ODDS AND ENDS

PURDUE INTERNATIONAL STATISTICS SYMPOSIUM IS COMING IN 2023!

DATA MINE
The first large-scale learning community for undergraduate and graduate students from all majors, focused on Data Science for All.

THEME SEMINARS
A series of seminars with leading researchers on timely and important research topic to OUR faculty and students.

PU STAT ALUMNI
Connect with all alumni, friends together, and with the current faculty and students. Organizing events for conferences, local gathering, fund raising and many others.

Mark Daniel Ward, director of the Purdue University Data Mine, works with two students involved in the popular data science program. (P.8-9)
GREETINGS FROM THE HEAD

As I write this letter, I have been the Head of Purdue Statistics for two full years. Time flies, and we now resume the department newsletter for our Purdue Statistics faculty, staff, students, alumni, and friends. We are all in the Purdue Statistics family!

During the last two years, two very challenging years under pandemic, with the help of all the Purdue Statistics family, we welcomed seven new faculty to our roster, redesigned our website, founded the distinguished theme lecture series, finished the departmental external review, and accomplished many other tasks. We worked remotely, hybridly, and in-class all together and graduated 150+ undergraduate students and 63 graduate students. The entire Purdue Statistics family continued on with our mission of being one of the most forward-thinking modern statistics departments in the world. Purdue Statistics has grown over the years, and I am confident the future of Purdue Statistics is firmly focused on continued success. I am grateful to the alumni, faculty, staff, friends, and students of Purdue Statistics for their support and hard work. Thank you all! We have also worked hard to maintain relationships with current alumni from all over the world. In 2021, we founded the Purdue Statistics Alumni Association to reconnect Purdue Statistics with its friends and alumni—all of whom have such happy memories and stories! Thank you for always being so welcoming!

We look forward to seeing Purdue Statistics friends and alumni at the Joint Statistical Meetings in Washington, D.C., this year. The Purdue Statistics Reception will start at 5:00 pm, Sunday, August 7, 2022 at M-Congress (Virtual Zoom is available as well). As always, there will be great food, drink, and conversation! See you there and online!

Boiler up!

Dennis

Dennis K. J. Lin
University Distinguished Professor and the Head
Department of Statistics, Purdue University
DEPARTMENTAL NEWS

NEW HIRING, AWARDS, PROMOTION AND MANY OTHERS

Since pandemics, we have hired a number of new faculty members and staff members.

Faculty 2022

Lin Wang: She was assistant professor in the department of statistics at George Washington University. She received her PhD from UCLA Statistics department on 2019. Her research area is experimental design and sampling and resampling methods.

Drew Yarger: He was PhD student in the department of statistics at University of Michigan, supervised by Professors Stoey and Hsing. His research area is on functional data analysis and spatial temporal modeling.

Faculty 2021

Antik Chakraborty: He was postdoc in the department of statistical sciences at Duke University. He received his PhD from Texas A&M University statistics department. His research area is high dimensional data analysis and various scalable Bayesian analysis.

Nianqiao Ju: She was PhD student in the department of statistics at Harvard University, supervised by Pierre Jacob. Her research area is agent-based models and Monte Carlo methods analysis.

Fei Xue: She was Postdoc in the department of Biostatistics, Epidemiology and Informatics at University of Pennsylvania. Her research area includes data integration, missing data, mediation analysis, personalized modeling, precision medicine, high dimensional inference, variable selection, statistical genetics, and survival analysis.

Haibo Liu: He is an Assistant Professor of Statistics and Mathematics. He received his Ph.D in 2019 from the University of Iowa, supervised by Dr. Qihe Tang and Dr. Ambrose Lo. His research interests include pricing in incomplete markets, insurance-linked securities, and insolvency risk.

New Staff Members

Laura L Holladay is Executive Assistant to the Head.

Laura was born/raised and still lives in Lafayette. She got her Associates from Ivy Tech (Business Admin/Office Admin), then took advantage of the Purdue University Global opportunity and received bachelor’s (Industrial/Organizational Psychology – Human Resources/Professional Development) and master (Educational Psychology). Laura Started working at Purdue in 2011 and have continued to advance herself through various positions until her path led to the Department of Statistics in June of 2022.

Personal Life – 2 children (Jeremy and Steph). love to travel, all music, reading books, watching movies, and a technology nerd!

Breanna V Maxwell is Senior Administrative Assistant

Breanna lives in Delphi, Indiana with her two children, Ethan and Eva. They enjoy staying active whether it be playing outside, riding bikes, water activities, or just being in the sun. They also enjoy cooking meals together and trying new recipes. Breanna teaches fitness classes in Delphi to stay connected in her community. Breanna started working at Purdue University in 2018 in the Center for Career Opportunities and just joined the Department of Statistics this summer as a Senior Administrative Assistant. She is looking forward to getting to know everyone this coming fall and being a part of the Stat team!

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Awards

Anindya Bhadra, is a winner of the Young Statistical Scientist Award (YSSA) in the category “Statistical Applications,” given by the International Indian Statistical Association (IISA) for the year 2022. According to the stated award criteria, the YSSA recognizes “outstanding contribution made by members in each of the areas of Theory and Methods, Applications and Statistical Practice.” The nominees must strictly be under the age of 44 throughout the award calendar year. A list of awardees from the previous years is available on the IISA website at: https://www.intindstat.org/recipients.

William S. Cleveland, Shanti S. Gupta Distinguished Professor of Statistics, received and accepted an Honorary Doctorate from Hasselt University in Belgium. This honor is based on Cleveland’s work in data science and data visualization. In his 2001 paper “Data Science: An Action Plan for Expanding the Technical Areas of the Field of Statistics,” he re-defined data science to its current meaning.

According to the citation from Hasselt, Professor Cleveland’s work on the “cognitive processes that underlie how people understand graphs was among the earliest attempts to study visualization and the theories supporting it. [He was] one of the first who believed that the conventions used in visual representation should be backed up by data and theory. Many data visualization leaders - from Stephen Few and Nathan Yau to Hadley Wickham and Edward Tufte - explicitly refer to [Cleveland] as one of their most important influences.”

Ksheera Sagar, 4th year PhD student, won a 2022 ENAR Distinguished Student Paper Award! Sagar wins this award for his paper “Precision matrix estimation under the horse-shoe-like prior-penalty dual,” co-authored with collaborators Sayantan Banerjee, Jyotishka Datta (a Purdue Statistics alumnus) and his PhD advisor, Anindya Bhadra. In this paper, Sagar addresses the problem of precision matrix estimation in Gaussian graphical models and settles a longstanding methodological gap that exists between Bayesian and frequentist estimation approaches. He also applies his methods to a protein-protein interaction network estimation problem in B-cell lymphoma.

