Report from Statistical Consulting Services
January 2015 - February 2015

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Summary

This is a brief report on the full consulting project services and walk-in services provided by Statistical Consulting Services (SCS) during the period of January 2015 to present. A list of faculty and students who have participated in SCS is provided. A total of **11** new full consulting projects have been received, also **5** full consulting projects from last semester are still active, and we have provided our walk-in consulting services to **23** clients so far. The services provided by SCS from this period are summarized in this report.

1 List of Student Consultants

During the period from January 2015 to present, the following students provided consulting services to SCS.

Name	**Semester**	# of full consulting projects	# of walk-in service clients
Fan Zhang	Spring 2015	1	1
Hao Li	Spring 2015	1	1
Yeongjin Gwon	Spring 2015	2	0
Paul McLaughlin	Spring 2015	1	1
Ved Deshpande	Spring 2015	1	1
Dooti Roy	Spring 2015	6*	12
Brian Bader	Spring 2015	3*	1
Hee-Koung Joeng	Spring 2015	1	6
Total	Spring 2015	16	23

Note that 5 projects (Dooti (4) and Brian (1)) from fall 2014 are currently active.

2 SCS Full Consulting Projects Provided During Spring 2015

Past and present services provided by SCS:

SCS14016 Client: Elizabeth Eagan, Ph.D. student. Advisor: Tammie Spaulding. Department of Speech, Language, and Hearing Sciences. Consultant: Dooti Roy. Supervisor: Ming-Hui Chen. Topic: *Determining which factors predict a successful transition into 9th grade for student with learning disabilities.* Date received: 04/30/2014. The initial meeting held: 2:00pm-3:00pm, Friday, 05/02/2014. Status: Active.

SCS14019 Client: Jason Seacat, Faculty. Department of Psychology, Western New England University. Consultant: Dooti Roy. Supervisor: Ming-Hui Chen. Topic: *Conducting Bayesian analysis to determine probabilities of experiencing four types of weight-related stigma on the basis of individuals' body mass index (BMI).* Date received: 08/21/2014. The initial meeting held: 6:00pm-7:00pm, Wednesday, 08/20/2014. (Note that the meeting was held before the client submitted a formal consulting application.) Status: Active.

SCS14024 Client: Vanessa Harwood, Ph.D. student. Advisor: Tammie Spaulding. Department of Speech, Language, and Hearing Sciences. Consultant: Dooti Roy. Supervisor: Ming-Hui Chen. Topic: *Determining the relationships among of electrophysiological markers of speech stimuli, a nonword repetition task, and basic language skills in young children.* Date received: 09/19/2014. The initial meeting held: 11:00am-12:00pm, Wednesday, 10/08/2014. Status: Active.

SCS14025 Client: Tammie Spaulding, Faculty, Department of Speech, Language, and Hearing Sciences. Consultant: Dooti Roy. Supervisor: Ming-Hui Chen. Topic: *Meta-analysis of the nonverbal IQ between children with a disorder and typically developing children.* This project is a continuation of SCS14011. Date received: 10/24/2014. The initial meeting held: 1:30pm-2:00pm, Wednesday, 10/29/2014. Status: Active.

SCS14027 Client: Steven Hoffler, (Ph.D.) graduate student (Smith College). **School for Social Work**. Consultant: Brian Bader. Supervisor: Ming-Hui Chen. Topic: *design of survey and analysis.* Date received: 12/06/2014. The initial meeting held: 3:30pm - 4:30pm, Wednesday, 12/10/2014. Status: Active.

SCS15001 Client: Christin Munsch, faculty. **Department of Sociology**. Consultant: Hee-Koung Joeng. Supervisor: Ming-Hui Chen. Topic: *Interpreting and testing the interactions.* Date received: 01/15/2015. The initial meeting held: 5:00pm - 6:00pm, Thursday, 01/22/2015. Status: Complete.

