R functions that he developed for land-use predictions, a number of folks from NASS came up to him afterwards with questions and a profound interest in his work. One thing led to another and Sartore found himself immersed in a number of projects at NASS as a NISS research associate. One of his early projects at NASS reached its completion with an enhanced methodology to compute unbiased estimates for the US Census of Agriculture. Since then, he has been involved also in other projects that uses satellite data to predict crop yields, and survey data to provide forecasts of hog production for various time frames and regional levels (county, state and national).

### Working with Government

Sartore shared that there are a number of challenges in working with a government institution. First of all, while there might be recent versions or packages of software available via the web, federal institutions are prohibited from working with these programs for security reasons. As a result, much of the software with these new methods or approaches needs to be built in-house. While on the one hand, this is something that takes time, "it also allows one to work through and test the computation of these approaches, and include our own." Secondly, having access to the latest data is forbidden by law. Thus, the challenge is to use the available data to develop models, or suggest methods, that has to be accurate even when the latest data were to be incorporated by federal employees.

One thing that Sartore misses from his time in time growing up in Italy is the chance the chance practice playing the organ as he did in Italy. A place to practice is not an easy thing to find but he has had a chance to visit a number of churches and meet a number of wonderful people.

"My experience with NISS has provided me with way more opportunities than I expected. There is so much more that can be accomplished both by me personally as well as the potential for finding solutions for the projects that I am involved in."

Luca Sartore, NISS Research Associate



*Sartore emphasizes a point during a presentation at JSM 2018*





**Michael Robbins**, Statistician and Researcher at Rand Corporation and former NISS PostDoc Fellow from 2009 to 2011, was recently the recipient of a major NSF grant entitled “BIGDATA: IA: A Multi-phase Survey Strategy for Generalizing Inferences from Big Data”. This project will develop new statistical methods for generalizing inferences drawn from non-representative Big Data sources. The start date is January 1, 2019, and extends through 2022.

As a Postdoc at NISS, mentored by Dr. Sujit Ghosh from NC State University, Michael developed an imputation algorithm for the USDA’s Agricultural Resource Management Survey (ARMS) on the project titled “Imputation in High-Dimensional Economic Data as Applied to the Agricultural Resource Management Survey”, which was administered by NISS and the National Agricultural Statistical Service (NASS).

Congratulations Michael on this significant achievement! We all look forward to progress regarding your research.

## NEW WEBSITE FEATURE: MEET-UP RECORDINGS

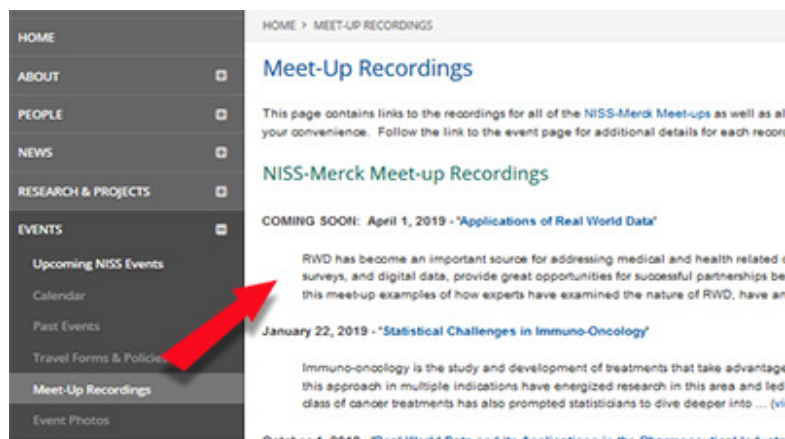
### Meet-Up Recordings

It seems that virtual meetings are here to stay! They certainly are convenient, both in terms of travel and expense. While one drawback might be having to put up with the occasional technical glitch or audio levels that just won’t seem to cooperate, the upside is that we automatically get recordings of the session to refer to later, or to share with colleagues who might not have been able to attend the live event!

As you know, NISS has been busy hosting a number of virtual meet-ups both in conjunction with Merck and through the Academic Affiliates of NISS. As a result, we have started to accumulate quite a few of these recordings.