As a winner of this prestigious and highly selective award, Sagar receives generous travel support to present his work at the 2022 ENAR Spring Meeting in Houston, an invitation to the ENAR President’s Reception, waived registration fee, and a one year membership at ENAR.

Hua-Hua Chang, Professor of Educational Psychology and Research Methodology, Professor of Statistics (Courtesy), received the 2021 Award for Career Contributions from the National Council on Measurement in Education (NCME), a professional organization for individuals involved in assessment, evaluation, testing, and other aspects of educational measurement.

The NCME Career Contributions Award is presented annually to honor educational contributions having a widespread positive impact on the field of educational measurement. Winners receive a monetary award of $3,000 and are honored in a plenary award ceremony at the annual meeting of the NCME.


## Awards

**Xiao Wang** was elected as a Fellow of both the ASA and IMS!

Professor Wang’s ASA fellow citation: “For outstanding contributions to statistical methodology and theory on machine learning, functional data analysis, and nonparametric statistics; for exceptional service to the profession and excellence in student mentoring.”

Professor Wang’s IMS fellow citation: “For significant contributions to nonparametric statistics, shape-restricted inference, and functional data analysis, and for dedicated professional service and students’ mentoring.”

**Mark Daniel Ward** on his recent election as a Fellow of the ASA!

Professor Ward’s ASA citation: “For leadership in the integration of data science principles and innovative experiential opportunities for undergraduates; for supporting the growth of diversity and accessibility in the profession, and for scholarly contributions in probability.”

**Fei Xue** received the 2022 IMS New Researcher Travel Award.

IMS members who are selected to receive the IMS New Researcher Travel Award can use the funds for travel to present a paper or a poster at any IMS-sponsored or co-sponsored meeting.

**George McCable** received the 2022 ASA W. J. Dixon Award

In December of 2008, the ASA accepted a gift establishing the W. J. Dixon Award for Excellence in Statistical Consulting. The award was established to recognize outstanding contributions to statistical consulting and to honor the memory of Dixon. The award is given annually to a distinguished individual who has demonstrated excellence in statistical consulting or developed and contributed new methods, software, or ways of thinking that improve statistical practice in general.

Professor McCable’s citation: “For his numerous consulting activities with companies and institutions on civil rights issues related to compensation, hiring, and promotion, as well as property rights; for his long-term collaborations and methodologic contributions to the Nutrition Sciences; for his leadership and shared expertise in statistical consulting; and for excellence in textbook writing.”

**Joan Varrone** (CFO Consulting and Service, M.S. 1973) received 2022 Purdue Distinguished Science Alumni Award.

Joan Varrone started her own consulting firm in June, 2010 called CFO Consulting and Services. She serves as a part-time consulting CFO to start-ups in digital media, software, and biotech. She builds bottoms up business plans, implements financial infrastructure, and supports fund raising. Previously, Joan held senior management positions at large multinationals with strategic and operational responsibility for corporate planning and optimal financing of 40 operations worldwide.

Joan received her M.S. degree from Purdue University in 1973 and her MBA from NYU in 1980. Joan Varrone received the Statistics Outstanding Alumni Award from Purdue Statistics in 2011.
### Distinguished Professorships

Professors **Faming Liang** and **Dennis Lin** have been honored by **Distinguished Professorship** in October 2021.

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### Alumni News and Awards

**Ming-Hui Chen**, Professor and Department Head of Statistics, University of Connecticut, honored **the Board of Trustees Distinguished Professor** in his university. Each year, the Office of the Provost of UConn seeks nominations from across UConn for the newest cohort of Board of Trustees Distinguished Professors. Candidates must excel in all three areas of research, teaching, and public engagement. A committee of faculty is charged by the Provost’s Office to review and select each year’s honorees from among a competitive pool of nominees.

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**Ping Ma**, Professor of Statistics, University of Georgia, honored **Distinguished Research Professor**. The title of Distinguished Research Professor recognizes senior faculty members who are internationally recognized for their innovative body of work and its transformational impact on the field. The Professorship is awarded to individuals working at the very top of their discipline, who are recognized as preeminent leaders in their fields of study.

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**Gayla Olbricht**, Associate Professor of Mathematics and Statistics, Missouri University of Science and Technology, honored **2022 Women of the Year** in her university. The Woman of the Year award is given annually to a female full-time tenured or tenure-track faculty member in recognition of dedication to education and commitment to diversity. ([https://news.mst.edu/2022/04/gayla-olbricht-is-missouri-sts-2022-woman-of-the-year/#:~:text=Missouri%20University%20of%20Science%20and,reception%20at%20Hasselmann%20Alumni%20House](https://news.mst.edu/2022/04/gayla-olbricht-is-missouri-sts-2022-woman-of-the-year/#:~:text=Missouri%20University%20of%20Science%20and,reception%20at%20Hasselmann%20Alumni%20House))

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**2022 Promotions**

There are three promotion within the department in 2022. Professor **Raghu Pasupathy** was promoted to Full professor, Professors **Jianxi Su** and **Takashi Owada** were promoted to Associate Professors (with tenure).

Congratulations to Raghu, Jianxi and Takashi!

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**Prof. Wang took a picture with a random person in the campus**
2021 Spring Award Winners

Undergraduate Student Awards and Honors - Statistics and Actuarial Science

- Actuarial Science Scholarship: Jacob Alvey, Christopher Choy, Luke Cooley, Andrew Deuschele, Elissa Haake, Owen Pierce, Zachary Smith, Qingyi Tan, Suyash Uppal, YuAn Michelle Wen
- AEGON Scholarship: Jacob Rahn
- V.L. Anderson Scholarship: Chartsiri Jirachotkulthorn
- Bill and Marilyn Chen Scholarship: Melissa Cai Shi
- Great American Insurance Group Scholarship: Christopher Conley, Nicholas Farber, Sarah McDanell
- Christine Bell Heim Award: Lauren Sturges
- Milliman Award: Jacob Barry, Laura Hayes, Kaitlyn Stangl, Kyle Stowe, Seth Thompson, Allyssa Timko
- Milliman Diversity Award: Danielle Harrison
- David S. Moore Undergraduate Scholarship: Michael Cruz, Kelly Reagin, Cameron Winkler
- Northwestern Mutual Actuarial Science Service Award: Samantha Tugman

College of Science Outstanding Students in Statistics:
- Outstanding Senior: Andrew Zehr
- Outstanding Junior: Aniket Kumar Gupta
- Outstanding Sophomore: Cameron Winkler
- Outstanding Freshman: Shannon Sturt
- Swiss Re Award: William Bach, Samuel Chilson, Andrew George, Mitchell Gigli, Eve Smith

