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### Manuscripts, Books, Book Chapters, Other reports & reviews, Book reviews, On-line instructional material.

Publications (Manuscripts): (\* = Undergraduate student)

1. Morrow, K.A., Das, S., Metge, B.J., Ye, K., Mulekar, M.S., Tucker, J.A., Samant, R.S., Shevde, L.A. (2011). Loss of tumor suppressor Merlin in advanced breast cancer is due to post-translational regulation, *Journal of Biological Chemistry*, In Press, <http://www.jbc.org/cgi/doi/10.1074/jbc.M111.250035>.
2. Fruh, S.M., Mulekar, M.S., Hall, H., Fulkerson, J.A., King, A., Jezek, K. and Roussel, L. (2011). Benefits of Family Meals with Adolescents: Nurse Practitioners' Perspective, *The Journal for Nurse Practitioners*, Accepted for publication.
3. Mulekar, M.S. and Champanerkar, J. (2011). Modeling sampling distributions of similarity measures, *Proceedings of Joint Statistical Meetings, Section on Statistical Computing and Section on Statistical Graphics* (Miami Beach, FL), Submitted.
4. Mulekar, M.S. and Fukasawa\*, T. (2011). Estimating bias in similarity measures for the Pareto populations, *J. of Combinatorics, Information, & System Sciences*, 30, 103-115.
5. Al-Obaidi, S., Wall, J.C., and Mulekar, M.S. (2011). The consistency of a prayer-based self-efficacy scale to assess self-confidence of Muslim individuals with low back pain, *Physiotherapy Research International*, In Press.
6. Taylor, D., Mulekar, M.S., Luterman, A., Meyer, F., Richards, W., Rodning, C.B. (2011). Spirituality within the patient-surgeon relationship, *Journal of Surgical Education*, 68, 36-42. 10.1026doi:10.1016/j.jsurg.2010.08.007
7. Mulekar, M.S. and Fukasawa\*, T. (2010) Estimation of statistical measures of income similarity, *J. of Statistical Theory and Practice*, 4, 743-755.
8. Fruh, S.M., Fulkerson, J.A., Mulekar, M., Kendrick, L.A.J., and Roussel, L. (2010). The surprising benefits of family meals, *The Journal of Nurse Practitioners*, 7, 18-22.
9. Wang, B., Mishra, S.N., Mulekar, M.S., Mishra, N., Huang, K. (2010). Comparison of bootstrap and generalized bootstrap methods for estimating high quantiles, *J. of Statistical Planning and Inference*, 140. 2926-2935. DOI: [10.1016/j.jspi.2010.03.016](https://doi.org/10.1016/j.jspi.2010.03.016).
10. Kimball, S.K., Mulekar, M.S., Cummings, S., and Stamates, J. (2010). The University of South Alabama Mesonet and coastal observing system: A technical and statistical overview, *Journal of Atmospheric and Oceanic Technology*, 27, 1417-1439.
11. Mulekar, M.S. and Kimball, S. (2010). Quality control for meteorological data collected by the University of South Alabama mesonet stations, *Proceedings of 2010 Joint Statistical Meetings* (Vancouver, BC), Alexandria, VA.
12. Mulekar, M.S. and Kimball, S. (2009). Investigating spatial and seasonal variations in radiation levels, *2009 JSM Proceedings (Washington, D.C) Environmental Statistics Section*, Alexandria, VA .
13. Mulekar, M.S. and Siegal, M.H. (2009) Estimating effect of sample size on the location, spread, and shape of the sampling distribution, *Mathematics Teacher*, 103, 35-42.
14. Mulekar, M.S. and Mishra, S.N. (2009). Selection using overlap coefficients, *American Journal of Mathematical and Management Sciences*, 29, 71-89.

