# History of the Ohio State University Department of Statistics during its second Quarter Century (1999-2000 to 2023-2024).

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## I. Introduction

The Ohio State University Statistics Department was founded in 1974. In its first 25 years, the Department underwent remarkable growth and, by 1999, the Department had earned a national research and teaching reputation. By 1999, it consisted of 24 faculty members and 7 staff and a total of 495 graduate degrees had been conferred. Recollections about the early Department history up to 1999 are gathered in the 25<sup>th</sup> anniversary document "A Short History of Statistical Science at The Ohio State University" written by D. Ransom Whitney, Jagdish Rustagi, Thomas Santner, and H. N. Nagaraja. This can be found on the Department History page of the Department website (https://stat.osu.edu/about/department-history).

The second 25 years of the department's history, beginning 1999-2000 and ending 2023-2024, have been no less eventful. During the years 1999-2024, the Department continued to gain national and international visibility. Despite sporadic budget cuts, the Department's national academic ranking steadily increased and had reached an academic ranking in the top 20 of national departments.

During its history, the Department has been led by outstanding chairs: D. Ransom Whitney (1974-79), Jagdish Rustagi (1979-83, 1984-88), Douglas Wolfe (1983-84), Prem Goel(1988-92), Thomas Santner (1992-96, 1997-2000), William Notz (1996-97), Douglas Wolfe (2000-08), Mark Berliner (2008-15), Steven MacEachern (2015-23), and Eloise Kaizar (2023-ongoing).

Additionally, during the second 25 years, the Department continued to hire excellent faculty and also added two joint hires (Kubatko with Evolution, Ecology and Organismal Biology, and Sivakoff with Mathematics). As of 2024, the Department has 26 Statistics faculty members, plus a further 7 specialists in Teaching Practice (Table 1) despite a number of retirements of senior faculty and some loss of faculty who moved for personal reasons (Table 2). There are 9 staff dealing with administration, fiscal issues, and educational programs (Table 3), 7 part time lecturers, and roughly 80 graduate students.

In this 50<sup>th</sup> anniversary document, we present some of the highlights of the second quarter century of the Department. Many more details than can be included here are gathered in the departmental newsletters produced from 2000 to 2011, and which can be found on the Department History page of the Department website. Those newsletters give details of research projects, graduate student activities, awards, internships and degrees, as well as alumni news, among other topics. From 2012 to the present, the news has been given in individual articles on the Department home page under "Recent news" and "More News". (Keep pressing the "Load More" button at the bottom of the "More News" page to go back in time.)

## II. Teaching innovations and new programs

#### (i) Redesign of Undergraduate Courses and New Major

A major change in the format of the Department's large multi-lecture undergraduate service courses took place during the period 1999-2024. In 2000, the Statistics Department taught three large multi-lecture undergraduate service courses. These were Statistics 135 (intended for students in the Humanities and now 1350), Statistics 133 (intended for Business students and now 1430), and Statistics 145 (intended for students in the Social Sciences and now 1450). Each course involved several large lectures taught by faculty or senior graduate students and several small (25-50 student) labs taught by graduate teaching assistants. A faculty member coordinated the course content, common exams, grading, course material, and supervision of graduate teaching assistants. To ensure the consistency and quality of course material, the Statistics Department hired several full-time faculty teaching specialists to coordinate these courses. The first specialist hired was Roger Woodard in 1999. In 2003 Jack Miller, was hired and became the coordinator of Statistics 145. In 2004 Deborah Rumsey was hired to be the Director of the Mathematics and Statistics Learning Center (MSLC) and began coordinating Statistics 133.

Funded by a Pew grant in 2002, the Department redesigned the undergraduate course Statistics 135. Professor Dennis Pearl was instrumental in creating and managing a "Statistics Buffet"

strategy with interchangeable paths –lecture, video, group solving sessions, and group projects. This redesigned course was named a finalist in the Computer World honors program as one of the top seven (worldwide) uses of technology in education. Dennis Pearl continued to coordinate Statistics 135 until 2014 when Michelle Everson was hired to coordinate the course. In 2013, Jack Miller left Ohio State to take a position at the University of Michigan and Jonathan Baker was hired to coordinate Statistics 145. In addition to these teaching specialists, the Department began to hire part-time lecturers to assist in teaching some of the large lectures in these courses.

In 2006, the Department introduced two new undergraduate honors courses, one (Statistics 133H) for Business majors and the other (Statistics 246H) for students who completed Statistics 245. The Department also introduced a new undergraduate sequence for actuarial science students and a new initiative for an interdisciplinary undergraduate minor program in survey sampling, which involves a new undergraduate survey methodology course.

Although, the Department had offered an undergraduate minor in Statistics for many years, it was lacking an undergraduate major. This was rectified in 2018 when the Department began development of a new Undergraduate Major in Statistics which was fully implemented in 2022.

#### (ii) New Degree Program in Data Analytics

In 2014, the Statistics Department and Department of Computer Science and Engineering jointly launched the undergraduate major in Data Analytics. This was the result of a university sponsored initiative in data analytics. The major has five specializations: *Biomedical and Public Health Analytics, Business Analytics, Computational Analytics, Data Visualization,* and *Social Science Analytics*. Chris Hans (Statistics) and Srinivasan Parthasarathy (Computer Science and Engineering) were the initial co-directors for the major, and continued until Tom Metzger succeeded Hans as co-director. Every year since 2016, the Department has demonstrated the strength of the Data Analysis major by participating in the Data Analytics contest *Data Fest*. *Data Fest* is sponsored by the American Statistical Association and hosted by several of the most prestigious colleges and universities in the country.

#### (iii) Graduate Programs

At the graduate level, the Statistics Program and its exam structure has been revisited and updated every few years to reflect changes in the field. A Master of Statistics (MS), a PhD in Statistics, and a PhD in Biostatistics have all been offered since the founding of the Department. The Master of Applied Statistics (MAS) was added to the offerings later. This was a very popular program both within the Statistics Department and for students external to the Department. In the early 2000s, the MAS program was regularly graduating up to 50 students annually. The Department has regularly held research reading groups and research-level courses for graduate students, often under the course number 8750, covering topics such as statistical genetics, ranked-set sampling, Bayesian statistics, computer experiments, network analysis, spatial statistics, clinical trials, statistical learning and data mining.

In 2002 the Department developed a one-of-a-kind PhD degree in Statistics Education. In 2006 the Graduate School approved our two Graduate Minors, one in Statistics and one in Statistical Data Analysis. Throughout the 2000s, the Department continued to provide graduate students in other disciplines with degree opportunities through its MAS and its two Graduate Minor programs.

A Graduate Interdisciplinary Specialization (GIS) program was instituted by Ohio State in the early 2000s. In Spring Quarter 2000, a GIS in Survey Research was approved by the university, with courses offered by Agricultural Education, Economics, Educational Policy, Geography, Journalism, Marketing, Political Science, Psychology, Public Health, Sociology, and Statistics, among others. The department was also involved in proposing and administrating the GIS in Geospatial Data and Analysis with the Department of Geography; this ran from 2006 to 2018. In 2009, a GIS in Quantitative Methods in Consumer Behavior was also approved and ran for a decade; it was jointly proposed and administered by the Departments of Statistics, Psychology, and Marketing. Unfortunately, the implementation of a new university rule limiting post-candidacy coursework eventually reduced interest in the GIS programs as well as the Department's external MAS program.