Graduate Student Awards
- Virgil Anderson and Gloria Fischer Graduate Fellowship: David Arthur, Jungeum Kim, Yan Sun, Chi-Hua Wang
- I. W. Burr Award: Hanxi Sun, Andrew Thomas
- L. J. Cote M.S. Excellence in Statistics Award: Mengqian Shen, Tianyu Liu
- Regina and Norman F. Carroll (Col. USAF) Scholarship: Bo-Yu Chen, Zhengming Li, Qian Zhang
- Emily and Paul Kidwell Graduate Student Excellence Award: Ksheera Sagar KN
- McAuliffe Graduate Scholarship: Shanyun Gao
- B & M McLean Graduate Scholarship: Yining Ding, Mudit Gaur, Rajdeep Haldar, Grant Halver, Hilda Ibriga, Yiran Jiang, Chuanhui Liu, Jorge Loria, Shihui Wang, Zifu Wei
- Outstanding Teaching by a Statistics Teaching Assistant: Hilda Ibriga
- STATCOM Community Service Award: Sivanand Puliyadi Ravi
- William J. Studden Publication Award: Yan Sun

Faculty and Staff Awards
- Regina and Norman F. Carroll (Col. USAF) Research Award: Takashi Owada, Jun Xie
- Outstanding Assistant Professor Teaching Award: Takashi Owada, Jianxi Su
- Norma Lucas Administrative Professional Excellence Award: Patti Foster

Statistics Undergraduate Scholarship: Dianping Yang

July 2022
2022 Spring Award Winners

Undergraduate Student Awards and Honors - Statistics and Actuarial Science
- Actuarial Science Scholarship: Andrew Deusche, Samuel Muir, Bianca Chan, Megan Janke, Mark Baker, Lucas Embrey, Julia Hopper, Colin Mackenzie, Evan Voris, Elissa Haake, Michael Bellars, Seth Thompson, Andrew George
- AEGON Scholarship: William Bach
- V.L. Anderson Scholarship: Bei Yu, Yuhong Zheng, Jing Li.
- Bill and Marilyn Chen Scholarship: Luke Cooley
- Christine Bell Heim Award: Sofia Lalani
- OneAmerica Actuarial Science Service Award: Laura Hayes
- Milliman Diversity Award: Tanya Yanez, Precious Baker
- David S. Moore Undergraduate Scholarship: Zixiao Wang, Chaewon Oh

College of Science Outstanding Students in Actuarial Science:
- Outstanding Senior: Lauren Sturges
- Outstanding Junior: Eve Smith
- Outstanding Sophomore: Samuel Chilson
- Outstanding Freshman: Grace Zhang

College of Science Outstanding Students in Statistics:
- Outstanding Senior: Stephen Everett
- Outstanding Junior: Grace Kowalski
- Outstanding Sophomore: Dylan Clarke
- Outstanding Freshman: Yunye Liang
- Swiss Re Award: David Gohmann, Alexandra DeLuca, Jacob Alvey, Heidi Marg, Qingyi Olivia Tan

Statistics Undergraduate Scholarship: Julian Boes, Zijie Zhang

Graduate Student Awards
- I. W. Burr Award: Jungeum Kim
- Emily and Paul Kidwell Graduate Student Excellence Award: Jorge Loria, Jiwon Jung
- Outstanding Teaching by a Statistics Teaching Assistant: Halin Shin
- STATCOM Community Service Award: David B. Arthur
- William J. Studden Publication Award: Yan Sun

Faculty and Staff Awards
- Regina and Norman F. Carroll (Col. USAF) Research Award: Michael Levine, Bowei Xi, Min Zhang
- Outstanding Assistant Professor Teaching Award: Mengyi Xu
- Norma Lucas Administrative Professional Excellence Award: Patti Foster

College of Science Awards
- Engagement Award: Michael Zhu
- Professional Achievement Award: Chuanhai Liu
- Customer Service Award: Patti Foster
- Diversity Award: Jianxi Su
- Outstanding Service Award: Bruce Craig

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Department External Review

The department external review were conducted on March 21-22nd, 2022. The review committee was chaired by Rebecca Dorge (CMU), with members: Ray Carroll (TAMU), Regina Liu (Rutgers), Xiao-Li Meng (Harvard), Steven Stigler (Chicago), and Jussi-ca Utts (UC Davis).
THE DATA MINE

THE FIRST LARGE-SCALE LEARNING COMMUNITY FOR UNDERGRADUATE AND GRADUATE STUDENTS FROM ALL MAJORS, FOCUSED ON DATA SCIENCE FOR ALL. HILLENBRAND HALL, WHERE MANY DATA MINE STUDENTS LIVE, IS FILLED WITH NEW LEARNING COMMUNITIES OF STUDENTS PREPARING FOR THE DATA-DRIVEN WORKFORCE OF THE 21ST CENTURY.

After an successful NSF grant on STAT-LLC (learning community), Purdue University institutionalized and expanded its experiential student research projects. The Data Mine began in Fall 2019 with 100 students and has grown quickly; it has approximately 800 undergraduate and graduate students in Spring 2022. Students from almost all colleges and schools at Purdue are participating the program.

The Data Mine has 20 learning communities built around partnerships from many disciplines. One of these 20 learning communities continues the tradition of targeting students in Statistics. This learning community features a new course about data, “Bad Versus Good”, taught during the fall semester and coordinated by Alan Friedman (Biological Sciences), Andy Hirsch (Physics), and Bruce Craig (Statistics). In the spring semester, the students in this particular learning community take the “Introduction to Statistical Computing” graduate course, taught by Vinayak Rao (Statistics) or Chuanhai Liu (Statistics).

The students in The Data Mine participate in courses, seminars, research, and professional development experiences, which are offered by departments, research centers, and colleges throughout the university.

In addition, The Data Mine has 60 Corporate Partners projects with 47 partners, most of which are in various sectors of industry. The Corporate Partners program enables the students to work directly with employees of companies or national laboratories on data-driven projects. The full list of most recent Corporate Partners can be found in https://datamine.purdue.edu/symposium/. The Data Mine also coordinates several Sponsored Research contracts.

The Indiana Data Mine (2021-2026)

The Lilly Endowment is funding a statewide expansion of The Data Mine with a $10 million grant. As stated in the press release (https://www.purdue.edu/newsroom/releases/2021/Q2/purdue-to-launch-indiana-digital-crossroads-with-10-million-grant-from-lilly-endowment.html):

“Students who become involved with The Data Mine will learn data science skills through immersive engagement with Indiana-based companies that will potentially lead to careers in Indiana, enhancing the state’s surging tech sector. That growth is fueled by an explosion of data in the world, and industries from medical to professional sports want to know how to interpret that information. The $10 million grant to Purdue Research Foundation is funded through Lilly Endowment’s recent initiative, Charting the Future for Indiana’s Colleges and Universities. Purdue is one of 16 Indiana colleges and universities receiving grants in the final phase of the initiative, which was designed to help Indiana higher education institutions assess and prioritize their most significant challenges and develop strategies to address them.

