Eric Alan Vance

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EDUCATION

Ph.D. Duke University, Statistical Science   2008
Statistical Analysis of Dynamic Network Data
Advisor: Dr. David L. Banks

M.S. Duke University, Statistics and Decision Sciences   2005
Quantifying Elephant Social Structure: Using a Bayesian Bilinear Mixed Effects Model to Elicit Qualities of Elephant Behavior
Advisor: Dr. Michael L. Lavine

A.B. University of California, Berkeley   1997
Graduated with distinction as a triple major in Mathematics; Economics; and Statistics

SELECTED HONORS AND AWARDS

American Statistical Association (ASA) W.J. Dixon Award for Excellence in Statistical Consulting	2023
Fulbright U.S. Scholar for Indonesia	2023–2024
Data For Good Organization and Infrastructure Award for LISA 2020 Global Network	2023
ASA Jackie Dietz Award for The Best Paper of 2021 in the *Journal of Statistics and Data Science Education*	2022
Fellow of the ASA	2021
Best Contributed Paper, ASA Section on Statistical Consulting	2021
Research and Innovation Office (RIO) Faculty Fellow (CU Boulder)	2021–22
ASA Jackie Dietz Award for The Best Paper of 2019 in the *Journal of Statistics Education*	2020
ASA Statistical Consulting Section's Outstanding Mentorship Award	2019
Co-author on Best Contributed Paper, ASA Section on Statistical Consulting	2014
Google Faculty Research Award	2013, 2014
Elected Member of the International Statistical Institute	2013
Commencement speaker, Department of Statistics, Virginia Tech	2009, 2011, and 2012
Conference Travel Fellowship (Duke University)	2005 – 2007
James B. Duke Fellowship (Duke University)	2002 – 2006
TRW Winner Award	1996
National Merit Scholar	1993

ACADEMIC APPOINTMENTS

Associate Professor   2016 – present
University of Colorado Boulder, Department of Applied Mathematics   Boulder, CO

Director   2016 – present
Laboratory for Interdisciplinary Statistical Analysis (LISA) at CU Boulder   Boulder, CO

As director of LISA, I educate and train students and post-docs to become effective, interdisciplinary statisticians and data scientists who expand the extraordinary impact of statistics and data science in research, business, policy, and society. As of Summer 2022, I have trained and mentored 112 LISA collaborators and have personally collaborated on more than 250 projects. Under my direction, LISA assisted a total of 2696 domain experts to apply data science to advance their research, including collaborating on 498 research projects, providing advice for 274 visitors to Walk–in/Zoom-in hours, and teaching 1924 attendees via 110 short courses and workshops how to apply data science in their research.

Founder and Global Director   2012 – present
LISA 2020 Global Network
    The LISA 2020 Global Network comprises 35 statistics and data science collaboration laboratories in 10 developing countries: 28 in Africa (Nigeria, Ghana, Ethiopia, Tanzania, Kenya, South Africa), 4 in India and Pakistan, and 3 in Brazil. Between 2019 and 2022, these labs trained 2,680 statisticians and data science students to communicate and collaborate with more than 1,827 researchers to discover local solutions for local challenges and taught 535 short courses and workshops to improve the statistical skills of 17,999 attendees.

Director   2008 – 2016
Virginia Tech, Laboratory for Interdisciplinary Statistical Analysis (LISA)   Blacksburg, VA
    As director of LISA, I supervised graduate students, faculty & staff in fulfilling LISA's mission to train statisticians to become interdisciplinary collaborators, provide research infrastructure to enable and accelerate high impact research, and engage with the community in outreach activities to improve statistical skills and literacy. I trained 225 statisticians to become interdisciplinary statistical collaborators and have personally collaborated on more than 450 projects. Under my direction, LISA assisted a total of 9429 clients to apply statistics to advance their research, including collaborating on 2719 research projects, providing statistical advice for 2962 visitors to LISA Walk–in Consulting, and teaching 3748 attendees via 196 short courses how to apply statistics in their research.

Associate Research Professor   2015 – 2016
Virginia Tech, Department of Statistics   Blacksburg, VA

Assistant Research Professor   2008 – 2014
Virginia Tech, Department of Statistics   Blacksburg, VA

Graduate Teaching Assistant   2004 – 2005, 2007 – 2008
Duke University, Department of Statistical Science   Durham, NC
Duke University, Institute for Statistics and Decision Sciences (ISDS)   Durham, NC

Research Assistant   2003 – 2006
Statistical and Applied Mathematical Sciences Institute (SAMSI)   Durham, NC

Instructor   Summer 2003 and 2004
Duke University   Durham, NC

PUBLICATIONS   ORCID.ORG/0000-0001-5545-1878, ResearcherID: J-6597-2014

Publication Metrics

* denotes student I mentored   ‡ denotes post-doc I mentored

Published in peer-reviewed journals, books, or conference proceedings

1. Alzen J.L., Trumble I.M. ‡, Cho K., **Vance E.A.** (2024). Training Interdisciplinary Data Science Collaborators: A Comparative Case Study. *Journal of Statistics and Data Science Education 32*(1), 73–82. https://doi.org/10.1080/26939169.2023.2191666

2. Wheeler, K. I., Dietze, M. C., LeBauer, D., Peters, J. A., Richardson, A. D., Ross, A. A., Thomas, R. Q., Zhu, K., Bhat, U., Munch, S., Buzbee, R. F., Chen, M., Goldstein, B., Guo, J., Hao, D., Jones, C., Kelly-Fair, M., Liu, H., Malmborg, C., Neupane N., Pal D., Ross A.A., Shirey V., Song Y., Steen M., **Vance E.A.**, Woelmer W.M., Wynne J., Zachmann L. Zachmann, L. (2024). Predicting spring phenology in deciduous broadleaf forests: NEON phenology forecasting community challenge. *Agricultural and Forest Meteorology*, *345*, 109810. https://doi.org/10.1016/j.agrformet.2023.109810

3. Sinha, A. K., Vatsa, R., Love, K., Awe, O. O., **Vance, E. A.** (2023). The Intersection of Data and Statistics with Sustainable Development Goals. In O. O. Awe & E. A. Vance (Eds.), *Sustainable Statistical and Data Science Methods and Practices: Reports from LISA 2020 Global Network, Ghana, 2022* (pp. 393–408). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-41352-0_20

4. Awe, O. O., Love, K., **Vance, E. A.** (2023). Teaching Data Science in Africa Via Online Team-Based Learning. In O. O. Awe & E. A. Vance (Eds.), *Sustainable Statistical and Data Science Methods and Practices: Reports from LISA 2020 Global Network, Ghana, 2022* (pp. 409–415). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-41352-0_21

5. **Vance E.A.** (2023). Preface. In O. O. Awe & E. A. Vance (Eds.), *Sustainable Statistical and Data Science Methods and Practices: Reports from LISA 2020 Global Network, Ghana, 2022* (pp. v–vii). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-41352-0

6. Pettigrew, D.B., Garnett, J., Ryals-Luneberg, C.*, **Vance, E.A.** (2023). Terminal Ballistics of Stone-Tipped Atlatl Darts and Arrows: Results From Exploratory Naturalistic Experiments. *Open Archaeology, 9*(1), 20220299:1–38. https://doi.org/10.1515/opar-2022-0299

7. Thomas, R. Q., Boettiger, C., Carey, C. C., Dietze, M. C., Johnson, L. R., Kenney, M. A., McLachlan, J. S., Peters, J. A., Sokol, E. R., Weltzin, J. F., Willson, A., Woelmer, W. M., & **Challenge Contributors** (2023). The NEON Ecological Forecasting Challenge. *Frontiers in Ecology and the Environment*, *21*(3), 112–113. https://doi.org/10.1002/fee.2616

8. Baiduc, R.R., Sun, J.W.*, Berry, C.*, Anderson, M., **Vance, E.A.** (2023). Relationship of Cardiovascular Disease Risk and Hearing Loss in a Clinical Population. *Scientific Reports, 13*, 1642. https://doi.org/10.1038/s41598-023-28599-9

9. Benzeev R.*, Zhang S.*, Rauber M.A., **Vance E.A.,** Newton P. (2023). Formalizing tenure of Indigenous lands improved forest outcomes in the Atlantic Forest of Brazil. *PNAS Nexus, 2*(1), 1-8. https://doi.org/10.1093/pnasnexus/pgac287

10. **Vance, E.A.**, Glimp, D.R., Pieplow, N.D., Garrity, J.M, Melbourne, B.A. (2022). Integrating the Humanities into Data Science Education: Reimagining the Introductory Data Science Course. *Statistics Education Research Journal, 21*(2), 1–18. https://doi.org/10.52041/serj.v21i2.42

11. **Vance, E.A.**, Pruitt, T.R.* (2022). Statistics and Data Science Collaboration Laboratories: Engines for Development. In O.O. Awe, K. Love, E.A. Vance (Eds.), *Promoting Statistical Practice and Collaboration in Developing Countries* (pp. 3–26). Chapman and Hall/CRC. https://doi.org/10.1201/9781003261148-2

12. **Vance, E.A.**, Love, K., Awe, O.O., Pruitt, T.R.* (2022). LISA 2020: Promoting Statistical Practice and Collaboration in Developing Countries. In O.O. Awe, K. Love, E.A. Vance (Eds.), *Promoting Statistical Practice and Collaboration in Developing Countries* (pp. 37–46). Chapman and Hall/CRC. https://doi.org/10.1201/9781003261148-3

13. Love, K., Gunderman, D.J.*, Awe, O.O., Druckenmiller, M., **Vance, E.A.** (2022). LISA 2020 Network Survey on Challenges and Opportunities for Statistical Practice and Collaboration in Developing Countries. In O.O. Awe, K. Love, E.A. Vance (Eds.), *Promoting Statistical Practice and Collaboration in Developing Countries* (pp. 47–59). Chapman and Hall/CRC. https://doi.org/10.1201/9781003261148-4

14. Mawora, T., Otieno, J., **Vance, E.A.** (2022). Exploring the Need for a Statistical Collaboration Laboratory in a Kenyan University: Experiences, Challenges, and Opportunities. In O.O. Awe, K. Love, E.A. Vance (Eds.), *Promoting Statistical Practice and Collaboration in Developing Countries* (pp. 61–70). Chapman and Hall/CRC. https://doi.org/10.1201/9781003261148-5

15. Olubusoye, O.E., Alaba, O., Folorunso, S., Akintande, O.J., **Vance, E.A.** (2022). Promoting and Sustaining a Virile Statistical Laboratory in Nigeria's Premier University: Lesson from UI-LISA Experience. In O.O. Awe, K. Love, E.A. Vance Eds.), *Promoting Statistical Practice and Collaboration in Developing Countries* (pp. 95–109). Chapman and Hall/CRC. https://doi.org/10.1201/9781003261148-10

16. Awe, O.O., and **Vance, E.A.** (2022). The ABC of Successful Statistical Collaborations: Adapting the ASCCR Frame in Developing Countries. In O.O. Awe, K. Love, E.A. Vance (Eds.), *Promoting Statistical Practice and Collaboration in Developing Countries* (pp. 149–156). Chapman and Hall/CRC. https://doi.org/10.1201/9781003261148-15

17. **Vance, E.A.**, Trumble, I.M.‡, Alzen, J.L., Smith, H.S. (2022). Asking great questions. *Stat, 11*(1), e471. https://doi.org/10.1002/sta4.471

18. Baiduc, R.R., Sun, J.W.*, Spankovich, C., **Vance, E.A.** (2022). Tobacco, but Neither Cannabis Smoking Nor Co-Drug Use, Is Associated With Hearing Loss in the National Health and Nutrition Examination Survey, 2011 to 2012 and 2015 to 2016. *Ear and Hearing, 43*(5). 1582–1592. https//doi.org/10.1097/AUD.0000000000001219

19. Wiens, A.*, Lovejoy, H.L., Mullen, Z.*, **Vance, E.A.** (2022). A modelling strategy to estimate conditional probabilities of African origins: The collapse of the Oyo Empire and the transatlantic slave trade, 1817–1836. *Journal of the Royal Statistical Society: Series A (Statistics in Society), 185*(3), 1247–1270. http://doi.org/10.1111/rssa.12833

20. Corwin L.A., Ramsey M.E.*, **Vance E.A.**, Woolner E., Maiden S., Gustafson N., Harsh J.A. (2022). Students' Emotions, Perceived Coping, and Outcomes in Response to Research-Based Challenges and Failures in Two Sequential CUREs. *CBE – Life Sciences Education, 21*(2), ar23:1–17. https://doi.org/10.1187/cbe.21-05-0131

21. **Vance E.A.**, Alzen J.L., Smith H.S. (2022). Creating Shared Understanding in Statistics and Data Science Collaborations. *Journal of Statistics and Data Science Education, 30*(1), 54–64. https://doi.org/10.1080/26939169.2022.2035286

22. LeBlanc, M., Rueegg, C.S., Bekiroglu, N., Esterhuizen, T.M., Fagerland, M.W., Falk, R.S., Frøslie, K.F., Graf, E., Heinze, G., Held, U., Holst, R., Lange, T., Mazumdar, M., Myrberg, I.H., Posch, M., Sergeant, J.C., Vach, W., **Vance, E.A.**, Weedon-Fekjar, H., Zucknick, M. (2022). Statistical advising: Professional development opportunities for the biostatistician. *Statistics in Medicine, 41*(5), 847–859. https://doi.org/10.1002/sim.9290

23. Baiduc R.R., Berry C.M.*, Lemons K., **Vance E.A.** (2021). Electrocochleography and Auditory Brainstem Responses in Persons with Non-Optimal Blood Pressure. *Journal of the American Academy of Audiology*, 32(9), 576–587. https://doi.org/10.1055/s-0041-1733970

24. **Vance E.A.** and Love K. (2021). Building Statistics and Data Science Capacity for Development. *CHANCE, 34*(3), 38–46. https://pdf.usaid.gov/pdf_docs/PA00Z334.pdf

25. Olubusoye O.E., Akintande O.J., and **Vance E.A.** (2021). Transforming Evidence to Action: The Case of Election Participation in Nigeria. *CHANCE, 34*(3), 13–23. https://pdf.usaid.gov/pdf_docs/PA00Z332.pdf

26. **Vance, E.A.** (2021). Using Team-Based Learning to Teach Data Science. *Journal of Statistics and Data Science Education, 29*(3), 277–296. https://doi.org/10.1080/26939169.2021.1971587

Winner, ASA Jackie Dietz Award for The Best Paper of 2021 in the *Journal of Statistics and Data Science Education*

27. Bonino A.Y., Ramsey M.E.*, Pancoast E.S., **Vance E.A.** (2021). Development of masked speech detection thresholds in 2- to 15-year-old children: Speech shaped noise and two-talker speech maskers. *Ear and Hearing, 42*(6), 1712–1726. https://doi.org/10.1097/AUD.0000000000001062

28. Ibacache, K., Rybin Koob A., **Vance E.** (2021). Emergency Remote Library Instruction and Tech Tools: A Matter of Equity During a Pandemic, *Information Technology and Libraries*, 40(2). https://doi.org/10.6017/ital.v40i2.12751

Selected by the Distance and Online Learning Section of the Association of College & Research Libraries as a "Top 5 Article for Tech Tools for Engagement." https://acrl.ala.org/dols/2021/12/top-5-articles-on-tech-tools-for-engagement/

29. Baiduc R.R., Ramsey M.*, Sanders A., **Vance E.A.** (2021). Association Between Nonoptimal Blood Pressure and Cochlear Function, *Ear and Hearing, 42*(2), 393–404. https://doi.org/10.1097/AUD.0000000000000937

30. Ibacache K., Muñoz-Diaz J.A., Berry C.M.*, **Vance E.A.** (2020). Forgotten Hispano-American Literature: Representation of Hispano-American Presses in Academic Libraries, *College & Research Libraries*, 81(6), 928–944. https://doi.org/10.5860/crl.81.6.928

31. Bonino A.Y., Wiens A.*, Nightengale E.C., **Vance E.A.** (2020). Interrater Reliability for a Two-Interval, Observer-Based Procedure for Measuring Hearing in Young Children, *American Journal of Audiology, 29*(4), 762–773. https://doi.org/10.1044/2020_AJA-20-00022

32. Baiduc R.R., Mullervy S., Berry C.M.*, Brumbach S., Prabhu S., **Vance E.A.** (2020). An Exploratory Study of Early Auditory Evoked Potentials in Cannabis Smokers. *American Journal of Audiology*, 29(3), 303–317. https://doi.org/10.1044/2020_AJA-19-00065

33. Scribner J.L., **Vance E.A.**, Protter D.S.W., Sheeran W., Saslow E., Cameron R., Klein E., Jimenez J.C., Kheirbek M.A., Donaldson Z.R. (2020). A neuronal signature for monogamous reunion.

