

## *Executive Summary Statistics Department 2005-2006*

**Discovery** (13.04 Tenured of Tenure-track Faculty, 3 Instructors, 1 Post-Doc, 1 Research Scientist)

- Appeared: 1 textbook, 32 peer-reviewed journal articles.
- In press: 28 peer-reviewed articles and 1 textbook.
- Faculty Presentations: 2 Invited International, 11 Invited National, 4 Contributed National.
- One Newly Elected Fellow of the Institute of Mathematical Statistics
- One Newly Elected Member of the International Statistical Institute
- Ten Fellows of the American Statistical Association (Five Current Faculty, Five Emeritus Faculty)
- Two Fellows of the American Society for Quality (Both Current Faculty)
- Two Past Editors of a Major Statistical Journal (*Journal of Quality Technology*)
- Eleven Associate Editorships/Editorial Board Memberships Held of Major Journals by Eight Faculty Members
- Research Expenditures: \$133,466 FY (2004-05)
- Allocated Research Awards: \$162,392

### **Graduate Education**

- Number of Graduate Students:
  - Spring 2005: 44 (18 M.S., 26 Ph.D.)
  - Fall 2005: 56 (26 M.S., 30 Ph.D.)
- Number of Ph.D. Awarded:
  - Spring 2005: 2
  - Fall 2005: 4
- Number of M.S. Awarded:
  - Spring 2005: 6
  - Fall 2005: 7
- Ten Graduate Presentations at National Meetings
- Seven Corporate Partners (Program Enhances Graduate Assistantships and Provides Practical Internships): Minitab, Eli Lilly, General Electric, DuPont, Kraft, Pratt & Whitney, SAS

### **Undergraduate Education**

- Number of Undergraduate Majors:
  - Spring 2005: 41
  - Fall 2005: 38
- Number B.S. Awarded Spring 2005: 8
- Number B.S. Awarded Fall 2005: 3

### **Service**

- Service on Nine Major National/International Committees
- 104 Billable Hours of Faculty Consulting and 382 Billable Hours of Graduate Student Consulting within the University through the Consulting Center

## I. LEARNING

### Graduate Student Presentations at National Meetings

“Metropolis Algorithms for Finding Ecological-environmental Relationships.” Joint Statistical Meetings 2005, Minneapolis, MN. Presented by **David Farrar**

“High Breakdown Estimation Methods for Phase I Multivariate Control Charts. Joint Statistical Meetings. Minneapolis, MN. August, 2005. Presented by **Willis A. Jensen**

“The Use of Multivariate Control Charts to Detect Changes in the Spatial Patterns of Disease.” Joint Statistical Meetings, Minneapolis, Minnesota, August 2005. Presented by **M. D. Joner.**

“CUSUM Control Charts for Monitoring Autocorrelated Binary Observations,” INFORMS Annual Meeting, San Francisco, California, November 2005. Presented by **S. Mousavi**

“Nonparametric Approaches to Response Surface Methodology”. Joint Statistical Meetings. Minneapolis, MN. August, 2005. Presented by **Stephanie M. Pickle.**

“A Comparison of Surveillance Methods for Small Incidence Rates.” Joint Statistical Meetings, Minneapolis, Minnesota, August 2005. Presented by **L. Sego**

"Appropriate Upper Control Limits for the T2 Chart Based on the Successive Differences Covariance Matrix Estimator." Spring Research Conference. Park City, UT. 2005. Presented by **J.D. Williams**

"Statistical Monitoring of Dose-Response Quality Profiles from High-Throughput Screening ." Joint Statistical Meetings. Minneapolis, MN. August, 2005. Presented by **J.D. Williams**

"Statistical Monitoring of Dose-Response Quality Profiles from High-Throughput Screening ." Fall Technical Conference. St. Louis, MO. October, 2005. Presented by **J. D. Williams**

“Efficient Sampling Plans for Control Charts for Monitoring the Mean and Variance of an Autocorrelated Process.” Joint Statistical Meetings, Minneapolis, Minnesota, August 2005. Presented by **X. Zhong**

## II. DISCOVERY

### Books, Appeared in 2005

**Vining, G.G.** and Kowalski, S.M. (2006), *Statistical Methods for Engineers*, 2<sup>nd</sup> ed., Belmont, CA: Duxbury Press. (available fall 2005).