15. Mulekar, M.S., Gonzales\*, S., and Aryal\*, S. (2008). Bias and variance estimates for the overlap of two exponential populations, *American Journal of Mathematical and Management Sciences*, 28, 61-79.
16. Mulekar, M.S. and Knutson\*, J.C., and Champanerkar, J.A. (2008). How useful are approximations to mean and variance of the index of dissimilarity? *Computational Statistics & Data Analysis*, 52, 2098-2109.
17. Mulekar, M.S., Kimball, S., and Sowell\*, J.V. (2008) Comparison of soil temperatures at Pascagoula and Agricola, MS, *2008 JSM Proceedings* (Denver, CO) *Environmental Statistics Section*, Alexandria, VA.
18. Mulekar, M.S., Kimball, S., and Boone\*, J.M. (2007). Is there a weekend effect in diurnal temperature range at Pascagoula and Agricola, MS? *2007 JSM Proceedings* (Salt Lake City, UT) *Environmental Statistics Section*, Alexandria, VA.
19. Gonzales, R.P., Cummings, G.R., Phelan, H.A., Harlin, S., Mulekar, M., Rodning, C.B. (2007). Increased rural vehicular mortality rates: Roadways with higher speed limits or excessive vehicular speed? *The Journal of Trauma- injury, infection, and Critical care*, 63, 1360-1363
20. Zhou, Y, Mulekar, M.S., and Nerellapalli, P. (2007) Adaptive spam filtering using dynamic feature spaces, *International Journal on Artificial Intelligence Tools*, 18(4), 627-646.
21. Mulekar, M.S. (2006). Selecting the most diverse population using Gini measure of income inequality, *Statistica & Applicazioni*, Vol. IV, No. 2, 91-104.
22. Mulekar M.S. (2006). Visualizing Central Limit Theorem, *Alabama Journal of Mathematics*, Spring/Fall Issue, Vol 30 25-36.
23. Mulekar, M.S. (2006). How is the TI-83 changing how we teach probability in the introductory course in statistics? *Proceedings of the Joint Statistical Meetings* (Seattle, WA), Alexandria, VA.
24. Gonzalez, R.P., Cummings, G., Mulekar, M.S., and Rodning, C.B. (2006). Increased mortality in rural vehicular trauma: identifying contributing factors through data linkage, *Journal of Trauma-Injury Infection & Critical Care*, 61, 404-409.
25. Rao, P.N., Crippin, J., Levine, E., Hunt, J., Baliga, S., Balat, L., Anthony, L., Mulekar, M., and Raj, M.H.G. (2006), Elevation of riboflavin carrier protein in hepatocellular carcinoma, *Hepatology Research*, 35, 83-87.
26. Mulekar, M.S. and Matejcik, F.J. (2006). On selecting the process with the smallest number of unfortunate events, *Journal of Operations Research Society*, 57, 416-422. doi:10.1057/palgrave.jors.2602001
27. Franklin, C.A. and Mulekar, M.S. (2005). Is Central Park Warming?, *Mathematics Teacher*, 99, 600-605.
28. Kimball, S.K., and Mulekar, M.S. (2004). A 15-year climatology of North Atlantic tropical cyclones, part I: Size parameters, *Journal of Climate*, 17, 3555-3575.
29. Franklin, C.A. and Mulekar, M.S. (2004). Effect of prior information on string length estimates, *Teaching Statistics*, 26, 66-71.
30. Mulekar, M.S. and Kimball, S.K. (2004). The statistics of hurricanes. A lead article in *Stats*, Winter Issue 39, 3-9.
31. Mulekar, M.S., Dixon\*, J. Jr., Goodman, S.R., and Pace, B.A. (2003) Effects of n-acetylcysteine on the formation of dense cells and the quality of life for patients with