Proceedings of the National Academy of Sciences, 117(20), 11076–11084. https://doi.org/10.1073/pnas.1917287117

34. Bernstein R.M., O'Connor G.K.*, **Vance E.A.**, Affara N.A., Drammeh S., Dunger D.B., Faal A., Ong K.K., Sosseh F., Prentice A.M., Moore S.E. (2020). Timing of the Infancy-Childhood Growth Transition in Rural Gambia. *Frontiers in Endocrinology, 11*(142), https://www.frontiersin.org/article/10.3389/fendo.2020.00142

35. Brenkert-Smith H., Jahn J.L.S., **Vance E.A.**, Ahumada J. (2020). Resistance and Representation in a Wildland-Urban Interface Fuels Treatment Conflict: The Case of the Forsythe II Project in the Arapaho-Roosevelt National Forest. *Fire, 3*(1), 2, https://doi.org/10.3390/fire3010002

36. **Vance, E.A.** and Smith, H. (2019). The ASCCR Frame for Learning Essential Collaboration Skills. *Journal of Statistics Education*, *27*(3), 265-274, https://doi.org/10.1080/10691898.2019.1687370

    Winner, ASA Jackie Dietz Award for the Best Paper of 2019 in the *Journal of Statistics Education*

37. Bonino, A.Y., Ramsey, M.E.*, McTee, H.M., **Vance, E.A.** (2019). Behavioral Assessment of Hearing in 2- to 7-Year-Old Children: Evaluation of a Two-Interval, Observer-Based Procedure Using Conditioned Play-Based Responses. *American Journal of Audiology*, *28*(3), 560–571. https://doi.org/10.1044/2019_AJA-19-0004

38. Coulombe J.C., Livingston E.W., Ortega A.M., Bateman T.A., **Vance E.A.**, Stodieck L.S., Ferguson V.L. (2018). Microgravity exposure diminishes trabecular microarchitecture and cortical bone structure differently in growing and skeletally mature mice. *Journal of Bone and Mineral Research,* Vol. 33, pp. 326-326. Annual Meeting of the American-Society-for-Bone-and-Mineral-Research.

39. Van Houweling, E., Hall, R., Carzolio, M.*, **Vance, E.** (2017). 'My Neighbor Drinks Clean Water, While I Continue to Suffer': An Analysis of the Intra-Community Impacts of a Rural Water Supply Project in Mozambique. *Journal of Development Studies*, *53*(8), 1147-1162, http://dx.doi.org/10.1080/00220388.2016.1224852

40. Chirwa, C.F.C., Hall, R.P., Krometis, L.H., **Vance, E.A.**, Edwards, A.*, Guan, T.*, Holm, R.H. (2017). Pit latrine fecal sludge resistance using a dynamic cone penetrometer in low income areas in Mzuzu city, Malawi. *International Journal of Environmental Research and Public Health, 14*(2), 87–99. https://dx.doi.org/10.3390/ijerph14020087

41. **Vance, E.A.**, LaLonde, D.L., Zhang L.* (2017). The Big Tent for Statistics: Mentoring Required. *The American Statistician*, *71*(1), 15–22. http://dx.doi.org/10.1080/00031305.2016.1247016

42. **Vance, E.A.**, Tanenbaum, E., Kaur, A., Otto, M.C., and Morris, R. (2017). An Eight-Step Guide to Creating and Sustaining a Mentoring Program. *The American Statistician*, *71*(1), 23–29. http://dx.doi.org/10.1080/00031305.2016.1251493

43. Love, K., **Vance, E.A.**, Harrell, Jr., F.A., Johnson, D.E., Kutner, M.H., Snee, R.D., Zahn D. (2017). Developing a Career in the Practice of Statistics: The Mentor's Perspective. *The American Statistician*, *71*(1), 38–46. http://dx.doi.org/10.1080/00031305.2016.1255257

44. Hall, R.P., **Vance, E.A.**, Van Houweling, E.A., Huang, W.* (2015). Willingness to Pay for VIP Latrines in Rural Senegal. *Journal of Water, Sanitation and Hygiene for Development, 5*(4), 586-593.

45. Simmons, D.R., Tendhar, C., Yu, R., **Vance, E.A.**, Amelink, C. T. (2015). Developing the Postsecondary Student Engagement Survey (PosSES) to Measure Undergraduate Engineering Students' Out-of-Class Involvement. *2015 ASEE Annual Conference and Exposition,* Seattle, Washington. 10.18260/p.23845

46. Hall, R.P., **Vance, E.A.**, Van Houweling, E. (2015). Upgrading domestic-plus systems in rural Senegal: An incremental Income-Cost (I-C) analysis. *Water Alternatives, 8*(3), 317-336.

47. **Vance, E.A.** (2015). Recent Developments and Their Implications for the Future of Academic Statistical Consulting Centers. *The American Statistician, 69*(2), 127-137. https://dx.doi.org/10.1080/00031305.2015.1033990

48. Gazel, E., Hayes, J., Hoernle, K., Kelemen, P., Everson, E., Holbrook, W.S., Hauff, F., van den Bogaard, P., **Vance, E.A.**, Chu, S.*, Calvert, A., Carr, M.J., Yogodzinski, G.M. (2015). Continental Crust in Oceanic Arcs. *Nature Geoscience, 8*(4), 321-327.

49. Hall, R.P., Van Houweling, E.A., **Vance, E.A.** (2014). The Productive Use of Rural Piped Water in Senegal. *Water Alternatives, 7*(3), 480-498.

50. Seiss, M.*, **Vance, E.A.**, Hall, R.P. (2014). The Importance of Cleaning Data During Fieldwork: Evidence from Mozambique. *Survey Practice*, *7*(4).

51. Sharma, A., Marchant, M.A, **Vance, E.A.**, Smith, E.P., Richardson, W.W., Hightower, L.S. (2014). National Survey of Study Abroad Programs Conducted in Asia Using the Food and Agriculture Education Information System (FAEIS) Database, *NACTA Journal*, *58*(2), 140-147.

52. Monaco, T.A., Taylor, J.A., Langenbach, A., **Vance, E.** (2014). Intra- and inter-observer reliability of combined segmental measurement techniques for predicting immediate post-deployment intraluminal tracheal stent length in dogs, *Canadian Veterinary Journal*, *55*(5), 435-441.

53. Stallings, J.*, **Vance, E.**, Yang, J.S., Vannier, M.W., Liang, J.M., Pang, L.J., Dai, L., Ye, I., Wang, G. (2013). Determining scientific impact using a collaboration index, *Proceedings of the National Academy of Sciences, 110*(24), 9680-9685.

54. **Vance, E.A.**, Xie, X., Henry, A., Wernz, C., Slonim, A.D. (2013). Computed tomography scan use variation: patient, hospital, and geographic factors, *The American Journal of Managed Care*, *19*(3), e93-e99.

55. Alexander, K.A., Carzolio, M.*, Goodin, D., **Vance, E.** (2013). Climate change is likely to worsen the public health threat of diarrheal disease in Botswana, *International Journal of Environmental Research and Public Health*, *10*(4), 1202-1230. https://www.mdpi.com/1660-4601/10/4/1202

56. Hall, T.S., McQuay, W., **Vance, E.** (2011). Features of a trust model for a complex system, *Proceedings of the ASME 2011 International Mechanical Engineering Congress & Exposition*.

57. Smith, E.K., Resler, L.M., **Vance, E.A.**, Carstensen, L.W., Kolivras, K.N. (2011). Blister rust incidence in treeline whitebark pine, Glacier National Park, U.S.A: environmental and topographic influences, *Arctic, Antarctic and Alpine Research*, *43*(1), 107-117.

58. Hall, T.S. and **Vance, E.A.** (2010). Improving self-efficacy in statistics: role of self-explanation & feedback, *Journal of Statistics Education*, *18*(3), 1–22. https://doi.org/10.1080/10691898.2010.11889583

59. **Vance, E.A.**, Archie, E.A., Moss, C.J. (2009). Social networks in African elephants, *Computational and Mathematical Organization Theory*, *15*(4), 273-293.

60. Hollister-Smith, J.A., Poole, J.H., Archie, E.A., **Vance, E.A**., Georgiadis, N.J., Moss, C.J., Alberts, S.C. (2007). Age, musth and paternity success in wild male African elephants, Loxodonta africana, *Animal Behaviour*, *74*(2), 287-296.

61. Dinwoodie, I.H. and **Vance, E.A.** (2007). Moment estimation in delay tomography with spatial dependence, *Performance Evaluation*, *64*(7-8), 613-628.

Peer-reviewed edited volumes

62. Awe, O.O., Love, K., **Vance, E.A.** (Eds.) (2022). *Promoting Statistical Practice and Collaboration in Developing Countries* (1st ed., 634 pages). Chapman and Hall/CRC. https://doi.org/10.1201/9781003261148

63. Awe, O. O. and **Vance, E. A.** (Eds.). (2023). *Sustainable Statistical and Data Science Methods and Practices: Reports from LISA 2020 Global Network, Ghana, 2022* (1st ed., 415 pages). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-41352-0

Under Review or in Press

1. Vance, E.A and Notodiputro, K.A. "A Framework for Teaching and Learning Collaboration in Statistics and Data Science: How Well Can It Work in Indonesia?" In press for *OZOCTS 2023 Proceedings* January 2024

2. Vance E.A., Alzen J.L., Şeref M.M.H. "Assessing Statistics and Data Science Collaborations." Under revision for *Journal of Statistics and Data Science Education*.

3. Olubusoye O.E., Bamiduro T.A., Adepoju A.A., Alaba O.O., Akintande O.J., Vance E., Idris S.U., Sani, I. "Survey Data on National Election Participation in Nigeria." Submitted to *Data in Brief* June 2020.

4. Bonino A.Y., Baker S.*, Mood D., Schacht E.*, Tamanaha J. (Jr.)*, Sun J.*, Vance, E.A. "Pediatric hearing research with a large-scale clinical data repository: What is the best way to identify hearing loss in children who have developmental disabilities?" Under revision for *Ear and Hearing* April 2022.

5. Vance E.A., Trumble I.M.‡, Alzen J.L., House L. "The $Q_1Q_2Q_3$ Workflow for Statistics and Data Science Collaborations." Under revision to submit to *Journal of Statistics and Data Science Education* January 2024.

6. Metzger T.A.*, Pruitt T.R.*, Alzen J.L., Goshu A.T.‡, Vance E.A. "THE IMPACT OF WORKING IN A STATISTICAL COLLABORATION LABORATORY ON THE STATISTICS STUDENT COLLABORATORS." Accepted in *Statistics Education Research Journal* January 2024.

7. Verniani, A., Galvin, E.*, Tredinnick, S.*, Putman, E., Vance, E.A., Clark, T.K., Anderson, A.P. "Features of Adaptive Training Algorithms for Improved Complex Skill Acquisition." Accepted in *Frontiers in Virtual Reality* January 2024.

Conference proceedings

1. **Vance, E.A.**, and Smith, H.S. (2021), "Asking Great Questions: Part of a Theory of Communication in Interdisciplinary Collaborations," in *JSM Proceedings*, Statistical Consulting Section. Alexandria, VA: American Statistical Association. 995–1008. https://par.nsf.gov/servlets/purl/10310043

2. **Vance, E.A.** (2020), "Goals for Statistics and Data Science Collaborations," in *JSM Proceedings*, Statistical Consulting Section. Alexandria, VA: American Statistical Association. 2198–2209.

3. **Vance, E.A.**, Alzen, J.L., and Şeref, M.M.H. (2020), "Assessing Statistical Consultations and Collaborations," in *JSM Proceedings*, Statistical Consulting Section. Alexandria, VA: American Statistical Association. 161–169.

4. Halvorsen, K.T., Hanford, K.J., **Vance, E.A.**, Wilson, J., and Zahn, D. (2020), "Transforming Your Stumbling Blocks into Stepping Stones," in *JSM Proceedings*, Statistical Consulting Section. Alexandria, VA: American Statistical Association. 2523–2541.

5. Kazuzuru, B. and **Vance, E.A.** (2018) "Performance, Challenges, and Benefits of Statistical Collaboration for Universities in Developing Countries: The Case of Sokoine University of Agriculture (SUA)." *Proceedings of the Annual Statistics Conference,* 3rd Statistical Conference of Department of Statistics, University of Dodoma, Dodoma, Tanzania, ISBN 978-9987-04-062-9.

6. Vivacqua, C.A., de Pinho, A.L.S., Nunes, M.A., **Vance, E.A.** (2018) (Invited Paper). "Integrating Collaboration, Communication and Problem Solving to Promote Innovation in Statistics Education." *Proceedings of the Tenth International Conference on Teaching Statistics (ICOTS10, July, 2018), Kyoto, Japan*, 5 pages.

7. **Vance, E.A.** (2016). "The LISA 2020 Program to Build Statistics Capacity and Research Infrastructure in Developing Countries." *Proceedings of the 60th International Statistical Institute's World Statistics Congress*, Rio de Janeiro, Brazil, 2015.

8. Msemo, E.* and **Vance, E.A.** (2016). "LISA 2020: Impacting Agricultural Productivity in Tanzania Through the Wheels of Statistics." *Proceedings of the 60th International Statistical Institute's World Statistics Congress*, Rio de Janeiro, Brazil, 2015.

9. Awe, O.O*, Crandell, I.* and **Vance, E.A.** (2016). "Building Statistics Capacity in Nigeria Through the LISA 2020 Program." *Proceedings of the 60th International Statistical Institute's World Statistics Congress*, Rio de Janeiro, Brazil, 2015.

10. Awe, O.O.* and **Vance, E.A.** (2014) (Invited Paper). Statistics education, collaborative research, and LISA 2020: A view from Nigeria. In K. Makar, B. de Sousa, & R. Gould (Eds.), *Sustainability in statistics education. Proceedings of the Ninth International Conference on Teaching Statistics (ICOTS9)* (pp. 1-4). International Statistical Institute. https://icots.info/9/proceedings/pdfs/ICOTS9_5A3_AWE.pdf

Technical reports
1. Thomas, R.Q., C. Boettiger, C.C. Carey, M.C. Dietze, L.R. Johnson, M.A. Kenney, J.S. Mclachlan, J.A. Peters, E.R. Sokol, J.F. Weltzin, A. Willson, W.M. Woelmer, and Challenge Contributors. (2022) "The NEON Ecological Forecasting Challenge." Preprint available at *ESS Open Archive*, https://www.doi.org/10.22541/essoar.167079499.99891914/v1

2. Trumble I.M. ‡, Alzen J.L., House L.L., Vance E.A. (2022) "The Content of Statistics and Data Science Collaborations: The QQQ Framework." Preprint available on ArXiv, https://arxiv.org/abs/2209.04887.

3. Alzen J.L., Trumble I.M. ‡, Cho K., Vance E.A. (2022) "Training Interdisciplinary Statistical Collaborators: A Comparative Case Study." Preprint available at https://doi.org/10.21203/rs.3.rs-1831444/v1.

4. **Vance, E.A.** (2022) "LISA: Laboratory for Interdisciplinary Statistical Analysis 2021-22 Annual Report." Submitted July 22, 2022, 33 pages. https://osf.io/u9p53.

5. **Vance, E.A.** (2022) "LISA: Laboratory for Interdisciplinary Statistical Analysis 2020-21 Annual Report." Submitted July 21, 2022, 29 pages. https://osf.io/5fqcj.

6. **Vance, E.A.** (2022) "LISA: Laboratory for Interdisciplinary Statistical Analysis 2019-20 Annual Report." Submitted July 20, 2022, 26 pages. https://osf.io/7b5nr.

7. Wiens A.*, Lovejoy H.B., Mullen Z.*, **Vance, E.A.** (2020) "Estimating conditional probabilities of historical migrations in the transatlantic slave trade using kriging and Markov decision process models." Preprint available on ArXiv, https://arxiv.org/abs/2008.11301.

8. **Vance, E.A.** (2020) "LISA: Laboratory for Interdisciplinary Statistical Analysis Annual Report 2018-19." Submitted January 15, 2020, 27 pages. https://doi.org/10.17605/OSF.IO/26KNE.

9. Mullen, Z.*, Wiens, A.*, **Vance, E.**, Lovejoy, H. (2019) "Mapping the uncertainty of 19th century West African slave origins using a Markov decision process model." Preprint available on ArXiv, https://arxiv.org/abs/1908.00431.