### Papers, Appeared in 2005

Bing, N. and **Hoeschele, I.** (2005), Genetical genomics analysis of a yeast segregant population for transcription network inference, *Genetics*, 170, 533-542.

Bing, N., **Hoeschele, I.**, Ye, K., and Eilertsen, K.J. (2005), Finite mixture model analysis of microarray expression data on samples of uncertain biological type with application to reproductive efficiency, *Veterinary Immunology and Immunopathology*, 105, 187-196.

**Birch, J.B.** and **Morgan, J.P.** (2005), TA Training at Virginia Tech: A Stepwise Progression, *American Statistician*, 59, 14-18.

Boone, E., Ye, K., and **Smith, E.P.** (2005), Assesment of two approximate method for comparing posterior probabilities, *Computational Statistics and Data Analysis*, 48, 221-234.

Cao, J. and **He, C.** (2005), Bias adjustment in Bayesian estimation of bird nest age-specific survival rates. *Biometrics*, 61, 877-878.

Ching, C-Y., Bakhiet, R.M., Hart, V., and **Holtzman, G.I.** (2005), Isoflavones improve plasma homocysteine status and antioxidant defense system in healthy young men at rest but do not ameliorate oxidative stress induced by 80% VO(2)pk exercise, *Ann. Nutr. Meth.*, 49, 33-41.

Gao, G., and **Hoeschele, I.**, (2005) Approximating identity-by-descent matrices using multiple haplotype configurations on pedigrees. *Genetics*, 171, 365-376.

**He, C.Z.**, and **Sun, D.** (2005). Bayesian Survival Analysis for Discrete Data with Left-Truncation and Interval Censoring., *Handbook of Statistics*, 25, 913-934.

**Hoeschele, I.** and Li, H. (2005), A note on joint versus gene-specific mixed model analysis of microarray gene expression data, *Biostatistics*, 6, 183-186.

Kim, K. and **Reynolds, M.R., Jr.** (2005). Multivariate Monitoring Using an MEWMA Control Chart with Unequal Sample Sizes. *Journal of Quality Technology*, 37, 267-281.

- Montgomery, D.C., **Myers, R.H.**, Carter, W.H., Jr., and **Vining, G.G.** (2005), The hierarchy principle in designed industrial experiments, *Quality and Reliability Engineering International*, **21**, 197-201.
- Ni, S. and **Sun, D.** (2005). Alternative Bayesian Estimators for Vector-Autoregressive Models, *Journal of Business and Economic Statistics*, **23**, 105-117.
- Pfister-Genskow, M., Myers, C., Childs, L., Lacson, J., Betthausen, J., Gouleke, Forsberg, E. P., Zheng, Y., Leno, G., Schultz, R., Liu, B., Chetia, C., Yang, X., **Hoeschele, I.**, and Eilertsen, K.J, (2004), Identification of differentially expressed genes in individual bovine preimplantation embryos produced by nuclear transfer: Improper reprogramming of genes required for trophoblast development, *Biology of Reproduction*, **72**, 546-555.
- Ren, C., **Sun, D.**, Speckman, P. L, **He, C. Z.**, Swan, S. (2005). Hierarchical Models for the Probabilities of Conception, *Biometrical journals*, **47**, 721-739.
- Reynolds, M.R., Jr.** and Kim, K. (2005). Multivariate monitoring of the process mean vector with sequential sampling, *Journal of Quality Technology*, **37**, 149-162.
- Reynolds, M.R., Jr.** and Stoumbos, Z.G. (2005). Should CUSUM and EWMA charts be used with a Shewhart limit?, *Technometrics*, **47**, 409-424.
- Rouder, J. and Lu, J., Speckman, P., **Sun, D.**, and Jiang, J. (2005). A hierarchical model for estimating response time distributions., *Psychonomic Bulletin and Review*, **12**, 105-117.
- Ryan, T.P. and **Woodall, W.H.** (2005), The most-cited statistical papers, *Journal of Applied Statistics*, **32**, 461-474.
- Spitzner, D.J.** (2005), Risk-reducing hierarchical shrinkage for generalized linear models, *Journal of the Royal Statistics Society Series B*, **67**, 1-14.
- Spitzner, D.J.** (2005), Using goodness-of-fit procedures in high-dimensional testing, *Journal of Statistical Computation and Simulation*, **76**: 447-457.
- Stoumbos, Z.G. and **Reynolds, M.R., Jr.** (2005). Economic design of adaptive control schemes for monitoring the process mean and variance, *Nonlinear Analysis: Real World Applications*, **6**, 817-844.
- Sun, D.**, and Sun, X., (2006). Estimation of the Normal Precision Matrix and Covariance Matrix with missing data, *Journal of Multivariate Analysis*, **97**, 698-719.
- Sun, D.**, and Speckman, P. (2005). A note on existence of posterior moments, *Canadian Journal of Statistics*, **33**, 591-601.

