

NAME: Stephen D. Simon

Completion of Scholarly Activities- Teaching

Applicants must demonstrate excellence in two (2) of the three (3) recognized areas of scholarly activity. Candidates may elect not to submit data for the optional area, or they may submit information in all three (3) areas and allow the SOM Faculty Appointment and Promotion Committee to independently consider their strengths in those areas. The following areas should be described with sufficient detail to allow the Committee to assess the merit of each listed activity. **All activities described below should occur since the applicant's affiliation with UMKC or applicant's last promotion.** Where applicable, brief narrative descriptions of the professional/clinical service activity should be included.

1. **FACULTY RANK:** Beginning with present position and in reverse chronological order, list all faculty positions and ranks held, giving dates and institutions.

Research Biostatistician, Office of Medical Research, The Children's Mercy Hospital, May 1996 to present, with a joint appointment as **Associate Professor** in the School of Medicine at the University of Missouri, Kansas City.

[5 positions, held from June 1979 to April 1996 not listed.]

2. **MEDICAL STUDENT TEACHING:** List all courses in which you taught since your affiliation with UMKC or your last promotion. Provide the official university course title/number, students involved (year 1, 2, etc.), class enrollment number, date(s) of your involvement and a brief narrative of your participation (content of your teaching/presentations). Begin list with most recent courses and continue in reverse chronological order. Please provide all Student Teaching Evaluations since your affiliation with UMKC or last promotion.

None

- 3. OTHER TEACHING:** Beginning with the most recent and then in reverse chronological order, list all clinical teaching activities in which you participated. These activities may include both formal and informal lectures, bedside teaching rounds, CME, and grand rounds but must involve students, residents, fellows and/or faculty. Provide date(s), location (hospital/institution) and clinical service in which these activities occurred. Narrative descriptions of each activity (see above) are particularly relevant to this category of scholarly activity. Please provide all Resident, Fellows and/or Faculty Teaching Evaluations since your affiliation with UMKC or last promotion. The applicant is referred to Appendix B, *Guidelines for Promotion of SOM Full-Time Non-Regular (Non-Tenure), Non-Physician and Non-Clinical Physician Faculty* for suggestions on the types of other or innovative activities which may be included. These suggestions are not all-inclusive however. Faculty members who have other unique or innovative teaching activities are encouraged to describe those in this section. Each activity must be listed by title, date(s) of activity, location and with a narrative description as mentioned above. Candidates may attach additional documentation (*e.g.* lecture notes, publication reprints) which elucidate the faculty member's activities for up to two (2) of these activities.

This material is separated into three broad areas: development of pedagogical resources, training classes outside CMH, and training classes at CMH. There is an uncertain dividing line between a research presentation (listed in Advancement of Knowledge (Research), Section 6) and a training class (this section). I have adopted the arbitrary rule that anything that is 45 minutes or shorter is a research presentation and anything that is 60 minutes or longer is a training class. For the most part, this is a reasonable choice, but a case can be made that some of the material in this section might fit better in Advancement of Knowledge (Research), Section 6 and vice versa.

Development of pedagogical resources. I have developed extensive web resources for teaching Statistics. I use these resources in all of my training classes. Here is a summary of the resources at my own website, at Chance News, and at Wikipedia.

In 1997, I set up a small web site called StATS (Steve's Attempt to Teach Statistics) which is available both inside and outside CMH. **This website is not peer-reviewed.** The URL for the main page of StATS is www.childrensmercy.org/stats. Over the years, I have added many pages. There are currently more than 1,300 pages on this site, with a comparable number of graphic images (formulas, screen shots of statistical software, and statistical graphs). These pages cover statistics, research methodology, research ethics, and evidence based medicine. I have been logging compliments at www.childrensmercy.org/stats/details/compliments.asp.

