RONALD D. FRICKER, JR.

VICE PROVOST FOR FACULTY AFFAIRS AND PROFESSOR OF STATISTICS
VIRGINIA POLYTECHNIC AND STATE UNIVERSITY
BLACKSBURG, VIRGINIA 24061

Education:
Ph.D. in Statistics, Yale University, 1997
M.A. in Statistics, Yale University, 1994
M.S. in Operations Research, The George Washington University, 1991
B.S. with Merit in Mathematics, United States Naval Academy, 1982

Professional Experience:

Vice Provost for Faculty Affairs, Virginia Tech	2022 – present
Interim Dean, College of Science, Virginia Tech	2021 – 2022
Senior Associate Dean / Associate Dean for Faculty Affairs, College of Science, Virginia Tech	2019 – 2020
Professor and Head, Department of Statistics, Virginia Tech	2015 – 2019
Professor, Naval Postgraduate School	2013 – 2015
Associate Professor, Naval Postgraduate School	2005 – 2013
Associate Director, National Security Research Division, RAND	2002 – 2004
Professor, RAND Graduate School	1999 – 2004
Adjunct Assistant Professor, USC	1999 – 2004
Senior Statistician, RAND	1997 – 2004
Manager / Member Technical Staff, TRW	1990 – 1997
Manager / Member Technical Staff, JJMA	1987 – 1990
Officer, United States Navy	1982 – 1987

Professional Summary:

Ron Fricker is the Vice Provost for Faculty Affairs and a Professor of Statistics. He is internationally recognized in the use of statistics and data science in national security applications as well as quality improvement methods and survey-based research. Dr. Fricker joined Virginia Tech as Head of the Department of Statistics in 2015 and served as the Interim Dean of the College of Science from 2021-22. Previously, he was a Professor of Operations Research at the Naval Postgraduate School and, prior to that, a Senior Statistician at the RAND Corporation and the Associate Director of the RAND National Security Research Division.

A recipient of multiple teaching awards and author of more than 100 papers, monographs, and technical reports, Dr. Fricker is a Fellow of the American Association for the Advancement of Science, a Fellow of the American Statistical Association, a Fellow of the Atlantic Coast Conference Academic Leaders Network, and an Elected Member of the International Statistical Institute. In 2022 he was elected to the Virginia Academy of Science, Engineering, and Medicine, and he serves on the Board of Mathematical Sciences and Analytics of The National Academies of Science, Engineering, and Medicine.

ACADEMIC RECORD

Research interests. Statistical methods to detect bioterrorism incidents; biosurveillance and disease surveillance; quality control and statistical process control; survey design and analysis.

Awards & Honors

- Elected Member, Virginia Academy of Science, Engineering, and Medicine, 2022.
- Fellow, American Association for the Advancement of Science, 2019.
- Inaugural Fellow, Atlantic Coast Conference (ACC) Academic Leaders Network, 2018-19.
- Richard W. Hamming Teaching Award for outstanding teaching, excellence in thesis supervision, and strength of contribution to NPS students beyond the classroom, 2013.
- Letter of Commendation for Excellence in Teaching, awarded for being in the top five percent of finalists for Schieffelin Award, 2012.
- Elected Member, International Statistical Institute, 2010.
- Fellow, American Statistical Association, 2009.
- Letter of Commendation for Excellence in Teaching, awarded for being in the top five percent of finalists for Schieffelin Award, 2009.
- Letter of Commendation for Excellence in Teaching, awarded for being in the top five percent of finalists for Schieffelin Award, 2008.
- Northrop-Grumman Faculty Award for Excellence in Systems Engineering Analysis (SEA), awarded by each graduating SEA class to recognize contributions to the students' integrated project, 2008.
- Northrop-Grumman Faculty Award for Excellence in Systems Engineering Analysis (SEA), awarded by each graduating SEA class to recognize contributions to the students' educational experience in the SEA curriculum (co-recipient with M. Stevens), 2007.
- Performance bonus for excellence in distance learning pedagogy, awarded by the Office of Continuous Learning, Naval Postgraduate School, 2007.
- Meyer Award for Teaching Excellence, awarded to a faculty member by students for teaching excellence and/or exceptional contributions to the students' overall learning experience, 2006.
- Barchi Prize runner up, "Using a Bootstrap Approach for Setting Reorder Points in Inventory Systems," Military Operations Research Society, 1999.
- Runner up, Vincent Astor Memorial Leadership Essay Contest, Naval Institute *Proceedings*, United States Naval Institute, 1983.
- Outstanding Operations Analysis student (with Daniel Lynch), United States Naval Academy, 1982.

Publications

Books

[1] Rigdon, S.E, R.D. Fricker, Jr. and D. Montgomery (2024). *Introduction to Probability and Statistics for Data Scientists*, Cambridge University Press.

[2] Rigdon, S.E., and R.D. Fricker, Jr. (2020). *Monitoring the Health of Populations by Tracking Disease Outbreaks and Epidemics: Saving Humanity from the Next Plague*, CRC Press.

[3] Fricker, R.D., Jr. (2013). *Introduction to Statistical Methods for Biosurveillance, with an Emphasis on Syndromic Surveillance*, Cambridge University Press.

Journal Papers

[4]   Cohen, A., et al. (2022). Subsewershed SARS-CoV-2 Wastewater Surveillance and COVID-19 Epidemiology Using Building-Specific Occupancy and Case Data, *ACS ES&T Water,* https://doi.org/10.1021/acsestwater.2c00059.

[5]   Fricker, Jr., R.D. (2021). Covid-19: One year on…, *Significance*, **18**:1, 12-15.

[6]   Ewing, E.T., S.E. Rigdon, and R.D. Fricker, Jr. (2020). Understanding COVID-19 in 2020 Through the Lens of the 1918 'Spanish Flu' Epidemic, *Chance*, **33**:3.

[7]   Fricker, Jr., R.D., and S.E. Rigdon (2020). Discovering the Cause of Yellow Fever: Designing Effective Experiments, *Significance*, **17**:3, 22-27.

[8]   Fricker, Jr., R.D., K. Burke, X. Han, and W.W. Woodall (2019). Assessing the Effect of *Basic and Applied Social Psychology'*s Ban on *p*-Values & Hypothesis Testing, *The American Statistician*, **73**, supl. 1, 374-384.

[9]   Fricker, Jr., R.D., and H.S. Burkom (2019). Data Aggregation in Disease Surveillance, *Journal of Quality Technology,* invited discussion paper, 1-6. *https://doi.org/10.1080/00224065.2019.1611360.*

[10] Zhao, M.J., A.R. Driscoll, S. Sengupta, N.T. Stevens, R.D. Fricker, Jr., and W.H. Woodall (2018). The Effect of Data Aggregation Level in Social Network Monitoring, *PLOS One,* **13**, *e0209075. https://doi.org/10.1371/journal.pone.0209075.*

[11] Zhao, M.J., A.R. Driscoll, R.D. Fricker, Jr., S. Sengupta, D.J. Spitzner and W.H. Woodall (2018). Performance Evaluation of Social Network Anomaly Detection Using a Moving Window Based Scan Method, *Quality and Reliability Engineering International*, **34**, 1699-1716.

