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Professional Networks

[Orcid](#)
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Educational Qualifications

PhD – Dec 2006
Texas A&M University,
Interdisciplinary Engineering
Specialization in Ergonomics

MS – May 1992
Texas A&M,
Industrial Engineering
Specialization in Human Factors
and Ergonomics

BS – May 1990
Texas A&M,
Bioengineering Specialization in
Human Factors

CPE – Oct 1994
Board of Certification in
Professional Ergonomics, Inc.

Mark Benden, PhD, CPE

Department Head for Environmental & Occupational Health,
School of Public Health
Texas A&M Health Science Center

Impacts

Contributions to Ergonomic Health and Safety

- Research has resulted in the development of the ANSI/BIFMA X6.1-2012 Educational Seating Standard, the ANSI/BIFMA G1 Ergonomic Standard, the improvement of the ANSI/BIFMA X5.1-2012 Seating Standard and the creation of the ANSI/BIFMA X5.11 Large Occupant Office Seating Standard.
- First patent, a 4-way adjustable office chair arm (1990) was the top approach to ergonomic chair arms for decades.
- According to Patent Vector, his 25 patented inventions are some of the most highly cited patents in the field of ergonomics and **rank above 82% of ALL US patents ever issued for impact**, with an estimated lifetime value of over \$2 billion.

Stand-Biased Desk Interventions in Children and Adults

- Developed the theory of *Technology Induced Inactivity* for children and adults to describe effects of sedentariness in modern-day life on health outcomes.
- Discovered novel methods of monitoring children activity in situ by use of fNIRS in schools as part of a 450-student intervention over two academic calendar years. His work in this area has received international acclaim and his publications on this topic are in the top 1% of altmetrics.
- His top paper on adult sedentarianism is still #1 in the *IIE Transactions on Occupational Ergonomics and Human Factors* with an Altmetric score of 1010 - the top 0.002 percentile of articles all-time and #18 for TAMU all-time.

Technology Advancements in Physical Activity and Energy Expenditure Measurement

- Many of his early designs were breakthroughs in the field of ergonomics and are now industry standards that have been deployed in millions of units of products sold.
- Pioneered objective mass data collection methods for employers with sensors on desks and computers, completely changing the potential for understanding the effectiveness of interventions, establishing a dose response rate, and office ergonomic monitoring.
- Consistently pushes the field of wearable monitoring for physical activity to new methods, techniques and tools by developing and testing new sensors.

Professional Experience

Texas A&M Health Science Center, School of Public Health, Environmental & Occupational Health Department	Sep 2015 to present
<i>Department Head, Full Professor & Director of the Ergonomics Center (dba Center for Worker Health as of 7/24)</i>	
<i>Interim Department Head Health Promotion & Community Health Sciences Dept</i>	
<i>Full Professor, Industrial & Systems Engineering Department</i>	
<i>Full Professor, Multi-Disciplinary Engineering Department</i>	
<i>Faculty Fellow, Center for Remote Health Technologies & Systems</i>	
<i>Faculty Fellow, Center for Community Health Development</i>	
<i>Faculty Fellow, Center for Health System & Design</i>	
<i>Faculty Fellow, Center for Population Health & Aging</i>	
<i>Associate Professor & Director of the Ergonomic Center</i>	Sep 2013 - Sep 2015
<i>Assistant Professor & Co-Director of the Ergonomics Center</i>	Jul 2008 – Sep 2013
HumanateDigital, Inc., (Faculty led Startup Company)	Sep 2022 to Present
<i>CTO & Co-Founder</i>	
Stand2Learn, Inc., (Faculty led Startup Company)	Sep 2011 to Jan 2018
<i>CEO & Founder</i>	
<i>Majority Share Holder</i>	
Texas A&M Health Science Center, School of Public Health, Environmental & Occupational Health Department	Sep 2013 to Sep 2015
<i>Associate Professor & Director of the Ergonomics Center</i>	
Texas A&M Health Science Center, School of Rural Public Health, Environmental & Occupational Health Department	Jul 2008 to Sep 2013
<i>Assistant Professor & Co-Director of the Ergonomics Center</i>	
Neutral Posture, Inc.	Oct 1998 to Jun 2008
<i>Executive Vice President of Engineering Development & Sales</i>	
Neutral Posture Ergonomics, Inc.	Feb 1998 to Oct 1998
<i>Director of Engineering and Development</i>	
Johnson & Johnson Safety & Industrial Hygiene	Mar 1997 to Feb 1998
<i>Staff Ergonomic Engineer</i>	
<i>Franchise Safety Manager, Cordis, Inc.</i>	
Johnson & Johnson Safety & Industrial Hygiene	May 1994 to Mar 1997