I have made contributions to two Wiki sites. The first is **Chance News**, a review of current news stories that use statistics or probability concepts. This unique pedagogical resource allows teachers of Statistics to cite real world examples in their classes. The URL for Chance News is chance.dartmouth.edu/chancewiki/index.php/Main_Page

- * Chance News 28, Sloppy animal research
- * Chance News 27, Forsooth
- * Chance News 26, Quotations
- * Chance News 26, Excluding car bombs from a measure of sectarian violence

- * Chance News 24, Forsooth
- * Chance News 24, The danger of providing expert witness testimony when you are not an expert
- * Chance News 23, Quotations
- * Chance News 23, What can you do with 100 words?
- * Chance News 23, Can Google replace your doctor?
- * Chance News 23, Amazon's Statistically Improbable Phrases
- * Chance News 22, I wasn't making up data, I was imputing!
- * Chance News 20, A clumsy attempt at anonymization
- * Chance News 18, What does "unable to replicate" mean?
- * Chance News 16, Exponential decay in Biblical ages
- * Chance News 16, Use and Reliability of Internet information
- * Chance News 14, Single and not so carefree
- * Chance News 12, Can dogs sniff out cancer?
- * Chance News 11, Laughter in the Supreme Court
- * Chance News 6, Self Experimentation
- * Chance News 4, Racial profiling
- * Chance News 4, Can you get fired over the wording of a questionnaire

I have also made edits to another Wiki site, **Wikipedia**. Wikipedia is a free content encyclopedia with hundreds of thousands of entries in multiple languages. My work on Wikipedia is mostly just minor corrections and revisions. I note the approximate time frame in which my edits were made.

- * Biased sample (February 2007)
- * Binomial proportion confidence interval (September and December 2006)
- * Sample (statistics) (September and October 2006)
- * Simple random sample (October 2006)

Although anyone, in theory, can edit a wiki page, the Chance News site only allows registered users this privilege. Other registered contributors at Chance News have made minor editorial changes to my contributions and I have made minor editorial changes to others contributions, but I have listed only those entries where I originally conceived and wrote the article. For both sites, if you review the history page, you can verify the contributions I made (look for the username simon66217). Please note that **the contributions to Chance News and Wikipedia are not peer-reviewed**. A summary of my work on Wiki pages with links to each individual article is on my website at www.childrensmercy.org/stats/category/WikiPages.asp.

Training classes outside CMH. I have been invited to give training classes at several regional, national, and international conferences. Note that many of these invitations are for “repeat performances” which is an indirect indication that the training classes were well received. The first time each class is listed, I include a brief abstract. I am the sole presenter for all of these classes, unless otherwise noted. Evaluations for these classes is included in an appendix.

* In December 2007, I will be giving a four hour class with the tentative title "**Assessing the safety of pediatric treatments**" for the Signal Detection and Risk Management conference in Amsterdam sponsored by Informa Life Sciences. Note that I will also be giving a research talk at the same conference, as described in Advancement of Knowledge (Research), Section 6. The abstract for the training class is not finalized yet; here is the current draft: "Assessing the safety of medical treatments for children offers some unique challenges and difficulties. Although the research is in many ways similar to adult research, there are special considerations because of the differing physiology of children and the more stringent regulatory reviews that these studies require. This talk will highlight the important medical, ethical, and statistical issues that face researchers in this area. This talk will present several case studies of published research to encourage open discussion of these issues and exploration of the best approaches to meet the sometimes conflicting needs of regulators, drug companies, and ethics review boards."

* In October 2007, I will be giving a 1.5 hour talk at the 2007 Annual Meeting of the Midwest Society for Pediatric Research in Indianapolis, Indiana. **Topic and abstract to be determined.** This will be the fourth consecutive year that I have been invited by this society.

* In September 2007, I will be giving a one hour class, **Stats #73-Medical Journals – The Trouble with Apples and Oranges**, for the Homecoming 2007 CME Program of the Kansas City University of Medicine & Biosciences.

* **Stats #72-Manipulation of peer-review publications by pharmaceutical companies** presented for the Grand Rounds of the Medical Center of Independence, Mar 19, 2007, 1 hour, 17 students. Abstract: This training class will discuss allegations of commercial biases in the peer review process.