[12] Fricker, Jr., R.D., and S.E. Rigdon (2018). Disease Surveillance: Detecting and Tracking Outbreaks Using Statistics, *Chance*, **31**, 12-22.

[13] Nesbitt, P., Q. Kennedy, J.K. Alt, and R.D. Fricker, Jr. (2015). Iowa Gambling Task Modified for Military Domain, *Military Psychology*, **27**, 252-260.

[14] Brown, G.G., W. DeGrange, R.F. Dell, and R.D. Fricker, Jr. (2015). Educating Military Operations Research Practitioners, *Interfaces*, **45**:2, 175-186.

[15] Yang, J.H., Q. Kennedy, J. Sullivan, and R.D. Fricker, Jr. (2013). Pilot Performance: Assessing How Scan Patterns & Navigational Assessments Vary by Flight Expertise, *Aviation, Space and Environmental Medicine*, **84**:2, 1-9.

[16] Ruth, D.M., Mastre, T., and R.D. Fricker, Jr. (2013). A Study of Mobile Learning Trends at the US Naval Academy and the Naval Postgraduate School, *EduCAUSE Review Online*.

[17] Fricker, R.D., Jr., and D. Banschbach (2012). Optimizing Biosurveillance Systems that Use Threshold-based Event Detection Methods, *Information Fusion*, **13**, 117-128.

[18] Hagen, K.S., R.D. Fricker, Jr., K. Hanni, S. Barnes, and K. Michie (2011). Assessing the Early Aberration Reporting System's Ability to Locally Detect the 2009 Influenza Pandemic, *Statistics, Politics, and Policy*, **2**, issue 1, article 1.

[19] Fricker, R.D., Jr. (2011). Biosurveillance: Detecting, Tracking, and Mitigating the Effects of Natural Disease and Bioterrorism. *Encyclopedia of Operations Research and the Management Sciences*. Available on-line at http://onlinelibrary.wiley.com/book/10.1002/9780470400531

[20] Fricker, R.D., Jr. (2011). Some Methodological Issues in Biosurveillance (with discussion and rejoinder), *Statistics in Medicine*, **30**, 403-441.

[21] Hamrick, T.A., Fricker, R.D., Jr., and G.G. Brown (2010). Assessing What Distinguishes Highly Cited from Less-Cited Papers Published in Interfaces, *Interfaces*, **40**, 454-464.

[22] Fricker, R.D., Jr. (2009). Optimizing Shewhart Charts in Parallel Production Lines, *International Journal of Quality Engineering and Technology*, **1**, pp. 125-135.

[23] Fricker, R.D., Jr., and J.T. Chang (2008). A Spatio-temporal Methodology for Real-time Biosurveillance, *Quality Engineering*, **20**, pp. 465-477.

[24] Fricker, R.D., Jr., Hegler, B.L., and D.A. Dunfee (2008). Comparing Syndromic Surveillance Detection Methods: EARS' Versus a CUSUM-Based Methodology, *Statistics in Medicine*, **27**, pp. 3407-3429.

[25] Joner, M.D., Jr., W.H. Woodall, M.R. Reynolds, Jr., and R.D. Fricker, Jr. (2008). A One-Sided MEWMA Chart for Health Surveillance, *Quality and Reliability Engineering International,* **24**, pp. 503-519.

[26] Fricker, R.D., Jr., Knitt, M.C., and C.X. Hu (2008). Directionally Sensitive MCUSUM and MEWMA Procedures with Application to Biosurveillance, *Quality Engineering*, **20**, pp. 478-494.

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[28] Fricker, R.D., Jr., and H.R. Rolka (2006). Protecting Against Biological Terrorism: Statistical Issues in Electronic Biosurveillance, *Chance*, **19**, pp. 4-13.

[29] Fricker, R.D., Jr., and M. Schonlau (2002). Advantages and Disadvantages of Internet Research Surveys: Evidence from the Literature, *Field Methods,* **14**, pp. 347-367.

[30] Talih, M. and R.D. Fricker, Jr. (2002). Effects of Neighborhood Demographic Shifts on Findings of Environmental Justice: A New York City Case Study, *Journal of the Royal Statistical Society - Series A*, **165**, pp. 375-397.

[31] Fricker, R.D., Jr. and N. Hengartner (2001). Environmental Equity and the Distribution of Toxic Release Inventory Sites in New York City, *Environmental and Ecological Statistics,* **8**, pp. 33-52.

[32] Fricker, R.D., Jr., and C.A. Goodhart (2000). Applying a Bootstrap Approach for Setting Reorder Points in Military Supply Systems, *Naval Research Logistics*, **47**, pp. 459-478.

[33] Gray M.J., E.H. Ondaatje, R.D. Fricker, Jr., and S.A. Geschwind (2000). Service-learning Through Learn and Serve America, Higher Education, *Change*, **32**, pp. 30-39.

[34] Schnelle, J.F., Alessi, C.A., Al-Samarrai, N.R., Fricker, R.D., Jr., and J.G. Ouslander (1999). The Nursing Home at Night: Effects of an Intervention on Noise, Light, and Sleep, *Journal of the American Geriatrics Society*, **47**, pp. 430-438.

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[36] Fricker, R.D., Jr. (1998). Nonrandomness in Microsoft Window's Solitaire, or, Using Electronic Games of Chance for Statistics Projects. *Teaching Statistics*, **20**, pp. 43-45.

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[39] Fricker, R.D., Jr. (1996). The Mysterious Case of the Blue M&Ms, *Chance*, **9**, pp. 19-22.

Monographs

[40] Fricker, R.D., Jr. and C. Christine Fair (2003). *Going to the Mines to Look for Diamonds: Experimenting with Military Recruiting Stations in Malls*, MR-1697-OSD, RAND.

[41] Fricker, R.D., Jr. (2002). *The Effects of Perstempo on Officer Retention in the United States Military*, MR-1556-OSD, RAND.

[42] Fricker, R.D., Jr., G.O. Jacobson, and L. Davis (2002). *Attempting to Evaluate State and Local Preparedness for a Chemical or Biological Attack*, IP-217, RAND.

[43] Birkler, J., J. Schank, J. Chiesa, I. Blickstein, R.D. Fricker, Jr., D. Rushworth, and G.K. Smith (2002). *Options for Funding Aircraft Carriers*, MR-1526-NAVY, RAND.

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[46] Fricker, R.D., Jr. and M. Robbins (2000). *Retooling for the Logistics Revolution: Designing Marine Corps Inventories to Support the Warfighter*, MR-1096-USMC, RAND.

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[48] Gray, M.J., *et al.* (1998). *Final Report of the Evaluation of the Learn and Serve America, Higher Education Program*, MR-998.0-CNCS, RAND, 1998.

Book Chapters

[49] Fricker, R.D., Jr. (2017). Sampling Methods for Online Surveys, *Handbook of Online Research Methods*, 2nd edition, N. Fielding, R.M. Lee and G. Blank, eds., chapter 10, London: SAGE Publications. Translated into Arabic in 2021.