**Sun, D.** and Sun, X. (2005). Estimation of the Normal Precision and Covariance Matrices in the Star-shaped Models, *Annals of the Institute of Statistical Mathematics*, 57, 455-484.

Sun, X., and **Sun, D.**. Estimation of the multivariate Normal covariance matrix with staircase pattern data., *Annals of the Institute of Statistical Mathematics*, 28.

Sun, Xi. and **Sun, D.** (2005). Estimation of the Cholesky decomposition of the covariance matrix in the star-shape model, *Statistics and Probability Letter*, 73, 1-12.

Teutsch, Chris D., John H. Fike, Gordon E. Groover, and **Susanne Aref**. Nitrogen Rate and Source Effects on the Yield and Nutritive Value of Tall Fescue Stockpiled for Winter Grazing. 2005. Plant Management Network.

**Vining, G.G.**, Kowalski, S.M., and Montgomery, D.C. (2005), Response surface designs within a split-plot structure, *Journal of Quality Technology*, 37, 115-129.

Wang, X., **He, C., Z.** and **Sun, D.** (2005). Bayesian Capture-recapture Applications in Epidemiology, *Statistics and Medicine*, 24, 249-267.

**Woodall, W.H.** and **Mahmoud, M.A.** (2005), The inertial properties of quality control charts, *Technometrics*, 47, 425-436.

Zhang, S., **Sun, D.**, and Chanetsa, F.. (2005), Space-time Trend of Smoking Rates in Missouri During 1990-2001, *Far East Journal of Theoretical Statistics*, 16, 69-85.

Zhang, S. and **Sun, D., He, C.**, and Schootman, M.. (2006), A Bayesian semiparametric model for colorectal cancer incidence, *Statistics in Medicine*, 25, 285-309.

### **Books, In Press in 2005**

Montgomery, D.C., Peck, E.A., and Vining, G.G. (2006). *Introduction to Linear Regression Analysis*, 4th ed. New York: John Wiley.

### **Papers, In Press in 2005**

Bailey, R.A., Cameron, P. J., Dobscyani, P., **Morgan, J. P.**, and Soicher, L.S. (2004). Designs on the web. *Discrete Mathematics*, to appear.

Bethausser, J.M., M. Pfister-Genskow, H. Xu, P.J. Gouleke, J.C. Lacson, R.W. Koopang, B. Liu, **I. Hoeschele**, K.J. Eilertsen and G.H. Leno (2006) Nucleoplasmin facilitates reprogramming and in vivo development of bovine nuclear transfer embryos. *Molecular Reproduction and Development* (in press)

- Cao, J. and **He, C.Z.** (2006), Bayesian Estimation of Age-specific Nest Survival Rates with Categorical Covariates. *Environmental and Ecological Statistics*.
- George, E., **Sun, D.** and Ni, S. (2006). Stochastic Search Model Selection for Restricted VAR Models. *Journal of Econometrics*.
- Gupta, S., Montgomery, D. C., and **Woodall, W. H.** (2006). Performance Evaluation of Two Methods for Online Monitoring of Linear Calibration Profiles. To appear in the *International Journal of Production Research*.
- Herbert, D.A. Jr., S. Malone, **S. Aref**, J. Faircloth, O. Abaye. Boll removal studies provide insights into compensation ability of Virginia cotton: a necessary step for further improvement of insect management strategies. 2006. *Journal of Entomological Science*. 41:.
- Jensen, W. A., Jones-Farmer, L. A., Champ, C. W., and **Woodall, W. H.** (2006). Effects of Parameter Estimation on Control Chart Performance: A Literature Review. To appear in the *Journal of Quality Technology*.
- Kowalski, S.M., **Vining, G.G.**, Montgomery, D.C., and Borror, C.M. (2006). "Modifying a Central Composite Design to Model the Process Mean and Variance when There are Hard-to-Change Factors," *Applied Statistics*, to appear.
- Mahmoud, M. A., Parker, P. A., **Woodall, W. H.**, and Hawkins, D. M. (2006). A Change Point Method for Linear Profile Data. To appear in *Quality & Reliability Engineering International*.
- Morgan, J. P.** (2005). Nested Designs. *Handbook of Combinatorial Designs*, to appear.
- Morgan, J. P.** and Parvu, V. (2005). Optimal row-column designs for three treatments. *Journal of Statistical Planning and Inference*, to appear.
- Morgan, J. P.** and Reck, B. (2004). E-optimal design in irregular BIBD settings. *Journal of Statistical Planning and Inference*, to appear.
- Ni, S., **Sun, D.** and Sun, X. (2006). Bayesian analysis for vector-autoregressive models under the intrinsic loss. *Journal of Business and Economic Statistics*.
- Oleson, J., **He, C. Z.** and **Sun, D.** (2006). Bayesian estimation in small areas under pre- and post-stratification. *Survey Methodology*. Revised.
- Peterson, Brennan D.; Newton, Christopher R.; Rosen, Karen H.; **Schulman, Robert S.** Coping Processes of Couples Experiencing Infertility. Accepted by *Family Relations*.
- Ren, C., **Sun, D.**, and Dey, D. (2006). Bayesian and frequentist estimation and prediction for exponential distributions. *Journal of Statistical Planning and Inference*.