* **Stats #17: Using Statistics to Monitor and Improve Quality** co-presented with SM Schrader for the 2007 Andrology Lab Workshop for the American Society of Andrology in Tampa Bay, Florida, April 21, 2007, 3 hours, approximately 40 students. I was responsible for two hours of lectures. This was the third consecutive year and the fifth time that I was invited to teach at this conference.

* **Stats #24-What Do All These Numbers Mean? Likelihood Ratios** presented for the 2006 annual meeting of the Midwest Society for Pediatric Research, October 2006, 1.5 hours, unknown number of students. Abstract: This training class will teach you some of the numbers used to describe medical diagnostic tests. This class is useful for anyone who reads journal articles that evaluate these tests.

* **Stats #24-What Do All These Numbers Mean? Likelihood Ratios** presented for the TMC-Orthopedic Department, Sep 21, 2006, 1 hour, 22 students.

* **Stats #32a-Statistical Evidence: Apples or Oranges? Randomized studies** presented for the Grand Rounds for TMC-Lakewood, May 8, 2006, 1 hour, 7 students. Abstract: This class is an abbreviated version of Stats #32 with a focus on the strengths and weaknesses of randomized studies. The talk requires no mathematical background and uses no formulas.

* **Sperm Morphology Workshop** co-presented with M Palladino, S Rothmann, A Bollendorf, SM Schrader for the 2006 Andrology Lab Workshop for the American Society of Andrology in Chicago IL, April 2006, 8 hours, approximately 40 students. I was responsible for 2 hours of lectures. Although the material for this class eventually evolved into Stats #17 (see above), the material in this class differed somewhat from that class and from my presentation in the 2005 Andrology Lab Workshop in that I placed emphasis on Pareto charts and Ishikawa (Fishbone) diagrams.

* **Sperm Morphology Workshop** co-presented with M Palladino, S Rothmann, A Bollendorf, SM Schrader for the 2005 Andrology Lab Workshop for the American Society of Andrology in Seattle WA, April 2005, 8 hours, approximately 40 students. I was responsible for two hours of lectures. Although the material for this class eventually evolved into Stats #17 (see above), the material in this class differed somewhat from that class and from my presentation in the 2006 Andrology Lab Workshop in that I placed emphasis on managerial and organizational issues associated with quality control programs.

* **Stats #67-Meta-Analysis and Diagnostic Tests** presented for the UMKC Department of Mathematics and Statistics seminar series, Feb 23, 2006, 1 hour, 19 students. Abstract: Meta-analysis is the quantitative combination of results from multiple research studies. Meta-analysis is a relatively new field in Statistics, and standards for the proper data analysis are still evolving. Meta-analysis of studies of diagnostic tests, in particular, is especially controversial, with many conflicting approaches for computing an overall estimate from the individual sensitivity or specificity values from these studies. In the first half of this talk, I will review the general methods for the quantitative combination of results in a meta-analysis, and work out two examples using R and the meta library. In the second half, I will use data from a meta-analysis of 20 studies of endovaginal ultrasonography for detecting endometrial cancer to illustrate and critically evaluate several competing approaches for quantitatively combining results from diagnostic studies. All the data sets used in this presentation come from journal articles where the full free text is available on the web.

* **Stats #32-Statistical Evidence: Apples or Oranges?** presented for the 2005 annual meeting of the Midwest Society for Pediatric Research, October 2005, 1.5 hours, unknown number of students. Abstract: This class is an expansion of the material covered in "How to Read a Medical Journal Article" It helps you assess the selection of a control group in a research study so you can decide whether a fair (apples to apples) comparison exists. The talk requires no mathematical background and uses no formulas.

* **Stats #32-Statistical Evidence: Apples or Oranges?** presented for the TMC-Orthopedic Department, Oct 6, 2005, 1 hour, 25 students.

* **Stats #66-What Can Alternative Medicine Teach Us About Evidence-Based Medicine?** presented for Grand Rounds for the Medical Center of Independence, Mar 8,

2006, 1 hour, 17 students. Abstract: There is at times a degree of antagonism between proponents of alternative medicine and proponents of evidence based medicine. There is a lot that the first group can learn from the second, but there are also things that the second group can learn as well. This talk discusses some of the limitations of evidence based medicine and the randomized clinical trial.