#### (iv) The Move from Quarters to Semesters

In the 2012-13 academic year, the Ohio State University (OSU) officially converted from quarters to semesters. This was a major undertaking, requiring a huge amount of time, planning, discussion and paperwork from the entire faculty and staff. Existing courses, course sequences, and degree requirements all had to be modified as part of the conversion. The schedule had to be completely re-thought. All course numbers were changed. For example, Statistics 135 and 620 became Statistics 1350 and 6801, respectively.

## (v) Covid Disruption

In March 2020, COVID-19 was declared a pandemic and caused severe disruptions around the world. Over spring break in 2020, university mandates to led to the elimination of in-person classes and instructors had to switch to online classes immediately after this spring break. To prepare for fall semester 2020, the university asked faculty to create online versions of courses and provided guidelines for what these courses should look like. This required a considerable amount of initial effort but did leave the Department with online versions of courses and resources.

#### (vi) Educational Materials and Conferences

The Department has been active in Statistics Education at the local, national, and international level throughout its history. Bill Notz, Dennis Pearl, and Elizabeth Stasny were involved in the EESEE (Electronic Encyclopedia of Statistical Examples and Exercises) project from 1998-2013. They developed an electronic resource containing data sets from real applications of statistics along with the background story behind the data and suggested exercises based on these data.

In 2002, Dennis Pearl and Deb Rumsey helped found the CAUSE organization (the Consortium for the Advancement of Undergraduate Statistics Education), with Pearl serving as its Director from 2002-2024. In August 2004, www.CAUSEweb.org went live, providing an extensive digital library of resources for statistics instructors as part of the National Science Digital Library system funded by NSF. CAUSEweb now contains more than 1500 items in the resources collection, more than 2100 items in the statistics-education research literature collection, dozens of items formally reviewed for content quality, effectiveness for teaching, and ease of use, and hundreds of items providing services or miscellaneous enhancements to community members. CAUSE also sponsors national and international conferences (eg. USCOTS, see Table 9).

The Department has produced two editors of the *Journal of Statistics and Data Science Education*; Bill Notz (2007-2009) and Michelle Everson (2013-2015). In addition, Jean Scott has served as the Editorial Coordinator for the journal since 2007.

Department faculty have authored a number of popular undergraduate statistics textbooks as well as many graduate level books in the last 25 years, including those in Table 4.

## III. Growing Visibility of the OSU Statistics Department

#### (i) Involvement with National Institutes

The Fall of 2002 marked the opening of the Mathematical Biosciences Institute (MBI) at OSU, which was funded by a \$10 million, five-year grant from the National Science Foundation (NSF). The successful proposal was developed by a team of faculty including Peter March, David Terman (Mathematics), and Doug Wolfe, Dennis Pearl (Statistics). The MBI was set up to promote interactions between statistical, mathematical, biological, and medical sciences through research and educational activities. Many Statistics Department faculty members were involved in the work of the MBI from 2002 to 2021 as directors, researchers, and mentors (See Section IV for more information on the MBI.)

Department faculty members have been involved with the work of a range of other national and international institutes; for example:

- (a) Various faculty have visited SAMSI, the NSF-funded Statistical and Applied Mathematical Sciences Institute. Cressie co-led the SAMSI Program on Space-Time Analysis in Environmental Mapping, Epidemiology, and Climate Change which was held in 2009-2010, and Berliner, Calder, and Cressie all participated in the program. Shili Lin was invited to spend a semester at SAMSI to co-lead their 2014-2015 program on Beyond Bioinformatics: Statistical and Mathematical Challenges. In addition, Berliner and Cressie participated in the program on Data Assimilation in Geophysical Systems (2004-2005), and Cressie and Santner participated in the program on Complex Networks (2010-2011).
- (b) In 2000, the Statistics Department (including OSU faculty members Berliner, Cressie, Goel, Raghavan, and Santner) participated in activities of the National Institute of Statistical Sciences (NISS).
- (c) Berliner was Geophysical Statistics Project Leader at the National Center for Atmospheric Research (NCAR), 1995-1997.
- (d) The Intergovernmental Panel on Climate Change (IPCC) shared the Nobel Peace Prize with Al Gore, in 2007. Mark Berliner was an active contributor to the Nobel Prize winning efforts of the IPCC.
- (e) In 2011, the Department was selected to be a node of the NSF-funded Research Network for Mathematical Sciences: Statistical Methods for Atmospheric and Ocean Sciences. Calder was Director of the local node.
- (f) Oksana Chkrebtii became one of the core faculty members for a \$26 million NSF-funded multi-institutional Engineering Research Center led by colleagues at the Department of Materials Science Engineering aimed at advancing the revolution in material design and manufacturing (the 2023 HAMMER project).
- (g) A number of faculty members have been invited to spend time at international research institutes, including: the Oberwolfach Research Institute for Mathematics, Germany (Dean, MacEachern), the

Isaac Newton Institute for Mathematical Sciences, UK, (Dean, MacEachern, Santner), Institut National de Recherche Agronomique, Avignon, France (Cressie).

#### (ii) Translational Data Analytics Institute

In 2014, the Translational Data Analytics Institute (TDAI) was established at OSU as part of an OSU data analytics initiative. TDAI brings together faculty and students with industry and community partners to create interdisciplinary, data-intensive solutions to grand challenges. The Statistics Department has been very active in the TDAI with Yoon Lee, Shili Lin, Desheng Liu, and Subhadeep Paul serving on the Leadership Team at various times, and Dena Asta serving as a core faculty member. Many members of the department have served as affiliated faculty for TDAI (including Chkrebtii, Craigmile, Hans, Herbei, Kaizar, Kubatko, Kurtek, MacEachern, Paganin, Peruggia, Turkmen, Vu, Xu, and Zhu).

# (iii) Conferment of University Awards and Honorary Degrees to Statistics Department Candidates

One measure of the growth of the influence of the Department within the Ohio State community is its success in having multiple candidates granted OSU honorary degrees. Since 1999, these has been awarded to Sir Adrian Smith (then Deputy Chair of the UK Statistics Authority) in 2015, and Professor Grace Wahba (University of Wisconsin) in 2022.

In 2011, Professor Gary G. Koch, University of North Carolina (UNC) at Chapel Hill, was awarded the Professional Achievement Award from The Ohio State University Alumni Association.

### (iv) Major Research Programs in the Department

For several years during 1999-2024, the Department led the entire College of Biological, Mathematical and Physical Sciences (BMAPS) in increased research support. Some grants were for interdisciplinary projects and others were for core statistical research. Details of grants won by faculty and staff are given in the newsletters and the Department website. A sample of grant-supported research is highlighted here.

Spatial and Environmental Statistics: The Spatial Statistics & Environmental Statistics (SSES) program was established in 1999 with Noel Cressie as Director. The program held grants from the Environmental Protection Agency, the Office of Naval Research, NASA, and the American Chemistry Council. Interdisciplinary seminars were held including speakers from environmental science and engineering, the Byrd Polar research center, chemistry and many others. In 2014, Peter Craigmile became the SSES program director until 2015, when the formal SSES program was wound up. Spatio-temporal environmental statistics continues to be an important part of the department.