SCS15002 Client: Christine Kirchhoff, faculty. **Civil and Environmental Engineering Department**. Consultant: Dooti Roy. Supervisor: Ming-Hui Chen. Topic: *Regression model with repeated measures.* Date received: 01/28/2015. The initial meeting held: 5:00pm - 6:00pm, Thursday, 01/29/2015. Status: Active.

SCS15003 Client: Craig Coleman, faculty. **Department of Pharmacy Practice**. Consultant: Brian Bader. Supervisor: Ming-Hui Chen. Topic: *Stiching and merging data sets using SAS.* Date received: 01/30/2015. The initial meeting held: 1:30pm - 2:00pm, Wednesday, 02/11/2015. Status: Active.

SCS15004 Client: Garrett Ash, (Ph.D.) graduate student. Major Advisor: Linda Pescatello. **Department of Kinesiology**. Consultant: Ved Deshpande. Supervisor: Ming-Hui Chen. Topic: *Sample size calculation for a repeated measures design.* Date received: 02/04/2015. The initial meeting held: 5:20pm - 6:20pm, Wednesday, 02/04/2015. Status: Active.

SCS15005 Client: Adam Zweifach, faculty. **Department of Molecular and Cell Biology**. Consultant: Paul McLaughlin. Supervisor: Ming-Hui Chen. Topic: *Sample size calculation.* Date received: 02/10/2015. The initial meeting held: 2:00pm - 2:55pm, Monday, 12/16/2015. Status: Active.

SCS15006 Client: Amy Mobley, faculty. **Department of Nutritional Sciences**. Consultant: Dooti Roy. Supervisor: Ming-Hui Chen. Topic: *Structural Equation Modeling (SEM) using statistical softwares.* Date received: 02/10/2015. The initial meeting held: 4:00pm - 5:00pm, Monday, 02/16/2015. Status: Active.

SCS15007 Client: Yin Wu, (Ph.D.) graduate student. Major Advisor: Linda Pescatello. **Department of Kinesiology**. Consultant: Yeongjin Gwon. Supervisor: Ming-Hui Chen. Topic: *Sample size calculation.* Date received: 02/10/2015. The initial meeting held: 2:00pm - 3:00pm, Thursday, 02/19/2015. Status: Active.

SCS15008 Client: Clyde Cady, faculty. **Department of Chemistry**. Consultant: Hao Li. Supervisor: Ming-Hui Chen. Topic: *Regression modeling and Clustering analysis.* Date received: 02/11/2015. The initial meeting held: 1:00pm - 2:00pm, Friday, 02/27/2015. Status: Active.

SCS15009 Client: Bouchillon Grant, (Ph.D.) graduate student. Major Advisor: Leslie Shor. **Chemical and Biomolecular Engineering Department**. Consultant: Fan Zhang. Supervisor: Ming-Hui Chen. Topic: *Test for independence.* Date received: 02/11/2015. The initial meeting held: 1:00pm-2:00pm, Wednesday, 02/18/2015. Status: Active.

SCS15010 Client: Jung Nyo Kim, Posdoc. **Department of Psychology**. Consultant: Yeongjin Gwon. Supervisor: Ming-Hui Chen. Topic: *Two way repeated measures ANOVA with unbalanced data to investigate effects of harmonic expectations on the processing of melodies.* Date received: 02/24/2015. The initial meeting held: pending. Status: Active.

SCS15011 Client: Mishra Neha, (Ph.D.) graduate student. Major Advisor: Joan A. Smyth. **Department of Pathobiology and Veterinary Science**. Consultant: Brian Bader. Supervisor: Ming-Hui Chen. Topic: *Clustering analysis to identify proteins.* Date received: 02/24/2015. The initial meeting held: pending. Status: Active.