10. Scribner, J.L., **Vance, E.**, Protter, D.S.W., Saslow, E., Cameron, R., Klein, E., Jimenez, J.C., Kheirbek, M.A., Donaldson, Z.R. (2019) "A neuronal signature for monogamous reunion." Preprint available on BioRxiv, https://doi.org/10.1101/675959.

11. **Vance, E.A.** and Smith, H. (2018) "Essential Collaboration Skills: The ASCCR Frame for Collaboration." 17 pages. Preprint available at http://arxiv.org/abs/1811.03578.

12. **Vance, E.A.** (2018) "LISA: Laboratory for Interdisciplinary Statistical Analysis Annual Report 2017-18." Submitted October 20, 2018, 20 pages. https://doi.org/10.17605/OSF.IO/4FM6P.

13. **Vance, E.A.** (2017) "LISA: Laboratory for Interdisciplinary Statistical Analysis Annual Report 2016-17." Submitted October 20, 2017, 19 pages. DOI 10.17605/OSF.IO/ZQEJ2.

14. **Vance, E.** and Pruitt, T. LISA: Virginia Tech's Laboratory for Interdisciplinary Statistical Analysis Annual Report 2015-16. Submitted August 8, 2016, 22 pages. http://hdl.handle.net/10919/72099

15. **Vance, E.** and Pruitt, T. LISA: Virginia Tech's Laboratory for Interdisciplinary Statistical Analysis Annual Report 2014-15. Submitted August 5, 2016, 28 pages. http://hdl.handle.net/10919/72097

16. **Vance, E.**, Franck, C. and Pruitt, T. LISA: Virginia Tech's Laboratory for Interdisciplinary Statistical Analysis Annual Report 2013-14. Submitted January 14, 2015, 37 pages. http://hdl.handle.net/10919/51692

17. Hall, R.P., Davis, J., van Houweling, E., **Vance, E.A.**, Carzolio, M.*, Seiss, M.*, Russel, K. (2014). Impact evaluation of the Mozambique rural water supply activity under a cooperative agreement between MCC and Stanford University. Submitted to the Millennium Challenge Corporation, April 15, 2014, 111 pages.

18. Hall, R.P., van Houweling, E., **Vance, E.**, Carzolio, M.*, Davis, J. (2014). Evaluation of eight small-scale solar systems in Cabo Delgado, Mozambique. Submitted to the Millennium Challenge Corporation, April 15, 2014, 51 pages.

19. **Vance, E.**, Franck, C. and Pruitt, T. LISA: Laboratory for Interdisciplinary Statistical Analysis Annual Report. Submitted November 4, 2013, 41 pages. http://hdl.handle.net/10919/50507

20. Hall, R.P., Davis, J., **Vance, E.**, van Houweling, E., Carzolio, M.*, Russel, K. (2013). Impact evaluation design and implementation report. Impact evaluation of the rural water activity in Nampula, Mozambique. Submitted to the Millennium Challenge Corporation, April 30, 2013, 35 pages.

21. **Vance, E.**, Franck, C., Pruitt, T. LISA: Laboratory for Interdisciplinary Statistical Analysis Annual Report. Submitted December 12, 2012, 30 pages. http://hdl.handle.net/10919/50506

22. Hall, R.P. Davis, J., van Houweling, E., **Vance, E.A.**, Seiss, M.*, Russel, K. (2012). Impact evaluation of the Millennium Challenge Corporation-supported Rural Water Supply Activity (RWSA) in Nampula, Mozambique. Mid-Term Report. Submitted to the Millennium Challenge Corporation, June 30, 2012, 94 pages.

23. **Vance, E.**, Franck, C., Pruitt, T. LISA Annual Report 2010-2011. Submitted November 11, 2011, 28 pages. http://hdl.handle.net/10919/19012

24. Hall, R. P., van Houweling, E., **Vance, E.**, Hope, R., Davis, J. (2011). Assessing the Link between Productive use of Domestic Water, Poverty Reduction, and Sustainability. Senegal Country Report. Submitted to the Water and Sanitation Program, World Bank, September 9, 2011, 95 pages.

25. Marchant, M.A., Richardson, W., Smith, E., **Vance, E.**, Mack, T., Hamm, J., Shen, Y.*, Griffin, K.*, Hightower, L., Bell, A. (2011) FAEIS Statistics Expert Panel Workbook. Submitted to the FAEIS Statistics Expert Panel, Washington, D.C., April 8, 2011, 200 pages.

26. Marchant, M.A., Richardson, W., Hamm, J., Mack, T., Smith, E., **Vance, E.**, Hightower, L., Bell, A., Shen, Y.*, Griffin, K.* (2010) FAEIS Peer Panel Workbook. Submitted to the FAEIS Peer Panel of the APLU, Dallas, TX, November 17, 2010, 200 pages.

27. **Vance, E.** and Pruitt, T. LISA: Laboratory for Interdisciplinary Statistical Analysis Annual Report 2009-2010. Submitted November 14, 2010, 22 pages. http://hdl.handle.net/10919/50505

28. **Vance, E.** LISA: Laboratory for Interdisciplinary Statistical Analysis Annual Report 2008-2009. Submitted October 6, 2009, 19 pages. http://hdl.handle.net/10919/50504

Popular press and non-peer reviewed publications

1. Omaar, H. (2021) "5 Q's for Eric Vance, Director of the Laboratory for Interdisciplinary Statistical Analysis (LISA) 2020 Network" *Center for Data Innovation*, August 13, 2021. https://datainnovation.org/2021/08/5-qs-for-eric-vance-director-of-the-laboratory-for-interdisciplinary-statistical-analysis-lisa-2020-network/

2. Gunderman, D. and **Vance, E.** (2021) "Low- and middle-income countries lack access to big data analysis – here's how to fill the gap" *The Conversation*, July 20, 2021. http://theconversation.com/low-and-middle-income-countries-lack-access-to-big-data-analysis-heres-how-to-fill-the-gap-159412

3. **Vance, E.** (2020). Five essential elements: A new framework for interdisciplinary collaboration. *Catalyst: Report on Collaborative Global Development*, https://posnercenter.org/learn/catalyst-collaborative-global-development-report/

4. **Vance, E.** (2019) Reflections on CSP: Why I Love the Conference on Statistical Practice." *Amstat News*, Issue 503, 28-29.

5. Florance, A., Bhattacharyya, A. and **Vance, E.** (2017) "ASA Committee on Applied Statisticians Promotes Ongoing Collaboration Initiative." Biopharmaceutical Report, Volume 24, No. 3, 13.

6. Murphy, M. (with Tanenbaum, E. **and Vance, E.)** (2017) "Q&A with Erin Tanenbaum and Eric Vance about *TAS* and Mentoring." *Amstat News*, Issue 475, 18-19.

7. **Vance, E.** (2016). Interview with Doug Zahn. *Amstat News*, Issue 471, 6-7.

8. **Vance, E.** (2016). "My Experience at the IISA Conference." *IISA Newsletter*, Spring 2016, 11-12.

9. **Vance, E**. (2015). Chair's Column—Goals for 2015, *The Statistical Consultant*, 31(1), 4-5.

10. **Vance, E**. (2014). An interview with W.J. Dixon Award Winner Dallas Johnson, *The Statistical Consultant*, 30(3), 7-12.

11. **Vance, E**. (2014). A conference on statistical practice!, *The Statistical Consultant*, 30(2), 4-5.

12. **Vance, E**. (2014). An interview with Doug Zahn, *The Statistical Consultant*, 30(1), 4-7.

13. **Vance, E**. (2013). Conference on statistical practice mentoring program to help promote statistics. *Amstat News*, Issue 437.

14. **Vance, E.** (2012). International Experiences in Statistics, *Amstat News*, Issue 420, 17-19.

FUNDED RESEARCH

Grants as Principal Investigator, Co-Principal Investigator, or Co-Investigator
I have been PI, co-PI, or co-I on 13 projects at CU Boulder for a total of $7,717,124. At Virginia Tech, I was PI, co-PI, or co-I on 16 projects for a total of $6,045,627.

Current
1. **Principal Investigator** – Building Statistics Capacity in Indonesia to Transform Evidence into Action to Benefit Society. *Fulbright U.S. Scholar Program, U.S. Department of State*, $45,200, 09/2023 – 04/2024.

2. Co-Principal Investigator (PI: David Glimp) – Growth and Sustainability of Interdisciplinary Data Science for All Course. *ASSETT Innovation Incubator Bridge Fund, CU Boulder*, $30,000, 01/2023 – 12/2023.

3. Co-Principal Investigator (PI: Jane Garrity) – Humanities Core Competencies as Data Acumen: Integrating Humanities and Data Science. *National Endowment for the Humanities*, $149,999, 08/2022 – 07/2025.

4. Co-Investigator (PI: Torin Clark) – Detecting Pilot Spatial Disorientation to Trigger Active Countermeasures during Lunar Landing. *NASA*, $799,999, 05/2022 – 05/2025.

5. Co-Investigator (PI: Angela Bonino) – Universal Autism Screening Program in Audiology Clinics. *AB Nexus Research Collaboration Grant Program*, $50,000, 12/2021 – 11/2022.

6. **Principal Investigator** – DUE: Integrating Content and Skills from the Humanities into Data Science Education (CODE:SWITCH). *NSF*, $300,000, 10/2021 – 09/2024.

7. Co-Investigator (PI: Allison Anderson) – Multi-Environment Virtual Training for Long Duration Exploration Missions. *NASA*, $ 1,378,263, 04/2021 – 03/2025.

8. Co-Principal Investigator (PI: Tom Cech) – NRT-HDR: Integrated Data Science (∫dS): Teams for Advancing Bioscience Discovery. *NSF*, $2,999,791, 10/2020 – 09/2025.

9. **Principal Investigator** – IGE: Transforming the Education and Training of Interdisciplinary Data Scientists (TETRIDS). *NSF*, $500,000, 07/2020 – 06/2023.

Past

10. Co-Investigator (PI: Angela Bonino) – NIH-R21: Measuring hearing in children with developmental differences. *NIH*, $462,272, 04/2020 – 06/2022

11. **Principal Investigator** – LISA 2020: Creating Institutional Statistical Analysis and Data Science Capacity. *United States Agency for International Development (USAID)*, $1,000,000, 09/2018 – 08/2022.

12. **Principal Investigator** – LISA 2020: Building developing countries' statistical analysis capacity. *CU Boulder Office for Outreach and Engagement*, $1,660, 10/2018 – 05/2019.

13. Co-Principal Investigator (PI: Henry Lovejoy) – Probability of Origins for Peoples Involved in the Collapse of the Oyo Empire, 1816-1836. *Center to Advance Research and Teaching in the Social Sciences, University of Colorado Boulder*, $4000, 01/2017 – 5/2018.

14. **Principal Investigator** – Building the LISA 2020 Team to Train Statisticians from Developing Countries to Create a Network of Statistical Collaboration Laboratories. *American Statistical Association*, $9000, 04/2015 – 03/2016.

15. Co-Principal Investigator (PI: Kathleen Alexander) – CNH: The Coupled Dynamics of Human-Dryland River Systems: Linkages and Feedbacks Between Human and Environmental Drivers of Water Quality and Human and Animal Health. *National Science Foundation*, $1,799,999, 07/2015– 05/2016.

16. Co-Principal Investigator (PI: Peter Ziegler) – Improvement and Marketing of the Food and Agricultural Education Information System (FAIES). *USDA/NIFA*, $220,000, 10/2015 – 09/2016.

17. Co-Principal Investigator (PI: Kathleen Alexander) – EEID: Can group living and the influence of the Allee effects explain infectious disease vulnerability in social species? *National Science Foundation*, $1,830,594, 06/2015– 05/2016.

18. **Principal Investigator** – Growing Research Capacity at SUA by Creating a Statistical Collaboration Laboratory. *Innovative Agricultural Research Initiative, USAID*, $150,000, 10/2013 – 09/2016.

19. Co-Principal Investigator (PI: Mary Marchant) – Improvement and Marketing of the Food and Agricultural Education Information System (FAIES). *USDA/NIFA*, $220,000, 10/2014 – 09/2015.

20. **Principal Investigator** – LISA 2020 Year 2: Building Statistics Capacity in Developing Countries to Solve Real-World Problems. *Google Faculty Research Awards*, $20,000, 09/2014 – 12/2015.

21. Co-Principal Investigator (PI: Kathy Alexander) The Epidemiology of Mycobacterium Mungi—how can we control this emerging disease? *Morris Animal Foundation*, $68,036, 05/2014 – 04/2016.

22. **Principal Investigator** – Growing Research Capacity at SUA by Creating a Statistical Collaboration Laboratory. *Innovative Agricultural Research Initiative, USAID*, $72,094, 11/2013 – 09/2015. This grant supports Eric Vance, Benedicto Kazuzuru, and a future statistics graduate student related to the LISA 2020 program.

23. Co-Principal Investigator (PI: Mary Marchant) – Improvement and Marketing of the Food and Agricultural Education Information System (FAIES). *USDA/NIFA*, $220,000, 10/2013 – 09/2014.

24. **Principal Investigator** – Building Statistics Capacity in Developing Countries by Educating and Training Statisticians to Communicate and Collaborate with Non-statisticians. *Google Faculty Research Awards*, $40,000, 05/2013 – 12/2014.

25. Co-Principal Investigator (PI: Mary Marchant) – Improvement and Marketing of the Food and Agricultural Education Information System (FAIES). *USDA/NIFA*, $210,000, 10/2012 – 09/2013.

26. Co-Principal Investigator (PI: Keith Moore) – *Innovative Agricultural Research Initiative, USAID*, $122,869, 08/2012 – 08/2014. This grant supported travel for Eric Vance and education and training for Emanuel Msemo related to the LISA 2020 program.

27. Co-Principal Investigator (PI: Mary Marchant) – Improvement and Marketing of the Food and Agricultural Education Information System (FAIES). *USDA/NIFA*, $247,000, 10/2011 – 09/2012.

28. Co-Principal Investigator (PI: Jennifer Davis) – Impact Evaluation for the Millennium Challenge Corporation-supported Rural Water Investment in Nampula, Mozambique. *Millennium Challenge Corporation,* $814,235, 09/2010 – 05/2014.

29. Co-Principal Investigator (other Co-PIs: Leanna House, Leigh Harrell) – Academic Assessment Grant. *Office of Academic Assessment, Virginia Tech*, $1800, 06/2009.

Grants and dollars earned for LISA as Key Personnel, Collaborator, Statistician, or Biostatistician
I have been Key Personnel for LISA on grants or contracts for $364,744.

Current

30. Statistician (PD: Allison Sedey) – Outcomes and Developmental Data Assistance Center for EHDI Programs (ODDACE). *Centers for Disease Control and Prevention*, $2,400,000, 9/2020 – 8/2023. This grant annually provides $53,000 for LISA.

31. Biostatistician (PI: Ronald J. Sokol) – Colorado Clinical and Translational Sciences Institute (CCTSI). *NIH*, $46,500,000, 05/2018 – 04/2024. This grant provides for 10% FTE annually for Dr. Vance/LISA.

Past

32. Statistician (PD: Burt Wagner) – Entropy in Ring Oscillators. *Deadline Specialists*, $2,400, 10/2020 – 04/2021. This was a project with the LISA Rate-Based Service Activity.

33. Collaborator (PI: Rachael Baiduc) – Sex Differences in the Association between Hearing Loss and Cardiovascular Disease Risk Burden. American Hearing Research Foundation, $49,844, 01/2020 – 12/2021. This grant provided $16,700 for LISA.

34. Key Personnel (PI: Dan Kauffman) – A Grocery Store Test Market for Farmer Grown Shrimp that Utilizes Consumer Education. *USDA*, $20,909, 07/2013 – 06/2014. This grant provided LISA with $2,000 for statistical collaboration.

35. Statistician (PI: Laurie Fox) – 2011 Sustainable Landscape Survey. 02/2011 – 06/2011. This grant provided LISA with $1,000 for statistical collaboration.

36. Statistician (PI: Tom Campbell) – A Carbon Nanotube Metrology System for Counterfeit Detection. *ADA Technologies,* 11/2010 – 10/2011. This contract provided LISA with $2,290 for statistical collaboration.

37. Key Personnel (PI: Mary Marchant) – Improvement and Marketing of the Food and Agricultural Education Information System (FAIES). *USDA/NIFA*, 10/2010 – 09/2011. This grant provided LISA with $47,354 for statistical collaboration.