Senior Ergonomic Engineer

ETHICON, Inc. May 1992 to May 1994
Ergonomic Engineer

M. E. Benden Company Sept 1988 to present
Ergonomic Design Consultant
Expert Witness

Pathway Industries, Inc. Jun 1991 to Jun 1992
Ergonomic Consultant

United State Army Reserve and Texas Army National Guard Dec 1985 to Dec 1993
First Lieutenant – last rank before moving to Inactive Reserve

Funded Research

Seedling Intramural Grant TAMU HSC Jun 2024 to Jun 2025
Contract: \$75,000
PI: Benden
Emergency Procedures Development

PCC/TTI April 2023-Dec 2023
Assessment of Temporary Portable Rumble Strips
And Retrieval Methods
TTI grant: \$75,000
PI: Benden

NIOSH - CDC Mar 2023 to Dec 2028
Occupational Safety and Health Training Center
NIOSH Grant: \$750,000
PI: Benden

General Motors Dec 2022 to Jun 2024
Contract: \$180,000
PI: Benden
Ergonomic Evaluation of the Arlington assembly plant production line

Seedling Intramural Grant TAMU HSC Jan 2023 to Jan 2024
Contract: \$100,000
PI: Benden
Digital Human Clinical receptionist

Seedling Intramural Grant TAMU HSC Jan 2023 to Jan 2024

Contract: \$150,000

Co- PI: Benden

College of Nursing digital human build for cancer training in rural settings

USPHS Grant

Mar 2022 to Mar 2023

Contract: \$380,000

PI: Benden

Training Modernization in partnership with UNMC

Southwest Center for Occupational and Environmental Health

Education and Research – Pilot Project

Jun 2021 to Jul 2022

Contract: \$10,000

PI: Benden

Musculoskeletal discomfort, physical activity, and workstation type: A follow-up study of traditional office workers after long-term remote work

T3 Intramural Grant TAMU

Mar 2021 to Dec 2022

Contract: \$30,000

Co- PI: Benden

Autonomous Vehicles for the Elderly

Clapp & Lauinger LLP

Mar 2018 to May 2019

Contract: \$225,000

PI: Benden

Research on Suitable Seating for Clerks in California

T3 Intramural Grant TAMU

Mar 2019 to Dec 2020

Contract: \$30,000

PI: Benden

Opioid Detection Software and Hardware

BP

Mar 2019 to Dec 2020

Contract: \$11,000

PI: Benden

Computer Workstation Remote Worker Study

Varidesk, Inc.

Mar 2018 to Feb 2021

Contract: \$75,000

PI: Benden

Sit-Stand Desk Utilization Research

TAMU Research Development Fund

Apr 2017 to present

Intramural Funding: \$1,200,000

PI: Palma; Role: Co - PI

Integrating Biometric Responses to Human Behavior

NIOSH - CDC Occupational Safety and Health Training Center NIOSH Grant: \$750,000 <i>PI: Benden</i>	Mar 2018 to Dec 2023
TAMU Center for Remote Health and Systems Technology Contract: \$10,000,000 <i>PI: Cote; Role: Co-I Education Thrust for 3+2 BSE MPH Occ NSF ERC PATHS-UP</i>	Aug 2017 to Aug 2022
TAMU Health Science Center Occupational Health & Safety Program NIOSH Grant: \$400,000 <i>PI: Benden</i>	Jul 2014 to Dec 2017
ODOT Contract: \$65,000 <i>PI: Pickens; Role: Co-PI Ergonomic Evaluation of Ohio Department of Transportation Maintenance Workers</i>	Sep 2016 to Dec 2017
Varidesk, Inc. Contract: \$50,000 <i>PI: Benden Gamification of Software Monitored Results to Increase the Usage of Sit-Stand Desks</i>	Sep 2017 to Dec 2017
Office of Ergonomic Research Contract: \$35,000 <i>PI: Benden Use of Sit-Stand Workstations: Does the Implementation of Behavioral Interventions Increase the Usage of Sit-Stand Desks?</i>	Jan 2016 to Dec 2017
Frito Lay Contract: \$5,000 <i>PI: Benden Distribution Center Ergonomic Evaluation</i>	Jan 2017 to May 2017
Virgi & Associates Contract: \$20,000 <i>PI: Benden Sit-Stand Checkout Clerks Evaluation</i>	Jun 2017 to Aug 2017
Clapp & Lauinger LLP Contract: \$25,000 <i>PI: Benden Sit-Stand 3D Rendering and Biomechanical Review</i>	Jun 2017 to Aug 2017