A large amount of research related to environmental issues was accomplished during 1999-2024, including (a) work with Ohio State's Byrd Polar Research Center and Department of Geological Sciences, on a physical statistical approach to the dynamics of ice streams funded in 2002 by the National Science Foundation (Berliner, Cressie), (b) a project, labelled "Sources to Biomarkers" (STB) to develop a hierarchical Bayesian modeling framework for analyzing pathways of exposure to toxic substances, funded in 2004 by the American Chemistry Council (Calder, Craigmile, Cressie, Santner, jointly with Battelle), (c) a land-use land-change study funded in 2006 by NASA (Calder and Shi, joint with Geography), (d) hierarchical statistical analysis of

very large remote sensing data funded in 2008 and 2009 by NASA's Jet Propulsion Laboratory (Cressie), (v) space-time models involving stochastic differential equations funded by NSF in 2014 (Craigmile, Herbei), (e) the analysis of large spatiotemporal datasets with application to quantitative models of human dynamics, funded in 2018 by NSF and the National Geospatial Intelligence Agency (Paul), (f) the study of dynamics of surface salinity in the ocean at resolutions finer than those of satellite observations, and its relationship to precipitation, funded in 2019 by NASA (Chkrebtii).

Bayesian Methodology: Methodological research in Bayesian parametric, semiparametric, and nonparametric methods, supported by NSF and NSA grants, has been undertaken by various faculty members in the last 25 years; for example: development of innovative Bayesian semiparametric methods for efficient and robust causal inference in the presence of effect heterogeneity in large observational datasets (Xu, MacEachern, Lu); improvement of data-driven modelling and decision-making in low-information settings (MacEachern, Lee, Xu, and collaborators); use of Bayesian methods for models that are only partially specified, as are many economic models (Peruggia, MacEachern, Forbes); dynamic visualization of varying prior and posterior in Bayesian analysis (Doss).

Funded by numerous grants from NASA, the Office of Naval Research, and NSF from 2003 to 2023, Berliner developed Bayesian physical-statistical modeling to combine scientific models and observations in complex settings. Applications included applications were in climate, climate change, glaciology, oceanography, Bayesian diffusion models, paleo-climate, sea surface and surface winds prediction.

Statistical and Machine Learning: One of the more recently identified areas of research in the Department is that of Statistical Learning. This research has been well-supported by the NSF. For example grants were awarded to: Tao Shi in 2013 for studying scalable spectral methods for statistical analysis; Yoonkyung Lee in 2015 for nonlinear dimension-reduction methods; Vince Vu in 2015 for statistical learning for high-dimensional relational data; Zhu in 2017 for developing statistical theory and computational tools to integrate multimodal data that will lead to the higher accuracy of learning, and enhance information storage, sorting and filtering; Lee and Zhu in 2020 to study the effect of data perturbation on general models in predictive settings for assessment of case influence and model sensitivity and to examine its link to model complexity.

**Health and Life Sciences:** Shili Lin was PI or co-PI on several grants supporting her research on statistical and computational methods for genetic and genomic data. These include funding received from NIH (2004, 2012, 2015) and from NSF (1999, 2003, 2010, 2012). In addition, Shili was co-PI on an NCI grant received 2004 on integrating genomic and epigenomic alterations in cancer and its microenvironment that was among the first six center grants awarded by the NCI Integrated Biology Program. Finally, Shili served as co-investigator on ten other grants from NIH and from the Bill & Melinda Gates Foundation.

In 2003, Hani Doss was co-PI on an NIH grant to investigate whether asthma and allergic condition biomarkers are related to glioblastoma risk, (with PI Schwartzbaum, College of Public Health). In 2009 and again in 2014, Joe Verducci and collaborators from Leadscope received NIH funding to develop web platforms for analyzing genomic data. In 2006, Verducci collaborated with researchers from the School of Pharmacy, the University of Idaho, and Battelle

NW on a 5-year NSF grant to model genetic signaling patterns from the brain to the reproductive system of rainbow trout.

In 2014 Elly Kaizar received NIH Funding for the development of statistical methods to support a model pediatric traumatic-brain-injury data bank. The same year, Shili Lin won research funding to analyze metagenomic count data. An NSF grant was awarded to Laura Kubatko (with co-PI Andrea Wolfe, EEOB) in 2015 to use next-generation sequencing approaches to estimate phylogeny for up to 90% of *Penstemon's* 280 + described species to investigate why this speciesrich genus has diversified so rapidly across North America. In 2017, Peter Craigmile (together with co-investigators Megan Roberts and Amy Ferketich, College of Public Health) was awarded an exploratory/developmental research grant to evaluate how licensing-law strategies change neighborhood disparities in tobacco retailer density. In 2017, Kate Calder was the lead researcher for an OSU team conducting a first of-its-kind study of adolescent health in an urban environment. She was a Co-PI on NIH grants received in 2009 and 2011 to study aspects of adolescent psychological and behavioral health. In 2020, Jared Huling (with Jennifer Lundine, Speech and Hearing Science) was awarded a grant from the Eunice Kennedy Shriver National Institute of Child Health and Human Development to develop a "functional status score" to represent a child's functional mobility, self-care, and cognitive and communication status.

Xinyi Xu was part of an interdisciplinary and multi-institutional group of scientists that was awarded a 5-year National Cancer Institute (NCI) grant in 2022 for investigating longitudinal relationships between environmental factors, colon and rectum cancer prognosis, and survival. Jennifer Sinnott was part of an interdisciplinary team from Statistics and the College of Public Health that was awarded \$2.4 million R37 MERIT Award from the National Cancer Institute (NCI) in 2022 to study the results of cancer treatment and, in particular, on understanding why Black women do not receive treatment in line with national recommendations as frequently as do White women.

Jason Hsu's research in multiple comparisons over many years has impacted biopharmaceutical statistical practice. In addition, he has provided multiple comparisons codes which are incorporated into the software SAS, JMP, and Minitab.

**Statistics, Psychology and Marketing:** In 2005, the NSF awarded a team of faculty (Dean, MacEachern, Peruggia, Browne, from Statistics, Van Zandt from Psychology, Otter and Allenby from Marketing) one of the first interdisciplinary grants to develop new models of consumer decision making. Joint seminars were held and research teams of faculty and students worked on a wide range of projects spanning the three departments.

In 1999, Verducci collaborated with three faculty from Psychology on a 5-year NIH grant to study grief in teenagers following a parental death. In 2002 Peruggia and Van Zandt received funding from the NSF Division of Social and Economic Sciences for research on Bayesian analysis of chronometric data and, with Craigmile in 2010, they received NSF funding for modeling trends, dependence, and tail structure in sequential response time data. Research on human behavior includes a 2014 NSF grant awarded to Craigmile, Peruggia, and Van Zandt to study new methods for analysis of human performance and a 2022 research pilot award to Peruggia, Addy, and Kunkel for developing quantitative methods for the evaluation of virtual reality experiences.

Engineering and Physics: Goel (Statistics) and McCord (Civil and Environmental Engineering and Geodetic Sciences) co-led a project awarded in 2003 by the National Consortium on Remote Sensing in Transportation-Flow for combining information from satellite and airborne imagery with ground-based data for improved estimation of traffic volumes on a specific highway segment on a typical day and over the entire highway network during a time period. Pratola (Statistics) was part of an interdisciplinary and multi-institutional 2020 NSF grant for bringing statistical methodology to important problems at the frontier of nuclear physics.

Computer Experiments and Computational Efficiency: Santner has received continuous funding from the Hospital for Special Surgery and the Cornell University Biomechanics Program for statistical analysis of knee wear, together with an NIH grant in 2014 for the design of meniscal substitutes via an integrated experimental, computational and statistical approach.

