50-Th ANNIVERSARY DEPARTMENT OF STATISTICS University of Wisconsin

Richard Johnson Professor Emeritus

In 2010, the Department of Statistics at the University of Wisconsin will celebrate its 50th anniversary.

The inspiration for a separate Department of Statistics came from several faculty members in the Business School, School of Agriculture, and other departments having a strong quantitative component. An international search for a chairperson resulted in the outstanding choice of George E. P. Box¹ (1960-1991) as the founding chair.



George E. P. Box

His first new faculty members included John Gurland (1960-1987) and Norman Draper (1961-1999). Professor Box's strong desire to have applications play a central part led him to create a department where some members held joint appointments with other departments having important applications. Towards this goal, he created joint faculty appointments for three students whose theses he had

¹ Numbers in parenteses indicator years as faculty member

mentored. George Tiao (1962-1983), Ph. D. Economics, Business School, Bill Hunter (1963-1986), Ph. D. Statistics, School of Engineering, and Sam Wu (1965-1979), Ph. D. Mechanical Engineering, Mechanical Engineering. At this time George Box himself started a long running, and very fruitful, research program with professors in Chemical Engineering.

The majority of the next hires strengthened the theoretical component of the program and ultimately led to its reputation for being strong and balanced. Jerome Klotz (1965-1999), five new assistant professors in 1966 including Gouri Bhattacharyya (1966-1995), Richard Johnson (1966-2008) and George Roussas (1966-1972), and then Steve Stigler (1967-1978) and Grace Wahba(1967-) were hired. Also, Bernie Harris (1967-2002) joined the department.

In 1967 the department moved into new building that was shared by Statistics, Computer Science, and an administrative computing group. Robert Miller (1968-2005) joint with Business School, and John VanRyzin (1969-1979) who guided an early group of biostatisticians increased connections with those areas.

During this time, George Box was doing pioneering work with G. Jenkins on time series. He also began his famous Monday night Beer & Statistics Seminar at his home. Interested students and faculty would listen to a short presentation of a statistical problem encountered by a scientist on campus. The discussions that followed were always interesting and informative. Often, the results of implementing some of the suggestions were reported in the following weeks.

The Statistics Department's first decade was marked by an exceptional period of productivity and growth.

Over the next several years, the Department of Statistics developed a strong program that featured a balance of theory and practice. Advances in time series, design of experiments, and engineering applications continued to be highlights. Greg Reinsel (1976-2004) and Jeff Wu (1977-1990) were important contributors to time series and design, respectively.

Brian Joiner (1974-1984), who developed a consulting lab, Tom Leonard (1980-1995), Bayesian inference, and Robert Wardrop (1974-2006) were added to faculty. The joint appointments held by Anastasios "Butch" Tsiatis (1974-19890), Department of Prevention Medicine, Jed Frees (1984-1997), School of Business and Tom Kurtz (1986-2008), Department of Mathematics, strengthened those areas.

The current full-time faculty of the Statistics Department are Grace Wahba (1967-), Erik Norheim (1977-), Doug Bates (1980-), Kam Tsui (1980-), Wei-yin Loh (1982-), Jun Shao (1994-), Chunming Zhang (2000-), Kjell Doksum (2002-), Zhengjun Zhang(2005-), Zhigang Qain (2006-) and Yazhen Wang (2009-).

Over the years, the joint appointment positions became concentrated in two programs, Biometry in the School of Agriculture and Life Sciences and Biostatistics in the Medical School. The Biometry program, begun in the late 1970s, has active collaborations, including a joint Masters degree, across the biology departments in agriculture, veterinary medicine and basic sciences. The current faculty associated with Biometry are Brian Yandell (1982-), Murray Clayton (1984-), Jun Zhu (2000-), Bret Larget (2002-), and Cecile Ane (2006-).

The Biostatistics Program started from the UWCCC Biostatistics Shared Resource, developed in part by John Crowley(1973-1981). Dave DeMets (1982-) was hired to oversee statistical activities in the Medical School, which evolved from division to center in 1986 and to department by 1991. Barry Storer (1984-1996), Michael Kosorok (1992-2006) and Jason Fine (1998-2008) help strengthen the biostatistics program. A name change to the Department of Biostatistics & Medical Informatics (BMI) in 1996 reflected the changing demands on this group. The current faculty holding joint appointment in Statistics are DeMets (1982-), Rick Chapell(1990-), Michael Newton (1991-), Sunduz Keles (2004-), and Sijian Wang (2008-). Several additional BMI faculty are affiliated with Statistics, including Mari Palta (1982-), Mary Lindstrom (1987-), KyungMann Kim (1997-), Ron Gangnon (2005-), Christina Kendziorski (2001-), Moo Chung (2001-), Adin-Cristian Andrei (2006-) and Karl Broman (2007-). The M.S. and Ph.D. graduate degrees in Biostatistics are official options under Statistics jointly administered by the Departments of Statistics and Biostatistics & Medical Informatics.

Because this history is necessarily brief, there are certainly many persons who made important contributions while on the faculty but who are not mentioned.

Over the first 50 years, members of the faculty have published thousands of papers and over 30 texts and monographs.

The faculty are justly proud of 562 Master Degrees and 398 Ph. D's that have been awarded. Many recipients hold leading positions in academia, government, and industry.

To celebrate the 50-th anniversary, a research conference STATISTICAL SCIENCE-MAKING A DIFFERENCE will be held June 3^{rd} and 4^{th} , 2010 in Madison, Wisconsin. For more information, see www.stat.wisc.edu/Department/50th_Anniversary/50th.html.