



**AMERICAN STATISTICAL ASSOCIATION  
HOUSTON AREA CHAPTER  
NEWSLETTER  
January 14, 2014**



**\*\*\*Tuesday, January 21, 2014\*\*\***

**Heidi Spratt, PhD**

**Associate Professor  
UTMB Bioinformatics Program  
The University of Texas Medical Branch**

**Development of a Metabolic Biomarker Panel for the Early Diagnosis  
of Hepatocellular Carcinoma in Hepatitis C Infected Populations**

Hepatocellular carcinoma (HCC) is the fifth most common cause of cancer and also one of the deadliest. It has recently shown an upward trend in the number of diagnoses per year. One of the precursors to HCC infection is the Hepatitis C virus (HCV). According to the NIH, HCV is one of the main causes of chronic liver disease in the United States. About one-third of HCV patients will develop cirrhosis of the liver. Of those, about 1-2% annually will develop HCC. Ultimately, 80% of HCC cases are developed from liver cirrhosis. Hepatitis C causes an estimated ten to twelve thousand deaths each year in the U.S. alone; the virus varies greatly in both its course and disease outcome. Many patients infected with HCV are asymptomatic and have some degree of chronic hepatitis, often associated with some degree of fibrosis of the liver. The prognosis for patients with early-stage fibrosis is frequently good. At the other end of the spectrum are patients with severe HCV who experience all the classic symptoms of the disease, and who ultimately develop liver cirrhosis. The prognosis for such patients is slim and mortality is usually the result. Little is known about how HCV infection progresses to HCC in patients with advanced fibrosis, so the main goal of this project is to discover biomarkers for the detection of early stage liver cancer. Patients with HCV and HCC co-infection will be compared to HCV only infected patients to develop a biomarker panel for the detection of early stage liver cancer. For the development of such biomarkers, nuclear magnetic resonance metabolomics experiments will be conducted on urine samples from infected patients. Machine learning techniques such as multivariate adaptive regression splines will be used to create a biomarker panel that has the ability to predict HCC infection.

**HACASA meetings are open to the public! Please pass on copies of this announcement to colleagues and friends and post on appropriate bulletin boards.**

**WHEN and WHERE:**

**\*Tuesday, January 21, 2014\* at Duncan Hall, Rice University  
5:30pm - Social Time with snacks and Drinks: Room 1049  
6:30pm – Talk (Room 1049)**



Duncan Hall (also known as the Computational Engineering Building) is on the northeast side of the Rice University Campus. For parking information and directions please refer to the Rice parking websites, the following have been found helpful:

<http://cohesion.rice.edu/campusservices/parktrans/parking/visitors.cfm>  
<http://www.rice.edu/maps/maps.html>

Thank you to **Rice University** and the **Department of Statistics at Rice University** for their generous support of HACASA by allowing us the use of their facilities for our gatherings, **and sponsoring FREE PARKING. See an officer for a voucher at the meeting.**

**To help us cover cost of our weekly snacks, we are asking for small donations (\$5 or more). Also, please RSVP so we can bring enough snacks and drinks. Please RSVP to Margaret Kuzynski at HoustonASA@gmail.com.**

### **Introducing the officers!**

The officers for the 2013-2014 academic year are:

President: Becky Slack ([RSSlack@mdanderson.org](mailto:RSSlack@mdanderson.org))

President Elect and Science Fair Coordinator: Erin Hodgess ([HodgessE@uhd.edu](mailto:HodgessE@uhd.edu))

Past President: Hao Liu ([haol@bcm.edu](mailto:haol@bcm.edu))

Secretary: Michael Swartz ([Michael.D.Swartz@uth.tmc.edu](mailto:Michael.D.Swartz@uth.tmc.edu))

Treasurer: Margaret Kuczynski ([margaret.kuczynski@gmail.com](mailto:margaret.kuczynski@gmail.com))

ASA Chapter Representative: Heidi Spratt ([hespratt@utmb.edu](mailto:hespratt@utmb.edu))

### **Reminder!**

Membership dues: Students: \$1, and non-students: \$8.

### **Welcome New Members!**

Please take a moment at this month's meeting to welcome new members!