* **Stats #36-Statistical Evidence. Interviewing Other Witnesses** presented to the TMC-Orthopedic Department, Jun 2, 2005, 1 hour, 2 students (there must have been more than 2 students, but for some reason, only 2 students signed the registration form). Abstract: This class helps you assess the quality of the corroborating or supporting evidence for a research study. This class requires no mathematical background and uses no formulas.

* **Stats #35-Statistical Evidence: Do the Pieces Fit Together? (Meta analysis)** presented to the TMC-Orthopedic Department, Mar 10, 2005, 1 hour, 19 students. Abstract: This class helps you assess the quality of a systematic overview or meta-analysis. This class requires no mathematical background and uses no formulas.

* **Stats #66-What Can Alternative Medicine Teach Us About Evidence-Based Medicine?** presented for Grand Rounds for TMC-Lakewood, Aug 25, 2005, 1 hour, 23 students.

[My records for training classes in years 2004 and earlier are difficult to reconstruct. Although I did give several outside training classes in those years, they did not occur as frequently as they have in more recent records.]

Training classes at CMH. I teach a series of short modular courses that can be taken in any order. This helps at the Hospital because doctors, nurses, and other health care professionals are too busy to take courses in sequence. These courses are typically one to three hours in length. There is a lot of overlap in the individual classes, partly to facilitate the modular nature of these classes and partly because repetition is the best teacher. I am the sole presenter for each of these classes. Evaluations for these classes are included in an appendix.

Sometimes a two or three hour class was condensed into a single hour by the request of the person inviting me to talk. Sometimes the content of a two or three hour class was divided across consecutive weeks/months, again by request of the inviter. The first time each class is listed, I include a brief abstract, unless the abstract appears above in the Training classes outside CMH subsection. The evaluations for most of these classes are included in an appendix (my records are incomplete because of problems with lack of administrative support during certain times).

* **Stats #34-Statistical Evidence: Mountain or Molehill? (1 hour version).** (Aug 28, 2007, 1 hour, 5 students). Abstract: This class is an expansion of the material covered in "How to Read a Medical Journal Article." It helps you assess the evaluation of outcomes in a research study so you can decide whether the study has a clinically relevant impact. The talk requires no mathematical background and uses no formulas.

* **Stats #24-What Do All These Numbers Mean? Likelihood Ratios.** (Aug 14, 2007, 2 hours, 2 students).

* **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.** (Aug 3, 2007, 1 hour, 18 students). Abstract: This two hour training class will teach you how to interpret confidence intervals and p-values.

* **Stats #73-Medical Journals: the trouble with apples & oranges.** (Jul 19, 2007, 1 hour, 16 students). Abstract: This training class will discuss the problems with selection of a control group.

* **Stats #71-Control Charts for Continuous Monitoring of the NNT.** (Jun 1, 2007, 1 hour, 6 students). Abstract: While most of the efforts in signal detection use newly developed data mining algorithms that are both complex and computer intensive, there is still room in your research arsenal for simpler approaches that have withstood the test of time, like the statistical process control chart. By applying a straightforward data transformation, you can use the control chart to monitor the Number Needed to Harm (NNH), an easily interpreted measure of absolute risk.

* **Stats #25-What Do All These Numbers Mean? Regression Coefficients (1 hour version).** (Jun 1, 2007, 1 hour, 4 students). Abstract: This two hour training class will teach you to interpret results from linear and logistic regression models. This class is useful for anyone who is involved with producing or interpreting medical research.

* **Stats #33-Statistical Evidence: Who Was Left Out? (1 hour version).** (May 30, 2007, 1 hour, 5 students). Abstract: This class is an expansion of the material covered in "How to Read a Medical Journal Article" It helps you assess the exclusions, and dropouts in a research study so you can decide whether a fair (apples to apples) comparison exists. The talk requires no mathematical background and uses no formulas.