3 SCS Walk-in Services

3.1 Service Hours (February 2, 2015 - May 1, Spring 2015)

Day	Time	Consultant name
Monday	9:00am - 12:00pm	Hao Li
	12:00pm - 3:00pm	Yeongjin Gwon
	3:00pm - 5:00pm	Hee-Koung Joeng
Tuesday	3:30pm - 6:30pm	Dooti Roy
Wednesday	9:00am - 12:00pm	Ved Deshpande
Thursday	3:30pm - 6:30pm	Brian Bader
Friday	9:00am - 12:00pm	Paul McLaughlin
	12:00pm - 2:00pm	Fan Zhang
	2:00pm - 3:00pm	Hee-Koung Joeng

3.2 Walk-in services provided by SCS

SCSWS15001 Client: Masoud Mehrraoufi, (Ph.D.) graduate student . Major Advisor: Arash E. Zaghi. **Civil and Environmental Engineering Department**. Consultant: Dooti Roy. Topic: *Interpretation ANOVA, with interaction using MATLAB*. Date: 02/03/2015.

SCSWS15002 Client: Yankle Allyson, (Ph.D.) graduate student. Major Advisor: Virginia Hettinger. **Department of Political Science**. Consultant: Dooti Roy. Topic: *Clustering analysis and factor analysis using Stata*. Date: 02/03/2015.

SCSWS15003 Client: Mark Peczuh, faculty. **Department of Chemistry**. Consultant: Dooti Roy. Topic: *Sample size calculation for working on a grant proposal*. Date: 02/03/2015.

SCSWS15004 Client: Zhang Jue, (M.S.) graduate student. Major Advisor: Valerie Duffy. **Department of Allied Health Sciences**. Consultant: Dooti Roy. Topic: *ANOVA, ANACOVA, and Chi-square non parametric tests with SAS*. Date: 02/03/2015.

SCSWS15005 Client: David Des Armier, (Ph.D.) graduate student. Major Advisor: Doris Bolliger (university of Wyoming). **Center for Excellence in Teaching and Learning**. Consultant: Ved Deshpande. Topic: *Multiple Imputation*. Date: 02/04/2015.

SCSWS15006 Client: Athena Tao, undergraduate student. Major Advisor: Marcy Balunas. **School of Pharmacy**. Consultant: Brian Bader. Topic: *Two-sample test for proportions*. Time: 3:40pm - 4:30pm, 02/05/2015.

SCSWS15007 Client: Jung Nyo Kim, Posdoc. **Department of Psychology**. Consultant: Hee-Koung Joeng. Topic: *Two factors analysis with repeated measures*. Time: 2:07pm - 2:44pm, 02/06/2015.

SCSWS15008 Client: Clyde Cady, faculty. **Department of Chemistry**. Consultant: Hao Li. Topic: *teaching data grant proposal*. Time: 11:40pm - 12:00pm, 02/09/2015.

SCSWS15009 Client: Amna Al Abri, (Ph.D.) graduate student. Major Advisor: Leslie Snyder. **Department of Communication**. Consultant: Dooti Roy. Topic: *SEM with Mplus*. Time: 3:35pm - 3:45pm, 02/10/2015.

SCSWS15010 Client: Manya Jyotishi, (Ph.D.) graduate student. Major Advisor: Letitia Naigles. **Department of Psychology**. Consultant: Dooti Roy. Topic: *Repeated measure ANOVA, sample size, and power calculation*. Date: 02/10/2015.

SCSWS15011 Client: Elif Ikizer, (Ph.D.) graduate student. Major Advisor: Nairan Ramirez-Esparza. **Department of Psychology**. Consultant: Dooti Roy. Topic: *SEM with Mplus*. Date: 02/10/2015.

SCSWS15012 Client: Lauren Bryant, (Ph.D.) graduate student. Major Advisor: Kimberly Cuevas. **Department of Psychology**. Consultant: Dooti Roy. Topic: *Repeated measure ANCOVA in SPSS*. Date: 02/10/2015.

SCSWS15013 Client: Yin Wu, (Ph.D.) graduate student. Major Advisor: Linda Pescatello. **Department of Kinesiology**. Consultant: Dooti Roy. Topic: *Sample size calculation*. Date: 02/10/2015.