[50] Kulzy, W.W., D.J.Y. Combs, and R.D. Fricker, Jr. (2016). Using the Social Framework Model of Trust to Better Understand Trust in Government, in *Modeling Sociocultural Influences on Decision Making: Understanding Conflict, Enabling Stability*, Cohn, Schatz, Freeman, and Combs, eds., CRC Press, Chapter 19, 397-422.

[51] Anderson, L.A., and R.D. Fricker, Jr. (2016). Understanding Public Opinion Towards Violent Extremists, in *Modeling Sociocultural Influences on Decision Making: Understanding Conflict, Enabling Stability*, Cohn, Schatz, Freeman, and Combs, eds., CRC Press, Chapter 20, 423-448.

[52] Rigdon, S.E., and R.D. Fricker, Jr. (2015). "Health Surveillance" in *Innovative Statistical Methods for Public Health Data*, D-G Chen and J.R. Wilson, eds., Springer, 203-249.

[53] Fricker, R.D., Jr., S.E. Buttrey, and W. Evans (2014). Visualization for Sociocultural Signature Detection, in *Sociocultural Behavior Sensemaking: State of the Art in Understanding the Operational Environment*, Jill Egeth, Gary Klein, and Dylan Schmorrow, eds., The MITRE Corporation.

[54] Fricker, R.D., Jr. (2012). Sampling Methods for Web and E-mail Surveys, *SAGE Internet Research Methods*, J. Hughes, ed., London: SAGE Publications. Reprinted from *The SAGE Handbook of Online Research Methods*, N. Fielding, R.M. Lee and G. Blank, eds., chapter 11, London: SAGE Publications, 195-216.

[55] Fricker, R.D., Jr. and M. Schonlau (2012). Advantages and Disadvantages of Internet Research Surveys, *SAGE Internet Research Methods*, J. Hughes, ed., London: SAGE Publications. Reprinted from Advantages and Disadvantages of Internet Research Surveys: Evidence from the Literature, *Field Methods*, **14**, 347-367.

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Management Sciences, Cochran, J.J. (ed.), John Wiley & Sons Ltd. Available on-line at http://onlinelibrary.wiley.com/book/10.1002/9780470400531.

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[58] Fricker, R.D., Jr. (2008). Sampling Methods for Web and E-mail Surveys, *The SAGE Handbook of Online Research Methods*, N. Fielding, R.M. Lee and G. Blank, eds., chapter 11, London: SAGE Publications, pp. 195-216.

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Technical Reports

[61] Fricker, R.D., Jr., S.E. Buttrey, and J.K. Alt (2015). "Future Navy Recruiting Strategies," Naval Postgraduate School technical report.

[62] Kennedy, Q., P. Nesbitt, J.K. Alt, and R.D. Fricker, Jr. (2015). "Cognitive Alignment with Performance Targeted Training Intervention Model: CAPTIM," Naval Postgraduate School technical report, NPS-OR-15-001.

[63] Fricker, R.D., Jr., W.W. Kulzy, and D.J.Y. Combs (2014). "The Integrative Model of Organizational Trust as a Framework for Understanding Trust in Government," NPS technical report, NPS-OR-14-003.

[64] Fricker, R.D., Jr., and D.J. Coté (2014). "Facilitating Targeted Interventions in Substance Abuse Treatment Programs Via a Risk Scoring Methodology," Naval Postgraduate School technical report, NPS-OR-14-002.

[65] Committee on Review of Test Protocols Used by the DoD to Test Combat Helmets (2014). "Review of Department of Defense Test Protocols for Combat Helmets," The National Academies Press, National Research Council.

[66] Nesbitt, P., Q. Kennedy, J. Alt, R.D. Fricker, Jr., L. Whitaker, J. Yang, J.A. Appleget, J. Huston, and S. Patton (2014). "Understanding Optimal Decision-making in Wargaming," NPS technical report, NPS-OR-14-001.

[67] Deveans, T., S. Lechtenberg-Kasten, S.E. Buttrey, R.D. Fricker, Jr., J.A. Appleget and W.W. Kulzy (2012). "Africa Knowledge, Data Source, and Analytic Effort (KDAE) Exploration," TRAC-Monterey technical report NPS-TRAC-M-TR-12-037.

[68] Committee to Review the Testing of Body Armor Materials for Use by the U.S. Army (2012). "Testing of Body Armor Materials: Phase III," The National Academies Press, National Research Council,.

[69] Fricker, R.D., Jr. (2012). "A Sampling Methodology for INSURV Material Inspections," Naval Postgraduate School technical report NPS-OR-12-001.

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[71] Fricker, R.D., Jr., and S.E. Buttrey (2008). "Assessing the Effects of Individual Augmentation (IA) on Active Component Navy Enlisted and Officer Retention," Naval Postgraduate School Technical Report, NPS-OR-08-003.

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[80] Thie, H.J., R.D. Fricker, Jr., and A. Robbert (1998). "Using Statistical Process Control to Measure Personnel Processes," RAND, PM-776-JS, February.

Other Publications

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[84] Fricker, Jr., R.D., and S.E. Rigdon (2020). Investigating a Disease Outbreak, *Significance*, **17**, 14.

[85] Fricker, R.D., Jr. and W.H. Woodall (2016). In Response: Play It Again, and Again, Sam, *Significance,* **13,** 46.

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[87] Anderson, L., and R.D. Fricker, Jr. (2015). Raking: An Important and Often Overlooked Survey Analysis Tool, *Phalanx*, **48**, 36-42.

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[89] Fricker, R.D., Jr. (2013). Editorial: The 10th Rothkopf Rankings of Universities' Contributions to the INFORMS Practice Literature, *Interfaces*, **43**:6, 572-577.

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[91] Fricker, R.D., Jr. (2012). Editorial: The First Rothkopf Rankings of Non-Academic Organizations, *Interfaces*, **42**:6, 585-590.

[92] Yang, J.H., Kennedy, Q., Sullivan, J., and R.D. Fricker, Jr. (2012). Scan Patterns on Overland Navigation in Varying Route Difficulty: Is Total Flight Hours (TFH) a Good Measure of Expertise?, Boston, MA: *Human Factors and Ergonomics Society Proceedings*, **56**:1, 1406-1410.

[93] Major, W.F., Kline, J., and R.D. Fricker, Jr. (2012). Assessing Counter-Piracy Tactics: Is it Better to Fight or Flee?, *Phalanx*, **45**:3, 22-24.

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Blogs, Podcasts, and Videos

[111] "Impact of the COVID-19 pandemic in the United States," *The Academic*, https://theacademic.com/the-impact-of-the-covid-19-pandemic/, February 2023.

[112] "Lessons from the 1918 Influenza Pandemic," *Taylor & Francis Experts on Statistical Data and Modeling around COVID-19*, www.routledge.com/go/taylor-and-francis-experts-on-statistical-data-and-modeling-around-covid-19, June 2021.