Haworth Contract: \$5,000 <i>PI: Benden</i> <i>Expert Report on State of the Science in Sedentary Behavior</i>	Feb 2017 to Aug 2018
CDC to Positive Motion Grant: In-Kind <i>PI: Westbrook; Role: Subcontract PI</i> <i>NIH Commercialization Accelerator Program Grant – Marketing Consultations</i>	Sep 2017 to Sep 2018
Herman Miller Contract: \$65,000 <i>PI: Mehta; Role: Co-I</i> <i>Cognitive ergonomics assessment of office furniture</i>	Feb 2017 to Sep 2017
Holly Frontier Contract: \$35,000 <i>PI: Benden</i> <i>Ergonomic assessment of Asphalt Refineries in New Mexico</i>	Jan 2016 to Dec 2016
Johnson & Johnson Contract: \$5,000 <i>PI: Benden</i> <i>Ergonomics Buying Guide</i>	Feb 2017 to Dec 2017
Linak Contract: \$25,000 <i>PI: Benden</i> <i>Software Support for Ergonomic Sit-Stand Study</i>	Jan 2016 to Sep 2016
TAMUS Chancellor's Office Grant: \$25,000 <i>PI: Benden</i> <i>Oil & Water Sourcing</i>	Feb 2017 to Aug 2017
CDC to Positive Motion Grant: \$1,000,000 <i>PI: Westbrook; Role: Subcontract PI</i> <i>Development of a Stand-Biased School Desk to Reduce Childhood Obesity</i>	Sep 2013 to Sep 2016
ExxonMobil Contract: \$25,000 <i>PI: Benden</i> <i>Cataloging Modern Office Jobs via ACGIH, TLV-HAL Ratings</i>	Apr 2013 to Apr 2014

NIH – Eunice Kennedy Shriver National Institute of Child Health & Human Development Jan 2012 to Dec 2012
Grant: \$400,000
PI: Benden
Brazos Partnership for Childhood Obesity Research

CDC to Positive Motion Sep 2011 to Sep 2012
Grant: \$150,000
PI: Wilke; Role: Subcontract PI
Development of a Stand-Biased School Desk to Reduce Childhood Obesity

Texas Transportation Institute Jan 2010 to May 2011
University Transportation Center for Mobility
Grant: \$105,000
PI: Benden
Teen Driver Cell Phone Blocker

United Way Brazos Valley Jun 2009 to May 2010
Grant: \$5,000
PI: Benden
Sit-Stand Classroom Project

TAMU Health Science Center Jun 2010 to Jul 2014
Occupational Health & Safety Program
NIOSH Grant: \$400,000
PI: Congleton; Role: CO-I

DHHS CDC – National Center for Chronic Disease Prevention and Health Promotion Prevention Research Center Feb 2009 to Sep 2009
For Community Health Development
Grant: \$5,000
PI: McLeroy; Role: PI
Investigational pilot grant on Ambicycle development and use

Publications

Peer Reviewed Journal Publications

59. Temitope Olokunlade, Ledric D. Sherman, Mark E. Benden, Gang Han, Caroline D. Bergeron, Matthew Lee Smith, Incident and recurrent falls among non-Hispanic Black and Hispanic men with chronic conditions, *Journal of Safety Research*, Volume 95, 2025, Pages 416-423, ISSN 0022-4375, <https://doi.org/10.1016/j.jsr.2025.10.021>.