The goal of The Indiana Data Mine is to create regional data science hubs and begin geographically based programs designed to engage businesses and undergraduate students. As Indiana’s land-grant university, Purdue will leverage its presence throughout the state to develop these regional data hubs to energize and prepare communities, employers and high school and college students for jobs of the future. This will allow Purdue to share the success of its Data Mine and integrative data science initiative more broadly. The first locations for these regional hubs will be Purdue University Fort Wayne and Purdue Polytechnic Institute in Anderson.”

Purdue Statistics Newsletter
The National Data Mine Network (2022-2024)

The National Science Foundation has just awarded The Data Mine team a new $1.5 million grant through the Harnessing the Data Revolution: Data Science Corps program. A brief description of the project description is given on the NSF website (https://www.nsf.gov/awardsearch/showAward?AWD_ID=2123321):

“The data science community has a timely opportunity to reimagine the impact of the data sciences on the economy, and to improve outcomes for communities, by ensuring that students at Minority Serving Institutions have access to cutting edge courses, research opportunities, and industry partnerships. In 2018, Purdue University established The Data Mine, a university-wide undergraduate learning community that teaches data science to participating undergraduates from all majors, regardless of their previous experience. It will scale naturally to a nationwide model because it is accessible, supportive, but also of a genuine data science challenges that motivate students to learn the required competencies. The National Data Mine Network (NDMN) will directly fund 300 undergraduate students at Minority Serving Institutions with research stipends (100 stipends per year), administered directly to students by the American Statistical Association. The leadership team leverages collaborative strengths of the American Statistical Association, the Math Alliance, Purdue University, American University, and the Atlanta University Center Data Science Initiative. The students will use high-performance computing to solve data-driven challenges that arise in every sector of industry, including biomedical engineering, healthcare engineering, image processing, manufacturing, supply chain management, and transportation. This project will enable undergraduate students to learn data science with hands-on work, in research or data science projects informed by industry partners. Each participating institution will have a node led by faculty members and 3-4 undergraduate students. All faculty members will share their best practices about mentoring research, how to establish mutually beneficial relationships with industry partners in their community, and how to develop institutional mechanics to support the work and to build data science programs. Some of the key deliverables of this HDR DSC project will be: well-documented projects for courses and for student research, a robust online training resource of data science projects, an instructor handbook that accompanies the data science projects, a development curriculum for the faculty to grow their own skills, and promising best practices on how faculty can develop relationships with mentors from industry for real-world data-driven projects. A key benefit of the NDMN to faculty is the ability to inject data science skills into their careers, to gain knowledge and expertise about how to carry out hands-on, data-intensive research projects, as well as the potential to develop new industry partnerships, while also building their own data science courses and programs. Another key impact will be a tightly knit community supporting a new generation of 300 diverse undergraduate trainees in the data sciences. A third key impact will be a nationwide network of faculty who work together to build these data science courses, programs, and industry partnerships at Minority Serving Institutions.”

The Data Mine is a living, learning and research-based community created to introduce students to data science concepts and equip them to create solutions to real-world problems. Members of The Data Mine will be part of a team, living, studying and ultimately, performing data-driven research together. The Data Mine is part of Purdue University’s Integrative Data Science Initiative, which is designed to train students across all majors with the data literacy needed to succeed in a data-driven world.
Many things are happening in our graduate program, as has been with the entire field of Statistics. We are proud to have maintained a considerable enrollment of over 150 graduate students in the academic year of 2021-2022, despite the challenges posed by the pandemic. More than half of our graduate students are in the PhD program. We also congratulate our twelve PhD students and 51 MS students who have graduated in the academic year of 2020-2021. Beyond traditional job positions in academia and pharmaceutical companies, many of our recent graduates are going onto the IT industry at prestigious companies such as Amazon, Facebook, Google, and Microsoft. Employment opportunities for our graduate students have been very good in the recent several years. In Summer 2022, we have about 30 students taking summer internships. The demand of summer employment is unprecedented.

Our graduate program has continuously attracted high quality graduate applicants. Our graduate admission process is very competitive, with an average admission rate of 14% for the PhD program in the past five years. This August we will welcome 48 new graduate students to the department, with 16 in the PhD program and 32 in the MS program.

With the growth of the department and many new faculty members, our PhD program is now broader and includes many state-of-art research directions such as deep learning and causal inference. Our MS programs have also been updated, with the Joint Statistics and Computer Science MS program seeing the biggest increase in the student number. We have also established a new MS program for Data Science in Finance, with both online and residential programs. This program replaces our previous MS program in Computational Finance.

We additionally held the annual Spring Award event on April 7th this year. The department is pleased to sustain a dozen graduate scholarships and awards, including two new graduate awards. The Emily and Paul Kidwell Graduate Student Excellence Fund, established in honor of our alumni Dr. Paul Kidwell (PhD advisor Dr. Bill Cleveland) was awarded to two PhD students, Jorge Loria and Jiwon Jung, who will use the funds for travel support to conferences. The inaugural Applied Statistics Scholarship, established by another alumni for students in the Applied Statistics MS program, was given to MS graduate Shanyun Gao in 2021. In addition, Jungeum Kim received the I.W. Burr dissertation award. Jungeum will become a postdoc at University Chicago. Yan Sun received the William J. Studden publication award and will join Amazon this summer. Other award winners include Mengqian Shen and Tianyu Liu for the L.J. Cote MS Excellence in Statistics award, Halin Shin for the Outstanding Teaching Assistant award, and David Arthur for the STATCOM community service award.

(Details of the awards are shown in the Award Section earlier)

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**Purdue Alumni Reception at JSM**

Purdue Statistics Alumni Association (PSAA) will host a reception at the JSM on Sunday (8/7/2002), 5:00pm - 6:30pm at M-Congress and via Zoom at https://purdue-edu.zoom.us/j/96712129948?pwd=Z0ViL0NmWHhuZGxUk56MWp1ekxnUT09

The event will provide you an excellent opportunity to catch up with old friends, and to make new friends from the Purdue Stat family. We will also update you on the latest alumni and departmental news and achievements. We would love to see you in the reception! Also, we would appreciate if you can help spread this news to all our alumni and friends.
UPDATES ON PROGRAMS

Undergraduate Program in Statistics
by Qifan Song

The Undergraduate Majors in Statistics, Actuarial Science and Data Science Committee is chaired by Dr. Qifan Song and includes Dr. Thomas Sellke, Dr. Jianxi Su, and Dr. Laura Cayon. The committee monitors and considers/evaluates proposed changes to the undergraduate programs. They work closely with the undergraduate academic advisors.

