

David M. Nickerson
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University of Central Florida
Orlando, FL 32816-2370

Education

- Ph.D., August 1985, University of Florida, Department of Statistics
- M.Stat., May 1982, University of Florida, Department of Statistics
- B.S., August 1980, University of Central Florida, Department of Mathematics

Professional Employment

- Assistant, Associate and Full Professor, University of Central Florida, Department of Statistics, August 1990 to present.
- Chair, University of Central Florida, Department of Statistics, August 2007 to September 2015.
- Interim Chair, University of Central Florida, Department of Statistics and Actuarial Science, August 1997 to July 1999 and January 2005 to July 2007.
- Assistant and Associate Professor, University of Georgia, Department of Statistics, September 1986 to December 1991.
- Assistant Research Scientist, University of Florida, Biostatistics Unit of the Department of Statistics, September 1985 to August 1986.

Awards

- Teaching Incentive Program Award – UCF award for recognition of teaching productivity and excellence, 1996 and 2004.
- Faculty Award - In recognition of the outstanding senior graduate student in the Department of Statistics, University of Florida, 1984.
- Phi Kappa Phi - Graduate School Honor Society, 1982.
- William Mendenhall Award - In recognition of the outstanding first year graduate student in the Department of Statistics, University of Florida, 1981.

Society of Actuaries/Casualty Actuarial Society Exams Passed

- Exam P/1 – Probability (09/23/2008)
- Exam FM/2 – Financial Mathematics (05/05/2009)
- Exam MFE/3F – Models for Financial Economics (05/12/2010)
- Exam C/4 – Construction and Evaluation of Actuarial Models (02/09/2016)
- Exam MLC – Models for Life Contingencies (05/03/2016)

Grants & Contracts

- University of Florida – College of Medicine, 2015-2017: Gene Therapy for Post-Traumatic Osteoarthritis, \$31,502 (PI)
- University of Florida – College of Medicine, 2011-2012: Utility of AAV Sertotype for Gene Delivery in Treatment of Chronic Joint Disease, \$14,593 (PI)
- National Institute of Health, 2010-2012: Using Mixed Reality to build per resistance skills in Latina middle schoolers. \$434,812 (Co-PI, my share \$21,741).
- Golfweek, 2006: Survey of Turf Management Programs. \$8,500 (Statistical consultant, my share \$4,250).
- Dynamac Corporation, 2005: Precipitation Chemistry in Central Florida. \$4,064 (Statistical Consultant).
- Embry-Riddle Aeronautical University, 1998: Tuition Pricing Study. \$5,000 (Statistical Consultant).
- Game & Fresh Water Fish Commission, 1997-98: Alligator Survey. \$3,600 (Statistical Consultant).
- National Science Foundation, 1993-1995: Scientific Computing Research Environments: Mathematics. \$40,895 (Co-PI, my share \$13,632).
- University of Georgia, 1987-88: “Two-Stage Shrinkage Estimation”. Faculty Research Grant Program, \$2,500 (PI).

Refereed Publications

1. Von Holle, B., Weber, S.E. and **Nickerson, D.M.** (2020). The influence of warming and biotic interactions on the potential for range expansion of native and nonnative species, *Annals of Botany Plants*, **12**: 1-10.
2. Watson Levings, R.S., Broome, T.A., Smith, A.D., Rice, B.L., Gibbs, E.P., Myana, D.A., Hyddmark, E.V., Nasri, E., Zarezadeh, A., Levings, P.P., Lu, Y., Dacanay, E.A., Foremny, G.B., Evans, C.H., Morton, A.J., Winters, M., Dark, M.J., **Nickerson, D.M.**, Colahan, P.T. and Ghivizzani, S.C. (2018). Gene therapy for osteoarthritis: Pharmacokinetics of intra-articular self-complementary adeno-associated virus interleukin-1 receptor antagonist delivery in an equine model, *Human Gene Therapy Clinical Development*, **29**: 90-100.
3. Watson Levings, R.S., Smith, A.D., Broome, T.A., Rice, B.L., Gibbs, E.P., Myara, D.A., Hyddmark, V., Nasri, E., Zarezadeh, A., Levings, P.P., Lu, Y., White, M.E., Dacanay, A., Foremny, G.B., Evans, C.H., Morton, A.J., Winter, M., Dark, M.J., **Nickerson, D.M.**, Colahan, P.T. and Ghivizzani, S.C. (2018). Self-complementary adeno-associated virus-mediated interleukin-1 receptor antagonist gene delivery for the treatment of osteoarthritis: Test of efficacy in an equine model, *Human Gene Therapy Clinical Development*, **29**: 101-112.
4. Smith, A.D., Morton, A.J., Winter, M.D., Colahan, P.T. Ghivizzani, S., Brown, M.P., Hernandez, J.A. and **Nickerson, D.M.** (2016). Magnetic resonance imagining scoring of an experimental model of post-traumatic osteoarthritis in the equine carpus, *Veterinary Radiology & Ultrasound*, **57**: 502-514.