[113] "578,555 People Have Died from COVID-19 in the US, or Maybe It's 912,345 – Here's Why It's Hard to Count," *The Conversation*, https://theconversation.com/578-555-people-have-died-from-covid-19-in-the-us-or-maybe-its-912-345-heres-why-its-hard-to-count-161068, May 24, 2021.

[114] Interview with Sarah Schweinsberg on counting lives lost to COVID, The World and Everything in It – April 15, 2021, https://wng.org/podcasts/the-world-and-everything-in-it-april-15-2021-1618478826.

[115] "Understanding and Responding: The Politics of Public Health during Epidemics," Virginia Tech Web Panel, https://liberalarts.vt.edu/news/events/2020/10/politics-of-public-health-during-epidemics.html, November 2, 2020.

[116] "Planning for a Pandemic," Stats + Stories interview and podcast with S.E. Rigdon, https://statsandstories.net/health1/planning-for-a-pandemic, October 8, 2020.

[117] "Up to 204,691 Extra Deaths in the US So Far in this Pandemic Year," *The Conversation*, https://theconversation.com/up-to-204-691-extra-deaths-in-the-us-so-far-in-this-pandemic-year-143139, August 13, 2020.

[118] "COVID-19 Testing Doesn't Cause Cases," www.cambridgeblog.org/2020/08/covid-19-testing-doesnt-cause-cases, Cambridge University Press, August 11, 2020

[119] "Test positivity rate: How this one figure explains that the US isn't doing enough testing yet," *The Conversation*, https://theconversation.com/test-positivity-rate-how-this-one-figure-explains-that-the-us-isnt-doing-enough-testing-yet-143340, July 30, 2020.

[120] "How deadly is COVID-19? A biostatistician explores the question," *The Conversation*, https://theconversation.com/how-deadly-is-covid-19-a-biostatistician-explores-the-question-142253, July 10, 2020.

[121] "Predictive Analytics Meets Pandemic," Virginia Tech Web Panel, https://youtu.be/Tw8DOVzOFXQ, June 24, 2020.

[122] "On COVID-19 Surveillance," www.cambridgeblog.org/2020/06/on-covid-19-surveillance, Cambridge University Press, June 5, 2020.

Teaching Experience

- Professor, Virginia Tech, 2015-present
  - Quantitative/Computational Thinking and Global Citizenship (UH 2514)
  - Probability and Statistics for Engineers (STAT 4604)
  - Introductory Statistics (STAT 2004)

- Professor, Naval Postgraduate School, 2005-2015
  - Probability (OA3101)
    - Taught once or twice per year to resident Operations Research students

- o Statistics (OA3102)
  - ▪ Taught twice per year to resident Operations Research students
- o Survey Research Methods (OA4109)
  - ▪ Taught once per year
  - ▪ Developed as a resident elective course; distance learning version to be developed
- o Probability and Statistics (OS3180)
  - ▪ Taught course via VTC and in residence for the Master of Science in Systems Engineering (MSSE) curriculum
- o Fundamentals for Naval Analysis (OS2080)
  - ▪ Developed and taught asynchronous course using pre-recorded internet-based lectures for the Master of Systems Analysis and Systems Analysis Certificate curricula
- o Fundamentals for Naval Analysis II (OS3080)
  - ▪ Revised and taught as VTC-based course for the Master of Systems Analysis and Systems Analysis Certificate curricula
- o Naval Tactical Analysis (OS3680)
  - ▪ Taught residence class in the Master of Systems Engineering Analysis curriculum
- o Probability and Statistics for Systems Engineers (OS2100)
  - ▪ Taught course via VTC and in residence for the Master of Science in Systems Engineering (MSSE) curriculum

- Professor, Pardee RAND Graduate School, 1999-2004
  - o Empirical Analysis I
  - o Statistics and Data Analysis II

- Adjunct Assistant Professor, Marshall School of Business, USC, 1999-2004
  - o Applied Statistics for Managers
    - ▪ Taught classroom-based, Internet-based, and broadcast-based versions of course
  - o Quality Improvement Methods

- Teaching Assistant, Yale University, 1995-1996
  - o Stochastic Processes
  - o Quality Control and Improvement
  - o Optimization I
  - o Probabilistic Models

- Engineering Instructor, Surface Warfare Officer School, U.S. Navy, 1985-1987

Conferences and Symposia

- Invited speaker, "Saving Humanity from the Next Plague: When Public Health and Politics Collide." Virginia Bar Association Baliles Luncheon, Homestead, Virginia, July 22, 2022.
- Keynote speaker, "On Operations Research and Being an Analyst." MORS Education and Professional Development Colloquium, virtual, March 24, 2021.
- Keynote speaker, "Monitoring the Health of Populations by Tracking Disease: Some Preliminary Lessons I Have Learned from the COVID-19 Pandemic." CDC's Statistical Science Awards Ceremony, virtual, January 15, 2021.

- Keynote speaker, "*Basic and Applied Social Psychology* Banned *P*-values: How's That Working Out?" Annual meeting of the Virginia Chapter of the ASA, Virginia Commonwealth University, Richmond, VA, October 2018.

- Invited panelist: Department Heads Panel, Virginia Tech Academic Leaders Program, Blacksburg, VA, August 2018.

- Chair, "Advances in Statistical Process Control," Joint Statistical Meetings, Vancouver, BC, August 2018.

- Invited speaker, "Advocating and Embodying Equality in Career Development and Leadership in Academia," Joint Statistical Meetings, Vancouver, BC, July 2018.

- Invited seminar, "Assessing the Effect of *Basic and Applied Social Psychology P*-value Ban," Department of Statistics, North Carolina State University, Raleigh, NC, April 2018.

- Invited speaker: Business-Higher Education Forum's NYC Data Science Task Force, New York, NY, December 2017.

- Chair, "Statistical Training Needs to Address Cognitive Limitations and Biases," ASA Symposium on Statistical Inference, Bethesda, MD, October 2017.

- Invited panelist: Department Heads Panel, Virginia Tech Academic Leaders Program, Blacksburg, VA, September 2017.

- Chair, "Advances and Challenges in Disease Surveillance," Joint Statistical Meetings, Baltimore, MD, August 2017.

- Invited speaker, "Academic Leadership," Fall technical Conference, Minneapolis, MN, October 2016.

- Invited panelist: Department Heads Panel, Virginia Tech Academic Leaders Program, Blacksburg, VA, September 2016.

- Invited speaker: "Improving Biosurveillance System Performance," The 4th International Symposium on Statistical Process Monitoring, Padua, Italy, July 2015.

- Discussant: "Novel Contexts For SPC Methods And Applications," Joint Statistical Meetings, Boston, MA, August 2014.

- Invited speaker: "Exploring the Integrative Model of Organizational Trust as a Framework for Understanding Trust in Government," 3rd International Conference on Cross-Cultural Decision Making, Krakow, Poland, July 2014.

- Invited speaker: "Educating Military Operations Research Practitioners," 20th Conference of the International Federation of Operations Research Societies, Barcelona, Spain, July 2014.

- Co-author: "Assessing Threats to Peace in the Autonomous Region of Muslim Mindanao in the Philippines," 3rd International Conference on Cross-Cultural Decision Making, Krakow, Poland, July 2014.