38. Statistician (PI: Elizabeth Lanter) – Analyzing Emergent Literacy Skills. *Radford University Research Seed Grant,* 11/2009 – 06/2010. This grant provided LISA with $700 for statistical collaboration.

39. Key Personnel (PI: Anthony D. Slonim; Co-PI: Christian Wernz) – Assessing Regional Differences in Healthcare Technology Use and Quality. *Research Acceleration Program, Carilion Clinic,* $25,000, 11/2009 – 04/2010. This grant provided LISA with $1,000 for statistical collaboration.

40. Statistician (Co-PIs: Jennifer Davis, Ralph Hall) – Assessing the Link between Productive Use of Domestic Water, Poverty Reduction and Sustainability. *Water and Sanitation Program, World Bank,* $700,000, 09/2009 – 03/2010. Virginia Tech received $173,729, of which $6,500 was provided to LISA for statistical collaboration.

41. Statistician (PI: Feng Guo) – Transportation, 10/2008 – 12/2008. This grant provided LISA with $800 for statistical collaboration.

42. Statistician (PI: Amy Bell) – A Discovery-Based First Year Electrical and Computer Engineering Course Emphasizing Real-World Projects that Benefit Society. *National Science Foundation*, 10/2008 – 12/2008. This grant provided LISA with $7500 for statistical collaboration.

Funding earned from Virginia Tech for LISA as LISA Director

43. Director – Laboratory for Interdisciplinary Statistical Analysis, *Virginia Tech*, 1/2011 – 6/2013. $660,000.

44. Director – Laboratory for Interdisciplinary Statistical Analysis, *Virginia Tech*, 7/2013 – 6/2014. $299,308.

45. Director – Laboratory for Interdisciplinary Statistical Analysis, *Virginia Tech*, 7/2014 – 6/2015. $299,308.

46. Director – Laboratory for Interdisciplinary Statistical Analysis, *Virginia Tech*, 7/2015 – 5/2016. $299,308.

SELECTED CONFERENCE PRESENTATIONS AND WORKSHOPS   (presenter[s] shown in **bold**)

Keynote presentations

1. **Vance, E.** "A Framework for Teaching and Learning Collaboration in Statistics and Data Science: How Well Can It Work in Indonesia?" Keynote presentation at the International Conference on Statistics and Data Science (ICSDS), Universitas Hasanuddin, Makassar, Indonesia, 2023.

2. **Vance, E.** "Team Based Learning as an Effective Pedagogical Model for Data-Driven Leadership." Keynote workshop at the International Conference on Artificial Intelligence and Robotics (ROBOTFORUM2023), Las Vegas, NV, 2023.

3. **Vance, E.** "Blending Research and Education via Statistics and Data Science Collaboration." Keynote presentation at the 9th International Conference on Research, Implementation & Education of Mathematics and Sciences (ICRIEMS), Universitas Negeri Yogyakarta, Indonesia (remote presentation), 2022.

4. **Vance, E.** "Promoting Statistical Practice and Collaboration in Developing Countries." Keynote presentation at the LISA 2020 Sustainability Symposium, Kumasi, Ghana, 2022.

5. **Vance, E.** "Overview of Data Science and Introduction to Data Science Collaboration." Keynote talk for the online workshop for the African Data Science Academy, ADA Global Academy Scholarship/Mentorship Program (26 participants), January 17, 2022.

6. **Vance, E.** "The Extraordinary Potential of Statistical Collaboration." Keynote presentation at the Statistical Society of Australia Statistical Consulting Network 2020 Meeting, online, 2020.

7. **Vance, E.** "LISA 2020: Building Statistics and Data Science Capacity to Transform Evidence into Action." Keynote presentation of the LISA 2020 Symposium, online, 2020.

8. **Mullen, Z., Wiens, A., Lovejoy, H.** and **Vance, E.** "Using Statistics to Trace the Uncertain Origins of Enslaved Africans Leaving the Bight of Benin During the Collapse of the Oyo Empire, 1817-1836." Technical Keynote at the 2019 Black 'Migrations' Symposium, University of Missouri, Columbia, Missouri.

9. **Vance, E.** "The Extraordinary Impact of Statistical Collaboration." Keynote at the 1st International Statistical Conference of the Nigerian Statistical Association, Lagos, Nigeria, 2017.

10. **Vance, E.** "Envisioning the 21st Century Global Land Grant University: Building Statistics Capacity." Keynote address at World Statistics Day Symposium, Virginia Tech, Blacksburg, VA, 2015.

11. **Vance, E.** "LISA 2020: Creating a Network of Statistical Collaboration Laboratories." Keynote address at the Virginia Academy of Sciences Statistics Meeting, Richmond, VA, 2014.

TED-Style talks

12. **Vance, E.** "The Extraordinary Potential of Statistics and Data Science Collaboration." Research & Innovation TED-Style Talks: Innovation for the Future of Humanity, Boulder, CO, 2022. https://www.youtube.com/watch?v=17RJTEakZ_0&t=1s

13. **Vance, E.** "Building Engines for Development." CU Foundation Board of Trustees Meeting, Boulder, CO, 2018.

Invited paper presentations

1. **Vance, E.** "Mentoring to Build Capacity." International Statistical Institute's 64th World Statistics Congress, Ottawa, Canada, 2023.

2. **Vance, E.** "How a Statistics and Data Science Collaboration Laboratory Can Transform Evidence into Action." International Conference on Statistics and Data Science 2022 (ICSDS 2022), IPB University, Indonesia, remote, 2022.

3. **Vance, E.** "Statistics and Data Science Collaboration to Benefit Society." 8th International Symposium of Current Progress in Mathematics and Sciences (ISCPMS), Universitas Indonesia, remote, 2022.

4. **Vance, E.** "Experiences, Challenges, and Opportunities in Building Capacity in Statistics Education and Practice." 63rd International Statistical Institute's World Statistics Congress, online, 2021.

5. **Vance, E.** "Building Local Capacity for Data-Driven Development." Presentation at USAID's Development, Research, and Innovation Virtual Engagements (DRIVE) Convening, online, 2021.

6. **Vance, E.** "LISA 2020 Northern Nigeria Regional Symposium Welcome Address." Presentation at the LISA 2020 Northern Nigeria Regional Symposium, Keffi, Nigeria, remote, 2020.

7. **Vance, E.** "LISA 2020 Southwestern Nigeria Regional Symposium Welcome Address." Presentation at the LISA 2020 Southwestern Nigeria Regional Symposium, Ile-Ife, Nigeria, remote, 2020.

8. **Vance, E.** "LISA 2020, Statistics Education, and Women Empowerment." Presentation at the plenary session "Statistics Education and Women Empowerment in Developing Countries" of the LISA 2020 Symposium, online, 2020.

9. **Vance, E.** "How the LISA 2020 program is scaling up statistical analysis capacity." 62nd International Statistical Institute's World Statistics Congress, Kuala Lumpur, Malaysia, 2019.

10. Amin, M. and **Vance, E.** "Enhancing food security in Pakistan with advanced statistical knowledge and tools through effective statistical collaboration." 62nd International Statistical Institute's World Statistics Congress, Kuala Lumpur, Malaysia, 2019.

11. **Vance, E.** "How Stat Labs Can Transform Evidence to Action for Maximum Impact." Joint Statistical Meetings (JSM), Denver, CO, 2019.

12. **Smith, H.S.** and Vance, E. "Essential Professional Skills for Collaborative Statisticians and Data Scientists." Joint Statistical Meetings (JSM), Denver, CO, 2019.

13. Zaharatos, B., **Mullen, Z.**, Vance, E. "Essential Technical Skills for Collaborative Statisticians and Data Scientists." Joint Statistical Meetings (JSM), Denver, CO, 2019.

14. **Vance, E.** "LISA 2020: Teaching Statisticians and Data Scientists to Collaborate for Development." Invited Catalyzer Session at the Posner Center Symposium 2019, "Lessons in Collaboration," Denver, CO.

15. **Vance, E.** and Smith, H. "Collaboration Skills Statisticians Can Leverage to Thrive in an Era of Data Science." Joint Statistical Meetings (JSM), Vancouver, BC, 2018.

16. **Vance, E.** "Training Statisticians and Data Scientists to Become Effective Interdisciplinary Collaborators." 61st International Statistical Institute's World Statistics Congress, Marrakech, Morocco, 2017.

17. Kazuzuru, B.‡ and **Vance, E.** "SUALISA Partnerships with Business, Government Agencies, and NGO's in Tanzania." 61st International Statistical Institute's World Statistics Congress, Marrakech, Morocco, 2017.

18. **Awe, O.O.*** and Vance, E. "Progress and Impact in Teaching and Learning Statistics in Nigeria Through LISA 2020." 61st International Statistical Institute's World Statistics Congress, Marrakech, Morocco, 2017.

19. **Vance, E.** "The Extraordinary Potential of Statistical Collaboration Laboratories." Joint Statistical Meetings (JSM), Chicago, IL, 2016.

20. **Vance, E.** and **Shapiro, G**. "How Statisticians Can Lead Global Engagement in Science." AAAS Annual Meeting, Washington, D.C., 2016.

21. **Goshu, A.T.**‡ and Vance, E. "Statistical Collaboration Center and Its Services at Hawassa University, Ethiopia." AAAS Annual Meeting, Washington, D.C., 2016.

22. **Vance, E.** "LISA 2020: Growing a Network of Statistical Collaboration Laboratories to Impact the World." International Indian Statistical Association conference, Pune, India, 2015.

23. **Vance, E.** "Preparing Students to Become Collaborative Statisticians." Joint Statistical Meetings (JSM), Seattle, WA, 2015.

24. **Vance, E.A.** "The LISA 2020 Program to Build Statistics Capacity and Research Infrastructure in Developing Countries." 60th International Statistical Institute's World Statistics Congress, Rio de Janeiro, Brazil, 2015.

25. **Msemo, E.*** and Vance, E.A. "LISA 2020: Impacting Agricultural Productivity in Tanzania Through the Wheels of Statistics." 60th International Statistical Institute's World Statistics Congress, Rio de Janeiro, Brazil, 2015.

26. **Awe, O.O*,** Crandell, I.* and Vance, E.A. "Building Statistics Capacity in Nigeria Through the LISA 2020 Program." 60th International Statistical Institute's World Statistics Congress, Rio de Janeiro, Brazil, 2015.

27. **Vance, E.** "LISA 2020: How Stat Labs Can Make an Impact Now and in the Future." Joint Statistical Meetings (JSM), Boston, MA, 2014.

28. **Awe, O.O.*** and Vance, E.A. "Statistics Education, Collaborative Research, and LISA 2020: A View From Nigeria." ICOTS9, Flagstaff, AZ, 2014.

29. **Vance, E.** "Building statistics capacity in developing countries by training statisticians to communicate and collaborate with non-statisticians." JSM, Montreal, Canada, 2013.

30. **Vance, E.** "Fostering the Culture of Collaboration at Virginia Tech." JSM, San Diego, CA, 2012.

31. **Vance, E.** "LISA On-the-ground Statisticians in Mozambique: a new paradigm for interdisciplinary collaboration." IDR Symposium, Virginia Tech, Blacksburg, VA, 2011.

32. **Vance, E.** "Training Statisticians to Become Interdisciplinary Collaborators." JSM, Miami Beach, FL, 2011.

33. **Vance, E.** "Social Networks within Calling Networks." Army Conference on Applied Statistics, Durham, NC, 2006.

Invited panel discussions

1. **Otto, M.** (chair), **Vance, E., Gause, C., Hesterberg, T., Jang, D., Chan, I.**, Kaur, A. (organizer) "Leadership and Collaboration Across Cultures." International Indian Statistical Association Annual Conference, Golden, CO, 2023

2. **Carling, K.** (chair), **Smaldone, F., Parker, M., Vance, E.,** and **Huq, A.** "Data-Driven Leadership." International Conference on Artificial Intelligence and Robotics (ROBOTFORUM2023), Las Vegas, NV, 2023.

3. Fowle K. and Wells, B. (chairs), **Yih, Y.**, Gupta, P., **Vance, E.**, **Olubusoye, O.**, **Tumuhamye, N.**, **Ssentongo, J.**, **Dayaratna, V.**, and **Alcaraz Velasco, G.** "How to Build and Engage Research Networks for Capacity Building and Research Generation Development," USAID's Development, Research, and Innovation Virtual Engagements (DRIVE) Convening, online, 2021.

4. **Awe, O.** (chair), **Olubusoye, O.**, **Vance, E.**, and **Miller, M.** "Sustainability of the LISA 2020 Network." LISA 2020 Symposium, online, 2020.

5. **Corliss, D.** (chair), **Vance, E., Kwasny, M.,** and **Regier, M.** "CSP Themes. Is it time to refocus? An interactive panel." ASA Conference on Statistical Practice, Sacramento, CA, 2020.

6. **Ghosh, D., Loh, P.L., Paddock, S., Sharp, J., Vance, E.**, Wilson, A. (moderator). "Collaboration Panel." Institute of Mathematical Statistics New Researchers Conference, Fort Collins, CO, 2019.

7. **Wagner, B.** (chair), **LaLonde, T., Vance, E., Greasby, T.,** and **King, J.** "The Future of Statistics: What are the Upcoming Challenges and Opportunities?" ASA Colorado/Wyoming Chapter Winter Meeting, Greeley, CO, 2018.

8. **Vance, E.** (chair), **Love, K.**, **Kwasny, M., Turner, R.,** and **Schweitzer, L.** "Closing General Session." ASA Conference on Statistical Practice, Portland, OR, 2018.

9. **Long, C.** (chair), **Lin, L., Love, K., Toledano**, **A.,** and **Vance, E.** "Communication Skills: What's Next?" ASA Conference on Statistical Practice, Portland, OR, 2018.

10. **Gore, A.** (chair), Rawat, N.K. (organizer), **Chattopadhyay, A., Nussbaum, B., Vance, E., Pantula, S., Datta, S.,** and **Ghosh, S.** "Are Statisticians Prepared for the Data Science Challenge? - A Career Development Panel." International Indian Statistical Association conference, Hyderabad, India, 2017.

11. **Ganguli, B.** (organizer and chair), **Vance, E., Spiegelman, D., Iyer, V., Banerjee, S.,** and **Gopalkrishnan, A.** "Panel Discussion on Biostatistics Education." International Indian Statistical Association conference, Hyderabad, India, 2017.

12. **Tumala, M.M.** (chair), **Oyejola, B., Vance, E., Mbegbu, J., Nwabueze, J., Asiribo, O.E., Bamiduro, T.A.** and **Osanaiye, P.A.** "Guide to Statistical Research Design, Proposal Development and Project Exectution." Plenary panel discussion at the 1st International Statistical Conference of the Nigerian Statistical Association, Lagos, Nigeria, 2017.

13. **Adams, J. (**chair**), Love, K., Stephens, E., Schweitzer, L.** and **Vance, E.** "Closing General Session." ASA Conference on Statistical Practice, Jacksonville, FL, 2017.

14. **Tritter, B.** (moderator), **Hall, R.**, **Homann, J.**, **Sturdy, J.** and **Vance, E.** "(Some of) the Data's Out There, Now What?" Open Data: Big Impact, Millennium Challenge Corporation, Washington, D.C., 2016.

15. **Kaur, A.** (organizer and chair), **Bhattacharya, A., Sathe, A., Koul, H**. and **Vance, E.** "Professional Development Skills for an Effective Statistician." International Indian Statistical Association conference, Pune, India, 2015.

16. Love-Myers, K. (organizer), **Vance, E.** (chair), **Zahn, D., Johnson, D., Kutner, M., Snee, R.** and **Harrell, F.** "Stepping Stones from Consulting to Collaboration to Leadership: Increasing the Impact of Statistical Practice." JSM, Seattle, WA, 2015.

17. **Vance, E.** "LISA 2020: Building Statistical Collaboration Capacity in Developing Countries." Part of a panel discussion on "Statistical Capacity Building: Recent Experiences, Needs, and Challenges" at the 60th International Statistical Institute's World Statistics Congress, Rio de Janeiro, Brazil, 2015.

18. **Rutherford, J.** (chair), **Kim, M.**, **Adams, J.** and **Vance, E.** "Closing General Session." Panel discussion at the ASA Conference on Statistical Practice, New Orleans, LA, 2015.

Invited session discussant
1. **Vance, E.** "Discussion on Transforming Evidence Into Action." International Statistical Institute's 64th World Statistics Congress, Ottawa, Canada, 2023.

2. **Vance, E.** "Discussion on Promoting Statistical Practice and Collaboration in Developing Countries." International Statistical Institute's 64th World Statistics Congress, Ottawa, Canada, 2023.