### **Mark Your Calendars!**

This year we are still meeting every month. In the Fall Semester (September through November) we will meet on the 2<sup>nd</sup> Tuesday. Starting in December and through the Spring, (January through May), we will move to the 3<sup>rd</sup> **Tuesday** of the month. The official dates and locations are below (all rooms are located in Duncan Hall on Rice University Campus):

**Tuesday, September 10, 2013 (DH3092)**

**Tuesday, October 8, 2013 (DH1049)**

**Tuesday, November 12, 2013 (DH1049)**

**Tuesday, December 17, 2013 (DH1049) Holiday Potluck**

**Tuesday, January 21, 2014 (DH1049)**

**Tuesday, February 18, 2014 (DH1049)**

**Tuesday, March 18, 2014 (DH1049)**

**Tuesday, April 15, 2014 (DH1049)**

**Tuesday, May 20, 2014 (DH1049) (Science Fair Winners)**

### **Let us know what you think!**

Send comments to Michael Swartz at [HoustonASA@gmail.com](mailto:HoustonASA@gmail.com) with the subject COMMENTS. Or Send comments / additions / corrections concerning the HACASA newsletter to Michael Swartz at [Michael.D.Swartz@uth.tmc.edu](mailto:Michael.D.Swartz@uth.tmc.edu)

### **Announcements**

## Celebrate 175 years of ASA!

We will be recording a greeting video from our chapter to the ASA regarding the 175<sup>th</sup> anniversary of the ASA. Participation is optional, and promises to be fun. Come to the meeting to find more details.  
From ASA:

"Get involved with ASA's 175<sup>th</sup> Anniversary celebration and upload a video greeting from your chapter. See the video created by the ASA staff and instructions on submitting your own video here:  
<http://www.amstat.org/asa175/sendagreeting.cfm>"

## Looking for speakers for Spring!

Hi All, Erin is looking for speaker volunteers for spring. If you want to give a Talk at HACASA, please contact Erin Hodgess at [HodgessE@uhd.edu](mailto:HodgessE@uhd.edu)

## HACASA Website MOVED!

Our new website is launched! Please visit it for more information and announcements: is <http://community.amstat.org/Houston/Home> for comments and suggestions regarding content, please contact our website coordinator\maintainer: Margaret Kuczynski ([margaret.kuczynski@gmail.com](mailto:margaret.kuczynski@gmail.com))

## SPECIAL ANNOUNCEMENT: Statistics2013 Photo Contest Deadline Extended!

In response to the surging number of submissions in the days leading up to the original deadline, we have extended the submission deadline for the [Statistics2013 Photo Contest](#) to December 1.

To refresh your memory, this statistics-oriented photo competition is for secondary-school students (grades/years 7-12) around the world.

The theme for the contest is: "How statistics advances the wellbeing of people in your country or our global society". Contest organizers are seeking high-quality photos that effectively illustrate the impact of statistics.

The Statistics2013 Photo Contest is organized by continents (excluding Antarctica) and will award cash prizes to the winner of the top photo and the winners on six continents.

The lucky contestant whose photo is selected as the top overall photo from among all images submitted will be awarded a prize of \$800 (U.S. dollars)! Additionally, the top three place-winners on each continent will be awarded cash prizes (U.S. dollars) as follows:

- First: \$350
- Second: \$200
- Third: \$150

The contest winners will be announced on or about December 16. [Click here for contest criteria.](#)

Please pass on the news about the Statistics2013 Photo Contest to teachers of students in grades/years 7-12 at secondary schools in your area. [You can copy this promotional article](#) and email it to the teachers and schools.

*For more information, email Jeff Myers at [Jeffrey@amstat.org](mailto:Jeffrey@amstat.org).*

## JOB POSTINGS

## **Statistician position at Southwest Research Institute**

Southwest Research Institute currently has an opening for a Statistician in its Fuels and Lubricants Division. Would it be possible for you to send notification of our ad posted at <http://www.amstat.org/ads/ResultsDetail.cfm?AdID=6317>. Southwest Research Institute (SwRI®) is an independent, nonprofit, applied engineering and physical sciences research and development organization. A partial listing of research areas includes antennas and propagation; automation, robotics, and intelligent systems; avionics, chemistry and chemical engineering; corrosion and electrochemistry; emissions research; engineering mechanics; fire technology; and fuels and lubricants. For more information about SwRI go to [www.swri.org](http://www.swri.org) and to view current job opportunities go to [www.swri.jobs](http://www.swri.jobs). <http://www.youtube.com/user/SwRItv>