The Department of Statistics offers two options for the Statistics Major leading to the Bachelor of Science degree: (a) Applied Statistics Option — This option prepares students for careers in applied statistics, statistical programming, and other areas that require broad knowledge of statistical ideas and techniques. (b) Mathematical Statistics Option — This option is excellent preparation for graduate study in statistics or other quantitative fields and for many types of employment. It can also lead to a dual degree in the Department of Mathematics.

Purdue's Actuarial Science Program is jointly administered by the Department of Mathematics and the Department of Statistics. Jeff Beckley, FSA (Mathematics, Statistics) is the Director of the program with the assistance of Associate Directors Dr. Jianxi Su, FSA (Statistics) and Dr. Mark Ward (Statistics). Students can receive both an Actuarial Science degree and an Applied Statistics degree. In addition, most also receive a Management minor. Students can also graduate with "Honors in Actuarial Science" by fulfilling additional requirements. The program provides comprehensive preparation for the five credential exams (i.e., P, FM, IFM, LTAM, STAM) organized by Society of Actuaries (SOA)/Casualty Actuarial Society (CAS) as well as approved course work for all three of the "VEE" requirements of the SOA/CAS.

The Data Science program at Purdue University is a relatively new program that started admitting undergraduate students in Fall 2017.

The program was jointly created by the Departments of Statistics, Computer Science, and Mathematics. Students in First Year Data Science share most of the curriculum with the Computer Science majors. After that, they may choose to focus on Computer Science, Mathematics, or Applied Statistics for the remainder of the degree progression. Data Science students have a large number of electives, providing an opportunity to specialize in another subject area in which they would like to apply their skills.

Despite the pandemic, the enrollment of undergraduate students in statistics, actuarial and data science (statistics option) grows steadily. The majority is still in the actuarial science program, but there is a major increase in the data science-statistics program.

Over the last couple of years, the number of statistics degrees conferred increases as well. See below tables for details. According to American Statistical Association, Purdue University has awarded the second largest number of BS degrees in Statistics in the United States for the recent 7 years.

Editor of the newsletter:

I am extremely pleased that our odds and ends resume. If you have any materials to share via us, or suggestions and comments, send it to me or our newsletter account. Thanks for your support!

Lingsong Zhang
Table 1: Number of Statistics Degrees Conferred in Recent 7 Years

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Spring</th>
<th>Summer</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>AY2014-15</td>
<td>29</td>
<td>97</td>
<td>8</td>
<td>134</td>
</tr>
<tr>
<td>AY2015-16</td>
<td>26</td>
<td>112</td>
<td>10</td>
<td>148</td>
</tr>
<tr>
<td>AY2016-17</td>
<td>30</td>
<td>94</td>
<td>15</td>
<td>139</td>
</tr>
<tr>
<td>AY2017-18</td>
<td>26</td>
<td>101</td>
<td>6</td>
<td>133</td>
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<tr>
<td>AY2018-19</td>
<td>28</td>
<td>98</td>
<td>10</td>
<td>136</td>
</tr>
<tr>
<td>AY2019-20</td>
<td>28</td>
<td>111</td>
<td>8</td>
<td>147</td>
</tr>
<tr>
<td>AY2020-21</td>
<td>30</td>
<td>117</td>
<td>12</td>
<td>159</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>197</td>
<td>730</td>
<td>69</td>
<td>996</td>
</tr>
</tbody>
</table>

Note: Each academic year (AY) includes a Summer semester, Fall semester, and Spring semester. For example, AY 2020-21 is comprised of the Summer 2020, Fall 2020, and Spring 2021 semesters.

The Purdue Center for Career Opportunities (CCO) collects post-degree information; the survey results are displayed below. Note that the national rate is reported by the National Association of Colleges and Employers (NACE). The below two tables provide summary of placements of our undergraduates. Note that the data science program is a brand new one, and is currently lack of data.

Table 2: Post-graduation placement of Statistics programs

<table>
<thead>
<tr>
<th>Year</th>
<th>Employed or Continuing Education</th>
<th>Response Rate of all Students</th>
<th>National Rate (Math &amp; Stat)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>95%</td>
<td>88%</td>
<td>75%</td>
</tr>
<tr>
<td>2018</td>
<td>95%</td>
<td>87%</td>
<td>79.5%</td>
</tr>
<tr>
<td>2019</td>
<td>96%</td>
<td>83%</td>
<td>77%</td>
</tr>
<tr>
<td>2020</td>
<td>85%</td>
<td>76%</td>
<td>84%</td>
</tr>
</tbody>
</table>

Table 3: Post-graduation placement of Actuarial Science programs

<table>
<thead>
<tr>
<th>Year</th>
<th>Employed or Continuing Education</th>
<th>Response Rate of all Students</th>
<th>National Rate (Actuarial Science)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2017</td>
<td>100%</td>
<td>87%</td>
<td>75%</td>
</tr>
<tr>
<td>2018</td>
<td>96%</td>
<td>82%</td>
<td>79.5%</td>
</tr>
<tr>
<td>2019</td>
<td>100%</td>
<td>79%</td>
<td>77%</td>
</tr>
<tr>
<td>2020</td>
<td>94%</td>
<td>70%</td>
<td>84%</td>
</tr>
</tbody>
</table>

The national rate is reported by the National Association of Colleges and Employers (NACE).

In addition, the actuarial science students will participate the SOA credential exams. The below table provides information about students passed SOA exams.

Table 4: Number of Students Who Passed the SOA Exams

<table>
<thead>
<tr>
<th>Year</th>
<th>P</th>
<th>FM</th>
<th>LTAM</th>
<th>IFM</th>
<th>STAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015-2016</td>
<td>34</td>
<td>34</td>
<td>4</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>2016-2017</td>
<td>32</td>
<td>37</td>
<td>3</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>2017-2018</td>
<td>36</td>
<td>46</td>
<td>2</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>2018-2019</td>
<td>32</td>
<td>32</td>
<td>10</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2019-2020</td>
<td>36</td>
<td>45</td>
<td>7</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>2020-2021</td>
<td>32</td>
<td>32</td>
<td>7</td>
<td>21</td>
<td>0</td>
</tr>
<tr>
<td>2021-2022</td>
<td>18</td>
<td>34</td>
<td>5</td>
<td>13</td>
<td>2</td>
</tr>
</tbody>
</table>


The awards for the undergraduate students are summarized in the award section.

///
Purdue Actuarial Science is a degree-granting program that is jointly coordinated by the Department of Statistics and Department of Mathematics. There are about 350 undergraduate students currently majoring in Actuarial Science. The program consists of three tenure-track faculty whose research interests range from statistics and economics modeling to diverse applications in insurance. Meanwhile, the program has three continuing lecturers who came from the insurance industry. Their intensive insurance experience has greatly strengthened the connection of the Purdue Actuarial Science program with insurance companies and benefited the students’ successes. Consequently, Purdue Actuarial Science has been ranked in a top position among multiple nation-wide Actuarial Science programs ranking list.

