Professor Ranjini Grove:

Happy winter to everyone and a thousand apologies for not getting this out sooner! I imagine classes are in full swing for everyone. They are for me! You may have heard our current juniors complaining about all the work I am making them do in STAT 340/341...well, it’s all true unfortunately! New majors -- I would highly recommend becoming familiar with R if you are not already, as one of the changes to the curriculum is a slightly more expanded role of computing and simulations.

Speaking of new majors, the new student orientation at the end of fall quarter was a blast! I can honestly say that the energy in the room was palpably different than in any previous year. I enjoyed meeting many of you and especially seeing the enthusiasm with which you connected with each other. I hope you enjoy the photos I am sharing of the event. Many thanks to Mee Ling and Kristine for helping to organize the event and also to Emily Flanagan and Hannah Director for sharing words of advice.

Looking ahead to spring and summer, there are two big events I want to bring to your attention. The first is DataFest - a data analysis challenge sponsored by the American Statistical Association. The Department of Statistics will be hosting this event for the second year in a row. Please pencil in the date: April 3-5. This weekend long event is a great opportunity for you to work on a real problem, learn new skills, and also meet data professionals from the area who have agreed to serve as judges/mentors. The webpage for DataFest 2019 is still online and you can check it out to get an idea of what DataFest looks like. Please stay tuned for updates on how you can sign up to participate in DataFest 2020.

DataFest sign up coming soon!

The second is graduation. As in years past, we would like to be able to count on our undergraduate volunteers for help with various aspects of the programming. Current juniors: I am especially hoping that many of you will contribute your time generously.

In this issue, I have decided to place a spotlight on StatCom — a student-run statistical consulting service. A big thank you to Max Schneider, statistics graduate student, for coordinating this effort and for putting together a wonderful read. You will hear from many of our majors who participated, and I want to encourage more of you to consider doing so in the future.

As always, you will also hear from a couple of your contemporaries. Jenna Gordon and Taylor Merry share their experience in the real world of statistics/academics. Please feel free to reach out to them for more information if you have any questions or comments for them.

Happy mid-winter, everyone!

From the SPA Desk, Emily Flanagan:

Welcome to Winter Quarter! I hope you all had a relaxing break and are looking forward to longer daylight hours as we enter the new year. On behalf of SPA, I’d like to sincerely thank all the faculty who wrote letters of recommendation during the grad app season. Remember to ask for your letters early! I would also especially like to thank Anna Neufeld, Dan Pollack, and the PhD mentors who enthusiastically supported the SPA Directed Reading Program (spa-drp.github.io) that launched this quarter. Keep your eyes peeled for the Spring application!

SPA meetings are on Thursdays, 5-6 pm in Padelford C-301. Swing by to learn new skills, make new friends, or just hang out. On February 19th we will be having a special meeting where PhD student Shane Lubold will discuss his work on inferring network structures when not all the data is present. This talk is appropriate for any student who has taken Stat 311. If you can't make it that week, no worries! Join us and the Women in Statistics and BioStatistics group on February 27th from 3:30 - 5:00 pm in the stat multipurpose room for fun board games, tea and snacks!

SPA will also be hosting undergraduate study halls on Tuesday from 5-7 and Thursday from 6-7 in Padelford C-301. This is a great time to study with your classmates and meet other students! Hope to see you at SPA, and good luck during your Winter Quarter!

Ask Mee-Ling

Q.:
"I have heard from some students saying our stat majors are not allowed to apply to the full time MS STAT program. Would you please tell me more about that?"

A.:
"All applicants who meet the prerequisite requirements for the full time MS STAT program are eligible to apply. For more application information please refer to https://www.stat.washington.edu/academics/graduate/applying#graduate

The application deadline is Dec 31 for Autumn admissions. As the program is extremely competitive, I encourage you to start early to prepare your credentials and to establish academic recommendations."
Undergrads share their StatCom consulting experiences

Statistics in the Community (StatCom) is a student-run consulting group at UW that provides pro-bono data analysis and statistical help to community groups in Seattle. Students work in consulting teams led by graduate students to provide a specific need to local clients. Projects usually last 4-5 weeks and are a fantastic way to put what you’ve learned in coursework to real practice! Read about two undergrad experiences below. You can learn more and sign up for StatCom at statcom.stat.washington.edu.