SCSWS15014 Client: Gettens Katelyn, (Ph.D.) graduate student. Major Advisor: Amy Gorin. **Department of Psychology**. Consultant: Fan Zhang. Topic: *Test of skewed data Mann-Whitney U Test using SPSS*. Time: 1:35pm - 1:55pm, 02/13/2015.

SCSWS15015 Client: Gettens Katelyn, (Ph.D.) graduate student. Major Advisor: Amy Gorin. **Department of Psychology**. Consultant: Hee-Koung Joeng. Topic: *Testing mediator variables using SPSS*. Time: 2:00pm - 2:50pm, 02/13/2015.

SCSWS15016 Client: Jung Nyo Kim, Posdoc. **Department of Psychology**. Consultant: Hee-Koung Joeng. Topic: *Two factors analysis with repeated measures with SAS*. Time: 3:00pm - 3:30pm, 02/16/2015.

SCSWS15017 Client: Amna Al Abri, (Ph.D.) graduate student. Major Advisor: Leslie Snyder. **Department of Communication**. Consultant: Hee-Koung Joeng. Topic: *SEM with Mplus and debugging code*. Time: 3:30pm - 4:43pm, 02/16/2015.

SCSWS15018 Client: Jyotishi Manya, (Ph.D.) graduate student. Major Advisor: Letitia Naigles. **Department of Psychology**. Consultant: Dooti Roy. Topic: *Mixed model analysis in SPSS*. Time: 4:19pm - 5:00pm, 02/17/2015.

SCSWS15019 Client: Kimberly Davies-Schrils, (Ph.D.) graduate student. Major Advisor: Janet Barnes-Farrell. **Department of Psychology**. Consultant: Dooti Roy. Topic: *Modeling and identifying the variables for each level*. Time: 5:31pm - 6:44pm, 02/17/2015.

SCSWS15020 Client: Elif Ikizer, (Ph.D.) graduate student. Major Advisor: Nairan Ramirez-Esparza. **Department of Psychology**. Consultant: Paul McLaughlin. Topic: *Estimating interaction terms using SPSS*. Time: 10:02am - 10:48am, 02/20/2015.

SCSWS15021 Client: Blanca Rincon, predoctoral fellow. Major Advisor: Mark Overmeyer-Velasquez. **El Instituto**. Consultant: Hee-Koung Joeng. Topic: *Categorical data analysis*. Time: 2:24pm - 3:14pm, 02/20/2015.

SCSWS15022 Client: Amna Al Abri, (Ph.D.) graduate student. Major Advisor: Leslie Snyder. **Department of Communication**. Consultant: Hee-Koung Joeng. Topic: *SEM with Mplus*. Time: 4:00pm - 4:20pm, 02/23/2015.

SCSWS15023 Client: Mishra Neha, (Ph.D.) graduate student. Major Advisor: Joan A. Smyth. **Department of Pathobiology and Veterinary Science**. Consultant: Dooti Roy. Supervisor: Ming-Hui Chen. Topic: *K-Mean clustering, ANOVA, B-H correction p values, and pooled sd*. Time: 3:30pm - 4:45pm, 02/24/2015.

4 Publicity Campaign and Advertisement Materials of Statistical Consulting Services

The SCS team actively participated in advertising the newly offered walk-in services. Two new flyers were designed by Brian Bader and Dooti Roy. The flyers were sent out to the Office of the Vice President for Research (OVPR), the CLAS Dean Office, various schools and departments at Storrs campus as well as UCHC on Friday, January 30, 2015.

Hee-Koung Joung and Hao Li took the responsibility of posting the flyers at various university locations at Storrs campus. The Office of the Vice President for Research (OVPR) and the CLAS Dean Office also helped circulate the flyers to students and faculty at UCONN. Thanks Megan Petsa for posting about SCS walk-in services in UCONN Daily Digest on February 2, 3 and 4. Dooti contacted Christine Buckley, Director of Communications, UCONN and as she promised, the new SCS service was announced in the February Inside CLAS newsletter (Figure 4). Dooti designed the walk-in service form which is attached below. Dooti set up drop box accounts for all the consultants where all the walk-in projects are stored and can be viewed/edited by the SCS group. Dooti also designed the SCS consultant checklist to guide the junior consultants through the initial process. Ved Deshpande and Ellis Shaffer worked together to improve SCS webpage and include a new walk-in services section. All the SCS consultants reached out through their friends and connections to publicize the service offering. SCS congratulates all its members on a successful and effective campaign for their hard work!