Remarkably, Purdue Actuarial Science earned the Center of Actuarial Excellence (CAE) destination from the Society of Actuaries (SOA) in 2021. The CAE destination represents the highest level of recognition among all Actuarial Science programs around the world. To qualify for the CAE designation, programs must meet eight criteria and specific requirements. These criteria include appropriate degree and curriculum of offerings, graduate count, faculty composition, quality of graduates, appropriate integration with other areas of study, connection to industry, and research and professional involvement. Being named as the CAE can help advance Purdue’s reputation, department ranking, future faculty hires, student enrolment and retention.

Actuarial Science, like so many other disciplines, has undergone dramatic changes recently, owing to the Data Science revolution. Recent significant changes to the Actuarial professional exams reflect this development. Realizing the importance of Data Science in the modern insurance practice, the Actuarial Science program has incorporated numerous innovative education components into the curriculum. For instance, the Actuarial Science program constitutes one of the largest cohorts of participants in the Data Mine learning community, new courses focusing on insurance predictive analytics have been created, and the students are provided with research opportunities motivated by real world insurance problems.

The Actuarial Science program at Purdue has been very successful in student placement. More than 80% of the Actuarial Science students can find an insurance related job at graduation. Many students who do not find a job upon graduation continue to study in graduate school, and they also have successful careers in other disciplines such as finance, computer science, and statistics. What is more, Purdue Actuarial Science has a history of producing leaders in the industry, with alumni who are upper management at top financial consulting and insurance companies across the nation and the globe. Our alumni are visible leaders in the discipline and have contributed significantly to the positive Purdue brand.

In the next future, the Actuarial Science program will endeavor to develop a graduate program that combines the traditional risk management study with cutting-edge Data Science topics. Given the demands of quantitative professionals for analyzing and managing risks across a variety of social and scientific systems, we are optimistic that the prospective graduate program can help attract world-wide talents to study at Purdue.
Our second half century of existence got off to an inauspicious start due to COVID. Both our walk-in software desk and appointment-based consulting components, which previously were held in the MATH building, were moved completely online. For those of you who have been a part of the SCS, you can imagine the plusses and minuses of such a move. On the plus side, it was much easier to set up and attend meetings (e.g., no travel time, we could double book meetings) and with permission, we could record meetings. On the negative side, it was easier to be distracted, we could not as easily read the room, and it was more challenging to interactively share ideas like we could on a blackboard or piece of paper. Nonetheless, we made the best of what we had to work with, and it is likely that some version of online/hybrid meetings will continue moving forward.

Special thanks to Bruce Craig, Arman Sabbaghi, and Chong Gu, who shared faculty duties over the last two years, and Ce-Ce Furtner and Holly Graef, who kept everything running smoothly. As you might have expected, there was a dramatic drop in the number of clients who utilized our services, but there are signs that demand is picking up. Also, the type of client/project we are now seeing is one that requires more consulting time. The following two tables summarize our impact we are having around campus. Almost 90% of our business is based on referral and a large majority of our clients will recommend us in the future.

For those who worked with the SCS, we want to add a shout out to the upcoming Purdue Symposium (June 2023). We had planned to have a 50th birthday party for the SCS but the pandemic delayed that until the Symposium.

---

### Table 1. How did you find out about the SCS? (percent of total)

<table>
<thead>
<tr>
<th>Source</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colleague</td>
<td>15.3</td>
<td>13.0</td>
<td>15.4</td>
<td>8.6</td>
<td>12.2</td>
<td>12.8</td>
</tr>
<tr>
<td>Fellow Student</td>
<td>9.7</td>
<td>17.6</td>
<td>6.3</td>
<td>11.4</td>
<td>8.2</td>
<td>11.2</td>
</tr>
<tr>
<td>Advisor or committee member</td>
<td>38.9</td>
<td>32.4</td>
<td>41.1</td>
<td>38.6</td>
<td>46.9</td>
<td>39.1</td>
</tr>
<tr>
<td>Used the SCS before</td>
<td>18.1</td>
<td>28.2</td>
<td>30.9</td>
<td>25.0</td>
<td>19.0</td>
<td>25.5</td>
</tr>
<tr>
<td>SCS Website</td>
<td>13.9</td>
<td>6.5</td>
<td>2.9</td>
<td>9.3</td>
<td>6.8</td>
<td>6.9</td>
</tr>
<tr>
<td>Other</td>
<td>4.2</td>
<td>2.3</td>
<td>3.4</td>
<td>7.1</td>
<td>6.8</td>
<td>4.5</td>
</tr>
<tr>
<td>Total Count</td>
<td>72</td>
<td>216</td>
<td>175</td>
<td>140</td>
<td>147</td>
<td>750</td>
</tr>
</tbody>
</table>

### Table 2. I would recommend the SCS to my colleagues

<table>
<thead>
<tr>
<th>Year</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>0</td>
<td>0</td>
<td>2</td>
<td>27</td>
<td>91</td>
<td>4.74</td>
</tr>
<tr>
<td>2017</td>
<td>2</td>
<td>0</td>
<td>10</td>
<td>46</td>
<td>172</td>
<td>4.68</td>
</tr>
<tr>
<td>2018</td>
<td>0</td>
<td>2</td>
<td>14</td>
<td>32</td>
<td>154</td>
<td>4.67</td>
</tr>
<tr>
<td>2019</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>37</td>
<td>109</td>
<td>4.63</td>
</tr>
<tr>
<td>2020</td>
<td>0</td>
<td>2</td>
<td>11</td>
<td>36</td>
<td>96</td>
<td>4.56</td>
</tr>
<tr>
<td>2021</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td>27</td>
<td>82</td>
<td>4.62</td>
</tr>
</tbody>
</table>

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Purdue Statistics Newsletter
DISTINGUISHED SEMINAR SERIES

Each year, Purdue Statistics plan to introduce a timely and important research topic to our faculty and students. It will begin with a tutorial-style lecture to provide some background knowledge, followed by lectures by leading researchers who have made tremendous contributions to the recent advances of the topic. The four-week series is intentionally structured to provide ample time to digest the pertinent information. We hope this series will be informative and encourage you to research the topic in the future. At minimum, it will be enjoyable!

2021 THEME: CAUSAL INFERENCE

Committee members: Michael Zhu, Jordan Awan, Anindya Bhadra, Chuanhai Liu, Vinayak Rao, Arman Sabbaghi, and Xiao Wang

Peter Bühlmann - ETH Zürich: Statistical Learning: Causal-oriented and Robust

Dr. Bühlmann is Professor of Mathematics and Statistics, and Director of Foundations of Data Science at ETH Zürich. His main research interests are in high-dimensional and computational statistics, machine learning, causal inference and interdisciplinary applications in the bio-medical field.