- sickle cell disease, *2003 Proceedings of the Annual Meeting of American Statistical Association*.
32. Mulekar, M.S., Haven, M., and Blumberg, C. (2002). The role of the American Statistical Association in Statistics Education, *Proceedings of International Conference on Teaching Statistics*, South Africa.
  33. Mulekar, M.S. and Mauromoustakos, A. (2002) More powerful but still easy to use data analysis with JMP<sup>®</sup> version 5, *2002 Proceedings of the Annual Meeting of American Statistical Association*.
  34. Kayes, S., Cusick, S., Griffin, J., McKinley, J., Floyd, C., Mulekar, M.S., and Wilson, F. Helminths and Asthma Redux: A role for *Toxicara canis*, *Proceedings of the 10<sup>th</sup> International Congress of Parasitology – ICOPA X 2002*: 561-565.
  35. Pace, B.S., Shartava, A., Pack-Mabien, A., Mulekar, M.S., Ardia, A., and Goodman, S.R. (2001). Effects of N-acetylcysteine on dense cell formation in sickle cell disease. *American Journal of Hematology*, 73, 26-32.
  36. Mulekar, M.S., Gonzales\*, S. and Aryal\*, S. (2001). Estimation and inference for the overlap of two exponential distributions, *2001 Proceedings of American Statistical Association, Joint Statistical Meetings*.
  37. Mulekar, M.S., and Franklin, C.A. (2001). Role of technology in advanced placement statistics, *Proceedings of 2001-International Conference on Technology in Collegiate Mathematics*.
  38. Mulekar, M.S. and Burchfield, P. C. (2001). The Advanced Placement Statistics Exams, *Alabama Journal of Mathematics*, 2001, 25, 1-15.
  39. Mulekar, M.S. and Mishra, S.N. (2000). Confidence interval estimation of overlap: equal means case, *Computational Statistics & Data Analysis*, 34, 121-137.
  40. Mulekar, M.S. (2000). Internet resources for AP-Statistics Teachers, *J Statistics Education*, Vol. 8, No. 2.
  41. Mulekar, M.S. and Matejcik, F.J. (2000). Determination of the sample size for selecting the smallest of  $k$  Poisson population means, *Communications in Statistics -- Theory Methods*, 29, 37-48.
  42. Mulekar, M.S. (1999). On the nonexistence of selection procedures for Poisson populations, In: a special issue of *Statistics & Decisions* honoring Late Prof. Robert Bechhofer, 55-68.
  43. Mulekar, M.S. and Sobel, M. (1999). Fixed-sample-size selection problem for Poisson populations, In: a special volume of *Statistics & Decisions* honoring the Late Prof. R. E. Bechhofer, 69-86.
  44. Mulekar, M.S. (1999). Internet resources for AP-Statistics teachers, *American Statistical Association, 1999 Proceedings of the Section on Statistical Education*, 194-198.
  45. Mulekar, M.S. (1998). Activities in Introductory Statistics Courses, *American Statistical Association, 1998 Proceedings of the Section on Statistical Education*, 233-237.
  46. Bikkina, M., Alpert, M.A., Mukerji, R., Mulekar, M.S., Cheng\*, B., and Mukerji, V. (1998). Diminished short term heart rate variability predicts inducible ventricular tachycardia, *CHEST, the Cardiopulmonary and Critical Care Journal*, 113, 312-316.
  47. Colley, R., Mulekar, M.S., Segal, M.A., Volkan, A.G., and Coarsey\*, R. (1997). The current status of accountant liability: Audit Practice Impact, *Managerial Auditing Journal*, 12, 343-353.

48. Mulekar, M.S., and Mishra, S.N. (1997). Inference on measures of niche overlap for heteroscedastic normal populations', in the special volume MULTIVARIATE STATISTICAL ANALYSIS in honor of Prof. Minoru Siotani of the *American Journal of Mathematical & Management Sciences*, 17, 163-185.
49. Alpert, M.A., Terry, B.E., Mulekar, M.S., Cohen, M.V., Massey, C.V., Fan, T.M., Panayiotou, H., and Mukerji, V. (1997). Cardiac Morphology and Left Ventricular Function in Normotensive Morbidly Obese Patients with and without Congestive Heart Failure, and Effect of Weight Loss, *Amer. J. of Cardiology*, 80, 736-740.
50. Alpert, M.A., Lambert, C.R., Terry, B.E., Cohen, M.V., Mulekar, M.S., Massey, C.V., Hashimi, M.W., Panayiotou, H., and Mukerji, V. (1995). Effect of weight loss on left ventricular diastolic filling in morbidly obesity', *The American Journal of Cardiology*, 76, 1198-1201.
51. Bikkina, M.H., Alpert, M.A., Mulekar, M.S., Shakoor, A., Massey, C.V., Covin, F.A. (1995). Prevalence of Intra-Atrial Thrombosis in patients with Atrial Flutter, *The American Journal of Cardiology*, 76, 186-189.
52. Mulekar, M.S. (1995). Detection of Population with least average nonconformities. *Journal of Applied Statistical Sciences*, 2, 141-151.
53. Butts\*, S.J., Mixon, K.D., Mulekar, M.S., and Bringmann, W.G. (1995). Gender differences in eyewitness testimony, *Perceptual & Motor Skills*, 80, 59-63.
54. Mulekar, M.S. (1995). Selecting best negative binomial population using two distance measures, *Statistics & Decisions*, 13, 53-70.
55. Mulekar, M.S. and Mishra, S.N. (1994). Overlap coefficients of two normal densities: equal means case. *Journal of Japan Statistical Society*, 24, 169-180.
56. Mulekar, M.S. and Young, L.J. (1994). Selection using difference and ratio of success probabilities. *Journal of Japan Statistical Society*, 24, 11-18.
57. Mulekar, M.S., Young, L.J., and Young, J.H. (1993). Testing insect population density relative to critical densities with 2-SPRT. *Environmental Entomology*, 22, 346-351.
58. Mulekar, M.S. and Young, L.J. (1993). A fixed sample size selection procedure for negative binomial populations. *Metrika*, 40, 25-35.
59. Mulekar, M.S., Young, L.J., and Young, J.H. (1993). Using an approximate Kiefer-Weiss solution for testing insect population density. *Metrika*, 39, 219-226.
60. Mulekar, M.S. and Young, L.J. (1991). Approximations for a fixed sample size selection procedure for negative binomial populations. *Communications in Statistics--Theory & Methods*, 20, 1767-1776.
61. Barker, R.W., Mulekar (Nagardeolekar) M.S., Stricker, K.W., and Wright, R.E. (1990). Fecundity of partially engorged female Dermacentor albipictus (Acari: Ixodidae) removed by cattle grooming'. *Journal of Medical Entomology*, Vol. 27, No. 1, 51-56.