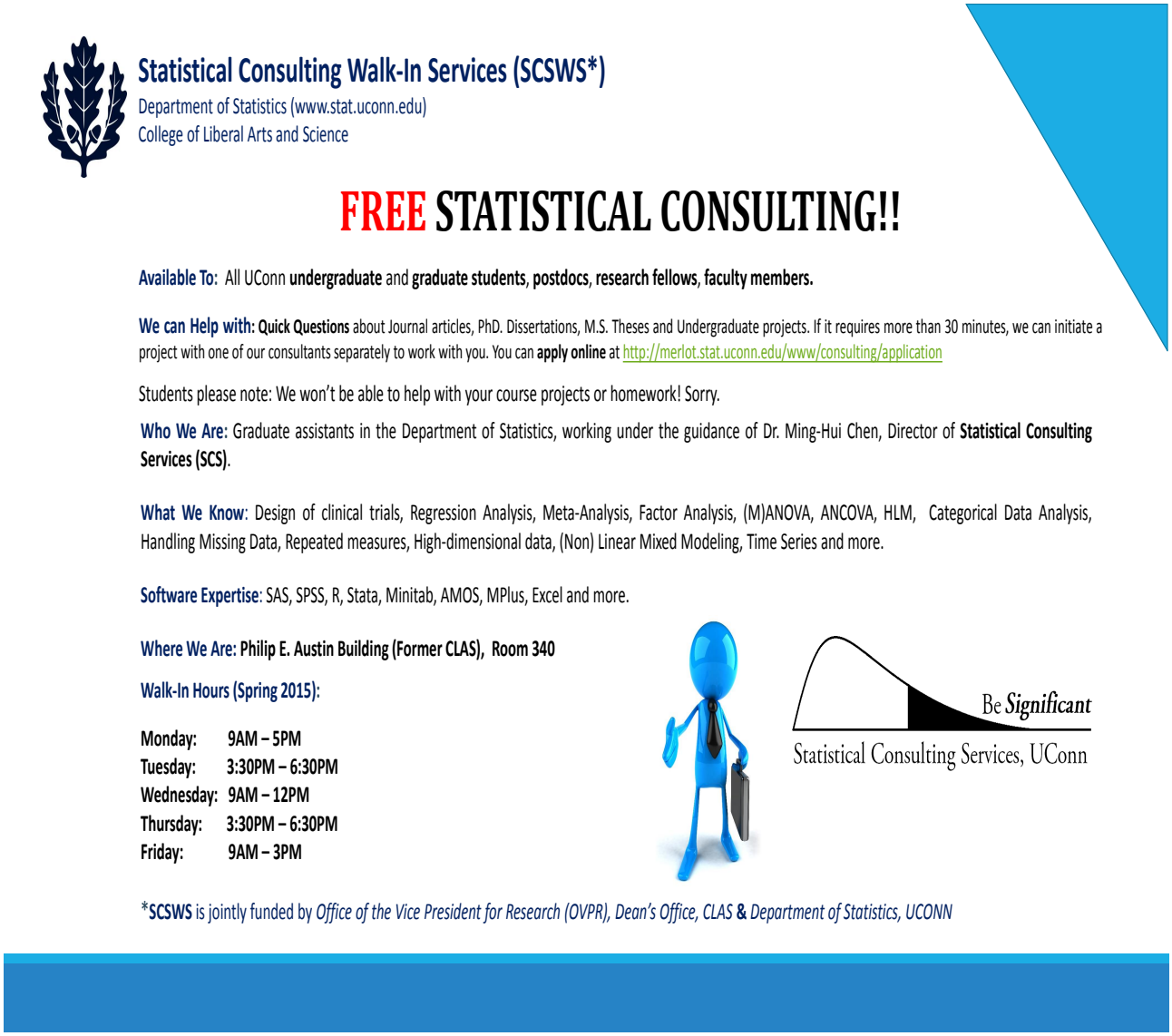


Figure 1: Flyer for Spring 2015 Walk-in Services.