NSF grants were awarded to Santner, Dean and Hans in 2013 for studying complex experiments and high-input simulators, to Vu in 2019 for discovering hidden commonalities between disparate methods for extracting information from data, and to Zhang in 2023 to develop inference tools for accurate risk control in computational acceleration for U-statistics, and network method-of-moments. An NSF grant was awarded to Peruggia in 2006 to study computational issues in model elaboration, diagnostics, and estimation. In 2016, Santner and collaborators received an NSF grant for innovations in statistical modeling, prediction, and design for computer experiments.

**Network Analysis:** NSF funding was awarded to Calder in 2012 for work on Bayesian methods for socio-spatial point patterns and networks, and to Sivakoff in 2014 (with Parthasarathy, CSE) to study sampling and inference on network analysis.

**Crime:** Beginning 2007, Calder collaborated with researchers from the Criminal Justice Research Center at OSU to study the patterns and potential causes of spatial variability in crime rates within and across major U.S. cities, receiving an NSF grant in 2008. Craigmile and Stasny, with co-authors, worked on a project to impute missing data in the Uniform Crime Reports, funded by the ASA Committee on Law and Justice Statistics/Bureau of Justice Statistics.

**Data Analytics:** In 2017, Sivakoff and Kurtek became co-principal investigators on an interdisciplinary grant dealing with the geometric and topological aspects of complex data from mathematical, statistical and algorithmic perspectives. The grant was awarded to Ohio State through the NSF's Transdisciplinary Research in Principles of Data Science Phase I (TRIPODS) Program.

## IV. Biostatistics and the MBI

The OSU biostatistical activity is organized around two OSU entities. The first of these is the OSU Biostatistics Program, a Division of the College of Public Health.

The Biostatistics Program in the College of Public Health was founded in 2010 to include both classroom instruction and joint research with faculty members in the Life Sciences. The PhD program in Biostatistics, which had been run by the Statistics Department, was then jointly administered by the Statistics Department and the OSU School of Public Health.

The Department of Statistics and the Biostatistics Program hosted an NSF-sponsored Research Experience for Undergraduates (REU) Program during Summer 2001. REU programs give undergraduates the chance to perform faculty-guided research and collaborative research. A second REU was offered in 2002, this time broadened from the students interested in Biostatistics research to any field of Applied Statistics. In total, the REU programs attracted ten undergraduates in 2001, and eight in 2002.

A second component of the OSU Biostatistical activity was conducted by members of the Mathematical Biosciences Institute (MBI)

https://en.wikipedia.org/wiki/Mathematical Biosciences Institute.

From its opening in 2002, and throughout its operation, the MBI hosted workshops centered on its thematic semesters which included subjects such as mathematical neuroscience (2002-2003), cellular processes (2003-2004), cancer and its environment, and analysis of complex data in biological systems, and uncertainty in ecological analysis (2006). The MBI operated a vibrant program for postdoctoral scholars, with between 8 and 15 postdocs in residence each year. The MBI maintains a digital archive of talks and educational programs given at the institute during its operation. <a href="https://video.mbi.ohio-">https://video.mbi.ohio-</a>

state.edu/video? gl=1\*12i4h5k\* gcl\_au\*MjAyODkyMDk5Ni4xNzQwMzMwMTY1\* ga\*MTAzNzI2ODY2OC4xNzQwMzMwMTY1\* ga 09WC99HMPE\*MTc0MDM1MzYwMy4yLjEuMTc0MDM1MzYxOC40NS4wLjA.

The MBI also facilitated numerous education and outreach programs, including a long-running "distributed" REU program in which undergraduate students started and ended their summer research experience at MBI while working at an institute partner university for the bulk of the summer. As another example, the popular Workshop for Young Researchers in Mathematical Biology was held annually to facilitate connections among early-career researchers.

Other workshops included "Gene Expression Data Analysis" (2004), "MicroRNA in Development and Cancer" (2007), "Statistical System Biology" (2009), and "Family-based Genomic Studies" (2018) all of which were co-organized by Shili Lin, and "Uncertainty in Ecological Analysis" (2006) organized by Noel Cressie.

An MBI Summer Program brought high school teachers to campus to study and collaborate on research projects with Ohio State faculty and postdoctoral researchers who are part of the MBI. This program offered mathematics and science teachers the chance to increase their hands-on experience of the interconnections between mathematical modeling and biological research.

After 20 years of sustained NSF funding, MBI closed in summer 2021. As a celebration of the legacy of mathematical biology and the MBI at OSU, Ohio State hosted the 50<sup>th</sup> anniversary meeting of the Society of Mathematical Biology in July 2023. <a href="https://2023.smb.org">https://2023.smb.org</a> Laura Kubatko, finishing her duties as MBI co-director, served as the meeting organizer and chair.

#### **Personnel Changes**

A number of researcher changes gave the MBI and Biostatistical units additional flexibility in the choice of projects that these groups worked on. The following describes a sampling of these administrative modifications. In 2010, H.N. Nagaraja resigned from the Department of Statistics to accept a newly-created position as Chair of the Division of Biostatistics in the College of Public Health at OSU, which he held until retiring in 2015. Shili Lin was appointed Professor in the Division of Biostatistics 2009-2014.

At the MBI, Avner Friedman (Mathematics) was the first Director, with Dennis Pearl (Statistics) and Andrej Rotter (Pharmacology) as the two Associate Directors. When Friedman stepped down, Marty Golubitsky was hired to lead the institute and served as director from 2008-2016. After Greg Rempala's term as interim director, Kate Calder (Statistics) and Janet Best (Mathematics) were appointed co-directors of the MBI in January 2018, and Laura Kubatko joined Janet Best as a co-director in July 2019 when Calder left the university. Sebastian Kurtek (Statistics) became Associate Director in 2018-2020. Other statistics faculty have acted as mentors to postdocs over the years, including Santner, Shen, Verducci, Kubatko, Calder. Members of the Local Scientific Advisory Committee included Shili Lin (2005-2018).

## V. The Departmental Consulting Service

In 2000, the Statistical Consulting Service (SCS) was directed by faculty members appointed to the position and staffed by graduate students as part of their training. Tom Santner and Bill Notz, served as co-directors 2000-2003. In 2003, the Department decided to find a full-time director who would handle both internal consulting as well as soliciting external projects with the goal of making the service self-supporting. To this end, the Department hired Tom Bishop, who served as Director from 2003-2007. As Director, Tom led the effort to form a new partnership with Nationwide Insurance to establish the Nationwide Center for Advanced Customer Insights in the Fisher School of Business here at Ohio State. The Center was fully funded by Nationwide and managed by Ohio State. It employed faculty members and graduate students from the Marketing, Statistics, Psychology, Economics, and Computer Science Departments to develop new analytical methodologies that help solve important marketing problems. A course, STAT 6750, was set up by Tom Bishop and Doug Wolfe for students across the university as an introduction to consulting-specific technical skills and experience working on consulting projects with advice from Statistics GTAs with faculty supervision. The course helped to stabilize finances for the consulting service which, in turn, allowed expansion of the SCS staff.