**Reynolds, M.R., Jr.** and Cho, G. Y. Multivariate Control Charts for Monitoring the Mean Vector and Variance-Covariance Matrix. To appear in *Journal of Quality Technology*.

**Reynolds, M.R., Jr.** and Kim, K. Multivariate Control Charts for Monitoring the Process Mean and Variability Using Sequential Sampling. Invited paper to appear in the special volume of *Sequential Analysis* in honor of Walter Shewhart.

Sheriff, S.L, **Sun, D., He, C.Z.** and Vangilder, L.D. (2006). Estimating hunter success rates using small area estimation methods. *Journal of Wildlife Management*.

**Sun, D.** and Kim, S.W. (2006). Intrinsic priors for testing ordered exponential means. *Journal of Statistical Planning and Inference*.

**Sun, D.,** and Ni, S.. Bayesian Analysis for Vector-Autoregressive Models under the Intrinsic Loss, *Journal of Business and Economic Statistics*.

**Sun, D.** and Speckman, P. (2006). Bayesian hierarchical linear mixed models for additive smoothing splines. *Annals of the Institute of Statistical Mathematics*

Sun, X. and **Sun, D.** (2006). Estimation of the multivariate Normal covariance matrix with staircase pattern data. *Annals of the Institute of Statistical Mathematics*.

**Vining, G.G.** (2006). "Adapting Response Surface Methodology for Computer and Simulation Experiments," *Grammar of Technology Development*, to appear.

**Vining, G.G.** and Kowalski, S.M. (2006), An overview of composite designs run as split-plots, *Frontiers in Intelligent Statistical Quality Control*, 8<sup>th</sup> ed., Lenz, H.J. and Wilrich, P.T., eds.

Wang, X., **He, C.Z.,** and **Sun, D.** (2006). Bayesian population estimation for a capture-recapture model using non-informative priors. *Journal of Statistical Planning and Inference*.

**Williams, James D., Woodall, William H., Birch, Jeffrey B.,** and Sullivan, Joe H., Distributional Properties of the Multivariate T<sub>2</sub> Statistic Based on the Successive Differences Covariance Matrix Estimator. Accepted for publication in *Journal of Quality Technology*. To appear in 2006.

**Woodall, W. H.** (2006). Use of Control Charts in Health Care Monitoring and Public Health Surveillance (with discussion by David Spiegelhalter and Olivia Grigg, University of Cambridge; James Benneyan, Northeastern University and Institute for Healthcare Improvement; M.A. Mohammed, University Hospital of Birmingham, UK; Stefan Steiner, University of Waterloo; Howard Burkom, Johns Hopkins University; James M.

Lucas, Consultant; and Rochelle Watkins, Curtin University of Technology, Australia).  
*Journal of Quality Technology*, 38, 88-103.