5. Weiler, A., Von Holle, B. and **Nickerson, D.** (2013). Reducing biotic and abiotic land-use legacies to restore invaded, abandoned citrus groves. *Restoration Ecology* **21**: 755-762.
6. Watson, R.S., Broome, T.A., Levings, P.P., Rice, B.L., Kay, J.D., Smith, A.D., Gouze, E., Gouze, J-N, Dacanay, A., Hauswirth, W.W., **Nickerson, D.M.**, Dark, M.J., Colahan, P.T. and Ghivizzani, S.C. (2013). scAAV-Mediated gene transfer of interleukin 1-receptor antagonist to synovium and articular cartilage in large mammalian joints. *Gene Therapy* **20**: 670-677.
7. Norris, A.E., Hughes, C., Hecht, M.L., Peragallo, N.P. and **Nickerson, D.** (2013). Randomized trial of a peer resistance skill-building game for Hispanic early adolescent girls. *Nursing Research* **62**: 25-35.
8. Marshall, F.E., Smith D.T. and **Nickerson, D.M.** (2011). Empirical tools for simulating salinity in the estuaries in Everglades National Park, Florida. *Estuarine, Coastal and Shelf Science* **95**: 377-387.
9. Broughton, E.H., Quintana-Ascencio, P.F. and **Nickerson, D.** (2011). Differential facilitative and competitive effects of a dominant macrophyte in grazed subtropical wetlands. *Journal of Ecology* **99**: 1263-1271.
10. Norris, A., Aroian, K. and **Nickerson, D.M.** (2011). Premigration persecution, post-migration stressors and resources, and post-migration mental health: A study of severely traumatized U.S. Arab immigrant women. *Journal of the American Psychiatric Nurses Association* **17**: 283-293.
11. Broughton, E.H., Quintana-Ascencio, P.F., **Nickerson, D.** and Bohlen, P.J. (2011). Management intensity affects the relationship between non-native and native species in subtropical wetlands. *Applied Vegetation Science* **14**: 210-220.
12. Von Holle, B., Wei, Y. and **Nickerson, D.** (2010). Climatic variability leads to later seasonal flowering of Floridian plants. *PLoS ONE*, **5**: 1-9.
13. Levings, P.P., McGarry, S.V., Currie, T.P., **Nickerson, D.M.**, McClellan, S., Ghivizzani, S.C., Steindler, D.A. and Gibbs, C.P. (2009). Expression of an Exogenous Human Oct-4 Promoter Identifies Tumor-Initiating Cells in Osteosarcoma. *Cancer Research*, **69**: 5648-5655.
14. Kay, J.D., Gouze, E., Oligino, T.J., Gouze, J-N., Watson, R.S., Levings, P.P., Bush, M.L., Dacanay, A., **Nickerson, D.M.**, Robbins, P.D., Evans, C.H. and Ghivizzani, S.C. (2009). Intra-articular gene delivery and expression of IL-1Ra mediated by self-complementary adeno-associated virus. *Journal of Gene Medicine*, **11**: 605-614.
15. Su, X., Tsai, C., Wang, H., **Nickerson, D.M.** and Li, B. (2009). Subgroup analysis via recursive partitioning. *Journal of Machine Learning Research*, **10**: 141-158.
16. Ghivizzani, S.C., Gouze, E., Gouze, J-N., Kay, J.D., Bush, M.L., Watson, R.S., Levings, P.P., **Nickerson, D.M.**, Colahan, P.T., Robbins, P.D. and Evans, C.H. (2008). Perspectives on the use of gene therapy for chronic joint diseases. *Current Gene Therapy*, **8**: 273-286.
17. **Nickerson, D.M.** (2008). Counting by weighing and its effect on comparing population proportions. *Statistics and Probability Letters*, **78**: 2321-2326.
18. Roth, J.D., Marshall, J.D., Murray, D.L., **Nickerson, D.M.**, Steury, T.D. (2007). Geographic gradients in diet affect population dynamics of Canada lynx. *Ecology*, **88**: 2736-2743.