* **Stats #51-The Ethics of Placebo Controlled Trials.** (May 11, 2007, 1 hour, 10 students). Abstract: This class will teach you some of the ethical problems associated with the use of a placebo group in a medical research study. This class is useful for anyone who is planning a research study that might need a placebo group.

* **Stats #32c-Statistical Evidence: Apples or Oranges? Matching and adjustments.** (Apr 25, 2007, 1 hour, 5 students). Abstract: This one hour training class will give you a general introduction in how to interpret research publications that use methods such as matching and covariate adjustment to assure a good comparison between the treatment/exposure group and the control group. In this presentation, you will apply these skills to actual published research.

* **Stats #1-Using SPSS to Manage Your Research Data.** (Apr 25, 2007, 1.5 hours, 9 students). Abstract: This three hour training class will give you a general introduction in how to use SPSS software to manage your research data. This class is useful for anyone who needs to use SPSS to enter or analyze research data. Students should know how to use a mouse and how to open applications within Microsoft Windows. No statistical experience is necessary. This class will provide hands-on computer experience using SPSS software. You will also use a simple Excel spreadsheet (bf.xls) and a Microsoft Access database (practice.mdb) in some of the practice exercises.

* **Stats #42-Designing a Research Study.** (Apr 6, 2007, 1 hour, 5 students). Abstract: This class will introduce you to the statistical issues important in developing a research study. Please bring a copy of a research paper comparing two groups (e.g., new

versus standard therapy) for use in class exercises. This class is useful for anyone who participates in the planning of research. There are no pre-requisites for this class.

* **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.** (Apr 3, 2007, 2 hours, 6 students).

* **Stats #52-Scientific Validity, Statistics, and IRB Review.** (Mar 23, 2007, 1 hour, 11 students). Abstract: When the Institutional Review Board (IRB) reviews your research, they will evaluate (among other things) the scientific validity of your study. Consulting with a statistician prior to IRB submission helps. Not all aspects of scientific validity touch on Statistics, but some do. In particular, a statistician can provide help with the selection of your sample, the size of your sample, and the plan for data analysis.

* **Stats #42-Designing a Research Study.** (Mar 23, 2007, 1 hour, 12 students).

* **Stats #2-Using SPSS to Describe Your Data.** (Mar 20, 2007, 3 hours, 2 students). Abstract: This three hour training class will give you a general introduction in how to use SPSS software to manage your research data. This class is useful for anyone who needs to use SPSS to enter or analyze research data. Students should know how to use a mouse and how to open applications within Microsoft Windows. No statistical experience is necessary. This class will provide hands-on computer experience using SPSS software. You will use two SPSS data sets for practice exercises: bf.sav, and housing.sav.

* **Stats #72-Manipulation of peer-review publications by pharmaceutical companies.** (Mar 9, 2007, 1 hour, 4 students).

* **Stats #32b-Statistical Evidence: Apples or Oranges? Observational studies.** (Mar 1, 2007, 1 hour, 4 students). Abstract: This one hour training class will give you a general introduction in how to interpret research publications that are based on observational studies. There are four major types of observational studies: cohort studies, case-control studies, cross-sectional studies, and historical controls studies. There are advantages and disadvantages to each of these types of studies. In this presentation, you will apply these skills to actual published research.

* **Stats #21-What Do All These Numbers Mean? Sensitivity and Specificity.** (Feb 13, 2007, 2 hours, 2 students). Abstract: This two hour training class will teach you some of the numbers used to describe medical diagnostic tests. This class is useful for anyone who reads journal articles that evaluate these tests. Please bring a pocket calculator.

* **Stats #36-Statistical Evidence. Interviewing Other Witnesses. Part B.** (Feb 2, 2007, 1 hour, 4 students).

* **Stats #32a-Statistical Evidence: Apples or Oranges? Randomized studies.** (Jan 30, 2007, 1 hour, 10 students).

* **Stats #36-Statistical Evidence. Interviewing Other Witnesses. Part A.** (Jan 5, 2007, 1 hour, 3 students).