Tom retired in 2007 and Chris Holloman served as Director of the SCS from 2007-2017, after serving as Associate Director in 2006. The Consulting Service also received external funding, such as that for work with the Ohio Department of Traffic (ODOT). To assist Holloman, Steve Naber served as Senior Consulting Research Statistician from 2010-2018. In 2017, Chris Holloman left the Department and the Consulting Service activity reverted back to individual faculty. The consulting course, STAT 6750, continues today.

In Spring 2007, graduate students Jeff Pan and Chris Sroka started Statistics in the Community (STATCOM) at Ohio State. This comprised a group of volunteers that provided limited, free, statistical consulting services to the local community. It served government and non-profit organizations that did not have the funds available to hire a professional statistical consultant. The idea for STATCOM came from graduate students at Purdue University, where a similar program had been operating since 2001.

## **VI.** Computing

In the late 1980s, the OSU Department of Statistics decided to use a single centralized compute system manufactured by the Pyramid corporation which all department users could access. Gradually this single machine was replaced by a set of individual, faculty-specific, workstations. Finally, the individual computers were replaced by a pooled collection of high-performance LINUX workstations, called "UNITY", and obtained from the departments comprising the College of the Arts and Sciences. By the mid 2000s, the Statistics Department had the exclusive use of 25 nodes from UNITY. On the software side of the Statistics Department's computing tools, the Department supported individual MacOS, Microsoft Windows and Red Hat Enterprise (Linux) machines. Higher intensity jobs have been available from the Ohio Supercomputer Center's resources.

As of 2024, Statistics faculty and graduate students have a cadre of support staff familiar both with high-level computing languages as well as with the collaborative nature of Statistical research. Some examples of OSU-provided technology services are networking, email, a course management system, cloud file sharing/storage, classrooms with projection systems and smart podiums, and extensive library services. The computing staff that services the Department of Statistics and the College of the Arts and Sciences have roughly 70 staff who provide broader assistance in research computing, computer labs, Ohio State's courseware system, tablet computers for interactive lecture capture, video conferencing, and general systems administration.

The Department works with the university to ensure needed research and teaching software are available on a site-licensed basis to faculty, staff and students, both on and off the campus. As of 2024, the list of software available through OSU includes R, Rstudio, Matlab, Mathematica, Minitab, SAS, JMP, SPSS and Microsoft 365.

## VII. Faculty, Student and Staff Office Space

No Department history would be complete without mentioning office space! Some graduate students in the first 25 years of the Department lived through office allocations above a bagel shop, followed by space in a series of condemned buildings. Later, a number of graduate students had good office space in buildings such as Journalism, Brown Hall (demolished in 2009), and the Math Building, but the space was scattered and space in Cockins Hall was very limited. All the chairs of the Department over the years worked extremely hard to try to bring all graduate students under the same roof. As the Department turned 25, Geodetic Science moved out of the fourth floor of Cockins Hall and the Department was able to move upstairs to the second, third, and fourth floors, leaving the first floor for the MSLC (Mathematics and Statistics Learning Center). Gradually more space became available on the second and third floors. In 2006, the Department received two former classrooms which were converted to graduate student office space. Finally, in 2008, with some space on the fourth floor of the Mathematics Building, all Statistics graduate students were provided with office space in Cockins Hall or the adjoining Mathematics building.

Cockins Hall has had many physical problems over the years! Leaks were common as radiators burst, the air conditioner hose leaked over the ceilings, and the roof leaked. Work on replacing the failed roof at Cockins Hall formally got underway in 2007 and was completed in 2008.

However, Christmas 2022 saw temperatures drop below zero degrees F with high winds. Pipes again burst throughout the building and Cockins Hall saw extensive damage on all floors. Repairs and renovations continued throughout 2023 and were not completed until early 2024.

As the Department and its programs have grown, the need for office staff has increased and, with it, the need for space to house staff. Renovations of space on the fourth floor have provided a suite of offices for staff, as well as the establishment of the Koch Conference/Reading Room.

## VIII. Professional recognitions and activities

During 1999-2024, many faculty have been honored with prestigious awards. These are listed in Table 5, and faculty honored with fellowships from professional societies are listed in Table 6. The many graduate student award winners, including the Ransom and Marian Whitney awards for best consultant in the Statistical Consulting Service and the best research associate, the Craig Cooley Memorial Prize for demonstrating exceptional scholarly excellence and leadership abilities, the Thomas and Jean Powers Teaching Awards for the best teaching associate and outstanding professor, and the Gary Koch Student Travel Awards, as well as Industrial, Departmental, and University Fellowships can be found in the Department newsletters and homepage articles.

Many faculty members have given of their time to serve professional societies in capacities such as journal editors and chairs of ASA sections; see Table 7. Not listed are the many faculty members who have served as associate editors for journals or received "best paper" awards.

# IX. Visiting Rustagi Lecturers and OSU-based Conferences Organized by Faculty Members

The Rustagi Lecture was established in 1988 by Jagdish Rustagi, a longtime faculty member and former chair of the Department, in honor of his parents. Each year, a prominent statistician is invited to present the lecture. The lecturers for the years 1988-2024 are listed in Table 8.

Department faculty have been very active in organizing or co-organizing research and education conferences over the years. Although many of these have been held in other locations, a number were held on the Ohio State University campus and are listed in Table 9.

In October 1999, a two-day anniversary conference was held at OSU to celebrate the first 25 years of the Department. The first day, with over 150 participants, included reminiscences from alumni and faculty. The second day, with over 250 participants (including 90 high school students), was a dual event which incorporated the 16th Annual Ohio Statistical Conference. The 2000 Department of Statistics newsletter (<a href="https://stat.osu.edu/sites/default/files/2020-12/statistics\_summer00.pm65.pdf">https://stat.osu.edu/sites/default/files/2020-12/statistics\_summer00.pm65.pdf</a>) provides a report on the conference.

In October 2024, the Department hosted alumni and friends for its 50th Anniversary Celebration. The events included two days of presentations, receptions, and friendly competitions culminating with a Golden Anniversary Banquet which attracted 200 participants (https://stat.osu.edu/newsletter/stat-50-november).

## X. Fun Facts

Some interesting fun facts from the Department's second 25 years (1999-2024) include:

Mark Berliner was an active contributor to the Nobel Prize winning efforts of the IPCC, which shared the Nobel Peace Prize with Al Gore, in 2007.

 $\underline{https://www.nobelprize.org/prizes/peace/2007/gore/facts/\#:\sim:text=The\%20Nobel\%20Peace\%20Prize\%20for,information\%20about\%20the\%20climate\%20challenge}$ 

Thanks to the Department Communications Committee, the "Department of Statistics at The Ohio State University" became a part of the Facebook community in 2010.

In March 2011, Dennis Pearl fulfilled a promise to his students by teaching a lecture while riding a unicycle across the very small and crowded stage in classroom EA 170.

In January 2016, Bill Notz featured in the NBC4 Powerball Jackpot Story.

Doug Critchlow was the 2018 North American Scrabble Championship Division 3 Champion and won the 2019 NASC Division 3 Seniors Trophy.

In October 2002, Bill Notz appeared on TV in a humorous local news story about the formula for determining the football BCS rankings, during which he jokingly (but, as it turned out, correctly) predicted Ohio State would win the National Championship.

In November 2021, Matt Amodio, who received an MAS degree in 2013 from the Department of Statistics at OSU, won 38 consecutive games on "Jeopardy!".

From 2021-2023, Kate Hu was awarded a number of patents for precision agriculture technologies and using mobile platforms to monitor air pollution.