3. **Vance, E.** "Discussion on Transforming Evidence into Action." International Statistical Institute's 63rd World Statistics Congress, online, 2021.

4. **Vance, E.** "Discussion on Statistical Consulting and Collaboration Techniques." LISA 2020 Symposium, Online, October 7, 2020.

5. **Vance, E.** "Increasing Domain Experts' Engagement with Statistics Through Statistical Collaboration Laboratories." International Statistical Institute's 62nd World Statistics Congress, Kuala Lumpur, Malaysia, 2019.

Invited poster presentations
6. **Vance, E.** "Teaching Data Science with Team-Based Learning." JSM, Online, 2020.

7. **Vance, E.** "LISA 2020: Building Statistics Capacity and Collaboration Infrastructure in Developing Countries." JSM, Vancouver, BC, 2018.

8. **Vance, E.** "Seeking Partners for LISA 2020: Creating a network of statistical collaboration laboratories in developing countries." JSM, Montreal, Canada, 2013.

Invited workshops
1. **Vance, E.** "Strategies for Improving Communication When Collaborating in Biomedical Research." Strengthening Biostatistics Resources in Sub-Saharan Africa: Networking and Collaborations, National Institute of Allergy and Infectious Diseases, National Institutes of

Health in collaboration with MRC Unit The Gambia at the London School of Hygiene and Tropical Medicine, The Gambia, (remote), 2022.

2. **Ziniel, S., Vance, E., Hall, M.,** and **Galbraith, A.** "How to Succeed in Pediatric Research: Improving Collaborations between Pediatricians and Statisticians in Interdisciplinary Teams." Academic Pediatric Association Interdisciplinary Pediatric Researchers Special Interest Group, Pediatric Academic Societies (PAS) Denver, CO, 2022.

3. **Vance, E.** and **Trumble, I.** ‡ "Essential Communication and Collaboration." Workshop, ASA Conference on Statistical Practice, online, 2022.

4. **Vance, E.** and **Smith, H.** "Essential Collaboration: The ASCCR Frame." Short Course, ASA Conference on Statistical Practice, Sacramento, CA, 2020.

5. **Vance, E.** "An Overview of the ASCCR Framework for Interdisciplinary Collaboration." Workshop during the 2nd LISA 2020 Symposium, Kuala Lumpur, Malaysia, 2019.

6. **Vance, E.** and **Smith, H.** "Essential Collaboration Skills." Professional Development Personal Skills Development Workshop, Joint Statistical Meetings (JSM), Denver, CO, 2019.

7. **Vance, E.** and **Smith, H.** "Collaboration Essentials for Statistical Advising." Pre-conference course at ADVICE|2018, the First International Conference on Statistical Advising, Oslo, Norway, 2018.

8. **Vance, E.** (chair), **Sharp, J.**, **Griffith, E.**, **Niu, X.**, **Craig, B.**, **and Kogan, C.** (co-chairs) "Workshop on Teaching Statistical Collaboration for Academic Consulting Center Directors." ASA Committee on Applied Statisticians sponsored workshop at JSM, Vancouver, BC, 2018.

9. **Vance, E.** and **Smith, H.** "Collaboration Essentials for Practicing Statisticians and Data Scientists." Short Course, ASA Conference on Statistical Practice, Portland, OR, 2018.

10. **Vance, E.** "SMART Goals, Non-Technical Collaboration Skills, Sharing Best Practices, and Creating Future Plans." Workshop during the First Annual LISA 2020 Symposium, Marrakech, Morocco, 2017.

11. **Vance, E.**, **Smith, H.** and **Zahn, D.** "Effective Collaboration." Continuing Education Personal Skills Development Workshop, JSM, Chicago, IL, 2016.

12. **Vance, E.** and Hall, R. "Data Anonymization: Lessons Learned from a Millennium Challenge Corporation Impact Evaluation." Transparency + Reproducibility Workshop, Berkeley Initiative for Transparency in the Social Sciences, University of California, Berkeley, 2016.

13. **Vance, E.** "Effective Collaboration." Workshop at International Indian Statistical Association conference, Pune, India, 2015.

14. **Vance, E.**, **Smith, H.** and **Zahn, D.** "Non-technical Skills to Become a More Effective Collaborator." Continuing Education Personal Skills Development Workshop, JSM, Seattle, WA, 2015.

15. **Vance, E.**, **Smith, H.** and **Zahn, D.** "Learning and Improving Skills to Become a More Effective Collaborator." Continuing Education Personal Skills Development Workshop, JSM, Boston, MA, 2014.

16. **Vance, E.** "Learning and Improving Skills to Become an Effective Statistical Collaborator." Tutorial, ASA Conference on Statistical Practice, Tampa, FL, 2014.

Concurrent and contributed paper presentations

1. **Vance, E.** and Notodiputro, K.A. "Teaching Interdisciplinary Collaboration Across Cultures." Australian Conference on Teaching Statistics (OZCOTS 2023), Wollongong, Australia, 2023.

2. **Vance, E.** and Notodiputro, K.A. "The Extraordinary Potential of Statistical Collaboration Laboratories." Australian Statistics Conference, Wollongong, Australia, 2023.

3. **Vance, E.** "The Content of Statistics and Data Science Collaborations: The $Q_1Q_2Q_3$ Framework." ASA Conference on Statistical Practice, San Francisco, CA, 2023.

4. **Vance, E.** "Asking Great Questions." JSM online, 2021.

   Winner, Best Contributed Paper Award from the ASA Section on Statistical Consulting

5. **Vance, E.** "Communication in Statistical Collaborations: Creating Shared Understanding." ASA Conference on Statistical Practice, online, 2021.

6. **Vance, E.** "Goals for Statistics and Data Science Collaborations." JSM, Online, 2020.

7. **Smith, H.** and **Vance, E.** "Essential Collaboration Skills: Creating and Sustaining Productive Relationships." ASA Conference on Statistical Practice, Sacramento, CA, 2020.

8. **Vance, E.** and **Smith, H.** "Essential Collaboration Skills: Attitude of Collaboration." ASA Conference on Statistical Practice, Sacramento, CA, 2020.

9. **Vance, E.** "A Framework for Interdisciplinary Collaboration Applied to Statistics and Data Science." Colorado/Wyoming ASA Chapter Spring Meeting, Boulder, Colorado, 2019.

10. **Vance, E.** and **Love, K.** "Developing a Network of International Statistical Laboratories." ASA Conference on Statistical Practice, New Orleans, LA, 2019.

11. **Vance, E.** and **Smith, H.** "Training the Next Generation of Statistical Advisors." ADVICE|2018, the First International Conference on Statistical Advising, Oslo, Norway, 2018.

12. **Smith, H.** and **Vance, E.** "Communication Best Practices: A Triangle of Statistical Communication." ADVICE|2018, the First International Conference on Statistical Advising, Oslo, Norway, 2018.

13. **Vance, E.** "Teaching Data Science, Statistical Thinking, and Collaboration Using Team-Based Learning." eCOTS Breakout Session, Electronic Conference On Teaching Statistics, 2018.

14. **Smith, H.** and **Vance, E.** "Collaboration Essentials: Listening, Paraphrasing & Summarizing." ASA Conference on Statistical Practice, Portland, OR, 2018.

15. **Vance, E.** and **Smith, H.** "Collaboration Essentials: Asking Great Questions." ASA Conference on Statistical Practice, Portland, OR, 2018.

16. **Vance, E.** "Building Capacity in Applied Statistics in South Asia Through the LISA 2020 Program." International Indian Statistical Association conference, Hyderabad, India, 2017.

17. **Vance, E.** and **Smith, H.** "Using Video to Improve Your Collaboration Skills." Joint Statistical Meetings, Baltimore, MD, 2017.

18. **Smith, H.** and **Vance, E.** "Explaining Statistics to Non-Statisticians." Joint Statistical Meetings, Baltimore, MD, 2017.

19. **Siziba, L.*** and Vance, E. "Fostering a Collaborative Approach to Research Through the University of Zimbabwe Laboratory for Interdisciplinary Statistical Analysis (UoZLISA)." 61st International Statistical Institute's World Statistics Congress, Marrakech, Morocco, 2017.

20. **Amin, M.‡** and Vance, E. "Strengthening a Statistical Channel/Bridge Among Researchers and Policy Makers Through statistical collaboration." 61st International Statistical Institute's World Statistics Congress, Marrakech, Morocco, 2017.

21. **Kazuzuru, B**.‡ and Vance, E. "Performance, Challenges, and Benefits of Statistical Collaboration for Universities in Developing Countries: The Case of Sokoine University of Agriculture (SUA)." Paper presented at African Statistics Day Conference, University of Dodoma, Tanzania, 2016.

22. **Amin, M.‡** and Vance, E. "Inevitability of Interdisciplinary Statistical Laboratories for Food and Agricultural Research in Developing Countries: The Case of Pakistan." Seventh International Conference on Agricultural Statistics, Rome, Italy, 2016.

23. **Ngaya, R**.* and Vance, E. "LISA 2020: Improving Agricultural Research in Tanzania Through Statistical Collaboration." Joint Statistical Meetings, Chicago, IL, 2016.

24. **Vance, E.** and **Smith, H.** "Using Video to Improve Your Practice of Statistics." ASA Conference on Statistical Practice, San Diego, CA, 2016.

25. **Smith, H.** and **Vance, E.** "Explaining Statistics to Nonstatisticians." ASA Conference on Statistical Practice, San Diego, CA, 2016.

26. **Crandell, I.***, Awe, O.* and Vance, E. "LISA 2020: Developing Statistical Collaboration Capacity in Nigeria." Joint Statistical Meetings, Seattle, WA, 2015.

27. **Vance, E.** and **Smith, H.** "Structuring Effective Statistical Collaborations and Consultations." ASA Conference on Statistical Practice, New Orleans, LA, 2015.

28. **Smith, H.** and **Vance, E.** "Communicating Effectively in Statistical Collaborations and Consultations." ASA Conference on Statistical Practice, New Orleans, LA, 2015.

29. **Vance, E.** "Training Statistical Consultants to Become Collaborative Statisticians." International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, NC, 2014.

30. **Kazuzuru, B.‡** and Vance, E. "The Challenges of Statistical Collaboration For Developing Countries." International Conference on Advances in Interdisciplinary Statistics and Combinatorics, Greensboro, NC, 2014.

31. **Vance, E.** "LISA 2020: Building Statistics Capacity for In-Country Impact Evaluations." Making Impact Evaluation Matter, Manila, Philippines, 2014.

32. **Hall, R.**, Van Houweling, E., Vance, E., Carzolio, M.*, and Davis, J. "Impact Evaluation of the MCC-Funded Rural Water Supply Program in Nampula, Mozambique." Making Impact Evaluation Matter, Manila, Philippines, 2014.

33. **Carzolio, M.***, Vance, E., Hall, R. "Introducing the Field Statistician: How integrating a statistics expert into the evaluation process improves results." Making Impact Evaluation Matter, Manila, Philippines, 2014.

    Winner, 2nd Place Presentation by a Young Researcher

34. **Msemo, E.*** and Vance, E. "Impacting Agricultural Productivity in Tanzania Through the Wheels of Statistics." JSM, Boston, MA, 2014.

    Winner, Best Contributed Paper Award from the ASA Section on Statistical Consulting

35. **Awe, O.O.*** and Vance, E.A. "LISA 2020: A Vision Towards Research Development in Nigeria." JSM, Boston, MA, 2014.

    Honorable Mention, Best Contributed Paper Award from the Section on Statistical Consulting

36. **Vance, E.** and **Magayane, F.** "Strengthening the capacity of agricultural researchers through a network of statistical collaboration laboratories." The 4th RUFORUM Biennial Conference, Maputo, Mozambique, 2014.

37. **Msemo, E.*** and Vance, E. "LISA 2020: A Spark for Global Development." Virginia Academy of Sciences Statistics Meeting, Richmond, VA, 2014.

38. **Vance, E.** and Pruitt, T. "LISA 2020: Creating a network of statistical collaboration laboratories in developing countries." Virginia Tech Deans' Forum on Global Engagement, Blacksburg, VA, 2014.

39. **Hall, R.** and **Vance, E.** "Impact Evaluation of the MCC's Rural Water Supply Project in Mozambique: Enhancing Local Partner Capacity through Collaboration." Virginia Tech Deans' Forum on Global Engagement, Blacksburg, VA, 2014.

40. **Vance, E.** and **Hall, R.** "Designing Impact Evaluations in Developing Countries: Leveraging Technology to Collect High-quality Data." 27th Annual Conference of the American Evaluation Association, Washington, D.C., 2013.

41. Hightower, L., Lu. H., Marchant, M.A., Vance, E., **Richardson, W.**, Smith, E., Mack, T. "Exploring Educational Attainment of Undergraduate Minority Students in Land-Grant Institutions." North American Colleges and Teachers of Agriculture (NACTA) Annual Conference, Blacksburg, VA, 2013.

42. **Vance, E.** "Teaching Statistical Collaboration." ASA Conference on Statistical Practice, New Orleans, LA, 2013.

43. **Agozino, O.**, Vance, E. and Fang, Z.* "Race, Ethnicity, Age and Gender Articulation in Existing Databases on Alcohol-Related Arrests." American Society of Criminology, 2011.

44. **Hall, R.** and **Vance, E.** "Assessing the Link between Productive Use of Domestic Water, Poverty Reduction and Sustainability." CAUS Symposium, Virginia Tech, Blacksburg, VA, 2011.

45. **Vance, E.** "The History of Statistical Consulting and the Future of Statistical Collaboration at Virginia Tech." JSM, Vancouver, Canada, 2010.

46. **Vance, E.**, Leman, S. and House, L. "What Scientists Really Want to Know." JSM, Washington, D.C., 2009.

47. **Vance, E.**, Banks, D. and Dasu, T. "Statistical Approaches to Mining Multivariate Data Streams." JSM, Salt Lake City, UT, 2007.

48. **Vance, E.** and Banks, D. "Agent-Based Methods for Dynamic Social Networks." JSM, Seattle, WA, 2006.

49. **Vance, E.** "Quantifying Elephant Social Structure: Using a Bayesian Bilinear Mixed Effects Model to Elicit Qualities of Elephant Behavior." JSM, Minneapolis, MN, 2005.

Contributed poster presentations

1. **Bonarrigo, L.**, Anderson, A.P., Clark, T.K., Robinson, S.K., Vance, E.A., Baldonado, K.M., Sherman, S.O., Tredinnick, S.*, Verniani, A., Galvin, E.*, Peterson, B., Rees, W., Putman, E. "DEVELOPMENT AND ASSESSMENT OF A VIRTUAL REALITY TRAINER FOR LONG DURATION SPACEFLIGHT." Poster presentation at the Aerospace Medical Association's Annual Scientific Meeting, Chicago, IL, May 2024.

2. **Baiduc, R.R.**, Sun, J.W.*, Berry, C.*, Vance, E. "Mapping Cardiovascular Disease Risk Status to Audiometric Phenotypes." Poster presentation at the 2024 Scientific and Technology Conference of the American Auditory Society, Scotsdale, AZ, February 2024.

3. **Anderson, A.P.**, Putman, E., Sherman, S., Bonarrigo, L., Galvin, E.*, Verniani, A., Tredinnick, S.*, Baldonado, K.M., Vance, E.A., Robinson, S., Szafir, D., Clark, T.K., "TRINITY: MULTI-ENVIRONMENT VIRTUAL TRAINER FOR LONG DURATION EXPLORATION MISSIONS." Poster presentation at the 2024 NASA HRP Investigators' Workshop, February 2024.

4. **Verniani, A.**, Galvin, E.*, Tredinnick, S.*, Vance, E., Anderson, A.P. "Evaluating Astronaut Training Algorithms in Virtual Reality for Long-Duration Exploration Missions." Poster presentation at the NASA Human Research Program Meeting, February 2023.

5. **Vance E.**, Pieplow N., Glimp D., Melbourne B., Hulden V., Garrity J., Lindroth E.*, Schneider M. "Collaborative Data Science Education: Statistics With Integration of Technology, Computing, and the Humanities (CODE:SWITCH)." Poster presentation at the AAAS IUSE National Summit, Washington D.C., June 2022.

6. **Bonino, A.,** Mood, D., Schacht, E.*, Vance, E. "Co-occurrence of autism and reduced hearing in children." Poster presentation at the Auditory Society Meeting February 2022.

7. **Trumble, I.** ‡, Macaluso, G., Vance, E. "Communicating Quantitative Information to the C-Suite." Poster presentation at the ASA Conference on Statistical Practice, online, 2022.