To make access to these recordings more efficient, a new web page on the NISS web has been created that has a listing of all of these Meet-up Recordings. You access this page by clicking on the ‘Events’ menu item, then selecting ‘Meet-Up Recordings’.

Check it out today!



## NISS WELCOMES NEW STAFF

**Candye Hughes** has significant experience in project management, operations and organizational planning. Prior to joining NISS, Candye served for four years as the Director of Administration at Sirona Strategies and prior to that she was the Director of Management Operations at St. Elizabeth’s Hospital. As Director of Management Operations, Candye oversaw work on a wide range of complex program activities and assessed complex administrative processes, systems and mission support programs.

Prior to her work at St. Elizabeths, Candye worked in a variety of positions at DC Child and Family Services Agency, collaborating with senior staff to prepare budgets and regular reports, analyze data and more. Candye also spent two years in the Peace Corps, as a water sanitation volunteer in Mali, West Africa.

Candye holds an MSW and a BA in Sociology from Howard University. She replaces William Sam who spent almost two years in this role for NISS. Everyone at NISS wishes William all the best regarding his future endeavors.

Welcome Candye! We all look forward to working with you.





## FEBRUARY

### [R & Spark: Tools for Data Science Workflows](#)

**Event Date:** Monday, Feb 25- 26 2019

**Event Location:** Washington, DC

COURSE OUTLINE R is a flexible, extensible statistical computing environment, but it is limited to single-core execution. Spark is a distributed computing environment which treats R as a first-class programming language. This course introduces data structures in R and their use in functional. ([read more](#))

## MARCH

### [Using Surveys to Improve the Representativeness of Nonprobability Samples in Epidemiologic Studies](#)

**Event Date:** March 11, 2019

**Event Location:** Washington, DC

The National Institute of Statistical Sciences (NISS) has invited Yan Li of the University of Maryland at College Park to organize a half-day workshop on “Using Surveys to Improve the Representativeness of Nonprobability Samples in Epidemiologic Studies.” The workshop is an expansion of her popular... ([read more](#))

### [71st Clemson University / University of Georgia Joint Statistics Colloquium](#)

**Event Date:** March 28, 2019

**Event Location:** Clemson, South Carolina

Since 1973, the Department of Mathematical Sciences (now known as the School of Mathematical and Statistical Sciences) at Clemson University and the Department of Statistics at The University of Georgia (UGA) have worked together to organize the UGA/Clemson Joint Seminar Series. The first joint... ([read more](#))

## APRIL

### [NISS-Merck Virtual Meet-up: “Applications of Real World Data”](#)

**Event Date:** April 1, 2019 - 11:00 am - 12:30 pm, EDT

**Event Location:** Online

The National Institute of Statistical Sciences (NISS) and Merck are sponsoring a second virtual meet-up on the topic of real world data (RWD). This second meet-up, a sequel to the first one held on October 4, 2018 (1st NISS-Merck meet-up on RWD), will focus on examples of using RWD. RWD has.. ([read more](#))

### [12th Annual Conference on Statistical Issues in Clinical Trials: Electronic Health Records \(EHR\) in Randomized Clinical Trials: Challenges and Opportunities](#)

**Event Date:** April 17, 2019

**Event Location:** Philadelphia, Pennsylvania

This conference is focused on “Electronic Health Records (EHR) in Randomized Clinical Trials: Challenges and Opportunities”. Speakers featuring case studies include: DENISE ESSERMAN, PhD Yale University - “From Screening to Ascertainment of the Primary Outcome using EHR, Challenges in the STRIDE... ([read more](#))

### [NISS Academic Meet-Up: “Succeeding as a Statistician in Academia: Things I Wish I Knew at the Start of My Career”](#)

**Event Date:** April 23, 2019 1-2 pm ET

**Event Location:** Online

The first Academic Meet-up organized by NISS focused on getting that first job as a statistician, the second meet-up focused on improving statistical communication skills. Both are very important aspects of growing your experience and potential as an statistician. But what happens now that you have landed that position in a college or university department? ... ([read more](#))