58. Vanessa Nasr, Mark Benden, Maryam Zahabi, An approach for assessing usability and accessibility of assistive technology for persons with disabilities, *Applied Ergonomics*, Volume 129, 2025, 104581, ISSN 0003-6870, <https://doi.org/10.1016/j.apergo.2025.104581>

57. Jennifer C. Palmer, Annabel L. Davies, Francesca Spiga, Berit L. Heitmann, Russell Jago, Carolyn D. Summerbell, Julian P.T. Higgins, Arne Astrup, Valter Cordeiro Barbosa Filho, Mark E. Benden, et al. Do the effects of interventions aimed at the prevention of childhood obesity reduce inequities? A re-analysis of randomized trial data from two Cochrane reviews, *eClinicalMedicine*, Volume 81, 2025, 103130, ISSN 2589-5370, <https://doi.org/10.1016/j.eclim.2025.103130>

56. Olokunlade, Temitope; Benden, Mark E.; Han, Gang; Sherman, Ledric; Oloruntoba, Oluyomi; Jessa, Igwesiri; Igbo, Author; Nwadije, Johncross; Mustapha, Toriq; Nwupo, Adaeze; Ogunbamowo, Adetoun; and Smith, Matthew L. (2024) "Fall-Related Risk Factors among Older Men: A Scoping Review," *Health Behavior Research*: Vol. 7: No. 4. <https://doi.org/10.4148/2572-1836.1264>

55. Zhu, Tingyu, Lan Xue, Carmen Tekwe, Keith Diaz, Mark Benden, and Roger Zoh. "Clustering Functional Data With Measurement Errors: A Simulation-Based Approach." *Statistics in Medicine* (2024) <https://doi.org/10.1002/sim.10238>

54. K.L. Wasserstein, M.L. Shah-Hartman, W. Gavin Luzier, E.W. Schaefer, M.E. Benden, D.L. Sekhar, Parent and child opinion on the use of standing desks in the classroom, *Preventive Medicine Reports* (2024), doi: <https://doi.org/10.1016/j.pmedr.2024.102875>

53. Junho Park, Maryam Zahabi, He Huang, Mark Benden, A novel approach for predicting usability of upper limb prostheses, *Applied Ergonomics*, Volume 120, 2024, 104344, ISSN 0003-6870, <https://doi.org/10.1016/j.apergo.2024.104344>

52. Lynn Salzar ,Tricia; Aguilar ,Kaysey N.; Smith ,Matthew Lee; Pickens ,Adam; Han, Gang; Anderson ,Grace; Benden ,Mark E.(2024) Stand-Capable Workstations Reduce Occupational Sedentary Time Among Administrative Workers doi: 10.1080/24725838.2024.2362720; IIE Transactions on Occupational Ergonomics and Human Factors; <https://doi.org/10.1080/24725838.2024.2362720>

51. Honvoh Gilson D. , Zoh Roger S. , Gupta Anand , **Benden Mark E.** , Tekwe Carmen D. Modeling approaches for assessing device-based measures of energy expenditure in school-based studies of body weight status, *Frontiers in Applied Mathematics and Statistics*, Vol.10, 2024 <https://www.frontiersin.org/journals/applied-mathematics-and-statistics/articles/10.3389/fams.2024.1399426> DOI=10.3389/fams.2024.1399426 ISSN=2297-4687

50. Kaysey N. Aguilar, Matthew Lee Smith, Stephanie C. Payne, Hongwei Zhao, **Mark Benden**, Digital human ergonomics training for remote office workers: Comparing a

novel method to a traditional online format, *Applied Ergonomics*, Volume 117, 2024, 104239, ISSN 0003-6870, <https://doi.org/10.1016/j.apergo.2024.104239>.

49. Junho Park, Maryam Zahabi, Xi Zheng, Marcia Ory, **Mark Benden**, Anthony D. McDonald & Wei Li (2024) Automated vehicles for older adults with cognitive impairment: a survey study, *Ergonomics*, 67(6), 831-848. DOI: [10.1080/00140139.2024.2302020](https://doi.org/10.1080/00140139.2024.2302020)

48. Roh T, Esomonu C, Hendricks J, Aggarwal A, Hasan NT, **Benden M.** (2023) Examining workweek variations in computer usage patterns: An application of ergonomic monitoring software. *PLOS ONE* 18(7): 287976. <https://doi.org/10.1371/journal.pone.0287976>

47. Junho Park, Maryam Zahabi, Skylar Blanchard, Xi Zheng, Marcia Ory, **Mark Benden**, A novel autonomous vehicle interface for older adults with cognitive impairment, *Applied Ergonomics*, Volume 113, 2023, 104080, ISSN 0003-6870, <https://doi.org/10.1016/j.apergo.2023.104080>

46. Kesiena O, Atarere J, **Benden M.** The impact of multiple regions of pain and work-life balance among healthcare workers. *Work*. 2023;75(1):357-362. doi: 10.3233/WOR-211239. PMID: 36591670.