He studied mathematics at ETH Zürich and received his doctoral degree in 1993. He was a Postdoctoral Fellow from 1994-1995 and a Neyman Assistant Professor from 1995 - 1997 at UC Berkeley, before he returned to ETH Zürich in 1997.

From 2013 - 2017, Dr. Bühlmann was Chair of the Department of Mathematics at ETH Zürich. He is a Fellow of the Institute of Mathematical Statistics, a Fellow of the American Statistical Association, and was Co-Editor of the Annals of Statistics from 2010 - 2012.

This series was inaugurated since 2020. The founding committee members include Michael Zhu (chair), Xiao Wang and Anindya Buda. Besides them, Jordan Awan is also current member in the committee. Since then, we have successfully organized the series for two years. In 2022, the theme is Recent Trends in Statistical Inferences, but the list of speakers has been chosen:

- Fri, September 2, Michael Jordan (Berkeley)
- Wed, September 7, Emmanuel Candes (Stanford)
- Fri, September 16, Xiaoli Meng (Harvard)
- Fri, September 23, Rina Barber (U. Chicago)

Detailed information will be posted in the Department Website soon.
Other honors which he recently received include Doctor Honoris Causa from the Université Catholique de Louvain in 2017, Neyman Lecturer 2018 elected by the Institute of Mathematical Statistics, Rothschild Lecturer 2018 at the Newton Institute (Cambridge), and recipient of the Guy Medal in Silver 2018 from the Royal Statistical Society.

Judea Pearl - University of California, Los Angeles: What is Causal Inference? - A Logical Perspective

Dr. Judea Pearl is Chancellor’s professor of computer science and statistics at UCLA, where he directs the Cognitive Systems Laboratory and conducts research in artificial intelligence, human cognition, and philosophy of science. He has authored numerous scientific papers and three books, Heuristics (1983), Probabilistic Reasoning (1988) and Causality (2000, 2009), which won the London School of Economics Lakatos Award in 2002. More recently, he co-authored Causal Inference in Statistics (2016, with M. Glymour and N. Jewell) and The Book of Why (2018, with Dana Mackenzie), which brings causal analysis to the general audience. Pearl is a member of the National Academy of Sciences and the National Academy of Engineering, a fellow of the Cognitive Science Society, and a founding fellow of the Association for the Advancement of Artificial Intelligence. In 2012, he won the Technion’s Harvey Prize and the ACM Alan Turing Award for the development of a calculus for probabilistic and causal reasoning.

James M. Robins - Harvard T.H. Chan School of Public Health: Single World Intervention Graphs (SWIGs): A Unification of the Graphical and Counterfactual Approaches to Causality with Applications

Dr. James M. Robins is the Mitchell L. and Robin LaFoley Dong Professor of Epidemiology and Professor of Biostatistics at the Harvard Chan School of Public Health. Prof. Robins has pioneered analytic methods appropriate for drawing causal inferences and estimating optimal causal models including nondynamic and dynamic marginal structural models, and total effect, direct effect and optimal regime structural nested models. Furthermore, Professor Robins, with his collaborator Andrea Rotnitzky, introduced the methodology, now ubiquitous, of doubly robust estimation in causal inference and missing data models.

Donald B. Rubin - Tsinghua, Temple, and Harvard Universities: Clutter-Free Causal Inference

Dr. Donald B. Rubin is currently Professor in the Yau Center for Mathematical Sciences, Tsinghua University; Murray Schusterman Senior Research Fellow, Fox Business School, Temple University; and Professor Emeritus, Harvard University. He has been elected to be a Fellow/Member/Honorary Member of: the Woodrow Wilson Society, Guggenheim Memorial Foundation, Alexander von Humboldt Foundation, American Statistical Association, Institute of Mathematical Statistics, International Statistical Institute, American Association for the Advancement of Science, American Academy of Arts and Sciences, European Association of Methodology, the British Academy, and the U.S. National Academy of Sciences. As of 2020, he has authored/coauthored nearly 500 publications (including ten books), has four joint patents, and for many years has been one of the most highly cited authors in the world, with currently over 300,000 citations, and over 20,000 per year in recent years (Google Scholar). Of his many publications with over 1,000 citations each, over ten of them are solely authored by Rubin. He has received honorary doctorate degrees from Otto Friedrich University, Bamberg, Germany; the University of Ljubljana, Slovenia; Universidad Santo Tomás, Bogotá, Colombia; Uppsala University, Sweden; and Northwestern University, Evanston, Illinois. He has also received honorary professorships from the University of Utrecht, The Netherlands; Shanghai Finance University, China; Nanjing University of Science & Technology, China; Xi’an University of Technology, China; and University of the Free State, Republic of South Africa. He is a widely sought international lecturer and consultant on statistical topics.

https://www.stat.purdue.edu/theme_seminar_2021/program.html, along with livable youtube links.
MEMORIAL LECTURES

There are a number of memorial lectures in the Department to memories our colleagues:

- J. K. Ghosh Lecture
- K. C. S. Pillai Lecture
- Prem S Puri Lecture
- Herman Rubin Lecture
- Myra Samuels Lecture

J. K. GHOSH LECTURE

This lecture series is in honor of Professor Jayanta K. Ghosh, an amazing researcher who was one of the major influences in several areas of theoretical statistics. Ghosh passed away on Sept. 30, 2017. The lecture series was made possible by gifts from the Ghosh family, Jim Berger, a professor of statistics at Purdue from 1974 to 1996, and his wife, Ann.

"We hope that the series will provide enduring recognition of an outstanding scientist," says Jim Berger, who knew Ghosh for 40 years and worked with him for several years at Purdue. "Future generations of students and faculty at Purdue will learn of Ghosh and his legacy each time the lecture is given."

Ghosh held prominent positions in the United States and India, including his terms as director of the Indian Statistical Institute and president of the International Statistical Institute. The impact of his more than six decades of work reached far beyond those two countries.

K. C. S. PILLAI LECTURE

The lectures were founded in memory of Professor K. C. Sreedharan Pillai, who joined the Purdue faculty as Professor of Statistics and Mathematics in 1962. Previously he was a Senior Statistical Advisor for the United Nations. In this capacity he founded the Statistical Center at the University of the Philippines.

His chief contributions to statistics were in the field of multivariate statistical analysis. His leadership in statistical research (more than 80 published papers) was recognized by his being named a Fellow of the American Statistical Association and a Fellow of the Institute of Mathematical Statistics. He was an elected member of the International Statistical Institute.