## MAY

### [The 7th Workshop on Biostatistics and Bioinformatics](#)

**Event Date:** May 10 - 12, 2019

**Event Location:** Atlanta, Georgia

Biostatistics and Bioinformatics have been playing a key and important role in statistics and other scientific research fields in recent years. The goal of this workshop is to stimulate research and to foster the interaction of researchers in Biostatistics & Bioinformatics research areas. The... ([read more](#))

### [WuFest: A Conference on Engineering Statistics and Related Topics](#)

**Event Date:** May 10 - 12, 2019

**Event Location:** Atlanta, Georgia

This conference is being held in the honor of Professor C. F. Jeff Wu. C.F. Jeff Wu is an iconic figure in the field of engineering statistics. Wu’s honors include membership in the National Academy of Engineering (2004), Member (Academician) of Academia Sinica (2000), COPSS (Committee of... ([read more](#))

### [The 2nd Midwest Statistical Machine Learning Colloquium](#)

**Event Date:** May 13, 2019

**Event Location:** Ames, Iowa

This is a one-day regional meeting of statisticians, engineers, computer scientists, mathematicians, and practitioners interested in the theory and applications of Statistical Machine Learning. The colloquium is being organized by the Iowa State University Departments of Industrial &... ([read more](#))

### [USCOTS 2019](#)

**Event Date:** May 16 - 18, 2019

**Event Location:** State College, Pennsylvania

CAUSE has held the United States Conference on Teaching Statistics (USCOTS) every other year since 2005. The 2019 USCOTS will be held on Thursday, May 16 – Saturday, May 18, 2019 at the Penn Stater Conference Center in State College, Pennsylvania, with pre-conference workshops on Tuesday, May 14 –... ([read more](#))

## MAY

[Tripods Center Workshop: Structure in the Micro-World](#)

Event Date: May 28 - 31, 2019

Event Location: Columbus, Ohio

Geometry and topology play a key role in describing nature at the microscopic scales. Shape determines the function of proteins in biochemistry, macroscopic properties of materials, and even behaviors of organisms. This workshop will bring together researchers... ([read more](#))

## JUNE

[SRCOS Summer Research Conference](#)

Event Date: June 2 - 5, 2019

Event Location: Carrollton, Kentucky

The various functions of SRCOS change over time, depending upon the needs and concerns of the statistics community. At present, the Council is involved in discussions of problems concerning teaching, consulting, research, ethics, courts of law, curricula, and student recruitment. ([read more](#))

[MBI Bayesian Causal Inference Workshop](#)

Event Date: June 2 - 4, 2019

Event Location: Columbus, Ohio

Description of this Workshop Causality lies at the heart of many scientific research endeavors, including Statistics, Biostatistics, Epidemiology, Economics, Computer Science, Data Science, Sociology, Political Science, etc. In recent years, the use of Bayesian methods in causal inference has drawn... ([read more](#))

[The 36th Quality and Productivity Research Conference](#)

Event Date: June 10 - 13, 2019

Event Location: Washington, DC

This conference is being hosted by American University in Washington D.C. on June 10-13, 2019. Researchers from across academia, industry, and government are invited to participate in the conference, exchange ideas, organize sessions, and present their research related to the spirit of QPRC and this... ([read more](#))

## JULY

[Workshop on Climate and Weather Extremes](#)

Event Date: July 22-24, 2019

Event Location: Berkeley, California

The previous Workshop on Climate and Weather Extremes was held in State College, PA, on October 23-25, 2016. The 2019 workshop will be similar in that it will serve two complementary purposes. The first is to introduce graduate students, as well as others wishing to enter into the area of extreme... Tuesday, May 14 -... ([read more](#))

Check the [NISS Events webpage](#)  
for up to date event info!

**AFFILIATES! SEND YOUR JOB ANNOUNCEMENTS TO NISS!**

*A link to the Job Announcements page can be found at the bottom of every page of the NISS website! It can't hurt to share your announcement with other organizations associated with NISS or other visitors to our website.*

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