## **Acknowledgments**

We would like to thank many faculty members, past and present (and especially Kate Calder, Noel Cressie, Yoon Lee, Steve MacEachern, and Elizabeth Stasny) for information and comments on earlier drafts of this manuscript. We thank Laura Kubatko for information on the MBI, and Brian Smith and Ryan Kilbane for information on the computing history.

## **APPENDIX:**

Table 1. Current Professors of Statistics and Professors of Teaching Practice,

Year hired	First	Last	Research areas
1988	Steve	MacEachern	Bayesian Statistics, Model Uncertainty and Selection, Nonparametric Methods, Monte Carlo and MCMC Methods, Robust Methods
1990	Mario	Peruggia	Bayesian Statistics, Model Uncertainty and Selection, Monte Carlo and MCMC Methods, Time Series Analysis, Statistical Graphics
1995	Shili	Lin	Statistical Genomics and Bioinformatics, High- Dimensional Data, Model Uncertainty and Selection, Bayesian Statistics, Monte Carlo and MCMC Methods
1996	Omer	Ozturk	Robust Methods, Nonparametric Methods, Uncertainty Quantification, Statistics Education
2002	Yoonkyung	Lee	Statistical Learning, Multivariate Analysis, Classification
2004	Deborah	Rumsey	Statistics Education, Learning Spaces, Teacher Training and Support
2005	Christopher	Hans	Bayesian Statistics, Model Uncertainty and Selection, Monte Carlo and MCMC Methods, Statistical Computing, Graphical Models
2006	Desheng	Liu	Spatial Statistics, Machine Learning, Remote Sensing
2005	Xinyi	Xu	Bayesian Statistics, Model Uncertainty and Selection, Decision Theory, High-Dimensional Data Analysis
2006	Eloise	Kaizar	Meta Analysis, Survey Sampling, Bayesian Statistics
2006	Radu	Herbei	Applied Probability, Monte Carlo and MCMC Methods, Inverse Problems, Uncertainty Quantification, Bayesian Statistics
2006	Laura	Kubatko	Statistical Genetics, Phylogenetics, Population Genetics, Computational Biology
2008	Asuman	Turkmen	Robust Methods, Statistical Genetics, Multivariate Analysis
2012	Sebastian	Kurtek	Shape Analysis, Functional Data Analysis, Image Analysis, Statistical Computing, Bayesian Statistics
2012	Vincent	Vu	High-Dimensional Data Analysis, Statistical Learning, Statistical Computing, Multivariate Analysis
2013	Jonathan	Baker	Mathematics and Statistics Education, Instructional Technology, Active Learning, Distance Education

2013	David	Sivakoff	Applied Probability, Percolation, Interacting Particle Systems, Stochastic Processes, Network Analysis
2014	Oksana	Chkrebtii	Uncertainty Quantification, Inverse Problems, Bayesian Statistics, Functional Data Analysis, Spatial and Spatio-Temporal Statistics
2014	Michelle	Everson	Statistics Education, Distance Education, Teacher Training and Support
2015	Dena	Asta	Network Analysis, Nonparametric Methods
2015	Jennifer	Sinnott	Survival Analysis, Statistical Genetics, High- Dimensional Data Analysis
2016	Yuan	Zhang	Statistical network analysis, Nonparametric inference, U-statistics, Conformal prediction
2017	Subhadeep	Paul	Network Analysis, Statistical Learning, Neuroimaging Data Analysis, High-Dimensional Data Analysis
2019	Thomas	Metzger	Bayesian statistics, Model selection, Statistical education
2021	Andrew	Richards	Statistics education
2021	Steephanson	Anthonymuthu	Statistics education
2022	Xiaoxuan	Cai	Causal Inference, Missing Data, Mediation Analysis, Observational Studies, Survival Analysis, Time Series
2023	Sally	Paganin	Bayesian Statistics, Models for latent variables, Statistical Computing, Statistical Genomics
2024	Arnab	Auddy	High Dimensional Statistics, Machine Learning Methods, Statistical and Computational Tradeoffs, Spectral Methods for Matrices & Tensors, Nonparametric Statistics
2024	Kate	Hu	Use of auxiliary Information and proxies for bias adjustment and precision improvement, Cost-effective study design, Z-estimation
2024	Isa	Marques	Modeling in space and time, Bayesian modeling and inference, Computational statistics, Environmental and ecological sciences and sustainability
2024	Jillian	Morrison	Data visualization, Statistics and Data Science Education, Interdisciplinary Research
2024	Max	Russo	Computational Statistics, Bayesian Statistics, Decision Theory, High Dimensional Data Analysis, Clinical Trials Design and Analysis
2024	Paul	Wiemann	Bayesian statistics, Computational statistics, Variational approximation, MCMC, Shrinkage priors, Spatial statistics

Table 2. Former faculty who retired or left during 1999-2024

Years in department	First	Last	Status
1980-2015	Mark	Berliner	Retired, Emeritus in residence
1983-2006	Saul	Blumenthal	Retired
1990-2011	Michael	Browne	Retired
2003-2019	Kate	Calder	Left to University of Texas
2003-2004	Arijit	Chakrabarti	Indian Statistical Institute.
2015- 2023	Lo-Bin	Chang	Left to Eisai Biostatistics
2001-2023	Peter	Craigmile	Left to Hunter College CUNY
1998-2012	Noel	Cressie	Left to University of Wollongong
1988-2021	Douglas	Critchlow	Retired, Emeritus in residence
1980-2011	Angela	Dean	Retired, Emeritus in residence
1994-2005	Hani	Doss	Left to University of Florida
1974-2005	Michael	Fligner	Retired
1983-2013	Prem	Goel	Retired, Emeritus
2003-2006	Tailen	Hsing	Left to University of Michigan
2001-2005	Ernest	Fokoue	Left to Kettering University
1977-2012	Hsu	Jason	Retired, Emeritus in residence
2017-2020	Jared	Huling	Left to University of Minnesota
1993-2003	Mark	Irwin	Left to Harvard University
2017-2018	Vishesh	Karwa	Left to Temple University
1999-2003	Stanley	Lemeshow	Left to OSU College of Public Health
2003-2013	Jack	Miller	Left to University of Michigan
2010	Elizabeth	Mannshardt	Left to North Carolina State University
1980-2015	Haikady	Nagaraja	Retired, Emeritus in residence
1984-2017	William	Notz	Retired, Emeritus in residence
1984-2013	Dennis	Pearl	Retired, to Penn State
2013-2024	Matt	Pratola	Left to Indiana University
1989-2010	Thomas	Santner	Retired, Emeritus in residence
1993-2003	Xiaotong	Shen	Left to University of Minnesota
2005-2014	Tao	Shi	Left to Citadel LLC
1984-2015	Elizabeth	Stasny	Retired, Emeritus in residence
1982-2012	Joseph	Verducci	Retired, Emeritus in residence
1973-2011	Douglas	Wolfe	Retired, Emeritus in residence
2001-2003	Roger	Woodard	Left to North Carolina State University
2014-2025	Yunzhang	Zhu	Amazon.com Inc.

## Deceased

Sadly, several former faculty members passed away in this period. These were Ransom Whitney (2007), Ramesh Srivastava (2012), Jagdish Rustagi (2014), Jean Powers (2015), Saul Blumenthal (2018), and Michael Browne (2018).

