DEPARTMENT OF MATHEMATICS AND STATISTICS

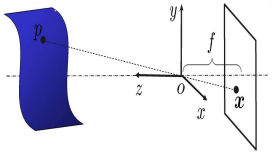
Statistical Image and Biomedical Analyses

Presently Funded Research Interests

- Topological Data Analysis
- Oriented projective shape analysis
- Nash embedding-based inference
- Procrustes distance-based inference

Biomedical Research Interests and Experience

- **Statistical Modelling and Analysis of Biomedical Data**
- Adjunct Associate Professor of Biostatistics, Department of Surgery, Texas Tech University Health Science Center School of Medicine (2008-2010) **(Biostatistician on Numerous Clinical Trials and Observation Studies**)
- .Designed and taught at S&T (i) Causal Data Science; (ii) Clinical Trials; (iii) Epidemiology; (iv) Computational Bayes Methods; (v) Statistical Learning; (vi) Topological Data Analysis, and (vii) Statistical Shape Analysis
- , Numerous statistical publications that are directly applicable to biomedical research.



Contact Information

Robert L. Paige, PhD
Professor of Statistics
Department of Mathematics & Statistics
College of Arts, Sciences, and Business
Email: paigero@mst.edu
Phone: (573) 341-4907

Funding: National Science Foundation (presently), National Security Agency

Keywords: Non-Euclidean Data Analysis; Biomedical Research

Representative Publications

•. Patrangenaru, V.,, Bubenik, P.,, Paige, R.L., et al.. (2019). Challenges in Topological Data Analysis on Object Spaces. Sankya A 81 (1), 244-271.

• Qiu, M., Paige, R.L.and Patrangenaru. V.(2019) A Nonparametric Approach to 3D Shape Analysis from Digital Camera Images -II., Journal of Applied Statistics, 46 (15), 2677-2699.

• Paige, R.L.Chapman, P. and Butler, B. (2011) Small Sample LD50 Confidence Intervals Using Saddlepoint Approximations. Journal of the American Statistical Association, 106 (493), 334-344.

• Brismee, J.M., Paige, R.L.,et al. (2007) Group and Home-Based Tai Chi in Elderly Subjects with Knee Osteoarthritis: A Randomized Controlled Trial, Clinical Rehabilitation, 21(2), 99-111.

MISSOURI S&T

Center for Biomedical Research