Statistical Consulting Services*

Department of Statistics (www.stat.uconn.edu)
College of Liberal Arts and Science

Statistical Consulting Services (SCS) provides statistical support for all stages of the research process, including study design, data analysis and visualization, and reporting of results.

Who We Are: SCS consists of a team of graduate assistants in the Department of Statistics, working under the guidance of Dr. Ming-Hui Chen, Director of SCS.

What We Know: Design of clinical trials, Regression Analysis, Meta-Analysis, Factor Analysis, (M)ANOVA, ANCOVA, HLM, Categorical Data Analysis, Handling Missing Data, Repeated measures, High-dimensional data, (Non) Linear Mixed Modeling, Time Series and more.

Software Expertise: SAS, SPSS, R, Stata, Minitab, AMOS, MPlus, Excel and more.

What We Do: Journal Articles, Ph.D. Dissertations, M.S. Theses, Undergraduate projects (except course projects), Industrial Projects, Grant Proposals, etc.

Available To: All UConn **undergraduate** and **graduate students**, **faculty members**, as well as **non-university clients.**

Where We Are: **Philip E. Austin Building** (Former CLAS), **Room 340**

HOW TO GET STARTED:

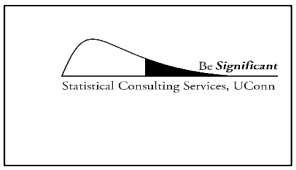
1) **Apply online** at http://merlot.stat.uconn.edu/www/consulting/application
2) Alternatively, **walk-in** for a consultation (free services).

WALK-IN HOURS (SPRING 2015):

Monday:	**9AM – 5PM**
Tuesday:	**3:30PM – 6:30PM**
Wednesday:	**9AM – 12PM**
Thursday:	**3:30PM – 6:30PM**
Friday:	**9AM – 3PM**

*__SCS__ is jointly funded by *Office of the Vice President for Research (OVPR), Dean's Office, CLAS* **&** *Department of Statistics, UCONN*

Figure 2: Flyer for Spring 2015 All Consulting Services.



Statistical Consulting Walk-in Service Form,

Department of Statistics, University of Connecticut

Spring-2015

For Office Use Only:

Date Serviced: Click here to enter a date.

Consultant: Time: Start 00:00 am - End 00:00 pm

For Applicant:

Name: (Last/First):

Department:

Telephone: Office:

E-mail:

How did you hear about us? Choose an item.

Applicant is: Choose an item.

(Specify Other):

If Student, Major Advisor:

Project Title:

Stage of Research: Choose an item.