- Invited speaker: "Modeling Trust in Government," Technical Exchange Meeting on Trust Research in the DoD Context, Arlington, VA, May 2013.

- Invited speaker: "Nonparametric Statistics - When Normal Isn't Good Enough," N81 "brownbag" series via VTC, January 2013.

- Invited speaker: "An Overview of the Committee for the Testing of Body Armor Materials for Use by the U.S. Army (Phases I, II, and III)," presentation to National Academy of Sciences Committee on Review of Test Protocols Used by the DoD to Test Combat Helmets, Aberdeen, MD, January 2013.

- Briefing, with LCDR W. Kulzy and LT David Combs: "Modeling Trust in Government: Empirically Assessing Mayer et al.'s Integrative Model of Organizational Trust," Department of State, December 2012.

- Contributed paper, with W. Kulzy, "Modeling and Evaluating Indigenous Populations' Trust in Government," 2nd International Conference on Cross-cultural Decision Making, San Francisco, CA, July 2012.
- Contributed paper, with J. Rix, "Displaying Survey-based HSCB Data for Decision-makers," 2nd International Conference on Cross-cultural Decision Making, San Francisco, CA, July 2012.
- Contributed paper, with S. Jones, "Using Survey Data to (Help) Parameterize Human Terrain Models," 2nd International Conference on Cross-cultural Decision Making, San Francisco, CA, July 2012.
- Invited speaker, "Optimizing Biosurveillance Systems," Quality and Productivity Research Conference, Long Beach, CA, June 2012.
- Invited speaker, tutorial presentation, "Survey Data in Support of Irregular Warfare: Important Analytic Considerations," Military Operations Research Society Symposium, Monterey, CA, June 2011.
- Invited speaker, panel presentation, "Survey Development and Execution: An Overview," Military Operations Research Society Symposium, Monterey, CA, June 2011.
- Contributed presentation, "Assessing EARS' Ability to Locally Detect the 2009 H1N1 Pandemic," 13th Biennial Conference on Statistical Methods, Decatur, GA, May 2011.
- Invited speaker, "Assessing EARS' Ability to Locally Detect the 2009 H1N1 Pandemic," 12th INFORMS Computing Society Conference, Monterey, CA, January 2011.
- Invited speaker, "Summary of Mobile Learning Devices Survey Conducted for CED3," Knox Lecture, NPS, Monterey, CA, November 2010.
- Poster, "Evaluating Biosurveillance System Performance: Using the Early Aberration Reporting System (EARS) to Detect H1N1 in Monterey County, California," with LT Katie Hagen, Susan Barnes, Krista Hanni, Kristy Meyer, Bryan Rees, November 2010.
- Invited speaker, "Using and Improving EARS for Local Public Health Biosurveillance," with Suzie Barnes, California Conference of Local Data Health Managers, August 2010.
- Topic contributed paper, "Assessing the Methodology for Testing Body Armor," with Alyson Wilson, 2010 Joint Statistical Meetings, August 2010.
- Invited speaker, "Biosurveillance: Detecting, Tracking, and Mitigating the Effects of Natural Disease and Bioterrorism," with Krista Hanni, MORS Interagency Perspectives Issues and Analysis On-line Meeting, February 2010.
- Invited speaker, "Two Toys I've Been Testing," NPS Distributed Learning Course, Monterey, CA, May 2009.
- Invited speaker, "Optimizing Biosurveillance Systems," Info-Fusion: Utilization of Multi-Source Data, CDC Symposium on Statistical Methods, Centers for Disease Control and Prevention, April 2009.
- Invited speaker, "Using the Repeated Two-sample Rank Procedure for Detecting Anomalies in Space and Time," University of California, Santa Cruz, Statistics Department, January 2009.
- Invited speaker, "Using the Repeated Two-sample Rank Procedure for Detecting Anomalies in Space and Time," University of California, Riverside, Statistics Department, November 2008.
- Invited speaker, "Using Elluminate (and Similar Products) for Distance Learning Teaching," Naval Postgraduate School Brown Bag Symposium on Using Elluminate, October 2008.
- Invited speaker, "Optimizing Biosurveillance Systems," 2008 INFORMS, October 2008.
- Invited speaker, "Detecting Anomalies in Space and Time with Application to Biosurveillance," CNO DFP Critical Infrastructure Vulnerability Workshop, August 2008.

- Invited speaker, "Improving Biosurveillance: Protecting People as Critical Infrastructure," CNO DFP Critical Infrastructure Vulnerability Workshop, August 2008.

- Topic contributed paper, "Using the Repeated Two-Sample Rank Procedure for Detecting Anomalies in Space and Time," 2008 Joint Statistical Meetings, August 2008.

- Invited speaker, "Assessing the Effects of Individual Augmentation on the Retention of Navy Personnel," 2008 Western Economics Association annual conference, July 2008.

- Discussant, "Black and Hispanic Marines: Their Accession, Representation, Success and Retention in the Corps" by A. Quester et al., 2008 Western Economics Association annual conference, July 2008.

- Invited speaker, "The Repeated Two-Sample Rank Procedure for Detecting Anomalies in Space and Time," 2008 Quality and Productivity Conference, June 2008.

- Invited speaker, "Optimizing Biosurveillance Systems," Joint session of the 2008 Qualitative Methods in Defense and National Security conference and the closing workshop for the SAMSI Program on Risk Analysis, May 2008.

- Invited speaker, "A Nonparametric Method for Detecting Anomalies in Space and Time," 2008 Interfaces conference, May 2008.

- Invited speaker, "Assessing the Effects of Individual Augmentation on Navy Retention," Eighth Annual Navy Workforce Research and Analysis Conference, May 2008.

- Invited speaker, "Assessing the Effects of Individual Augmentation on the Retention of Navy Personnel," 2008 West Point Workshop: "Real Data – The Art of Statistical Analysis," April 2008.

- Invited speaker, "Optimizing a System of Threshold-based Sensors," 2007 Informs Conference, November 2007.

- Keynote speaker, "Statistical Methods for Biosurveillance," 2007 Army Conference on Applied Statistics, October 2007.

- Invited speaker, "Statistical Methods for Improving Biosurveillance System Performance," Monterey Homeland Defense Conference, August 2007.

- Invited speaker, "SPC Applications in Syndromic Surveillance," 2007 Quality and Productivity Conference, June 2007.

- Invited speaker, "Sampling Methods for Internet-based Surveys," ESRC e-Society Programme and SAGE Handbook of Online Research Methods Colloquium, Royal Society, March 2007.

- Program Committee, Conference on Quantitative Methods in Defense and National Security, February 2007.

- Chair, "Syndromic Surveillance" session, First Annual Conference on Quantitative Methods & Statistical Applications in Defense and National Security, February 2006.

- Contributed paper, "Directionally Sensitive Multivariate Statistical Process Control Methods with Application to Syndromic Surveillance," Hawaii International Conference on Statistics and Mathematics, January 2006.

- Invited speaker, "Comparing Univariate and Multivariate Methods for Syndromic Surveillance," Los Alamos National Laboratory, April 2005.