19. **Nickerson, D.M.** and Madsen, B.C. (2005). Nonlinear regression and ARIMA models for precipitation chemistry in East Central Florida from 1978 to 1997. *Environmental Pollution*, **135**: 371-379.
20. Weheba, G.S. and **Nickerson, D.M.** (2005). The Economic Design of \bar{x} Charts: A Proactive Approach. *Quality and Reliability Engineering International*, **21**: 91-104.
21. **Nickerson, D.M.** (2003). Addendum to counting by weighing and the seed testing problem. *Annals of Applied Biology*, **143**: 371-374.
22. **Nickerson, D.M.** and Fine, T.S. (2002). District-level bounds in 2×3 tables. *Political Analysis*, **10**: 208.
23. Mulford, L.A., Taylor, J.S., **Nickerson, D.M.** and Chen, S. (1999). NF performance at full and pilot scale. *Journal of the American Water Works Association*, **91**: 64-75.
24. **Nickerson, D.M.** and Brunell, A. (1998). Power analysis for detecting trends in the presence of concomitant variables. *Ecology*, **79**: 1442-1447.
25. **Nickerson, D.M.** (1996). Sequential, accelerated-sequential and three-stage estimation of the mean of a first-order stationary autoregressive process: a Monte Carlo study. *Journal of Statistical Computation and Simulation*, **54**: 333-353.
26. **Nickerson, D.M.** (1995). Letter to the Editor. *The American Statistician*, **49**: 324.
27. **Nickerson, D.M.** (1994). Construction of a conservative confidence region from projections of an exact confidence region in multiple linear regression. *The American Statistician*, **48**: 120-124.
28. **Nickerson, D.M.** (1993). Another look at counting by weighing. *Communications in Statistics -- Simulation and Computation*, **22**: 323-343.
29. **Nickerson, D. M.** and Basawa, I. V. (1992). Shrinkage estimation for linear models with correlated errors. *Sankhya, Series A*, **54**: 411-424.
30. **Nickerson, D.M.** (1991). Reply to Technical Comment by Dugglely and Ward. *Physiological Zoology*, **64**: 890-893.
31. Grossman, G.D., **Nickerson, D.M.**, and Freeman, M.C. (1991). Principle components analysis of assemblage structure data: utility of tests based on eigenvalues. *Ecology*, **72**: 341-347.
32. Kim, Y., **Nickerson, D.M.**, and Basawa, I.V. (1990). Shrinkage estimation for a dynamic input-output linear model. *Statistical Inference in Stochastic Processes*, **6**: 249-266.
33. **Nickerson, D.M.**, Facey, D.E., and Grossman, G.D. (1989). Estimating physiological thresholds using two-phase segmented regression. *Physiological Zoology*, **62**: 866-887.
34. Blake, K., Massey, K., Hendeles, L., **Nickerson, D.M.**, and Neims, A. (1988). Relative efficacy of phenytoin and phenobarbital for the prevention of pheophylline induced seizures in mice. *Annals of Emergency Medicine*, **17**: 1024-1028.
35. **Nickerson, D.M.** (1988). Dominance of the positive part version of the James-Stein estimator. *Statistics & Probability Letters*, **7**: 97-103.
36. **Nickerson, D.M.** (1987). Sequential shrinkage estimation of the difference of two multivariate normal means. *Sequential Analysis*, **6**: 325-350.
37. **Nickerson, D.M.** (1987). Sequential shrinkage estimation of linear regression parameters. *Sequential Analysis*, **6**: 93-117.
38. Ghosh, M., **Nickerson, D.M.**, and Sen, P.K. (1987). Sequential shrinkage estimation. *Annals of Statistics*, **15**: 817-829.

39. Ghosh, M., and **Nickerson, D.M.** (1986). Sequential shrinkage estimation of independent normal means with unknown variances. *Communications in Statistics -- Theory and Methods*, **15**: 2115-2130.
40. Sposetti, V.J., Gibbs, C.H., Alderson, T.H., Jagers, J.H., Richmond, A., Conlon, M., and **Nickerson, D.M.** (1986). Bite force and EMG activity in overdenture wearers before and after attachment placement. *Journal of Prosthetic Dentistry*, **55**: 265-273.
41. Fennel, R.S., Purcell, C.A., Fitzsimmons, J.R., Carter, R.L., and **Nickerson, D.M.** (1985). Serial hippuran scanning to detect the late onset of renal allograft rejection in pediatrics transplant recipients. *International Journal of Pediatric Nephrology*, **6**: 256-260.