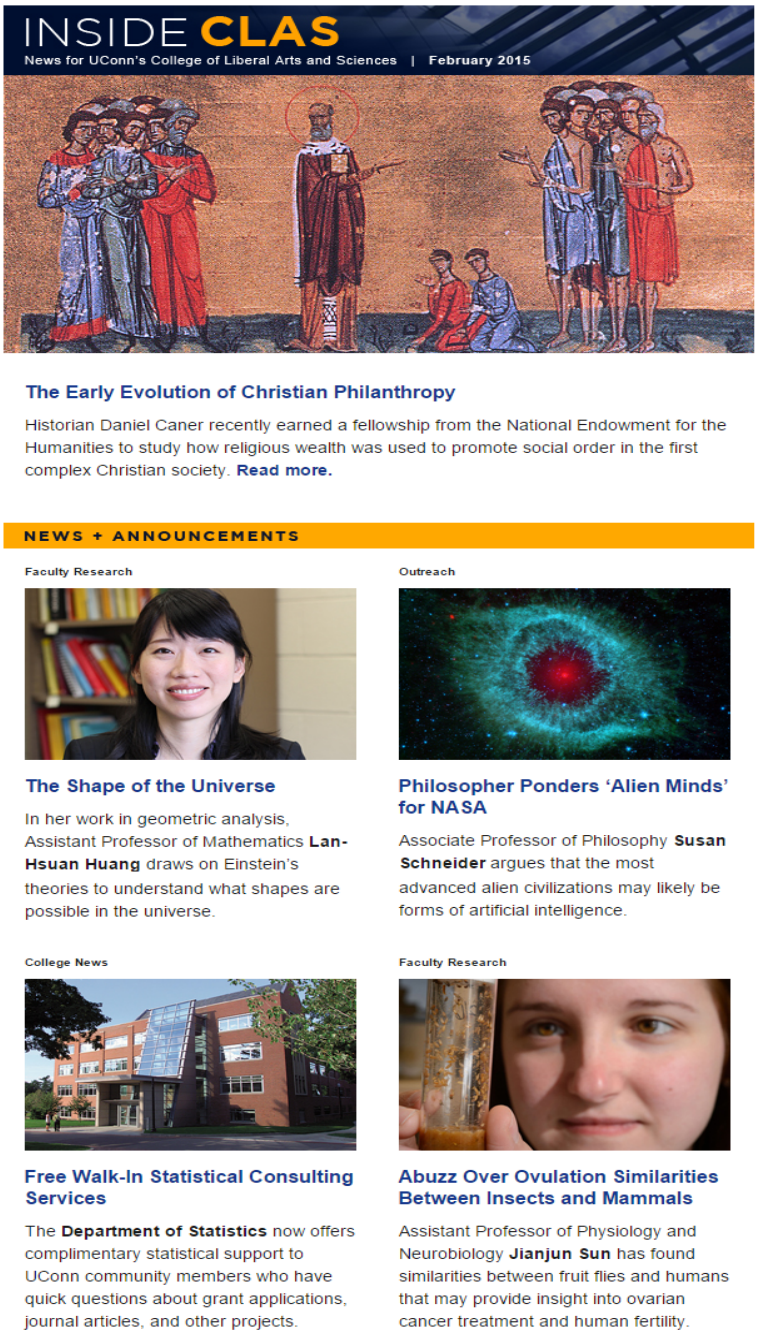
If design state is complete, was a statistician consulted for design? Choose an item.

If so, give name(s):

The results of this research will probably be published as: Choose an item.

Brief Summary of this service:

Figure 3: SCS Walk-in Service Form for Spring 2015.



INSIDE CLAS

News for UConn's College of Liberal Arts and Sciences | February 2015

The Early Evolution of Christian Philanthropy

Historian Daniel Caner recently earned a fellowship from the National Endowment for the Humanities to study how religious wealth was used to promote social order in the first complex Christian society. **Read more.**

NEWS + ANNOUNCEMENTS

Faculty Research

The Shape of the Universe

In her work in geometric analysis, Assistant Professor of Mathematics **Lan-Hsuan Huang** draws on Einstein's theories to understand what shapes are possible in the universe.

Outreach

Philosopher Ponders 'Alien Minds' for NASA

Associate Professor of Philosophy **Susan Schneider** argues that the most advanced alien civilizations may likely be forms of artificial intelligence.

College News

Free Walk-In Statistical Consulting Services

The **Department of Statistics** now offers complimentary statistical support to UConn community members who have quick questions about grant applications, journal articles, and other projects.

Faculty Research

Abuzz Over Ovulation Similarities Between Insects and Mammals

Assistant Professor of Physiology and Neurobiology **Jianjun Sun** has found similarities between fruit flies and humans that may provide insight into ovarian cancer treatment and human fertility.

Figure 4: SCS Walk-in Service Form for Spring 2015.