8. **Bonino, A.,** Mood, D., Schacht, E.*, Vance, E. "Co-occurrence of Reduced Hearing & Autism Spectrum Disorder: Prevalence, Hearing Profile, and Gaps in Care" Poster presentation at the ASHA 2021 Convention, November 2021.

9. **Anderson, M.**, Sanders, A., Sun, J.W.*, Vance, E., Baiduc, R. "Exploring Associations Between Cardiovascular Disease Risk and Hearing Loss in a Clinical Population." Poster presentation at the American Academy of Audiology meeting, virtual, 2021.

   AAA 2021 Virtual Professional Poster Winner

10. Lemons, K., Berry, C.*, Vance, E., **Baiduc, R.R.** "Blood Pressure Level, Auditory Brainstem Responses, and Electrocochleography." Poster presentation at the American Academy of Audiology meeting, virtual, 2021.

11. **Bajaj K.**, Bhattacharya A., Chakraborty S., Bazaz A., Vance E.A., Rajagopalan B. "A database of paleo climate & environment from the Indian subcontinent: A regional initiative for science and society." Poster presentation at the American Geophysical Union Fall Meeting, online, 2020.

12. **Baiduc RR**, Sun J.W.*, Anderson M, Vance EA, Dowd K. "The Link between Hearing Loss and Diabetes: Scientific Overview and The Audiology Project Outreach Efforts." Poster presentation at the Association of Diabetes Care and Education Specialists conference [virtual], August 2020.

13. **Vance, E.**, Awe, O., Ganguli, B., Olubusoye, O., Adenomon, M.O., Gebru, D., Trueha, K., Vivacqua, C., Adebanji, A. and Suleiman, S. "Statistical Practice Around the World." ASA Conference on Statistical Practice, New Orleans, LA, 2019.

14. **Vance, E.** and Laga, I.* "Variations in Statistical Practice Between North American Stat Labs." ASA Conference on Statistical Practice, Jacksonville, FL, 2017.

15. Vance, E., **Metzger, T.***, **Pruitt, T.** and Goshu, A.T.‡ "The Educational Impact of Working in a Statistical Collaboration Laboratory." 8th Annual Conference on Higher Education Pedagogy, Blacksburg, VA, 2016, pp 235–6, https://chep.teaching.vt.edu/content/dam/chep_teaching_vt_edu/CHEP_2016_Proceedings -1.pdf

16. **Hanlon, A.L.** and **Vance, E.** "Writing a Scientific Paper for Peer Reviewed Publication." ASA Conference on Statistical Practice, New Orleans, LA, 2015.

17. **Vance, E.**, Casement, C.* and Pruitt, T. "Using Survey Feedback to Improve the Effectiveness of Statistical Collaborators, Walk-in Consultants, and Short Course Instructors." 7th Annual Conference on Higher Education Pedagogy, Blacksburg, VA, 2015.

18. **Awe, O.O.*** and Vance, E. "LISA 2020: Improving Global Research Quality Through Creation of Statistical Collaboration Laboratories." 2014 Annual International Conference of the Faculty of Science, Obafemi Awolowo University, Ile-Ife, Nigeria, 2014.

19. **Hall, R.P.**, Davis, J., **Van Houweling, E.**, Vance, E.A., Carzolio, M.*, Seiss, M.* and Russel, K. "Impact Evaluation of the MCC-Funded Rural Water Supply Activity in Nampula, Mozambique." Experience Virginia Tech: Learn, Explore, Engage, Blacksburg, VA, 2014.

20. **Msemo, E.***, **Awe, O.*** and **Vance, E.** "LISA 2020: A Spark for Global Research Development." Virginia Tech Deans' Forum on Global Engagement, Blacksburg, VA, 2014.

21. **Sharma, A.**, Xie, C.*, Marchant, M.A, Vance, E.A., Richardson, W.W., and Hightower, L.S., "The Scholarship of Study Abroad Programs: Engaging Students Through International Experiences." Virginia Tech Deans' Forum on Global Engagement, Blacksburg, VA, 2014.

22. **Awe, O.O.*** and Vance, E.A. "Comparing Statistical Consulting and Collaboration Practices between Nigeria and the United States." ASA Conference on Statistical Practice, Tampa, FL, 2014.

23. **Vance, E. "***LISA 2020*: A vision to create a network of 20 statistical collaboration laboratories in developing countries by 2020." VT Engage Showcase, Blacksburg, VA, 2013.

24. **Vance, E.** "Using Team-Based Learning to Teach Effective Communication and Collaboration." 5th Annual Conference on Higher Education Pedagogy, Blacksburg, VA, 2013.

25. **Hightower, L.**, Lu. H.*, Marchant, M.A., Vance, E., Richardson, W., Smith, E. and Mack, T. "Exploring Educational Attainment of Undergraduate Minority Students in Land-Grant Institutions." 5th Annual Conference on Higher Education Pedagogy, Blacksburg, VA, 2013.

26. **Vance, E.** "LISA 2020: A vision to create a network of 20 statistical collaboration laboratories in developing countries by 2020." Department of Statistical Science 25th Anniversary Conference, Duke University, Durham, NC, 2012.

27. **Vance, E.** "Communication in Statistical Collaborations: Teaching Statisticians How to Be Effective Interdisciplinary Collaborators." Inaugural ASA Conference on Statistical Practice, Orlando, FL, 2012.

28. **Marchant, M.A.**, Hightower, L., Griffin, K.*, Richardson, W., Smith, E., Vance, E. and Sharma, A. "The Scholarship of Study Abroad Programs: Engaging Students through International Experiences." 4th Annual Conference on Higher Education Pedagogy, Blacksburg, VA, 2012.

29. **Vance, E.** "Communication in Statistical Collaborations: Teaching Statisticians How to Be Effective Interdisciplinary Collaborators." 4th Annual Conference on Higher Education Pedagogy, Blacksburg, VA, 2012.

30. Vance, E.A. and **Johnson, N.G.*** "Educating Statisticians to Become Interdisciplinary Collaborators." United States Conference On Teaching Statistics (USCOTS), Raleigh, NC, 2011.

31. **Hightower, L.**, Hamm, J., Shen, Y.*, Bell, A., Marchant, M., Mack, T., Smith, E. and Vance, E. "Studying Agriculture Internationally: Tracking International Study Abroad Projects," 3rd Annual Conference on Higher Education Pedagogy, Blacksburg, VA, 2011.

32. **Vance, E.** "Educating Statisticians to Become Interdisciplinary Collaborators," 3rd Annual Conference on Higher Education Pedagogy, Blacksburg, VA, 2011.

33. Hightower, L., Griffin, K.*, Shen, Y.*, Marchant, M.A., Smith, E., Vance, E., **Richardson, W.**, Bell, A., Hamm, J. and Mack, T. "Engaging Students Through International Experiences to Expand Diverse Perspectives." North American Colleges and Teachers of Agriculture (NACTA) Annual Conference, Edmonton, Canada, 2011.

34. **Vance, E.** "Using a Bayesian Bilinear Mixed Effects Model to Elicit Qualities of Elephant Social Behavior." ISBA Valencia 8, Benidorm, Spain, 2006.

35. **Vance, E.** "Social Networks in African Elephants." National Academy of Sciences, Washington, D.C., 2006.

Panel and Roundtable discussions
1. **Vance, E.** (host) "How to Build and Sustain Effective Collaborations" Roundtable discussion at JSM, Online, 2021.

2. **Vance, E.** (host) "Assessing Statistical Consultations and Collaborations." Roundtable discussion at JSM, Online, 2020.

3. **Vance, E.** (chair), **Halvorsen, K., Hanford, K., Wilson, J., and Zahn, D.*** "Stumbling Blocks to Stepping Stones." Panel Discussion at JSM, Online, 2020.
Winner, Best Contributed Session Award from the ASA Section on Statistical Consulting

4. **Vance, E.** (host) "The LISA 2020 Program to Build Statistical Analysis and Data Science Capacity." Lunchtime Roundtable Discussion Group, 62nd International Statistical Institute's World Statistics Congress, Kuala Lumpur, Malaysia, 2019.

5. **Vance, E.** (host) and **Smith, H.** (co-host) "How to Teach Essential Collaboration Skills." Roundtable discussion at JSM, Vancouver, BC, 2018.

6. **Smith, H.** (host) and **Vance, E.** (co-host) "How to Teach Essential Collaboration Skills to Undergraduate Statistics Majors." Roundtable discussion at JSM, Vancouver, BC, 2018.

7. **Vance, E**. (host) and **Awe, O.O.‡** (chair) "LISA 2020 Global Network—Lunch Roundtable Discussion with Heads of Statistics Departments (HODs)." 1st International Statistical Conference of the Nigerian Statistical Association, Lagos, Nigeria, 2017.

8. **Vance, E**. (host) "Structures of Successful Stat Labs." Roundtable discussion at JSM, Baltimore, MD, 2017.

9. **Vance, E**. (host) "Teaching Statistical Collaboration." Roundtable discussion at JSM, Chicago, IL, 2016.

10. **Vance, E.** (chair), **Shulman, H.**, **Kincaid, C.**, **Otto, M.**, and **Mogg, R.** "A Roadmap for Promoting Statistical Collaboration." Panel discussion at JSM, Chicago, IL, 2016.

11. **Vance, E**. (host) "Creating Research Infrastructure in Developing Countries." Roundtable discussion at JSM, Seattle, WA, 2015.

12. **Vance, E.** (organizer and chair), **Kaur, A**., **Kalicin, S.**, **Stork, L.**, **Kline, D.** and **Morganstein, D.** "How Mentoring Can Help with the Practice of Statistics: A Panel Discussion." Panel discussion at the ASA Conference on Statistical Practice, New Orleans, LA, 2015.

13. **Vance, E.** (host) "Building the LISA 2020 Mentoring Network to Support Newly Created Stat Labs in Developing Countries." Roundtable discussion at JSM, Boston, MA, 2014.

14. **Gauvin, J.** (chair), **Vance, E.**, **Morganstein, D.**, **Chowdhury, D.**, **Awe, O.***, **Lin, L.** and **Hardnett, F.** "Program Reflections and a Panel Discussion on Mentoring" ASA Conference on Statistical Practice, Tampa, FL, 2014.

15. **Love-Myers, K.** and **Vance, E.** (co-host) "Starting and growing a successful academic statistical consulting center." Roundtable discussion at JSM, Montreal, Canada, 2013.

16. **Vance, E.** (host) "How You Can Help with the LISA 2020 Initiative to Build Statistics Capacity in Developing Countries." Roundtable discussion at JSM, Montreal, Canada, 2013.

17. **Zahn, D., Smith, H., Stallings, J.*, Stinnett, S**. and **Vance, E.** (chair) "Understanding and Improving the Client-Consultant Interaction." Panel discussion at JSM, Montreal, Canada, 2013.

CONFERENCE SESSIONS ORGANIZED

Invited sessions
1. Vance, E. "Promoting Statistical Collaboration and Practice." International Statistical Institute's 64th World Statistics Congress, Ottawa, Canada, 2023.

2. Vance, E. "Transforming Evidence into Action." International Statistical Institute's 64th World Statistics Congress, Ottawa, Canada, 2023.

3. Vance, E. "Mentoring to Build Capacity." International Statistical Institute's 64th World Statistics Congress, Ottawa, Canada, 2023.

4. Vance, E. "The Educational Impact of Statistical Collaboration Laboratories on Students." International Statistical Institute's 62nd World Statistics Congress, Kuala Lumpur, Malaysia, 2019.

5. Vance, E. "Increasing Domain Experts' Engagement with Statistics Through Statistical Collaboration Laboratories." International Statistical Institute's 62nd World Statistics Congress, Kuala Lumpur, Malaysia, 2019.

6. Vance, E. "How to Scale Up Statistical Analysis Capacity to Achieve the Sustainable Development Goals." International Statistical Institute's 62nd World Statistics Congress, Kuala Lumpur, Malaysia, 2019.

7. Vance, E. "Maximizing the Impact of Statistical Collaboration." Joint Statistical Meetings (JSM), Denver, CO, 2019.

8. Vance, E. "Skills to Leverage and Gaps to Fill to Thrive in Data Science." JSM, Vancouver, BC, 2018.

9. Vance, E. "How Statistical Collaboration Laboratories Enhance Statistical Education." 61st International Statistical Institute's World Statistics Congress, Marrakech, Morocco, 2017.

10. Vance, E. "Collaborations with Business and Industry Through the LISA 2020 Program." 61st International Statistical Institute's World Statistics Congress, Marrakech, Morocco, 2017.

11. Vance, E. "The Extraordinary Power of Statistical Collaboration." JSM, Chicago, IL, 2016.

12. Trachtenberg, R. and Vance, E. "Statisticians Building Global Science Capacity and Infrastructure." AAAS Annual Meeting, Washington, D.C., 2016.

13. Vance, E. "The LISA 2020 Program to Build Statistical Capacity and Research Infrastructure in Developing Countries." 60th International Statistical Institute's World Statistics Congress, Rio de Janeiro, Brazil, 2015.

14. Vance, E. "The Impact of Statistical Consulting Centers: Past, Present, and Future." JSM, Boston, MA, 2014.

15. Vance, E. "International Statistical Consulting: Current Initiatives to Build Statistics Capacity in Developing Countries." JSM, Montreal, Canada, 2013.

16. Vance, E. "Fostering interdisciplinary collaboration through statistical consulting." JSM, San Diego, CA, 2012.

17. Holloman, C. and Vance, E. "Innovative Strategies for Incorporating Consulting into Graduate Education." JSM, Miami Beach, FL, 2011.

Contributed and topic-contributed sessions

18. Vance, E. "The Future of Statistical Consulting and Collaboration." Joint Statistical Meetings (JSM), Denver, CO, 2019.

19. Vance, E. "Challenges and Solutions for Building Statistics Capacity in Developing Countries." Special Topics Session at the 61st International Statistical Institute's World Statistics Congress, Marrakech, Morocco, 2017

20. Vance, E. "Effective Collaboration." ASA Conference on Statistical Practice, New Orleans, LA, 2015.

21. Vance, E. "How Mentoring Can Help with the Practice of Statistics: A Panel Discussion." ASA Conference on Statistical Practice, New Orleans, LA, 2015.

22. Chun, Y. and Vance, E. "The Glocal Impact of Statistics Without Borders and StatCom: Can We Make It Enduring?" JSM, Boston, MA, 2014.

23. Vance, E. "Program Reflections and a Panel Discussion on Mentoring" ASA Conference on Statistical Practice, Tampa, FL, 2014.

24. Zahn, D. and Vance, E. "Understanding and Improving the Client-Consultant Interaction." JSM, Montreal, Canada, 2013.

73 INVITED SEMINARS AND COLLOQUIA (RECEIVED REIMBURSEMENT FOR 42)(similar talks grouped)

"LISA 2020: Building a Global Network of Statistical Collaboration Laboratories" (20 talks)

- Bio3 Department, Georgetown University, Washington, DC, 2017

- Department of Mathematical Sciences, Montana State University, Bozeman, MT, 2017

- Department of Statistics, Kansas State University, Manhattan, KS, 2016

- Department of Statistics, University of Dar es Salaam, Tanzania, 2015

- Department of Statistics, University of Ibadan, Nigeria, 2015

- School of Mathematical and Statistical Sciences, Hawassa University, Ethiopia, 2015

- Department of Statistics, Boston University, Boston, MA, 2015

- Language and Culture Institute Humphrey Fellows Seminar, Virginia Tech, 2015

- Department of Mathematics, Obafemi Awolowo University, Ile-Ife, Nigeria, 2015

- University Seminar, Afe Babalola University (ABUAD), Ado-Ekiti, Nigeria, 2015

- University Council on International Affairs, Virginia Tech, Blacksburg, VA, 2014

- Center for Open Science, Charlottesville, VA, 2014

- Division of Biostatistics Grand Rounds, Oregon Health & Science University, Portland, 2014

- Department of Statistics, Texas A&M, College Station, TX, 2014

- School of Statistics, University of the Philippines, Diliman, Manila, Philippines, 2014

- Google, Mountain View, CA, 2014

- (with Awe, O.* and Msemo, E.*) Africa Coalition Brownbag Series, Virginia Tech, 2014

- Graduate Education Week, Virginia Tech, Blacksburg, VA, 2014

- Departments of Biostatistics and Statistics, University of Minnesota, Twin Cities, 2014

- Department of Statistics, Colorado State University, Fort Collins, CO, 2014

"Introduction to LISA, Statistical Thinking, and Collaboration"

- Colorado Data Science Team, CU Boulder, 2020

- Colorado Data Science Team, CU Boulder, 2019

- President's Teaching and Learning Collaborative, CU Boulder, 2017

- International Strategy Group, CU Boulder, 2017

- Scholarly Initiatives Working Group (SIWG), University Libraries, CU Boulder, 2017

- Stats, Optimization, and Machine Learning Seminar, CU Boulder, 2017

- Institute for Critical Technology and Applied Sciences, Virginia Tech, 2012

- McNair Scholars Program, Virginia Tech, 2010

"Theory of Collaboration in Statistics and Data Science"

- Center for Research Data and Digital Scholarship (CRDDS), CU Boulder, 2017

- ASA MSU Student Chapter Invited Seminar, Montana State University, Bozeman, MT, 2017

- Department of Applied Mathematics, CU Boulder, 2017

"Developing a Framework for Teaching and Learning Collaboration in Statistics and Data Science in Indonesia"

- Universitas Negeri Yogyakarta (Yogyakarta State University), Faculty of Mathematics and Natural Sciences, October 10, 2023

- Macquarie University, Department of Mathematics and Statistics, December 7, 2023.