## **Faculty Presentations**

### *Invited International*

Fourth International Symposium on Business and Industrial Statistics (2005) – Palm Cove, Australia. “Testing Issues for Response Surface Designs Run as Split-Plots” By **G.G. Vining**, co-authored by S.M. Kowalski

International Workshop on the Grammar of Technology Development (2005) – Tokyo, Japan. also Fifth Annual Meeting of the European Network for Business and Industrial Statistics (2005) – Newcastle, UK, “Modifying Response Surface Methodology for Computer and Simulation Experiments” by **G.G. Vining**

### *Invited National*

Scaling by Reference Conditions for Ecological Assessment. Presented at Interface Meeting 2005, St Louis, MO. by **Bates Prins, S.C.**, and **Smith, E.P.**

“TA Training at Virginia Tech: A Stepwise Progression”. Presented at the First Annual United States Conference on Teaching Statistics (USCOTS). May, 2005 by **Jeff Birch**.

“Bayesian Estimation of Wildlife Population Sizes Using Non-informative Priors.” Joint Statistical Meetings, Minneapolis, MN, August 7-11, 2005. by C. He.

Optimal design for three treatments in settings with multiple blocking factors. International Conference on Design of Experiments: Theory and Applications. Memphis, 13 May 2005 by **J.P. Morgan**

Optimal Incomplete Block Designs. Design and Analysis of Experiments 2005. Santa Fe, 14 October 2005 by **J.P. Morgan**

Multivariate Monitoring of the Process Mean Vector With Sequential Sampling. Invited presentation in the *Journal of Quality Technology*-sponsored session at the INFORMS Annual Meeting, San Francisco, California, November 2005 by **Reynolds, M.R., Jr.**, co-authored with Kim, K.

“Objective Bayesian Analysis for Spatial-Temporal Models.” The Fifth International Workshop on Objective Bayesian Methods, Branson, USA, June 4-9, 2005 by **D. Sun**

INFORMS Annual Meeting (2005) – San Francisco, California, “Response Surface Methodology for Split-Plot Experiments: A Sequential Learning Strategy” by **G.G. Vining** co-authored by S.M. Kowalski.



“Use of Control Charts in Health Care Monitoring and Public Health Surveillance, Quality & Productivity Research Conference, Minneapolis, MN, May 2005. Also presented at the 2005 INFORMS Meeting in San Francisco, CA, November 2005. by **Bill Woodall**

“The Inertial Properties of Quality Control Charts”, Invited paper for the *Technometrics* Session of the 49<sup>th</sup> Annual Fall Technical Conference, St. Louis, MO, October 2005 by **Bill Woodall**.

*Contributed National*

“Scaling by reference conditions for ecological assessment.” Presented at New Researchers Conference, June 2005, Minneapolis, MN. by **Bates Prins, S.C.**

Scaling by reference conditions for ecological assessment. Presented at North American Benthological Society Conference 2005, New Orleans, LA by **Eric P. Smith**, co-authored with **Bates Prins, S.C.**

“Perspectives on high-dimensional inference in functional data analysis.” Joint Statistical Meetings in Minneapolis, MN, August 2005 by **Spitzner, D. J.**

“Elementary Chis Squared” Joint Statistical Meetings, Minneapolis, Minnesota, August 10, 2005 by **Terrell, G.R.**,

*Grants (new):*

Grant from German Academic Exchange Organization (DAAD) to support a postdoctoral exchange fellow in my lab from November 2005 through March 2006 to Kathrin Friederike Stock with support for Distl and **Hoeschele**.

Missouri Department of Conservation, “WinBUGs Application in Hunting Survey,” Amount: Direct cost of \$104,100 plus tuition and indirect cost, 07/01/2005--06/30/2008, PI: **D. Sun**

National Cancer Institute of National Institutes for Health, “Neighborhood Effects on Quality of Life in Breast Cancer,” R01 CA112159 Total funding, \$1,219,000. Portion at VT and Univ. of Missouri \$297,629. 12/01/2005-11/30/2009, PI of subcontract: **D. Sun**.

DuPont, 2005, “Statistical Internship,” Total amount awarded: \$32,000 (\$25,478 direct and \$6522 indirect). PI: **Geoff Vining**.

*Grants (continuing):*

National Institutes of Health, R01 GM66103-01, (2002-2006), “Polygenic linkage and linkage disequilibrium mapping”, \$320,708, **I. Hoeschele**.

National Science Foundation DBI-0211863, (2002-2007), “Dissecting soybean resistance to Phytophthora by QTL analysis of host and pathogen expression profiles”, \$6,764,465, B.M. Tyler, M.A. Saghai Maroof, G.R. Buss, **I. Hoeschele**, K. Ye, A. Dorrance, S. St. Martin.