Abbey Moore  (4th year, Statistics)

"Last spring I participated in StatCom for the client, PEPS (Program for Early Parent Support) which provides services to early parents... The client had pre and post surveys that were voluntarily filled out by program participants, with a 30% drop in response rate from pre- to post-survey. While the client wanted to carry out the analysis themselves, they were unsure which statistical test would be the best fit for their data. After meeting with the client in-person, and discussing with the StatCom team, we delivered a report back to the client with the recommended statistical test to perform, why we thought it was the best test, and how to interpret the results of that test.

I really enjoyed the StatCom project! I liked working on a team with my classmates and ... learning (a lot!) from our graduate student mentor as well. Throughout the project, I realized that determining the ‘right’ course of action can be a much more complicated question to answer than I had previously thought.

Making decisions when there is no clear ‘correct’ answer is what made StatCom so interesting for me, and I think is a valuable experience for all undergraduate students to have. Any student who wants to practice applying what they’ve learned in their statistics coursework and who wants to use statistics to help others should consider participating in StatCom.”

Sky Qiu  (3rd year, ACMS – Data Science and Statistics)

"I had the privilege to work on PAWS project with my amazing team members fall quarter. PAWS is a non-profit organization that helps rehabilitating injured and orphaned wildlife, offering shelters to homeless cats and dogs. My team members and I are all very excited to help PAWS in the winter quarter to generate a report on the company’s statistics. Specifically, our final goal is to create a data dashboard... for the board to better visualize the company’s statistics across numerous datasets. We discussed the possible tools that we would use such as R Markdown and R Shiny package. We also talked to our client about their specific requests and some data security concerns. Because this project started near the end of the quarter, we will continue working on this project when we get back from winter break.

As an undergraduate majoring in ACMS – Data Science and Statistics, I think this is a great opportunity for me to get in touch with some real-world data and apply some analysis techniques learned from classroom. Plus, I also had the chance to learn some data handling and data security knowledge which I have never learned from class. I am very much looking forward to the final deliverable of this project.”
Taylor Merry (Class of 2020)

This summer I interned at Zillow Group in downtown Seattle as a data science intern on the Zillow Offers team. Zillow’s interns are assigned projects for the summer. My first project was to assess if pricing analysts were mispricing homes with certain attributes (e.g. close to major roads). This would be analyzed with a two-sample t-test and visualizations such as boxplots and estimated density plots.

My second project was to assess the effects of underpricing and overpricing on labor costs. A lower offer would decrease the probability the homeowner would accept the deal which leads to higher labor costs per home acquired. My task was to use logistic regression to predict the probability of an offer being accepted based off of offer strength. Then to use these probabilities to calculate the expected labor costs based on certain levels of offer strength (e.g. underpricing by 1%).

To complete the first project, I found classes such as STAT 302 and STAT 342 to be helpful with the coding, visualizations, and t-tests. For the second project, I found that STAT 416 and INFO 370 were helpful to use logistic regression for prediction in python. And in general, I would recommend a SQL programming class to learn how to retrieve data as I used SQL at work almost daily and my interviews consisted of a lot of SQL questions.

Jenna Gordon (Class of 2021)

I recently traveled to Minnesota to visit the University of Minnesota to attend its Diversity in Psychology Program. The program was fully paid for and was a fantastic opportunity to learn about their graduate school program as well as to learn about general graduate school processes. I found out about the program through the National Name Exchange, an online program that helps minority groups find internships, graduate schools, and other opportunities to advance their academic careers. The National Name Exchange allows universities to email minority students, who have signed up, opportunities the university offers to students based on the profile preferences the student sets up.

The program was highly informative on how to apply for graduate school and highlighted the importance of finding faculty letter recommenders earlier rather than later, tips for preparing for the GRE, and the key components to writing a compelling narrative for a personal statement. I also was able to learn about their Ph.D. I/O psychology program in detail as well as meet the I/O faculty of the school. I/O psychology is a subfield in psychology that focuses on improving businesses and employee life through psychological research. I also looked at their Quantitative psychology Ph.D. program which focuses on creating valid and reliable scales and metrics for psychological assessments. Both programs rely heavily on statistics and quantitative methods and both programs teach their graduate students how to use these tools effectively in research.

I highly recommend applying for it, for those of you interested in going to graduate school for psychology, or any other similar program to learn more about graduate school and what interests you.
First Years, Welcome!

* Making new friends is a whole lot easier when you can ask each other all sorts of inappropriate questions!