"Best Practices for Remote Collaborations"

- Michigan Institute for Clinical & Health Research (MICHR), University of Michigan (remote, with **H. Smith**), November 2020

"Statistical Collaboration as a Gateway to Environmental Sustainability"

- Faculty of Environmental Design and Management Faculty Lecture, Obafemi Awolowo University, Ile-Ife, Nigeria, 2017

"The Extraordinary Potential of Statistical Collaboration, Data Science, and LISA 2020"

- FORSTAT Indonesia Talk and Discussion, remote, February 7, 2022: https://www.youtube.com/watch?v=leA2zpJwNJw

- RAND Corporation, Statistics Seminar, remote, February 24, 2021

- CU Anschutz Summer Institute in Biostatistics (CoSIBS) Seminar, 2017

- Language and Culture Institute Humphrey Fellows Seminar, Virginia Tech, 2016

- Department of Biostatistics, Virginia Commonwealth University, Richmond, VA, 2016

- Department of Applied Mathematics, CU Boulder, 2016

- Dept. of Industrial Engineering and Management Science, Univ. of Central Florida, 2016

- Department of Statistics, University of Ibadan, Nigeria, 2015

"Data Anonymization: Lessons Learned from a Millennium Challenge Corporation Impact Evaluation." (with Hall, R.) Virginia Tech Library Open Data Week, Blacksburg, VA, 2016.

"Promoting Science in Developing Countries (and Everywhere Else)"

- Center for Open Science Stakeholder Meeting, Charlottesville, VA, 2016.

- Faculty of Sciences Seminar, Obafemi Awolowo University, Ile-Ife, Nigeria, 2015

- Graduate Education Week, Virginia Tech, Blacksburg, VA, 2015

"Envisioning the 21st Century Global Land Grant University: Building Statistics Capacity"

- Department of Statistics, University of Nebraska-Lincoln, 2015.
- INFORMS, Virginia Tech, Blacksburg, VA, 2015

"Research Opportunities in Statistical Collaboration and International Impact Evaluations"

- Association for Women in Mathematics Seminar, CU Boulder, 2017
- Department of Statistics Student Outreach Seminar, Virginia Tech, Blacksburg, VA, 2014

"Impact Evaluation of the MCC-Funded Rural Water Supply Activity in Nampula, Mozambique"

- (with **Hall, R.**, **Davis, J.**, and **Van Houweling, E.**) Millennium Challenge Corporation's Monitoring and Evaluation and Economic Analysis College, Washington, D.C., 2014
- (with **Hall, R.**) Millennium Challenge Corporation (MCC) global webinar, 2014
- (with **Hoegh, A.*** and **Carzolio, M.***) Africa Regional Strategy Coalition, Virginia Tech, 2012
- (with **Hall, R.**, **Davis, J.**, **Russel, K.** and **Seiss, M.***) MCC, Washington, D.C., 2011

"International Year of Statistics Special Invited Talks"

- Sokoine University of Agriculture (SUA), Morogoro, Tanzania, 2013
- Department of Statistics, Federal University of Rio Grande do Norte, Natal, Brazil, 2013
- Department of Statistics, Pennsylvania State University, State College, PA, 2013
- Department of Statistics, University of Georgia, Athens, GA, 2013
- Department of Statistics, Virginia Tech, Blacksburg, VA, 2013

"Training statisticians and data scientists to communicate and collaborate with non-statisticians"

- Department of Statistics and Data Science, University of Texas at Austin, 2023
- School of Mathematical and Statistical Sciences, Arizona State University, Tempe, ZA, 2023
- Department of Biostatistics and Bioinformatics, University of Colorado Anschutz, 2022
- Northrop Grumman, Boulder, CO, 2019 (with **Gunderman, D.*, Shand, W.*, Miller, C.***)
- INFORMS, Virginia Tech, Blacksburg, VA, 2013
- Department of Mathematics and Statistics, James Madison University, Harrisonburg, VA, 2010

"Best practices for cultural competency" (with **Hall, R.**) VT Engage Symposium, Virginia Tech, 2013

"On-the-ground Statisticians in Mozambique"

- Department of Mathematics, Wake Forest University, Winston-Salem, NC, 2012
- (with **Seiss, M.***) Department of Statistics, Virginia Tech, 2011

"Social Networks in African Elephants"

- CESCA, Virginia Tech, 2011

- Department of Biological Sciences, Virginia Tech, 2011

- INFORMS, Virginia Tech, 2009

- Department of Statistics, Virginia Tech, 2008

- School of Statistics, University of Minnesota, Twin Cities, 2008

INVITED LECTURES, PANELS, AND WORKSHOPS   (presenters shown in **bold**)

1. **Vance, E.** "Lightning Workshop on Data Science Collaboration" Invited workshop for the Data Science Center (12 participants), Queensland University of Technology, Brisbane, Australia, December 19, 2023.

2. **Vance, E.** "Attitudes in Statistics and Data Science Collaborations." Guest lecture for the Departmen Statistik dan Sains Data Graduate Seminar Course, IPB University, Bogor, Indonesia, (10 attendees), October 27, 2023.

3. **Vance, E.** "Developing a Framework for Teaching and Learning Collaboration in Statistics and Data Science in Indonesia." Guest lecture for the Departmen Statistik dan Sains Data Graduate Seminar Course, IPB University, Bogor, Indonesia, (10 attendees), October 20, 2023.

4. **Vance, E.** "Training Interdisciplinary Statisticians and Data Scientists" Webinar for Idea Lab 3: Building an Interdisciplinary Approach to Graduate Training, Council of Graduate Schools (remote, 42 participants), March 9, 2023.

5. **Vance, E.** "Using Team-Based Learning to Teach Data Science" *Journal of Statistics and Data Science Education* Webinar (remote, 52 participants), January 25, 2022.

6. **Vance, E.** "Overview of Data Science and Introduction to Data Science Collaboration." Keynote talk for the online workshop for the African Data Science Academy, ADA Global Academy Scholarship/Mentorship Program (26 participants), January 17, 2022.

7. **Smith, H.** and **Vance, E.** "Best Practices for Remote Collaboration." Online workshop hosted by the ASA Committee on Applied Statisticians (22 participants), September 24, 2021.

8. **Vance, E.** "Statistics and Data Science to Transform Evidence into Action." Guest lecture for the University of Nebraska Lincoln Principles of Statistical Consulting Course (12 attendees), September 22, 2021.

9. **Vance, E.** "Creating and Sustaining Effective Research Collaborations." Webinar for the University of Connecticut, Statistical Consulting Course (15 attendees), September 16, 2020.

10. **Vance, E.** and **Awe, Olawale** (discussant). "Creating and Sustaining Effective Research Collaborations." Webinar hosted by The African Academy of Sciences in their *AAS Mentoring Webinar Series* (123 attendees), June 11, 2020.

11. **Vance, E.** "Team-Based Learning." FTEP Workshop (13 attendees), University of Colorado Boulder, February 11, 2020.

12. **Vance, E.** and Smith, H. "Structuring Effective Meetings." Webinar hosted by The Ohio State University Center for Biostatistics in their *Practical Issues in Collaboration and Consulting* series. Q&A presented remotely to 27 attendees, October 23, 2019.

13. **Vance, E.** "How LISA can help you assess learning goals." Making Teaching and Learning Visible Guest Lecture, Faculty Teaching Excellence Program (FTEP) (4 attendees), University of Colorado Boulder, September 25, 2019.

14. **Vance, E.** "How LISA can help you assess learning goals." FTEP Workshop, (6 attendees) University of Colorado Boulder, September 23, 2019.

15. **Vance, E.** "Asking the Right Questions." Workshop and discussion for Dr. Céline Vetter's IPHY 5900 class (13 attendees), University of Colorado Boulder, September 5, 2019.

16. **Vance, E.** and **Smith, H.** "Putting the Pieces Together." Webinar hosted by the ASA Committee on Applied Statisticians, 2018.

17. **Vance, E.** "Statistical Collaboration Laboratories" National Science Foundation Evaluation and Assessment Team, (remote presentation), NSF, Alexandria, VA, 2018.

18. **Vance, E.** "How LISA can help you assess learning goals." Making Teaching and Learning Visible Guest Lecture, FTEP, University of Colorado Boulder, 2018.

19. **Vance, E.** "Statistical Analysis Techniques for Research." Office of Postdoctoral Affairs and Research and Innovation Office (RIO) Workshop, University of Colorado Boulder, 2018.

20. **Vance, E.** "How LISA can help you assess learning goals." FTEP Workshop, University of Colorado Boulder, 2018.

21. **Vance, E.** and **Smith, H.** "Collaboration Essentials: Asking Great Questions." Webinar hosted by the ASA Committee on Applied Statisticians, 2018.

22. **Vance, E.** "Workshop on Essential Statistical Collaboration Skills." Department of Biostatistics, Bioinformatics, and Biomathematics, Georgetown University, Washington, DC, 2017.

23. **Vance, E.** "Statistics and EBIO." Invited speaker at the Ecology and Evolutionary Biology Quantitative Think Tank group, University of Colorado Boulder, 2017.

24. **Ortega-Villa, A.** (chair), **Albert, P., Berrington de González, A., Koshiol, J.** and **Vance, E.** "Building and Maintaining Collaborations Panel." Panel discussion for the Division of Cancer Epidemiology & Genetics Fellows' Colloquium, National Cancer Institute, Rockville, MD, remote via WebEx, 2017.

25. **Vance, E.** "Workshop and Discussion about Structuring Effective Meetings." Workshop for IQ Biology students, University of Colorado Boulder, 2017.

26. **Johnson, A.** (chair)**, Magle, T., Michaelson, L.** and **Vance, E.** "Overcoming Barriers to Reproducible Research: A Panel Discussion." Panel discussion hosted by the Center for Research Data and Digital Scholarship, University of Colorado Boulder, 2017.

27. **Vance, E.** and **Smith, H.** "Structuring Effective Meetings." Webinar hosted by the ASA Committee on Applied Statisticians, 2017.

28. **Olubusoye, O.** and **Vance, E.** "Creating a Statistical Collaboration Laboratory." Workshop for faculty members of Yaba College of Technology, Lagos, Nigeria, 2017.

29. **Vance, E.** "Introduction to LISA and Statistical Collaboration." IQ Biology First-year Bootcamp, BioFrontiers, University of Colorado Boulder, 2017.

30. **Vance, E.** "The Extraordinary Power of Statistical Collaboration and LISA 2020." University of Minnesota's Summer Institute in Biostatistics (SIBS) Seminar, remote via Zoom, 2017.

31. **Vance, E.** and **Smith, H.** "Collaboration Essentials: Structuring One-on-one Meetings." Webinar hosted by the ASA Section on Statistical Consulting, 2017.

32. **Vance, E.** "Best Practices in Statistical Collaboration." Workshop at the Department of Mathematical Sciences, Montana State University, Bozeman, 2017.

33. **Vance, E.** "Research in Data Science, Statistical Collaboration, and Social Networks." Applied Mathematics 7400: Introduction to Research, University of Colorado Boulder, 2017.

34. **Vance, E.** "The Extraordinary Power of Statistical Collaboration: LISA 2020." University of Minnesota's Summer Institute in Biostatistics (SIBS) Seminar, remote via Skype, 2016.

35. **Vance, E.** "Best Practices for Statistical Collaboration." Department of Statistics Graduate Statistical Consulting Course, University of Nebraska-Lincoln, 2015.

36. **Vance, E.** "Envisioning the 21st Century Global Land Grant University to Build Research Capacity in Developing Countries." Department of Statistics First Year Experience Course, Virginia Tech, Blacksburg, VA, 2015.

37. **Vance, E.** "LISA 2020: Creating a Network of Statistical Collaboration Laboratories." University of Minnesota's Summer Institute in Biostatistics (SIBS) Seminar, remote via Skype, 2015.

38. **Vance, E.** "How Statistics Can Enable and Accelerate Research." Panel discussion at The Polytechnic, Ibadan, Nigeria, 2015.

39. **Vance, E**. "The Power and Impact of Statistical Collaboration." Panel discussion at the Federal School of Statistics, Ibadan, Nigeria, 2015.

40. **Vance, E.** "LISA 2020: How Stat Labs Can Make an Impact Now and in the Future." Department of Statistics First Year Experience Course, Virginia Tech, Blacksburg, VA, 2014.

41. **Vance, E.** "Seminar on Statistical Collaboration at Texas A&M." Department of Statistics Professional Internship Course, Texas A&M, College Station, TX, 2014.

42. **Vance, E.** "Using Video and the POWER Process to Improve Statistical Collaboration." School of Statistics Consulting Course, University of Minnesota, Twin Cities, Minneapolis, MN, 2014.

43. **Vance, E.** "The Importance of effective communication, LISA, and LISA 2020." Department of Statistics First Year Experience Course, Virginia Tech, Blacksburg, VA, 2013.

44. **Vance, E.** "Using Video and the POWER Process to Improve Statistical Collaboration." Department of Statistics Consulting Course, The Pennsylvania State University, State College, PA, 2013.

45. **Vance, E.** "Using Video and the POWER Process to Improve Statistical Collaboration." Department of Statistics Consulting Course, University of Georgia, Athens, GA, 2013.

46. **Vance, E.** "Statistics for the Humanities." Department of English graduate course 'Research Design in Rhetoric and Writing,' Virginia Tech, Blacksburg, VA, 2010.

47. **Vance, E.** "Thoughts on Statistical Collaboration." Department of Mathematics and Statistics Consulting Course, James Madison University, Harrisonburg, VA, 2010.

TEACHING EXPERIENCE

Associate Professor   2016 – present
University of Colorado Boulder, Department of Applied Mathematics   Boulder, CO

> I developed and co-teach (twice) AHUM 1825 "Inclusive, Interdisciplinary Data Science for All," to integrate data science and the humanities without requiring prior experience in either one. Students learn to use data analysis, statistics, and programming to answer questions of human importance, while applying the central humanities skills of source critique, attention to human motives, contextualization, and argument.

> I taught (once) APPM 1360 "Calculus 2 for Engineers," for undergraduate engineering students.

> I developed and taught (three times) STAT 2600, "Introduction to Data Science," for undergraduate statistics and applied mathematics students to learn how to import, tidy, explore, visualize, summarize, and model data as a member of a data science team and then communicate the results of these analyses to answer relevant questions and make decisions in R using reproducible workflows.

> I developed and teach (three times) STAT 4690/5690 (previously APPM 4505/5505), "Advanced Collaboration," for undergraduate and graduate applied mathematics students to learn advanced data science collaboration skills essential for their success as interdisciplinary collaborators.

> I developed and teach (eleven times) STAT 4680/5680 (previously APPM 4500/5500), "Statistical Collaboration," to teach undergraduate and graduate applied mathematics students professional skills essential for their success as interdisciplinary collaborators. Based on the pedagogical structure of *Team-based Learning*, students learn to communicate and collaborate based on course readings, in-class exercises, homework, and projects. Students work on 3-4 LISA projects each semester.

> I taught (once) APPM 8000, "Applied Mathematics Colloquium." I invited weekly speakers and then elicited feedback from the enrolled graduate students about the departmental colloquia.

Associate Research Professor   2015 – 2016
Virginia Tech, Department of Statistics   Blacksburg, VA

> I taught (twice) STA 5024, "Communication in Statistical Collaborations," which I developed to teach graduate statistics students non-technical skills essential for their success as collaborative statisticians. Based on the pedagogical structure of *Team-based Learning*, students learn to communicate and collaborate based on course readings, in-class exercises, homework, and projects.