- Invited speaker, "Statistical Methods for Syndromic Surveillance: An Empirical Assessment" for the Conference on Statistics in Counterterrorism, NYU, November 2004.

- Discussant for "Attack, Interdiction, and Response" session at the American Statistical Association (ASA) annual conference, 2004.

- Invited speaker, briefed Undersecretary of Defense for Personnel and Readiness on results of Officer PERSTEMPO research, OUSD(P&R)-sponsored conference, October 2001.
- Pentagon briefing, "Gulf War Illnesses and Pesticide Use in the Gulf War; A Review of the Scientific Literature and a Survey of Recalled Usage," with G. Cecchine, March 2001.
- Press briefing, Gulf War Illnesses Project on Pesticide Usage, with Undersecretary of Defense for Personnel and Readiness and Special Assistant for Gulf War Illnesses, 2001. Briefing carried live on C-SPAN.
- Invited speaker, "Improving Inventory Performance by "Rightsizing" Inventory Reorder Points," Interfaces Conference, 2000.
- Invited speaker, "Can Environmental Justice (EJ) Be Addressed Statistically?," American Statistical Association (ASA) Conference, 2000.
- Invited speaker, "Evaluating the Effects of PERSTEMPO on Junior Officer Retention," Military Operations Research Society Symposium, 2000.
- Invited speaker, United States Naval Academy Operations Analysis Colloquium, 1999.
- Invited paper, "Using a Bootstrap Approach for Setting Reorder Points in Inventory Systems," Military Operations Research Society Symposium, 1999.
- Invited speaker, "Using a Bootstrap Approach for Setting Reorder Points in Inventory Systems," Naval Postgraduate School, 1999.
- Invited session organizer, "Statistical Methods for Assessing Environmental Equity," American Statistical Association Conference, 1999.
- Contributed paper, "Detecting When a Monotonically Increasing Mean has Crossed a Threshold," American Statistical Association Conference, 1998.
- Contributed paper, "Nonparametric Control Charts for Multivariate Data," National Institute for Standards and Technology 1996 Joint Conference.
- Contributed paper, "The Repeated Two-Sample Rank (RTR) Procedure," American Statistical Association Conference, 1996.
- Invited paper, "The Inherent Difficulties in Applying TQM to a Particular Service Industry," American Statistical Association Winter Conference, 1994.
- Invited session organizer, "Hard Metrics: Service Industries and the Federal Government," American Statistical Association Winter Conference, 1994.

Grants and Research Funding

- Homo SocioNeticus: Scaling the Cognitive Foundations of Online Social Behavior, R. Fricker, PI, DARPA, $681,819, 2019.
- Curriculum redesign 4-VA Grant, Introductory Statistics (STAT 2004), R. Fricker, PI, $10,000, 2016-17.
- Future Navy Recruiting Strategies: Development of Concepts, Practices, Processes and Procedures to Recruit Generation Z and Alpha, R. Fricker and S. Buttrey co-PIs, $220,000, 2014-15.
- Navy Recruit Attrition Prediction Modeling, S. Buttrey and R. Fricker co-PIs, $93,648, 2014-15.
- The Human Social Cultural Behavior Modeling Initiative at the Naval Postgraduate School, Jeff Appleget and Ron Fricker, PIs, Office of Naval Research, $400,000, 2013.
- JSOTF-P Philippines Survey Data Exploration and Analysis, Ron Fricker, PI, Army TRADOC Analysis Center – Monterey, $85,000, 2013.

- Deployable Force Protection: Gaps In and Improvements Of, Ron Fricker, PI, U.S. Army TRADOC Analysis Center, $17,500, 2012.
- Africa Knowledge, Data Source, and Analytic Effort (KDAE) Exploration, Ron Fricker, PI, U.S. Army TRADOC Analysis Center, $45,000, 2012.
- The Human Social Cultural Behavioral (HSCB) Modeling Initiative at the Naval Postgraduate School, Jeff Appleget and Ron Fricker, PIs, Office of Naval Research, $160,000, 2011.
- Statistical Tasks in Support of the Board of Inspection and Survey, Ron Fricker, PI, U.S. Navy Board of Inspection and Survey, $47,000, 2011.
- Modeling Essential Services, Security, Economics and Employment Associated with Attitudes, Ron Fricker, PI, U.S. Army Center for Analysis, $125,000, 2010.
- Optimizing Threshold-based Surveillance Systems, Ron Fricker, PI, Army Research Office, $50,000, 2010.
- Statistical Models for Forecasting Insurgent Strikes with Application to Improvised Explosive Device Attacks in Iraq, Ron Fricker and Roberto Szechtman, co-PIs, Office of Naval Research, $240,000, 2007-8.
- Research on the Effects of Individual Augmentation (IA) on Navy Enlistment and Officer Retention, Ron Fricker and Sam Buttrey, co-PIs, Office of Chief of Naval Personnel, Manpower, Personnel, Training & Education, $59,946, 2007-8.
- Developing and Evaluating Methods Advanced Statistical Methods for Early Detection of Bioterrorism via Syndromic Surveillance with Application to Homeland Security and National Defense, Naval Postgraduate School, $247,000, 2005-7.
- Expert Panel on Detection of Aberrations in Surveillance Data, Karen Kafadar, University of Colorado at Denver, and Ron Fricker co-PIs, American Statistical Association Strategic Funding Initiative, $10,000, 2006.
- Promoting Collaboration and Outreach between Statisticians and Practitioners in National Security and Homeland Defense, Ron Fricker and Laura Schmidt, RAND, co-PIs, American Statistical Association Strategic Funding Initiative, $4,600, 2005.
- Principal investigator for multiple Department of Defense studies via the National Defense Research Institute, a federally funded research and development center, including:
  o Evaluation of the Effectiveness of Enhanced Recruiting Stations, $500,000, 2002-2003.
  o Operation Desert Storm/Desert Shield Pesticides Use Survey, $866,000, 1998-2000.
- Developing Methods for Early Detection of Biological Terrorism Using Advanced Statistical Process Control Methodology, DoD Independent Research and Development funding, $100,000, 2001-2002.
- Evaluation of Web-based Survey Technology, DoD Independent Research and Development funding, $120,000, 2000.
- Developing Statistical Methodology and an Analytical Framework for Evaluating Environmental Justice via a Longitudinal Study of Metropolitan New York City, National Science Foundation grant SRB-9816560, $300,000, 1999-2001.

Media Interviews

- "Russia Military Losses Could Be Double U.S. In Vietnam in Tenth of Time," interview with Jess Thomsom, Newsweek, https://www.newsweek.com/russian-casualties-ukraine-war-soldiers-scale-1764654, December 5, 2022.
- "Fact Check: Johns Hopkins Lecturer Did NOT Prove There Are No Excess 2020 Deaths Due To COVID," interview with Dean Miller, Lead Stories, https://leadstories.com/hoax-

- alert/2020/12/fact-check-johns-hopkins-lecturer-did-not-prove-covid19-data-prove-there-are-no-excess-deaths-due-to-covid19.html, December 1, 2020.