National Science Foundation, “Block Designs: Advances in Theory and Use,” DMS 01-04195, Completed 8-31-2005. Amount: \$207,179. PI: **J.P. Morgan**

Missouri Department of Conservation , “Adjusting Nonresponse Biases for Attitude Surveys ,” Amount: direct cost of \$166,088 plus tuition and indirect cost. 07/01/2004--06/30/2007, PI: **D. Sun**, CoPI: **C.Z. He**.

National Science Foundation, “Using Control Charts to Monitor Process and Product Quality Profiles,” DMII-0354859, Amount \$50,000, 2004-2005. Collaborative research with Douglas C. Montgomery, Arizona State University. PI: **Bill Woodall**

*Proposal(s) (declined):*

National Institutes of Health (2006-2010), \$2,010,596, “Mapping of fetal susceptibility loci to lung cancer”. M. Miller, P.I., **I. Hoeschele** and T. Dragani co-P.I.s .

National Institutes of Health (2006-2010), \$1,796,925, “Role of Ki-Ras in the pathogenesis of lung cancer”. M. Miller, P.I., **I. Hoeschele**, co-P.I.

National Institutes of Health (2006-2009), \$774,187, “Haplotyping and QTL mapping in pedigrees with missing data”. G. Gao, P.I., **I Hoeschele**, co-P.I.

National Institutes of Health (2006-2009), \$619,170, “Statistical method for network inference from specific perturbation experiments”, I. Hoeschele, P.I.

**Spitzner, D.** (2005). Randomness and nonparametric inference. Grant proposal submitted November 2005 to NSF Program in Statistics. Requesting \$199,449 over three years.

Zipper, C. E., Wynne, R., Smith, E. P., and **Spitzner, D.**, (2005). Advancing CWA Lake Monitoring by Combining Probabilistic Survey Design with Remote Sensing. Grant proposal submitted April 2005 to EPA Office of wetlands, oceans, and watersheds. Requesting \$251,956 over two years.)

*Proposals Pending*

National Science Foundation, DMS 06-04997. “Symmetry and Asymmetry in Experimental Design.” Amount: \$337,817. P.I.: **J.P. Morgan**.

Arterial Stiffness and the Metabolic Syndrome in Older Adults. Submitted to NIH. Principle Investigator: Davy, Kevin. **Robert S. Schulman** listed as Co-Investigator, to be funded for 8% of salary per year.

12/01/2006-11/30/2009: National Cancer Institute of NIH (R01 CA109675); Spatial, Temporal, Social Disparities in Breast Cancer. Total requested \$800,000. PI: Schootman (Washington University). Portion at VT and Univ. of Missouri: \$379,102 (Co-PIs: P.L. Speckman and D. Sun). 1.5 months/year for Sun, 1 month/year for P. Speckman and a 50% research assistant.

07/01/2006-06/30/2009: PI. Waterfowl harvest survey small area estimation, Missouri Department of Conservation, direct cost of \$145,000.

### **III. ENGAGEMENT**

#### **Corporate Partners Program**

Seven Members in 2005:

- Du Pont
- Eli Lilly & Co.
- General Electric
- Kraft Foods
- Minitab
- Pratt & Whitney
- SAS

**Co-Sponsor, Fifth International Symposium on Business and Industrial Statistics,  
January 2006, Lima, Perú (Logistical support in 2005)**

#### **IV. DIVERSITY**

“Graduate School in Statistics”. Presented at the STATFEST Conference in Peal City, Hawaii, March 5, 2005. Invited talk by **Jeff Birch**.

Recruited one graduate student from Morehouse College.

## V. SERVICE

### **Associate Editors/Members of Editorial Review Boards**

Susanne Aref, Editorial Review Board, *Journal of Biological Agriculture & Horticulture*

Chong He, Guest Editor of a special issue on New Developments of Statistical Analysis in Wildlife, Fisheries, and Ecological Research. *Environmental and Ecological Statistics*, 2005.

Ina Hoeschele, Associate Editor, *Genetics, Selection, Evolution*

Ina Hoeschele, Associate Editor, *Biometrics*

J.P. Morgan, Associate Editor, *Journal of Statistical Planning and Inference*.