* **Stats #24-What Do All These Numbers Mean? Likelihood Ratios.** (Dec 20, 2006, 2 hours, 3 students).

* **Stats #53-Signal Detection Strategies for Pediatric Treatments.** (Dec 1, 2006, 1 hour, 7 students). Abstract: Signal detection and pharmacovigilance are already highly

regulated and challenging fields, but once you factor in children as your subject group these challenges become even greater. There are physiologic, ethical, and statistical questions that you must consider for some (but not all) efforts in post marketing surveillance.

* **Stats #34-Statistical Evidence: Mountain or Molehill?** (Nov 30, 2006, 3 hours, 21 students).

* **Stats #53-Signal Detection Strategies for Pediatric Treatments.** (Nov 22, 2006, 3 hours, 4 students).

* **Stats #71-Control Charts for Continuous Monitoring of the NNT.** (Nov 14, 2006, 1 hour, 12 students).

* **Stats #23-What Do All These Numbers Mean? Odds Ratios and Relative Risks.** (Nov 8, 2006, 2 hours, 6 students). Abstract: This two hour training class will teach you some of the numbers used in studies where the outcome only has two possible values (e.g., dead/alive). This class is useful for anyone who has to interpret research findings in medical journals.

* **Stats #34-Statistical Evidence: Mountain or Molehill? (1 hour version).** (Nov 3, 2006, 1 hour, 7 students).

* **Stats #33-Statistical Evidence: Who Was Left Out?** (Nov 1, 2006, 3 hours, 14 students).

* **Stats #3-Using SPSS to Develop a Linear Regression Model.** (Oct 24, 2006, 3 hours, 2 students). Abstract: This three hour training class will give you a general introduction in how to use SPSS software to compute linear regression models. Linear regression models provide a good way to examine how various factors influence a continuous outcome measure. There are three steps in a typical linear regression analysis: 1. Fit a crude model, 2. Fit an adjusted model, 3. Check your assumptions. These steps may not be appropriate for every linear regression analysis, but they do serve as a general guideline. This class will provide hands-on experiences using SPSS software. You will use two SPSS data sets for practice exercises: bf.sav and housing.sav.

* **Stats #33-Statistical Evidence: Who Was Left Out?** (Oct 12, 2006, 3 hours, 12 students).

* **Stats #21-What Do All These Numbers Mean? Sensitivity and Specificity.** (Oct 6, 2006, 1 hour, 6 students).

* **Stats #2-Using SPSS to Describe Your Data.** (Oct 4, 2006, 3 hours, 5 students).

* **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.** (Sep 27, 2006, 2 hours, 15 students).

* **Stats #2-Using SPSS to Describe Your Data.** (Sep 19, 2006, 3 hours, 6 students).

* **Stats #1-Using SPSS to Manage Your Research Data.** (Sep 5, 2006, 3 hours, 5 students).

* **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.** (Sep 1, 2006, 1 hour, 4 students).