Proceedings

1. Mulford, L.A., Taylor, J.S. and **Nickerson, D.M.** (1997). ICR membrane pilot plant verification testing. *Proceedings of the American Water Works Association*, Volume C: 707-721.
2. Anagnostopoulos, G.C., Georgiopoulos, M., **Nickerson, D.** and Bebis, G. (1997). Ensembles of hybrid intelligent experts: extending the power of optimal linear combiners. *Proceedings of the IEEE International Conference on Systems, Man & Cybernetics*, Volume 2, 1350-1355.

Book Reviews

- Concepts in Probability and Stochastic Modeling. J.J. Higgins and S. Keller-McNulty (1995). *The American Statistician*, **49**: 321.

Presentations at Annual Meetings

- 1992 - Another Look at Counting by Weighing, ASA Annual Meetings, Boston, Massachusetts.
- 1991 - Shrinkage Estimation for a Dynamic Input-Output Linear Model, ASA Annual Meetings, Atlanta, Georgia.
- 1989 - Sequential Shrinkage Estimation for Linear Models with Autocorrelated Errors, *Invited presentation*, ASA Annual Meetings, Washington, D.C.
- 1988 - Sequential Shrinkage Estimation of the Difference Between Two Multivariate Normal Means, ASA Annual Meetings, New Orleans, LA.
- 1987 - Sequential Shrinkage Estimation of Linear Regression Parameters (Updated), ASA Atlanta Chapter Meetings.
- 1985 - Sequential Shrinkage Estimation of Linear Regression Parameters, ASA Annual Meetings, Las Vegas, NV.

Professional Memberships

- American Statistical Association
- Institute of Mathematical Statistics

Professional Service

- 2014 – Conference Committee, *Frontiers of Hierarchical Modeling in Observational Studies, Complex Surveys and Big Data*
- 2009 – Conference Committee, *Annual Meeting of the Florida Chapter of the ASA*
- 2008 – Referee, *The American Statistician*
- 2004 – Referee, *Sequential Analysis, Computers & Industrial Engineering*; Conference Committee, *Annual Meeting of the Florida Chapter of the ASA*
- 2003 – Referee, *Communications in Statistics*
- 1998 – Referee, *IEEE Transactions on Reliability*; Conference Committee, *Annual Meeting of the Florida Chapter of the ASA*
- 1996 – Referee, *Journal of Statistical Planning and Inference, The American Statistician*
- 1995 – Book Reviewer, *The American Statistician*
- 1994 – Referee, *Statistical Computation and Simulation, Functional Ecology, Journal of Statistical Planning and Inference, Journal of Applied Statistical Science*
- 1993 – Referee, *Communications in Statistics, Metrika*
- 1992 – Referee, *Communications in Statistics*
- 1991 – Referee, *Communications in Statistics*
- 1990 – Referee, *Metrika*
- 1989 – Referee, *Sequential Analysis, Canadian Journal of Statistics.*
- 1988 – Referee, *Institute of Statistical Mathematics, Communications in Statistics.*
- 1987 – Referee, *Sequential Analysis*; Reviewer, AFOSR proposals; Chair, IMS session #89, IMS Annual Meetings, Chair, SRCOS session #5, Summer Conference in Statistics
- 1986 – Referee, *Communications in Statistics*
- 1984 – Referee, *Sequential Analysis*

UCF Service

- Department
 - Search Committee: 1990-91, 1995-96, 1999-04, 2017-19
 - Colloquium Committee: 1999-04
 - Webmaster: 1999-02
 - M.S. Comprehensive Exam Committee: 1993-98, 1999-00, 2001-15
 - Ph.D. Proposal Committee: 2000-01, 2006-08
 - Chair Advisory Committee: 2000-02, 2003-04, 2017-20
 - Undergraduate Curriculum Committee: 2003-04, 2005-08
 - Institutional Effectiveness Committee: 2003-06
 - Assessment Committee: 2003-04, 2017-20
 - Program Coordinator/Advisor Actuarial Science B.S.: 2008-12, 2017-20
 - Program Coordinator/Advisor Actuarial Science Minor: 2008-20
 - AESP Committee: 2017-18
- College
 - Promotion & Tenure Committee: 1993-95, 2017-19
 - Excellence in Teaching & Advising Award: 1992-94
 - Dean's Advisory Council: 1995-96, 2000-04, 2017-20

- TIP Selection: 1996-97
- TIP Criteria: 2002-03
- RIA Selection: 2006-10, 2014-15
- Undergraduate Curriculum & Standards: 1996-97
- Mathematics Chair Review Committee: 1999-2000
- Dean Search Committee: 2011-12
- University
 - Faculty Senate: 1996-97, 2017-20
 - Budget & Administration Committee 2017-18
 - Undergraduate Policy & Curriculum Committee: 1996-97, 2018-20