#### Table 3. Current staff

Name Administrative Position

Christine Bishop Accountant and Grants Administrator

Maria Cabral Student Receptionist

Caitlin Donahue Graduate Program Coordinator

Antonio Hernandez Academic Advisor Michael Jeter Fiscal Associate

Cassie Johnson Administrative Assistant John Pieper Senior Department Manager

Jean Scott Program Coordinator

Jennifer Wells Academic Program Specialist

## Table 4. Undergraduate and graduate level books authored by faculty

### **Undergraduate texts 1999-2024:**

2007 Rumsey, D. Intermediate Statistics for Dummies. John Wiley & Sons.

2010 Rumsey, D. Essentials of Statistics for Dummies. John Wiley & Sons.

2011 **Rumsey, D.** Statistics for Dummies, 2<sup>nd</sup> Edition, and accompanying 2019 Workbook, 2<sup>nd</sup> Edition; John Wiley & Sons.

2015 Rumsey, D. U-Can Statistics! John Wiley & Sons.

2017 Wolfe DA and Schneider, G. Intuitive Introductory Statistics, Springer

2020 Moore, D.S. and **Notz, W.I**. Statistics Concepts and Controversies, 10<sup>th</sup> Edition. with chapters contributed by **Miller, J.** and **Everson, M.**, Macmillan Learning

2021 Moore, D.S., **Notz, W.I**. and **Fligner, M.** Basic Practice of Statistics, 9<sup>th</sup> Edition, Macmillan Learning

2021 **Rumsey**, **D**. Statistics II for Dummies, 2<sup>nd</sup> Edition. John Wiley & Sons.

2022 Rumsey, D. Statistics for Dummies, All in One. John Wiley & Sons.

2024 **Rumsey**, **D.** Probability for Dummies, 2<sup>nd</sup> Edition. John Wiley & Sons.

#### Graduate and Research Texts 1999-2024

2000 **Berliner**, **L.M.**, Nychka, D., and Hoar, T., editors. Studies in the Atmospheric Sciences, Springer.

2003 David, H.A. and Nagaraja, H.N., Order Statistics, 3rd Edition, John Wiley & Sons.

2005 Balakrishnan, N., Kannan, N., and **Nagaraja, H.N.**, editors. Advances in Ranking and Selection, Multiple Comparisons, and Reliability, Birkhauser.

2006 **Dean, A.** and Lewis, S. editors. Screening: Methods for Industrial Experimentation, Drug Discovery and Genetics, Springer Verlag.

2007 **Verducci, J.S., Shen, X.,** and Lafferty, J. (editors) Prediction and Discovery, Contemporary Mathematics Series, volume 443.

2008 Reprint Arnold, B.C., Balakrishnan, N., and **Nagaraja, H.N.**, A First Course in Order Statistics, SIAM (Originally published 1992, John Wiley & Sons.

2009 Lin, S., Zhao, H. Handbook on Analyzing Human Genetics Data: Computational approaches and software. Springer, New York.

2010 Knowles, L.L. and **Kubatko**, **L.S.** editors. Estimating Species Trees: Practical and Theoretical Aspects, Wiley-Blackwell.

- 2011 **Cressie, N.** and Wikle, C.K. Statistics for Spatio-Temporal Data. John Wiley & Sons 2013 Hollander M., **Wolfe D.A.**, and Chicken E. Nonparametric Statistical Methods. John Wiley & Sons.
- 2014 **Rustagi J.S.**, **Wolfe D.A.**, editors. Teaching of Statistics and Statistical Consulting. Academic Press.
- 2015 **Dean, A.,** Morris M., Stufken, J., Bingham, D., editors. Handbook of Design and Analysis of Experiments, Chapman & Hall/CRC Handbooks of Modern Statistical Methods.
- 2017 **Dean, A.,** Voss, D., and Draguljic, D., Design and Analysis of Experiments, 2<sup>nd</sup> Edition, Springer-Verlag
- 2017 Jermyn, I.H., **Kurtek, S.**, Laga, H., Srivastava, A. Elastic Shape Analysis of Three-Dimensional Objects, Synthesis Lectures on Computer Vision, Morgan & Claypool.
- 2017 Choudhary P.K. and Nagaraja H.N., Measuring Agreement: Models, Methods and Applications, John Wiley.
- 2019 **Santner, T.J.,** Williams, B. and **Notz, W.I.**, The Design and Analysis of Computer Experiments, 2<sup>nd</sup> Edition. Springer Verlag.
- 2020 **Wolfe, D.A.** and Schneider, G. Primer for Data Analytics and Graduate Study in Statistics. Springer.
- 2022 Lin, S., Scholtens, D., Datta, S. Bioinformatics Methods: From Microarrays to NextGeneration Sequencing. CRC Press.
- 2022 Argiento, R., Camerlenghi, F., **Paganin, S.**, editors. New Frontiers in Bayesian Statistics. Springer Proceedings in Mathematics and Statistics, Springer.
- 2022 Cui, X., Dickhause, T., Ding Y., and **Hsu, J.C.**, editors, Handbook of Multiple Comparisons, Chapman & Hall/CRC Handbooks of Modern Statistical Methods

Table 5. Faculty and Staff Professional and University awards 1999-2024

## **Awards from Professional Societies**

Year	First	Last	Award
2001	Mark	Berliner	Distinguished Achievement Medal, ASA
2003	Michael	Browne	Distinguished Lifetime Achievement Award in Multivariate
			Experimental Psychology
2003	Joseph	Verducci	American Presidential Award: Statistics in Chemistry
2003	Stanley	Lemeshow	Wiley Lifetime Award
2005	Xinyi	Xu	Leonard J. Savage Dissertation Award
2006	Noel	Cressie	Distinguished Achievement Medal, American Statistical Association
2009	Noel	Cressie	R. A. Fisher Lecture, Joint Statistical Meetings
2009	Joseph	Verducci	Fulbright Fellowship to Ireland
2011	Peter	Craigmile	El-Shaarawi Young Researcher's Award
2011	Michelle	Everson	Waller Education Award, American Statistical Association
2019	William	Notz	Founders Award, American Statistical Association
2023	William	Notz	Waller Education Award, Career, American Statistical Association

University Awards			
Year	First	Last	Award
2004	Noel	Cressie	Distinguished Professor of Mathematical and Physical Sciences
2005-8	Michael	Browne	Roger E. Kirk Scholar in Residence, Dept. of Psychology
2006	Noel	Cressie	Distinguished University Scholar, OSU
2006	Elizabeth	Stasny	Harlan Hatcher Memorial Award, Colleges of Arts and
			Sciences
2009	Paul	Brower	Arts and Sciences Outstanding Staff Award
2010	Paul	Brower	University Distinguished Staff Award
2010	Kythrie	Silva	Distinguished Staff Award, College of Biological,
			Mathematical, and Physical Sciences
2011	Lisa	Van Dyke	Arts and Sciences Outstanding Staff Award
2014	Brian	Smith	Arts and Sciences Outstanding Staff Award
2018	Jean	Scott	University Distinguished Staff Award
2019-	Steven	MacEachern	Distinguished Arts and Sciences Professor of Statistics
2019	Peter	Craigmile	Alumni Distinguished Teaching Award
2021	Michelle	Everson	Provost's Award for Distinguished Teaching by a Lecturer
2022	Brooke	O'Leary	Arts and Sciences Outstanding Staff Award