- * **Stats #32-Statistical Evidence: Apples or Oranges?** (Aug 31, 2006, 3 hours, 20 students).
- * **Stats #21-What Do All These Numbers Mean? Sensitivity and Specificity.** (Aug 22, 2006, 2 hours, 4 students).
- * **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.** (Aug 4, 2006, 1 hour, 7 students).
- * **Stats #25-What Do All These Numbers Mean? Regression Coefficients.** (Jul 27, 2006, 2 hours, 6 students).
- * **Stats #5-Using SPSS to Develop a Survival Data Model.** (Jul 11, 2006, 3 hours, 2 students). Abstract: This three hour training class will give you a general introduction in how to use SPSS software to compute survival data models. These models compare the amount of time until a certain event (such as death or relapse) occurs. This class is useful for anyone who encounters survival times as part of their research. This class will provide hands-on computer experience in the CMH computer lab using SPSS software.
- * **Stats #32-Statistical Evidence: Apples or Oranges?** (Jun 20, 2006, 3 hours, 21 students).
- * **Stats #24-What Do All These Numbers Mean? Likelihood Ratios.** (Jun 8, 2006, 2 hours, 6 students).
- * **Stats #17-Using Statistics to Monitor and Improve Quality, part 2.** (Jun 2, 2006, 1 hour, 6 students). Abstract: This training class will show you how to use statistical tools to assess the quality of an on-going medical process.
- * **Stats #32b-Statistical Evidence: Apples or Oranges? Observational studies.** (May 31, 2006, 1 hour, 9 students).
- * **Stats #4-Using SPSS to Develop a Logistic Regression Model.** (May 16, 2006, 3 hours, 4 students). Abstract: This three hour training class will give you a general introduction in how to use SPSS software to compute logistic regression models. Logistic regression models provide a good way to examine how various factors influence a binary outcome. There are three steps in a typical logistic regression analysis: First, fit a crude model. Second, fit an adjusted model. Third, examine the predicted probabilities. These steps may not be appropriate for every logistic regression analysis, but they do serve as a general guideline. In this presentation, you will see these steps applied to data from a breast feeding study, using SPSS software.
- * **Stats #17-Using Statistics to Monitor and Improve Quality, part 1.** (May 12, 2006, 1 hour, 5 students).
- * **Stats #3-Using SPSS to Develop a Linear Regression Model.** (Apr 5, 2006, 3 hours, 4 students).
- * **Stats #17-Using Statistics to Monitor and Improve Quality.** (Apr 4, 2006, 2 hours, 19 students).
- * **Stats #32a-Statistical Evidence: Apples or Oranges? Randomized studies.** (CMH-Nutrition, Mar 29, 2006, 1 hour, 23 students).

- * **Stats #33-Statistical Evidence: Who Was Left Out?** (Mar 28, 2006, 3 hours, 12 students).
- * **Stats #34-Statistical Evidence: Mountain or Molehill? (1 hour version).** (Mar 17, 2006, 1 hour, 5 students).
- * **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.** (Mar 16, 2006, 2 hours, 14 students).
- * **Stats #2-Using SPSS to Describe Your Data.** (Feb 16, 2006, 2 hours, 8 students).
- * **Stats #33-Statistical Evidence: Who Was Left Out?** (Feb 3, 2006, 1 hour, 4 students).
- * **Stats #35-Statistical Evidence: Do the Pieces Fit Together? (Meta analysis).** 1hr. version. (Feb 1, 2006, 1 hour, 22 students).
- * **Stats #32-Statistical Evidence: Apples or Oranges?** (Jan 26, 2006, 3 hours, 10 students).
- * **Stats #32-Statistical Evidence: Apples or Oranges? (1 hour version).** (Jan 11, 2006, 1 hour, 12 students).
- * **Stats #32c-Statistical Evidence: Apples or Oranges? Matching and adjustments.** (Jan 6, 2006, 1 hour, 6 students).
- * **Stats #34-Statistical Evidence: Mountain or Molehill? (1 hour version).** (Dec 14, 2005, 1 hour, 13 students).
- * **Stats #35-Statistical Evidence: Do the Pieces Fit Together? (Meta analysis).** (Dec 13, 2005, 3 hours, 7 students).
- * **Stats #51-The Ethics of Placebo Controlled Trials.** (Dec 12, 2005, 1 hour, 12 students).
- * **Stats #32b-Statistical Evidence: Apples or Oranges? Observational studies.** (Dec 9, 2005, 1 hour, 6 students).
- * **Stats #36-Statistical Evidence. Interviewing Other Witnesses.** (Dec 6, 2005, 1 hour, 17 students).
- * **Stats #34-Statistical Evidence: Mountain or Molehill?** (Nov 29, 2005, 3 hours, 4 students).
- * **Stats #3-Using SPSS to Develop a Linear Regression Model.** (Nov 17, 2005, 3 hours, 2 students).
- * **Stats #32a-Statistical Evidence: Apples or Oranges? Randomized studies.** (Nov 11, 2005, 1 hour, 6 students).
- * **Stats #21-What Do All These Numbers Mean? Sensitivity and Specificity.** (Oct 26, 2005, 1 hour, 11 students).
- * **Stats #33-Statistical Evidence: Who Was Left Out?** (Oct 18, 2005, 3 hours, 4 students).