Marion Reynolds, Editorial Review Board, *Journal of Quality Technology*

Marion Reynolds, Associate Editor, *IIE Transactions*

Eric Smith, Associate Editor, *Environmetrics*

Eric Smith, Associate Editor, *Journal of Agricultural, Biological, and Environmental Statistics*

George Terrell, Associate Editor, *Journal of Computational and Graphical Statistics*

Geoff Vining, Editorial Review Board, *Journal of Quality Technology*

Bill Woodall, Editorial Review Board, *Journal of Quality Technology*

### **Major National/International Society Service**

Chong He, Chair of Organizers and Program Committee of Conference on New Developments of Statistical Analysis in Wildlife, Fisheries, and Ecological Research, sponsored by NSF and University of Missouri, Columbia, Missouri, October 13-16, 2004.

Golde Holtzman, Secretary-Treasurer, Mu Sigma Rho National Honorary Society.

Marion Reynolds, Member of the Advisory Board of the Quality, Statistics, and Reliability Section of The Institute for Operations Research and the Management Sciences

Dongchu Sun, Chair of Organizers and Program Committee, Fifth International Workshop on Objective Bayesian Methods, Branson, USA, June 4-9, 2005

Geoff Vining, Chair, Statistics Division, American Society for Quality

Geoff Vining, Chair, Publications Management Board, American Society for Quality

Geoff Vining, General Conference Chair, Fifth International Symposium on Business and Industrial Statistics, Lima, Perú, January 2006.

Bill Woodall, Member, ASA Deming Lecturer Committee

Bill Woodall, Member, Shewhart Medal Committee, American Society for Quality

### **Panel Service**

**Ina Hoeschele**, Member of joint NSF/NIGMS Mathematical Biology review panel (September 2005)

### **University, College, and Department Service**

*Susanne Aref*

Director, Statistical Consulting Center

Conducted FDI workshops, four 2-hr workshops in spring, a 3-day workshop in summer, two 2-hour workshops in Fall.

ADVANCE work-group member

*Sam Bates Prins*

Chair, Communications Committee.

Computing Committee

College of Science Website Review Committee

*Jeff Birch*

Director of Graduate Programs

Chair, Teaching Evaluation Committee, 2000-present.

Chair, Graduate Committee, 2001-present.

Member, Advisory Committee, 2001-present.

Coordinator for STAT 3005-3006

Faculty advisor, Mu Sigma Rho. (National Statistics Honor Society) 1991-present

*Mike Box*

Department's Systems Administrator

*Leigh Harrell*

Undergraduate Co-ordinator

Member, College of Science Curriculum Committee

*Ina Hoeschele*

VBI annual research symposium committee

Search committee, Department of Statistics

Steering and admissions committees of GBCB Ph.D. program

Reviewer (entire faculty) of faculty application to VBI

*Golde Holtzman*

Corporate Partners Program Committee, chair (2000-2006)

*J.P. Morgan*

Chair, Personnel Committee, Department of Statistics

Search Chair, Department of Statistics

Graduate Committee, Department of Statistics

*Bob Schulman*

Consulting Committee

Policy/Procedures Committee

Qualifying Examination Committee

Teaching Evaluation Committee



Undergraduate Committee

Coordinator for STAT 3604, 5615, 5616, 5634, 5665, 5666

*Marion Reynolds*

Personnel Committee

Cluster Hiring Search Committee

Computing Committee

Qualifying Exam Committee

Policy/Procedures Committee

College of Science Honorifics Committee

*Dan Spitzner*

Chair, Colloquium Committee

*Dongchu Sun*

Personnel Committee, College of Science

*Geoff Vining*

Department Head

*Bill Woodall*

College Cluster Hiring Committee

College of Science Dean Search Committee

Departmental Personnel Committee

Departmental Graduate Committee

Departmental Corporate Partners Committee (with responsibility for organizing the Student Research Seminar)

## **VI. HONORS AND AWARDS**

### **Fellows of the American Statistical Association**

#### *Active Faculty*

Marion Reynolds  
Eric Smith  
Geoff Vining  
Bill Woodall

#### *Emeritus Faculty*

Jesse Arnold  
I.J. Good  
Klaus Hinkelmann  
Dick Krutchkoff  
Ray Myers

#### *Fellows of the American Society for Quality*

Geoff Vining  
Bill Woodall

#### Fellow of the Institute of Mathematical Statistics

Dongchu Sun

#### Elected Members, International Statistics Institute

Marion Reynolds  
Eric Smith  
Dongchu Sun  
Geoff Vining  
Bill Woodall

Sam Bates Prins, 2004-2005 Statistics Club Professor of the Year