## Table 6. Fellowships awarded by professional societies 1999-2024

Year	Name	Elected Fellow of
2000	H.N. Nagaraja	American Statistical Association
2001	William Notz	American Statistical Association
2001	Jason Hsu	American Statistical Association
2001	Mark Berliner	Institute of Mathematical Statistics
2002	Angela Dean	Institute of Mathematical Statistics
2002	Dennis Pearl	American Statistical Association
2004	Shili Lin	American Statistical Association
2004	Mario Peruggia	American Statistical Association
2004	Mark Berliner	American Association for the Advancement of Science
2005	Joseph Verducci	American Statistical Association
2006	Steven MacEachern	American Statistical Association
2006	Deborah Rumsey	American Statistical Association
2008	Noel Cressie	Spatial Econometric Association
2008	Thomas Santner	American Association for the Advancement of Science
2009	Shili Lin	American Association for the Advancement of Science
2010	Omer Ozturk	American Statistical Association
2015	Yoonkyung Lee	American Statistical Association
2016	Peter Craigmile	American Statistical Association
2019	Laura Kubatko	American Association for the Advancement of Science
2020	Steven MacEachern	International Society for Bayesian Analysis
2020	Peter Craigmile	Institute of Mathematical Statistics
2021	Steven MacEachern	Institute of Mathematical Statistics
2022	Xinyi Xu	American Statistical Association
2024	Shili Lin	Institute of Mathematical Statistics

Department members who became ASA and IMS Fellows before 1999, include:

ASA Fellows: Mark Berliner, Saul Blumenthal, Noel Cressie, Angela Dean, Prem Goel, Tailen

Hsing, Stanley Lemeshow, Tom Santner, Ransom Whitney, Douglas Wolfe

IMS Fellows: Robert Bartoszynski, Saul Blumenthal, Noel Cressie, Hani Doss, Prem Goel,

Tailen Hsing, Tom Santner, Douglas Wolfe

Table 7. Professional service 1999-2024

Year	First	Last	Service
1996-2020	Noel	Cressie	Member of Advisory Editorial Board, Wiley Series in
			Probability and Statistics, John Wiley & Sons
1998-2001	William	Notz	Associate Dean, College Math & Physical Sciences
2002-4	William	Notz	Editor of Technometrics
2004	Thomas	Santner	Chair, Council of Sections Governing Board, ASA
2005	Thomas	Santner	Committee on Nominations, ASA
2005	Mario	Peruggia	Chair, Section on Statistical Graphics, ASA
2007-9	William	Notz	Editor, Journal of Statistics Education
2007-9	Thomas	Santner	Board of Directors, ASA
2009-10	Joseph	Verducci	Co-Founder and Chair, ASA Section on
			Statistical Learning & Data Mining
2008	William	Notz	Chair, Section on Physical & Engineering Sciences, ASA
2010-12	Joseph	Verducci	Editor-in-Chief, J. of Statistical Analysis & Data Mining
2012	Angela	Dean	Chair, Section on Physical and Engineering Sciences, ASA
2013-15	Michelle	Everson	Editor Journal of Statistics Education
2014-2016	Shili	Lin	Standing member, GCAT Study Section, NIH
2015	William	Notz	Chair, Section on Statistical Education, ASA
2015-now	Mario	Peruggia	Co-Editor Bayesian Analysis
2016	Steven	MacEachern	President of International Society for Bayesian Analysis
2016-2020	Shili	Lin	Standing member, BMRD Study Section, NIH
2018	Shili	Lin	President of the Caucus for Women in Statistics
2020	Steven	MacEachern	Chair, Caucus of Academic Representatives, ASA
2020	Laura	Kubatko	President of the Society of Systematic Biologists
2020-now	Shili	Lin	Board of Directors, Canadian Statistical Sciences Institute
2020-24	Mario	Peruggia	Board of Directors, International Soc. Bayesian Analysis
2023-now	Yoonkyung	Lee	Board of Directors, Korean International Statistical Society
2024-now	Jonathan	Baker	Director, AMGEM STEM Gateway Learning Center
2024-now	Shili	Lin	NISS Statistics Serving Society (S3) Ingram Olkin Forums

Table 8. Chotey Lal and Mohra Devi Rustagi Lecturers 1999-2024.

Professor Susan A Murphy	Harvard University	2024
Professor Yee Whye Teh	University of Oxford	2023
Professor Michael I. Jordan	University of California, Berkeley	2022
Professor Richard Samworth	University of Cambridge	2021
Professor Jeffrey Rosenthal	University of Toronto	2020
Professor Nancy Reid	University of Toronto	2019
Professor Dennis Cook	University of Minnesota	2018
Professor Larry Wasserman	Carnegie Mellon University	2017
Professor Bin Yu	University of California, Berkeley	2016
Professor Elizabeth Thompson	University of Washington	2015
Professor David Madigan	Columbia University	2014
Dr. Alice S. Whittemore	Stanford University (Medicine)	2013
Professor Stephen E. Fienberg	Carnegie Mellon University	2012
Professor Xiao-Li Meng	Harvard University	2011
Professor Gary G. Koch	University of North Carolina, Chapel Hill	2010
Dr. Gregory Campbell	Food and Drug Administration	2009
Professor Jerry Friedman	Stanford University	2008
Professor James Berger	SAMSI & Duke University	2007
Professor Nan Laird	Harvard University	2006
Professor Raymond J. Carroll	Texas A&M University	2005
Professor Michael Stein	University of Chicago	2004
Professor C.R. Rao	Pennsylvania State University	2003
Professor Richard L. Smith	University of North Carolina, Chapel Hill	2002
Professor Thomas Kailath	Stanford University	2001
Professor Herbert A. David	Iowa State University	2000

From inception in 1988 to 1999, the following professors gave Rustagi lectures: Herman Chernoff (Harvard), Carl Morris (Texas), Neils Keiding (Copenhagen, Denmark), Larry Brown (Cornell), Herbert Robbins (Rutgers), Vijay Nair (Michigan), Valery B. Nevzoro (St. Petersburgh State, Russia), Donald Rubin (Harvard), Edward Wegman (George Mason), Terry Speed (California, Berkeley), Wing Hung Wong (UCLA).

Table 9. Conferences held on the OSU campus and organized by Ohio State Faculty and Staff.

Year	Conference
2000	First Midwest Conference for New Directions in Experimental Design (Dean)
2000	Workshop on Hierarchical Modeling in Environmental Statistics (Cressie)

2004	Ohio Statistics Conference (Miller)
2005, 7, 9	United States Conference on Teaching Statistics (USCOTS) (Pearl)
2007	First North American Workshop in Cladistic Methods (Kubatko)
2010	The Conference on Nonparametric Statistics and Statistical Learning,
	(Verducci, Shi, MacEachern, Lee, Ozturk, Xu, Wolfe)
2010	Celebration of lifetime of scientific contributions of Michael Browne
	(Depts Statistics & Psychology; Soc. Multivariate Experimental Psychology;
	Scientific Software International)
2016	ENVR/EnviBayes Workshop on Bayesian Environmetrics (Calder, Craigmile)
	(including a special invited session and dinner to honor Mark Berliner)
2016-24	American Statistical Association DataFest (Hans)
2018-24	Florence Nightingale Day (Lin, Kohlschmidt, Baker, T.Berliner, Mo,
	Nicolet, Turkmen)
2022	TDAI Foundations CoP Deep Learning Summer School, (Lee)