Assistant Research Professor   2008 – 2014
Virginia Tech, Department of Statistics   Blacksburg, VA

> I taught (six times) STA 4024, STA 4984, STA 5024, and STA 5984. These are various versions of the course "Communication in Statistical Collaborations," which I developed to teach undergraduate and graduate statistics students essential non-technical skills. I developed the

courses to use the pedagogical methods of *Team-based Learning* to "flip" the classroom so students will communicate and collaborate with each other during in-class exercises.

Head Teaching Assistant 2007 – 2008
Duke University, Department of Statistical Science Durham, NC
> As Head TA I managed 12 TAs for "Introductory Statistics." I was the organizer and TA for "Statistical Science First Year Experience," and a TA for "Generalized Linear Models" and "Probability/Measure Theory."

Teaching Assistant 2004 – 2005
Duke University, Institute of Statistics and Decision Sciences Durham, NC
> I was a teaching assistant for "Generalized Linear Models," "Probability/Stat Models," "Statistics for Engineers," and "Introductory Statistics."

Summer Instructor 2003 and 2004
Duke University, Institute of Statistics and Decision Sciences Durham, NC
> As instructor for "Introductory Statistics" (twice), I was solely responsible for all lectures, laboratories, homeworks, quizzes, and exams.

SHORT COURSES AND NON-CONFERENCE WORKSHOPS (presenters shown in **bold**)

1. **Vance, E.** "How to Build and Sustain Effective Research Collaborations." LISA 2020 Collaboration workshop, SKUAST-K, India, December 2, 2021.

2. **Awe, O.O.,** Vance, E. "Data Science Workshop on R Programming." LISA 2020 Outreach and Engagement in collaboration with Institute of Computing and ICT at Ahmadu Bello University, Zaria, Nigeria, 2019.

3. **Vance, E.** "LISA Presents: Designing Surveys." LISA Short Course, University of Colorado Boulder, 2018.

4. **Vance, E.** "LISA 2020 Workshop on Essential Collaboration Skills." University of Colorado Boulder, 2017.

5. **Becker, S., Folberth, J., Driggs, D., Gronski, J., Heavener, N.**, Wiens, A.* and Vance, E. "Data Science Camp." Week-long summer camp track in data science for 13 high school students at the Northrop Grumman STEM Camp, Aurora, CO, 2017.

6. **Vance, E.** "Structuring Meetings and Reviewing Video." Workshop for members of the Statistical Consulting and Research Services, Montana State University, Bozeman, 2017.

7. **Macaluso, G.** and **Vance, E.** "Presenting Quantitative Information to the C-Suite." Professional development workshop at the Leeds School of Business, University of Colorado Boulder, 2016.

8. **Vance, E.** "Special Lecture on Statistical Consulting and Collaboration." Workshop at Kansas State University, Manhattan, Kansas, 2016.

9. **Vance, E.** "Statistical Collaboration Workshop." Obafemi Awolowo University Laboratory for Interdisciplinary Statistical Analysis and Collaboration (LISAC), Ile-Ife, Nigeria, 2015.

10. **Vance, E.** "Statistical Collaboration Workshop." School of Statistics and Mathematical Sciences, Hawassa University, Hawassa, Ethiopia, 2015.

11. **Vance, E.** "Statistical Collaboration Workshop." Sokoine University of Agriculture Laboratory for Interdisciplinary Statistical Analysis (SUALISA), Morogoro, Tanzania, 2015.

12. **Vance, E.** "A Discussion and Workshop on Statistical Collaboration." Department of Statistics, University of Ibadan, Ibadan, Nigeria, 2015.

13. **Vance, E.** "The Basics of Effective Statistical Collaboration." Department of Mathematics, Obafemi Awolowo University, Ile-Ife, Nigeria, 2015.

14. **Vance, E.** "Oficina (Workshop) Statistical Collaboration." University of Rio Grande do Norte (UFRN), Natal, Brazil, 2014.

15. **Vance, E.** "Designing Surveys." LISA Short Course, Virginia Tech, Blacksburg, VA, 2012.

16. **Vance, E**. "Designing Surveys and Interpreting the Results." LISA Short Course, Virginia Tech, Blacksburg, VA, 2012.

17. **Vance, E.** "Designing Surveys and Reporting the Results." AAAS Scientific Responsibility, Human Rights and Law Program, Washington, D.C., 2012.

18. **Vance, E.** "Analyzing Real Data." LISA Short Course, Virginia Tech, Blacksburg, VA, 2010.

19. **Vance, E., Seiss, M.*, Kensler, J.*** and **Maiti, D.*** "An Introduction to Data Collection and Statistical Analysis". LEPDN Statistics Workshop, Virginia Tech, Blacksburg, VA, 2009.

STUDENTS, POST-DOCS, AND PRE-DOCS ADVISED   (primary advisor unless noted)

At CU Boulder I have been the primary advisor for two postdocs, two M.S. students, and four PMD students in APPM. I have advised six undergraduates on UROP (undergraduate research) and other projects. I have been a member of the Ph.D. dissertation committees of six APPM students and one M.S. student as well as the Ph.D. dissertation committees of four other students in the departments of Environmental Studies, Integrated Physiology, Music Education, and Economics.

At my previous institution I was the primary advisor for two postdocs, one PhD student, two pre-docs, and four M.S. students. I was also a member of numerous M.S. student committees.

Name	Degree	Date	Role and/or dissertation/thesis/project title
Caitlin Berry	Ph.D.	2023	Ph.D. committee member/Research mentor
Ellery Galvin	Ph.D.	2023	Ph.D. advisor
Sandra Tredinnick	PMD	2023	Efficacy of Virtual Reality Training Algorithms for Long-Duration Space Flight
Shimian (Sam) Zhang	Ph.D.	2022+	Ph.D. committee member
Caden Ryals-Luneberg	PMD	2022	Supervisor for "Communication Strategies for LISA 2020"
Joseph Parks	PMD	2022	Changes in Political Affiliations and Views in Colorado
G. Kesler O'Connor	Ph.D.	2022	Ph.D. and comprehensive committee member for "Source Localization on Infection Networks"

Rayna Benzeev	Ph.D.	2022	Ph.D. committee member "Tropical Forest Restoration and Land Rights in Brazil" (Environmental Studies Program)
Joshua Sun	BA/BS	2022	Cannabis, Cardiovascular Risk Factors, and Hearing (UROP)
Johnny Tamanaha, Jr.	BA/BS	2022	TBL Tools (UROP)
Ethan Schacht	BA/BS	2022	Pediatric Autism and Hearing Loss Diagnoses (UROP)
Estelle Lindrooth	BA/BS	2022	Student Learning Outcomes for Intro Data Science Students
Tonya Pruit	M.A. (VT)	2022	Supervisor for practicum for "Higher Education Administration"
Ilana Trumble	Post-doc	2022	$Q_1Q_2Q_3$ Framework for Collaboration
Will Peterson	Ph.D. (in IPHY)	2021	(comprehensive exam committee member)
Jacob Holster	Ph.D. (in Music Ed.)	2021	(comprehensive exam committee member)
Julie Matthias	PMD	2021	How Gestures and Action Words Predict Early Language Development: An Investigation of Semantic Networks
Christopher Craig	PMD	2021	Adaptive management for tallgrass prairie ecosystems
Samuel Radack	PMD	2021	Using Logarithmic Regression to Predict Probability of Childhood Participation in Outdoor Activities
Eve DeLeon	BA	2021	LISA 2020 Communications
James Douthit	BA/BS	2021	LISA 2020 Newsletter and Website
Shalini Mahanthege	M.S.	2021	(committee member) Modeling Fractional Snow Cover Area Using Locally Varying Spatial Models
Scott Baker	M.S.	2020	Classification of Common Basketball Actions Using Player Tracking Data from the ShotTracker System
Ashton Wiens	Ph.D.	2020	(committee member) Using Gaussian Processes for Registration and Nonstationarity Emulation
Wenqi (Flora) Zhang	Ph.D.	2020	(committee member) Statistical Approaches to Assess High Frequency Variability of Solar Irradiance
Sihong Xie	Ph.D. (in Econ)	2019	(committee member) Essays on Estimation of a Regression Jump: a Generalized Reflection Approach
Michael Ramsey	M.S.	2019	Statistical approaches applied to hearing and acoustic research
Zach Mullen	Ph.D.	2018	(committee member) Theory and Methods for Large Spatial Data
Imran Khan	Post-doc	2017	Type IV Errors
Richard Ngaya	M.S. (VT)	2017	LISA 2020: Improving Agricultural Research in Tanzania Through Statistical Collaboration
Jingli Xing	Pre-doc	2015	--
Ayele Goshu	Post-doc	2014	The Impacts of LISA on its Student Statistical Collaborators
Benedicto Kazuzuru	Post-doc	2014	The Challenges of Statistical Collaboration For Developing Countries
O. Olawale Awe	Pre-doc	2014	LISA 2020: A Vision Towards Research Development in Nigeria
Emanuel Msemo	M.S.	2014	Impacting Agricultural Productivity in Tanzania Through the Wheels of Statistics

Mark Seiss	Ph.D.	2014	Improving Survey Methodology Through Matrix Sampling Design, Integrating Statistical Review Into Data Collection, and Synthetic Estimation Evaluation
John Mulheren	M.S.	2014	Modeling and Assigning Behaviors in Simulated Individuals
Mahafuzer Md. Chy	M.S.	2010	Modeling Volatility Index for Credit Default Swap Spread Changes Prior to Financial Market Crisis: Evidence from S&P

SELECTED PROFESSIONAL LEADERSHIP AND ACADEMIC SERVICE

Manuscript reviewer
Journal of Statistics and Data Science Education; Statistics Education Research Journal; The American Statistician; Annals of Applied Statistics; Technometrics; Statistics, Politics, and Policy; Statistical Methodology; Teaching Statistics; Journal of Statistical Theory and Practice; Journal of Educational and Behavioral Statistics; Statistics in Transition; Stat; PLOS ONE; Journal of Clinical and Translational Research; Data in Brief; The American Journal of Managed Care; International Journal of Environmental Research and Public Health; Urban Science; International Journal of Geo-Information; Sustainability; Entropy; OZCOTS Proceedings

Proposal reviewer
National Science Foundation (panelist for Division of Mathematical Sciences)

American Statistical Association (ASA) Leadership

Representative for Colorado/Wyoming Chapter, Council of Chapters	2019 – 2023
Member, ASA Conference on Statistical Practice Steering Committee	2013 – 2019

- Chair   2018 – 2019
- Vice-chair and Chair of the Face-to-Face subcommittee   2017 – 2018
- Chair of the Communication, Impact, and Career Development subcommittee   2015

Member, Committee on Applied Statisticians   2013 – 2018
Past-Chair, Section on Statistical Consulting   2016

- Chair of the section nominations committee

Chair, Section on Statistical Consulting   2015
Chair-elect, Section on Statistical Consulting   2014
Leader, ASA President's Initiative on Mentoring   2014 – 2015

- Leader of the 2015 JSM Mentoring program that matched 56 mentees with mentors
- Leader of the 2015 ASA Conference on Statistical Practice Mentoring program that matched 18 mentees with mentors
- Creator of the 2014 JSM Mentoring program that matched 53 mentees with mentors
- Creator of the 2014 ASA Conference on Statistical Practice Mentoring program that matched 28 mentees with mentors
- Co-creator of the 2013 and 2014 Committee on Applied Statisticians Mentoring programs that matched 16 and 12 mentees with mentors

Associate Editor, *The American Statistician*   2015 – 2016

- Co-editor of a special section on Mentoring in support of statisticians and their professional practice.

Faculty Advisor, International StatCom Network   2012 – 2015
Vice-chair, Statistics Without Borders   2013 – 2014

| Representative, Council of Sections | 2012 – 2014 |
| Member, Council of Sections nominations committee | 2013 |

International Statistical Institute (ISI) Leadership

Member, ISI Capacity Building Committee	2022 – present
Member, Elections Committee	2017 – present
Member, Int'l Year of Women in Statistics & Data Science Committee	2019 – 2021
Member, ISI Membership Retention Taskforce	2018 – 2021
Member, World Bank Trust Fund for Statistical Capacity Building	2018 – 2019
Member, ISI Statistical Capacity Building Taskforce	2017 – 2021

University of Colorado Boulder Leadership

Member, Advisory Board of Center for Research Data and Digital Scholarship	2017 – present
Affiliate Faculty, Digital Humanities Graduate Certificate	2017 – present
Reviewer, Research and Innovation Office Seed Grants	2018, 2019
Member, Global Strategy Committee	2017 – 2018
Member, CEAS Curriculum Committee	2017

Department of Applied Mathematics, University of Colorado Boulder Leadership

Member, Awards Committee	2021 – present
Member, Statistics and Data Science Steering Committee	2016 – 2020, 2022
Member and Chair, Prob/Stat Prelim Committee (7 times)	2017, 2018, 2019, 2021, 2023
Member, Undergraduate Committee	2018 – 2021
Chair and Co-chair, Colloquium Committee	2017 – 2018
Member, Graduate Committee	2016 – 2018
Post-tenure review and re-appointment committees	various

Virginia Tech Leadership

Vice-chair, Commission on Outreach and International Affairs	2015 – 2016
Chair, Alumni Outreach Excellence Award Committee	2016
Member, Alumni Outreach Excellence Award Committee	2015
Member, International Alumni Education, Outreach, and Research Awards Committee	2015
First research faculty member to become a member of the Faculty Senate	2008 – 2015
Member, Commission on Outreach and International Affairs	2014 – 2015
Member, University Council on International Affairs	2014 – 2016
Member, (Library) Dean's Advisory Council	2014 – 2016
Member, Academy of Faculty Service Review Committee	2014
Member, Commission on Faculty Affairs	2011 – 2014
Faculty Advisor, Brazilian Students Association	2011 – 2013
Member, Africa Regional Strategy Committee	2011 – 2012
Member, University Council	2010 – 2012
Member, IGEP Review Committee and Board	2010 – 2012

Department of Statistics, Virginia Tech Leadership

Member, Policies Committee	2014 – 2016
Member, Recruiting Committee	2013 – 2016
Speaker at Graduate Student Orientation	2011 – 2016

Member, Corporate Partners Advisory Board	2008 – 2016
Faculty Advisor, StatCom Chapter at Virginia Tech	2008 – 2016
Chair, Consulting and Collaboration Committee	2008 – 2016
Member, Renovations Committee	2011 – 2014
Chair, Hiring Committee for the Assistant Director of LISA	2010
Chair, Hiring Committee for the LISA Administrative Specialist	2009
Member, Hiring Committee for the LISA Secretary and Departmental Support position	2008
Organizer and co-creator of several social events including the First Year Float	2008 – 2016

Duke University Leadership

Member, Board of Trustees Undergraduate Affairs Committee	2006 – 2008
Member, Academic Council Student Affairs Committee	2006 – 2008
Member, Student Health Insurance Advisory Committee	2005 – 2008
Chair and Member, Young Trustee Screening Committee	2004 – 2007
Co–chair, Basketball Committee Grounds and Lottery	2004 – 2007
Representative, Graduate and Professional Student Council (GPSC)	2003 – 2007
Member, Student Services Committee	2005 – 2006
Member and President, Graduate Consultative Committee, Statistics	2002 – 2004, 2005 – 2006
Member, GPSC Social Committee	2003 – 2005
Lobbyist for Graduate Students, NAGPS Legislative Action Day	2004

Other Leadership and Service

External Examinator for M.Sc. Biostatistical Collaboration and Consulting Course, Stellenbosch University, South Africa	2022
External Reviewer of Kotebe Metropolitan University (Ethiopia) Statistics PhD Program	2021
Member, Advisory Committee for Center for Open Science Africa Initiative	2015 – 2016
Invited participant, NSF Mathematical Sciences Internship Workshop	2015

PROFESSIONAL MEMBERSHIPS

International Statistical Institute (ISI)	2013 – present
American Association for the Advancement of Science (AAAS)	2013 – present
Team-Based Learning Collaborative (TBLC)	2011 – present
Mu Sigma Rho, Statistics Honor Society (honorary member)	2008 – present
International Society for Bayesian Analysis (ISBA)	2008 – present
American Statistical Association (ASA)	2005 – present
Iota Delta Rho (IDR), Interdisciplinary Research Honor Society (honorary member)	2012 – 2016
Sigma Xi	2012 – 2016
American Association for Agricultural Education (AAAE)	2014 – 2015
American Evaluation Association (AEA)	2013 – 2014