#### Books/Book Chapters:

1. Mulekar, M.S. (2012). *Distance and similarity measures*, In: Encyclopedia of Social Network and Mining (ESNAM), ed: Reda Alhaji & Jon Rekne, In preparation.
2. Mulekar, M.S., Jezek, K., and Fruh, S. (Summer 2012). *Data Analysis*, A chapter in: Evidence-based practice: An integrative approach to research, administration, and practice. Ed: Linda Roussel, Tracey Taylor-Overholts, and Heather R. Hall, Jones and Bartlett Publishers, Accepted for publication.

3. Scheaffer, R.L. Mulekar, M.S., and McClave, J.T. (2011). *Probability and Statistics for Engineers*, Brooks/Cole -Cengage Learning.
4. Mulekar, M.S., Boone, J.M., Aryal, S. (2010). Estimating sampling distributions of overlap coefficient and other similarity measures, Chapter 25 in *Handbook of Fitting Distributions*, ed: Z. Karian and E. J. Dudewicz, CRC Press.
5. Wang, B., Mishra, S.N., Mulekar, M.S., Mishra, N.S., Huang, K. (2010). Generalized bootstrap confidence intervals for high quantiles, Chapter 22 in *Handbook of Fitting Distributions*, ed: Z. Karian and E. J. Dudewicz, CRC Press.
6. Mulekar, M.S. and Young, L.J. (2002). Sequential estimation in the agricultural sciences. Invited to write this chapter In: *Applied Sequential Methodologies*, ed: Mukhopadhyay, N., Datta, S., and Chattopadhyay, S., Marcel Dekker, New York. Chapter 15, 293-318.
7. Mulekar, M.S. (2002). *Cracking AP Statistics Exams*, Princeton Review, New York.
  - 2002-03 edition
  - 2004-05 edition
  - 2006-07 edition
  - 2009 edition

#### Interview and Other Publications:

1. Mulekar, M.S. (2011) A Chat with Dr. E.J. Dudewicz, *J. of Combinatorics, Information, & System Sciences*, 30, 249-258.
2. Mulekar, M.S. (2009). Noel A.C. Cressie: COPSS Fisher Lecturer, *Amstat News*, May 2009, pp 36-37.
3. Mulekar, M.S. (2007). 'Father of Biostatistics' to speak on Fisher, randomization, and current practice, *Amstat News*, May 2007, Issue 359, pp 30.
4. Mulekar, M.S. (2007). 2007 COPSS Fisher Lecturer: Marvin Zelen, *IMS Bulletin*, 36, Issue 5, pp 15.
5. Mulekar, M.S. (2007). JSM: COPSS Award Ceremony, *IMS Bulletin*, 36(8), 8-9.

#### Book Reviews:

1. Mulekar, M.S. (2008). Review of 'Weight-of-evidence for forensic DNA profiling' by D.J. Balding, *Technometrics*, 50, No. 3: 407-408.
2. Mulekar, M.S. (2004). Review of 'Data Mining: Multimedia, Soft computing, and Bioinformatics' by Susmita Mitra, and Tinku Acharya, *Technometrics*.
3. Mulekar, M.S. (2001). Review of 'Statistical Inference in Science' by D.A. Sprott, *Technometrics*, 42, 9-10.
4. Mulekar, M.S. (1997). Review of 'Workshop Statistics: Discovery with data', by Allan Rossman, *Technometrics*, 39, No. 3.

#### Web-based Instruction materials:

***CyberStats: An Introduction to Statistics*** (2000). A course delivered entirely on the World Wide Web. It is based on the principle of active learning, through discovery, experimentation and simulation. Its instructional content is comprised of modular Units and of Case Studies allowing an instructor great freedom of choice in coverage and in approach. I was invited to author three

units for this course marketed by Cengage learning (Previously by Duxbury Press and Thompson Publications).

1. Unit on the F-distribution
2. Unit on the One-way-ANOVA
3. Unit on the Analysis of Variance