

Statistical Success—A New Model for Learning Statistics



The Department of Statistics introduced a new opportunity for sophomore undergraduate students, starting in 2014-15. The program is called the Statistics Living-Learning Community (STAT-LLC). This effort is funded by a 5-year, \$1.5-million National Science Foundation grant. Twenty sophomore undergraduate students participated in 2014-15. A total of 100 students will participate during the 5-year life of the grant (20 new sophomores every year). Although students from any major can apply to the program, the curriculum and research is focused on statistics. The goal of the program is to introduce students to concepts from Big Data Analysis—and to research experiences where students can apply these skills—at a very early point in their studies.

The students all live on the same floor of the Hillenbrand residence hall. Living together in a learning community is a known best practice for student success. The students take common sections of probability theory, statistical theory, and a new course on data analysis. In the new data analysis course, the students work in teams on projects, throughout the semester. They each participate in a 12-month research experience that lasts from August of their sophomore year to August of their junior year.

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All of the faculty on the team who submitted the grant to the NSF are from the Department of Statistics. Research mentors for the students are available from Statistics and from other disciplines across the university that have Big Data as a key component of the research.

During March 27-29, 2015, the students participated in the first annual ASA DataFest offered at Purdue. The data for the ASA DataFest was provided by Edmunds.com. The students spent 48 hours exploring a large data set about buyers and sellers of automobiles. They made team presentations at the end of the ASA DataFest about their discoveries. Edmunds.com was impressed with the results of the students' investigations.

On April 24 and 25, the students will travel to Rose-Hulman Institute of Technology to participate in the Undergraduate Mathematics Conference. The theme of this year's conference is "Statistics: From Big Data to Big Decisions."



Statistics Department members pose with Dean Roberts (left). Back row: Walid Sharabati, Lingsong Zhang, Bruce Craig, Doug Crabill, Sharon Christ. Front row: Mark Daniel Ward, Hao Zhang, Jun Xie, Hyonho Chun, Ce-Ce Furtner

Statistical Success—A New Model For Learning Statistics (cont.)



Left to right: Ashley Peterson, Bailey O'Malley, Christina DeSantiago, Lake Yoke, Weston Phillips



Left to right: Felix Francisco-Sanchez, Christine Zhang, Christopher Vincent, Peter Boyd



Left to right: Jenna Reno, Christine Ringwald, Emily Martin



Seated left to right: Abby Johnson, Emily Malek, Abigail Vorhies; standing, left to right: Erik Norlin, Patrick Gallagher