- "A Tale of Two Pandemics," interview with Sandy Hausman, WVTF, www.wvtf.org/post/tale-two-pandemics, November 24, 2020.

- "New Science Suggests How to Shorten Quarantine," interview with Roxanne Khamsi, *Elemental*, https://elemental.medium.com/new-science-suggests-how-to-shorten-quarantine-7cad61243428, November 9, 2020.

- "JAMA reports highlight number of deaths from COVID-19," interview with Gene Marrano and Rachel Meell, *WFIR*, https://wfirnews.com/news/journal-of-the-american-medical-association-reports-highlight-number-of-deaths-from-covid-19, October 27, 2020.

- "Amazon Study of Workers' Covid is Faulted Over Lack of Key Data," interview with Spencer Soper, *Bloomberg News*, https://www.bloomberg.com/news/articles/2020-10-06/amazon-covid-19-study-is-faulted-for-failure-to-measure-progress?sref=Zyubqcqc, October 6, 2020.

- "How well are Pa. and N.J. controlling COVID-19? We did the math. Here's what we found," interview with Marie McCullough, *The Philadelphia Enquirer*, www.inquirer.com/health/coronavirus/coronavirus-positivity-rates-can-be-valuable-but-confusing-metric-20200925.html, September 26, 2020.

- "Covid-19 Positivity Rate Might Not Mean What You Think It Does," interview with Jo Craven McGinty, *Wall Street Journal*, www.wsj.com/articles/covid-19-positivity-rate-might-not-mean-what-you-think-it-does-11599211800, September 5, 2020, p. A2.

- "How Many People Have Died From the Cornoavirus? Here's What the Latest US Data Says," interview with Karen Pallarito, *Health.com*, www.health.com/condition/infectious-diseases/coronavirus-survival-rate, September 4, 2020.

- "Links en rechts Amerika zien in de coronacijfers wat ze willen zien" interview with Bas den Hond, reporter for the Dutch daily newspaper Trouw, www.trouw.nl/buitenland/links-en-rechts-amerika-zien-in-de-coronacijfers-wat-ze-willen-zien~b3823160, July 24, 2020.

- Background discussion with Ryan Van Velzer, WFPL, about Kentucky Department for Public Health's COVID-19 data reporting and analyses compared to the CDC's Excess Mortality data, July 8, 2020.

- Interview with Lindsay Weber and Krys'tal Griffin, *Delaware News Journal*, delaware online, www.delawareonline.com/story/news/coronavirus-in-delaware/2020/07/02/how-bad-coronavirus-delaware-experts-weigh-in/3263851001/, July 2, 2020.

- "What Fallout Might PA Nursing Homes Face for Becoming a 'Ground Zero' in the COVID-19 Pandemic?" interview with Nicole Brambila, PublicSource, www.publicsource.org/what-fallout-might-pa-nursing-homes-face-for-becoming-a-ground-zero-in-the-covid-19-pandemic/, May 27, 2020.

- "Missouri's COVID-19 Fatality Numbers Have Doubled In May But Could Still Be Missing Many Deaths," interview with Alex Smith, KCUR, https://www.kcur.org/2020-05-22/missouris-covid-19-fatality-numbers-have-doubled-in-may-but-could-still-be-missing-many-deaths, May 22, 2020.

- Background discussion with Andrew Ryan, *The Boston Globe*, about COVID-19 data provided by the Massachusetts Department of Public Health, May 20, 2020.

- Interview with Irina Ivanova, CBS News MoneyWatch. Background discussion about Rymedi, a start-up company, that aggregates COVID-19 test data, May 15, 2020.

- "Kansas City Officially Reopens – Here Are 10 Things Everyone Should Know," interview with Alex Smith, KCUR, www.kcur.org/news/2020-05-15/kansas-city-officially-reopens-here-are-10-things-everyone-should-know, May 15, 2020.

- Background discussion with Vincent Gabrielle, KNOX News, about Knox County Health Department's COVID-19 data reporting and analyses, May 13, 2020.
- "Official Toll of Massachusetts Coronavirus Deaths Likely Undercounted, a Review Shows," interview with Andrew Ryan, *The Boston Globe*, www.bostonglobe.com/2020/04/22/nation/official-toll-massachusetts-coronavirus-deaths-likely-undercounted-review-shows , April 22, 2020.
- "The Number of Coronavirus Infections in Santa Clara, California May Be Up to 85 Times Higher than Testing Shows, According to New Research," interview with Aylin Woodward, *Business Insider*, www.businessinsider.com/santa-clara-coronavirus-cases-more-positives-than-tests-2020-4, April 17, 2020.
- "COVID-19 Updates, Medicine Safety, 3D Printed Medical Equipment, Exercise in Isolation," panel interview with Thomas Canalichio, *Newswise*, https://www.newswise.com/coronavirus/newswise-live-expert-panel-for-april-16-2020-covid-19-updates-medicine-safety-3d-printed-ventilators-exercise-in-isolation/?article_id=729945, April 16, 2020.
- "Saving Humanity from the Next Plague," National Public Radio interview with Robbie Harris, WVTF, Virginia Public Radio, www.wvtf.org/post/saving-humanity-next-plague#stream/0, April 7, 2020.
- "Despite Mounting Criticism Over America's Coronavirus Response, Here's What the US is Getting Right," interview with Brendan Cole, *Newsweek*, www.newsweek.com/coronavirus-cares-act-stimulus-donald-trump-1496582, April 7, 2020.
- "Predicting Coronavirus Cases, Deaths is Tricky, but Models Improving, Experts Say," interview with Rita Price, *The Columbia Dispatch*, www.dispatch.com/news/20200405/predicting-coronavirus-cases-deaths-is-tricky-but-models-improving-experts-say, April 5, 2020.
- "The Best Graphs and Data for Tracking the Coronavirus Pandemic: Where to find the curve and how to see if it's flattening," interview with Adi Robertson, *The Verge*, www.theverge.com/2020/4/2/21201832/novel-coronavirus-covid-19-best-graphs-tracking-data, April 2, 2020.
- "'No metro area will be spared': Officials warn more cities will face outbreaks," interview with Stephen Loiaconi, Sinclair Broadcast Group, https://abc6onyourside.com/news/nation-world/no-metro-area-will-be-spared-officials-warn-more-cities-will-face-outbreaks, March 30, 2020.
- "New Book: Tracking Disease Outbreaks," interview with Gene Marrano, WFIR News, https://wfirnews.com/news/timely-new-book-from-vt-professor-uses-stats-to-track-disease-spread, March 16, 2020.
- "New Book: Tracking Disease Outbreaks," National Public Radio interview with Robbie Harris, WVTF, Virginia Public Radio, www.wvtf.org/post/new-book-tracking-disease-outbreaks, March 5, 2020.
- "DoD Finds Troops Misused Pesticides During Gulf War," DoD News interview with Kathleen Rhem, https://archive.defense.gov/news/newsarticle.aspx?id=45137, January 18, 2001.
- "Gulf War Illnesses," Pentagon media briefing, https://www.c-span.org/video/?161738-1/gulf-war-illnesses, C-SPAN, January 12, 2001.