## **Associate/Full Professor of Biostatistics/Clinical Trials Position at University of Texas School of Public Health (Tenure Track):**

The University of Texas School of Public Health (UTSPH) seeks a **senior** biostatistician to take a leadership role in the Coordinating Center for Clinical Trials. This is a state funded tenure-track faculty position at the Associate or Full Professor level in the Division of Biostatistics at The University of Texas School of Public Health, Houston campus in the Texas Medical Center. For more information see job postings on the HACASA website.

## **Assistant Professor of Biostatistics (Tenure Track), Department of Preventive Medicine and Community Health University of Texas Medical Branch at Galveston:**

The University of Texas Medical Branch at Galveston (UTMB Health) is recruiting a tenure track Assistant Professor (Biostatistics) to join the faculty in the Department of Preventive Medicine and Community Health (PMCH). The department administers expanding clinical sciences, population health sciences, rehabilitation sciences and MPH programs, which are linked to the preventive medicine residency programs. Faculty members are active in clinical translational sciences and population health sciences research. Research strengths of PMCH faculty include aging, Hispanic health, cancer and comparative effectiveness/patient center outcome research (CER/PCOR). The department is exceptionally strong in providing collaborative expertise throughout the university. More information can be found at <http://pmch.utmb.edu/> or the Job Postings on the HACASA website.

## **Assistant Professor at the University of Texas at Austin:**

The Department of Statistics and Data Sciences at The University of Texas at Austin invites applications for a faculty appointment at the level of Assistant Professor to begin in Fall 2014.

The successful candidate will be expected to teach undergraduate and graduate statistics courses, develop an externally funded research program, supervise graduate students, collaborate with other faculty, and be involved in service to the university and the profession. For more information see [http://facultyjobs.utexas.edu/potential/view\\_job.cfm?jobID=2039](http://facultyjobs.utexas.edu/potential/view_job.cfm?jobID=2039) or the Job Postings on the HACASA website.

## **Statistician wanted for industry:**

United Global Solutions is currently in search of a Statistician for a Houston client to analyze and interpret data from various sources and provide expert opinions. This is an opportunity to help build a Statistics Department from the ground up, where you will be given the chance to be in a leadership role from the very beginning!

Requirements:

- Masters degree or PhD in Statistics
- Outgoing personality

- 3-7 years of experience
- Experience compiling reports, tables, and charts based on statistical methods

Benefits:

Our client offers outstanding benefits including, but not limited to: Medical, Dental, Vision, Life, 401(k), FSA, Holidays, PTO, Training and Mentoring programs.

Contact Adam Kaye, Executive Recruiter, United Global Solutions LLC, 832-294-2949,  
[adam.kaye@ugsmail.com](mailto:adam.kaye@ugsmail.com)

### **Opening at the Dan L. Duncan Cancer Center, Houston TX.**

The Dan L Duncan Cancer Center Division of Biostatistics at Baylor College of Medicine (Houston) collaborates with investigators engaged in the molecular profiling of cancers at various levels of complexity (including somatic mutation, mRNA, microRNA, DNA copy number, and protein), with the overall goal of better understanding cancer biology and improving cancer diagnosis and treatment. For this position, we are looking for someone to assist in statistical analysis of high throughput molecular data, including integration of datasets from disparate sources. BS in statistics, MIS, or related field required. For more information contact: Dr. Chad Creighton <[creighto@bcm.edu](mailto:creighto@bcm.edu)>. More information on the HACASA Website.

### **Opening at University of Texas El Paso**

The Department of Mathematical Sciences at The University of Texas at El Paso invites applications for a tenure-track position at the Assistant/Associate Professor level starting fall 2013. The Department is seeking someone who will develop an independent research program in statistics and teach undergraduate and graduate courses in statistics. Opportunities exist to participate in consulting and collaborative research through the Statistical Consulting Laboratory [www.statlab.utep.edu](http://www.statlab.utep.edu). More information on the HACASA website.