PREM S PURI LECTURE

The lectures were founded in memory of Professor P. S. Puri. Professor Prem S. Puri received his M.A. (1963) and Ph.D. (1964) degrees from the University of California at Berkeley where he also taught as acting assistant professor of statistics for one year (1965-66). He joined the Purdue faculty as assistant professor of statistics in 1966, being quickly
promoted to associate professor (1968) and full professor (1974). Prem Puri also held visiting positions at the Indian Statistical Institute (1983-84, 1986-88), the Steklov Mathematical Institute of the USSR Academy of Sciences (6-7/1973), and at UC Berkeley, and served as a consultant to the U.S. Forest Service (1971-73).

Professor Puri was a prolific researcher, publishing more than 70 papers, mostly in the areas of applied probability, theory of statistical inference, and stochastic models. He also produced seven Ph.D. students, one of whom is on Purdue’s Statistics faculty. His leadership in research was recognized by his being named a Fellow in both major statistical organizations in the United States: The Institute of Mathematical Statistics and the American Statistical Association. He was also an elected member of the International Statistical Institute.

**HERMAN RUBIN LECTURE**

This lecture series was founded in 2018 in memory of Professor Herman Rubin, who joined the Purdue faculty as a Professor of Statistics in 1967. Professor Rubin previously taught at several institutions including Michigan State University, the University of Oregon, and Stanford University. He earned his PhD (1948), M.S (1945), and BS (1944) degrees from the University of Chicago. He was also an inaugural Fellow of the American Mathematical Society and a Fellow of the Institute of Mathematical Statistics.

Professor Rubin was a prolific researcher and collaborator, publishing more than 130 papers, including several on the fundamentals of statistics that have remained in the standard texts for the fields of multivariate analysis and econometrics and inference for more than half a century.

**MYRA SAMUELS LECTURE**

The Myra Samuels Memorial Lecture is named in memory of Myra L. Samuels, who was associate professor of biostatistics and epidemiology in Purdue’s Department of Veterinary Pathobiology and associate director of Statistical Consulting in the Department of Statistics. Professor Samuels received her Ph.D. in statistics from the University of California, Berkeley, under Jerzy Neyman, and taught at Purdue for 24 years. Her research was oriented toward issues in biostatistics and included both conceptual issues in mathematical statistics and collaborations on applications.

Professor Samuels was a member of the American Statistical Association, the Biometric Society and the Society for Clinical Trials. Her textbook, Statistics for the Life Sciences, first published in 1989, is now in its fifth edition, revised by Jeffrey Witmer and Andrew Schafner. The textbook is still widely used in statistics courses.

**Recent Lectures**

- **J. K. Ghosh Lecture**
  - April 22, 2022, Jun S. Liu (Harvard University)

- **K. C. S. Pillai Lecture**
  - April 27, 2018, John D. Lafferty (Yale University)

- **Prem S Puri Lecture**
  - April 25, 2019, Steven P. Lalley (Univ. of Chicago)

- **Herman Rubin Lecture**
  - October 11, 2019, Persi Diaconis (Stanford Univ.)

- **Myra Samuels Lecture**
  - Friday, April 8, 2022, Bhramar Mukherjee (Univ. of Michigan)
UIUC-Purdue Joint Statistics Seminar

The long-history UIUC-Purdue Joint Statistics Seminar were resumed on April 9, 2022, at Danville Country Club of Illinois. The seminar started with welcome and opening remarks by Dennis Lin (head, Purdue Stat) and Bo Li (Chair, Illinois). Two major sessions with 6 speakers were held for the scientific program, followed with lunch and outdoor activities. The speakers are special guest, Professor Bhramar Mukherjee (Michigan); Shulei Wang (UIUC), Sabyasachi Chatterjee (UIUC), Xinran Li (UIUC), Antik Chakraborty (Purdue) and Dave Zhao (UIUC). The seminar were concluded with group outdoor activities on hiking, boating, fishing etc.

The six talks were:

9:30am – 10:00am Talk A: Predictions, Role of Interventions and the Crisis of Virus in India: A Data Science Call to Arms, Prof. Bhramar Mukherjee, Biostatistics Department, University of Michigan

10:00am – 10:30am Talk B: Self-Supervised Metric Learning in Multi-View Data: A Downstream Task Perspective, Prof. Shulei Wang, Statistics Department, UIUC

10:30am – 11:00am Talk C: A Cross Validation Framework for Signal Denoising, Prof. Sabyasachi Chatterjee, Statistics Department, UIUC

11:10am – 11:45am Talk D: Towards Optimal Randomization: a Reconciliation between Randomized and Optimal Designs, Prof. Xinran Li, Statistics Department, UIUC

11:45am – 12:15pm Talk E: Bayesian Inference on High-dimensional Multivariate Binary Data, Prof. Antik Chakraborty, Statistics Department, Purdue University

12:15pm – 12:45pm Talk F: A Nonparametric Regression Alternative to Empirical Bayes Methods, Prof. Dave Zhao, Statistics Department, UIUC
The purpose of the association is trying to connect with all alumni, friends together, and with the current faculty and students in the department. Organizing events for conferences, local gathering, fund raising and many others.

On March 26, 2022, the association successfully organized a Purdue Statistics e-reunion, which provided an excellent opportunity to catch up with old friends, and to make new friends from the Purdue Stat family via various breakout rooms. The latest alumni and departmental news and achievements were updated as well.

The event featured the introduction of Data Mine at Purdue and two panel discussions, one on Collaboration and Networking (panelists: Ming-Hui Chen, Ph.D., 1993, UConn Stat, Bhramar Mukherjee, Ph.D. 2001, UMich Biostat, Courtney Henry, Ph.D. 2018, GSK), and another on Big Data and Data Science (panelists: William Cleveland, Xiao Wang, Cheng Liu, Ph.D. 2014, Amazon)
2023 INTERNATIONAL PURDUE STATISTICS SYMPOSIUM

CELEBRATING 60TH ANNIVERSARY OF PURDUE STATISTICS

Organizing committee:
Faming Liang (Chair)
Hao Zhang (Conference Chair)
Bruce Craig
Vinayak Rao
Arman Sabbaghi
Jianxi Su
Xiao Wang
Mark Ward
Jun Xie

Fei Xue
Lingsong Zhang
Min Zhang
Michael Zhu

Purdue Statistics welcomes all faculty, students, staffs, colleagues in Purdue University, alumni, friends and interested parties to gather together to discuss recent advances in data sciences, and celebrating 60th anniversary of Purdue Statistics program! Boiler Up!

Save The Date
June 7-9, 2023

Statistics for Purdue Statistics (2022)

Faculty
Tenured+ tenure-track: 36
Professor of Practice: 1
Visiting scholar: 7
Lecturers: 13

Graduate Students
PhD: 89
Master: 57

Undergraduate Students
Stat Major: 170
Actuarial Science: 350
Data Mine: 1400

College of Science

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Editor: Lingsong Zhang (lingsong@purdue.edu).