Select Virginia Tech Daily News Features

- "Understanding COVID-19 is complicated, but you know what to do," February 2021.

- "[Hokies help bend trend in New River Valley](#)," September 2020.
- "[Virginia Tech team building infectious disease models, research to help guide decisions](#)," August 2020.
- "[TECH Together Campaign wants students to create innovative campus solutions](#)," July 2020.
- "[Biostatistics expert: 'We're not testing as much as we should be' for COVID-19's spread](#)," March 2020.

Panels

- Member, Committee to Review of Test Protocols Used by the DOD to Test Combat Helmets, The National Academies, 2012-14.
- Member, Committee to Review the Testing of Body Armor Materials for Use by the U.S. Army, Phase III, The National Academies, 2011-12.
- Member, Committee to Review the Testing of Body Armor Materials for Use by the U.S. Army, Phase II, The National Academies, 2010.
- Department of Homeland Security Center of Excellence - High Consequence Event Merit Review Panel, 2005.

Workshops

- Invited attendee, Prediction of Health Risks through ICT: Challenges to Future Research, GAP Second Workshop, Copenhagen, Denmark, November 2008.
- Invited attendee, Workshop on Critical Infrastructure, Chief of Naval Operations Distinguished Fellows Program, Monterey, CA, August 2008.
- Invited attendee, Centers for Disease Control and Prevention BioSense Science meeting, Atlanta, GA, 2005.
- Invited attendee, Department of Homeland Security Center of Excellence - High Consequence Event Merit Review Panel, Washington, DC, 2005.

Short Courses Taught

- "Conducting Military Surveys," Marine Corps Combat Development Command, Quantico, VA, May 2013.
- "Methodological Issues in Biosurveillance," Twelfth Biennial CDC/ATSDR Symposium on Statistical Methods, Decatur, GA, April 2009.
- "Survey Research Methods," Marine Corps Operational Test and Evaluation Activity, Quantico, VA, May 2008.

Ph.D. Dissertations Supervised

- Meng J. Zhao, committee member, Virginia Tech, graduated in 2017.
- Matthew Keefe, committee member, Virginia Tech, graduated in 2016.

Master's Theses Supervised

- Evans, William, Lieutenant Commander, USN, "Multivariate Visualization in Social Sciences and Survey Data," MS in Operations Research, September 2013.
- Tabar, Matthew J., Lieutenant Commander, USN, "Analysis of Decisions Made Using the Analytic Hierarchy Process," MS in Operations Research, September 2013.

- Cipperley, Benjamin J., Lieutenant Commander, USN, "Modeling Trust in Philippine Insurgent Organizations," MS in Operations Research, June 2013.

- Timmons, Spencer T., Major, USA, "Modeling Population Demographics and Societal Trends in the Sahel Region of Africa," MS in Operations Research, June 2013.

- Larrabee, Kevin S., Major, USA, "Assessing the Impact of the Trans-Sahara Counterterrorism Partnership (TSCTP)," MS in Operations Research, June 2013.

- Coté, David J., Major, USMC, "Predictors of Retention in a Homeless Veteran Intervention Program," MS in Operations Research, December 2012.

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- Moeller, Kevin, Lieutenant, USN, "Combating Irregular Warfare: Gaining Insight into Indigenous Populations Via Social Survey Analyses," MS in Operations Research, September 2010.

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- Paisant, M., Lieutenant, USN, "Evaluating the Effect of Individual Augmentation (IA) on United States Navy Officer and Enlisted Retention," MS in Operations Research, March 2008.

- Hattaway, S., Lieutenant Commander, USN, "Dynamic Allocation of Fires and Sensors (DAFS) Maritime Analysis," MS in Operations Research, March 2008.

- Robbins, K.A., Jr., Captain, USMC, "Optimizing the U.S. Marine Corps' Selective reenlistment Bonus Program for Career Force Retention," MS in Operations Research, September 2007.

- Hegler, Benjamin L., Ensign, USN, and Dunfee, David A., Ensign, USN, "Biological Terrorism Preparedness: Evaluating the Performance of the Early Aberration Reporting System (EARS) Syndromic Surveillance Algorithms," MS in Applied Science (Operations Research), June 2007.

- Knitt, Matthew C., Ensign, USN, and Hu, Cecilia X., Ensign, USN, "A Comparative Analysis of Multivariate Statistical Detection Methods Applied to Syndromic Surveillance," MS in Applied Science (Operations Research), June 2007.

- Conatser, D.G., Major, USMC, "Forecasting U.S. Marine Corps Reenlistments by Military Occupational Specialty and Grade," MS in Operations Research, September 2006.

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- Turkes, T., First Lieutenant, Turkish Army, "Fitting Lanchester and Other Equations to the Battle of Kursk Data ," MS in Operations Research, March 2000.

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- Editorial Board Member, *Statistics and Public Policy*, 2013-2015
- Editorial Board Member, *Statistics, Politics, and Policy*, 2009-2012
- Statistical Editor, *Journal of Disaster Medicine and Public Health Preparedness*, 2007-2009
- Associate Editor, *Operations Research*, 2002-2009
- Associate Editor, *Naval Research Logistics*, 2000-2003

Professional Societies

- Member, American Statistical Association Nominations and Awards Committee, 2021-2022
- Member, American Statistical Association (ASA) Committee on Nominations, 2020-2021
- Member, ASA section on Statistics in Defense and National Security (SDNS) awards committee, 2015-2018
- Member, ASA SDNS nominations committee, 2014-2017
- ASA SDNS Council of Sections representative, 2007-2010
- Past Chair, SDNS, 2007
- Chair, SDNS Committee on Nominations, 2007
- Chair, SDNS Committee on Charter Revision, 2007
- Chair, SDNS, 2006
- Chair-elect, SDNS, 2005
- Chair, ASA Committee on Statisticians in Defense and National Security, 2004
- Program Chair, ASA Section on Statistics in Defense and National Security, 2004
- Vice-Chair, ASA Committee on Statisticians in Defense and National Security, 2001-2003
- Membership Chair, the Quality and Productivity Section of ASA, 1998-2000
- Publicity Chair, Section on the Physical and Engineering Sciences of ASA, 1998-2000

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- Member, INFORMS Franz Edelman Award Committee, 2008-2014
- Program Committee Member, International Health Informatics Conference, 2013
- Program Committee Member, Quality and Productivity Research Conference (QPRC), 2012
- Program Committee Member, INFORMS Computing Society Conference, 2011
- Program Committee Member, Biosurveillance and Biosecurity Workshop, 2008

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- *Statistical Analysis and Data Mining*
- *Technometrics*
- *Journal of Quality Technology*
- *Quality Engineering*
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- *Journal of Disaster Medicine and Public Health Preparedness*
- *Operations Research*
- *Military Operations Research*
- *Naval Research Logistics*
- *IIE Transactions*

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- Fellow, American Statistical Association (ASA)
- Fellow, Atlantic Coast Conference Academic Leaders Network (ACC ALN)
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