- * **Stats #23-What Do All These Numbers Mean? Odds Ratios and Relative Risks.** (Oct 7, 2005, 1 hour, 9 students).
- * **Stats #2-Using SPSS to Describe Your Data.** (Oct 5, 2005, 3 hours, 5 students).
- * **Stats #32-Statistical Evidence: Apples or Oranges?** (Sep 7, 2005, 3 hours, 5 students).
- * **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.** (Sep 2, 2005, 1 hour, 4 students).
- * **Stats #1-Using SPSS to Manage Your Research Data.** (Aug 15, 2005, 3 hours, 8 students).
- * **Stats #5-Using SPSS to Develop a Survival Data Model.** (Jun 28, 2005, 3 hours, 4 students).
- * **Stats #34-Statistical Evidence: Mountain or Molehill?** (Jun 13, 2005, 3 hours, 2 students).
- * **Stats #36-Statistical Evidence. Interviewing Other Witnesses.** (Jun 3, 2005, 1 hour, 3 students).
- * **Stats #35-Statistical Evidence: Do the Pieces Fit Together? (Meta analysis).** 1hr. version. (May 13, 2005, 1 hour, 4 students).
- * **Stats #33-Statistical Evidence: Who Was Left Out?** (May 3, 2005, 3 hours, 19 students).
- * **Stats #23-What Do All These Numbers Mean? Odds Ratios and Relative Risks.** (CMH-Neurology, Apr 20, 2005, 1 hour, 12 students).
- * **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.** (Apr 18, 2005, 2 hours, 3 students).
- * **Stats #35-Statistical Evidence: Do the Pieces Fit Together? (Meta analysis).** 1hr. version. (Apr 8, 2005, 1 hour, 5 students).
- * **Stats #2-Using SPSS to Describe Your Data.** (Apr 7, 2005, 3 hours, 3 students).
- * **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.** (CMH-Neurology, Mar 23, 2005, 1 hour, 11 students).
- * **Stats #32-Statistical Evidence: Apples or Oranges?** (Mar 22, 2005, 3 hours, 7 students).
- * **Stats #33-Statistical Evidence: Who Was Left Out? (1 hour version).** (CMH-Neurology, Feb 23, 2005, 1 hour, 16 students).
- * **Stats #35-Statistical Evidence: Do the Pieces Fit Together? (Meta analysis).** (Feb 17, 2005, 3 hours, 10 students).
- * **Stats #34-Statistical Evidence: Mountain or Molehill? (1 hour version).** (Feb 4, 2005, 1 hour, 3 students).
- * **Stats #24-What Do All These Numbers Mean? Likelihood Ratios.** (Feb 2, 2005, 2 hours, 6 students).

* **Stats #22-What Do All These Numbers Mean? Confidence Intervals and P-Values.**
(Jan 26, 2005, 1 hour, 10 students).

* **Stats #23-What Do All These Numbers Mean? Odds Ratios and Relative Risks.**
(Jan 10, 2005, 2 hours, 6 students).

* **Stats #33-Statistical Evidence: Who Was Left Out? (1 hour version).** (Jan 7, 2005,
1 hour, 6 students).

[My records for training classes in years 2004 and earlier are difficult to reconstruct. I did teach a narrower range of classes in previous years, but with approximately the same level of frequency.]

4. HONORS/AWARDS: In reverse chronological order, beginning with the most recent, list those awards or honors recognition received for teaching activities. Please list the name of the award, awarding agency/department, what the award recognizes and the date it was received. This list should be limited to those awards/honors received since your affiliation with UMKC or last promotion.

My presentation "Medical Statistics Case Studies on the Web" was voted as the **best presentation in the area of Teaching Statistics in the Health Sciences** at the Joint Statistical Meetings in Anaheim CA, August 1997.

Please also note awards under Advancement of Knowledge (Research), Section 8.