45. Matthew Smith, Chung Lin Kew, Caroline Bergeron, Martha Parker, Oluyomi Oloruntoba, Kaysey Aguilar, Mark Benden, Ashley Merianos, CORRELATES OF JOB SATISFACTION AMONG FULL-TIME EMPLOYED OLDER ADULTS WITH CHRONIC CONDITIONS, *Innovation in Aging*, Volume 6, Issue Supplement_1, November 2022, Page 680, <https://doi.org/10.1093/geroni/igac059.2500>

44. Sarnosky K, **Benden M.**, Sansom G, Cizmas L, Regan AK. Impact of workplace displacement during a natural disaster on computer performance metrics: A 2-year interrupted time series analysis. *Work*. 2022;71(2):465-470. doi: 10.3233/WOR-210707. PMID: 35095008; PMCID: PMC8925109.

43. **Benden, M.**, Mehta, R., Pickens, A. *et al.* Health-related consequences of the type and utilization rates of electronic devices by college students. *BMC Public Health* 21, 1970 (2021). <https://doi.org/10.1186/s12889-021-11975-3>; <https://rdcu.be/cA5Sp>

42. William D. Johnson, S. Camille Peres, **Mark E. Benden**, Ranjana K. Mehta, Adam Pickens, Matthew Lee Smith, Noelle Sweany, Mallory A. Johnson, Lingual and non-lingual safety training methodology effectiveness: Does language of origin impact effectiveness, *International Journal of Industrial Ergonomics*, Volume 86, 2021, 103183, ISSN 0169-8141,

41. Kesiena O, Ajayi KV, Rene A, **Benden M.** Sociodemographic and work-related predictors of chronic lower back pain in the United States: the 2018 National Health Interview Survey data. *Public Health*. 2021 Aug 1;198:30-34. doi: 10.1016/j.puhe.2021.06.015. Epub ahead of print. PMID: 34348193.

40. Sarnosky, K., **Benden, M.**, Cizmas, L., Regan, A., & Sansom, G. "Remote Work and the Environment: Exploratory Analysis of Indoor Air Quality of Commercial Offices and the Home Office." *International Journal of Env. Mon. and Analysis*. (2021) ISSN Print: 2328-7659

39. Juha Baek , Bita A. Kash , Xiaohui Xu , **Mark Benden** , Jon Roberts & Genny Carrillo (2020): Pediatric asthma hospitalization: individual and environmental characteristics of high utilizers in South Texas, *Journal of Asthma*, DOI: 10.1080/02770903.2020.1827424

38. Goodrich, K., **Benden, M.**, Munch, J. and Wamwara, W. (2020), "Will college students take a stand? Effects of health orientations on purchase decision factors for standing desks", *Journal of Product & Brand Management*, Vol. 30 No. 7, pp. 949-963. <https://doi.org/10.1108/JPBM-07-2019-2481>

37. Baek, J.; Kash, B.A.; Xu, X.; **Benden, M.**; Roberts, J.; Carrillo, G. Effect of Ambient Air Pollution on Hospital Readmissions among the Pediatric Asthma Patient Population in South Texas: A Case-Crossover Study. *Int. J. Environ. Res. Public Health* **2020**, *17*, 4846.

36. Baek, J.; Kash, B.A.; Xu, X.; **Benden, M.**; Roberts, J.; Carrillo, G. Association between Ambient Air Pollution and Hospital Length of Stay among Children with Asthma in South Texas. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3812

35. Rhee, J., & **Benden, M. E.** (2020). Stand-Biased Desk Intervention on Sleep Quality of High School Students: A Pilot Study Using Tri-Axial Accelerometry. *International Journal of Environmental Research and Public Health*, *17*(1), 37. <https://doi.org/10.3390/ijerph17010037>

34. Sharma, P. P., Mehta, R. K., Pickens, A., Han, G., & **Benden, M. E.** (2019). Smart Software Can Increase Sit-Stand Desk Transitions During Active Computer Use. *International Journal of Environmental Research and Public Health*, *16*(13), 2638. <https://doi.org/10.3390/ijerph16132438>

33. Tekwe, C. D., Zoh, R., Yang, M., Carroll, R., Honvoh, G., Allison, D., **Benden, M. E.**, & Xue, L. (2019). Instrumental variable approach to estimating the scalar-on-function regression model with measurement error with application to energy expenditure assessment in childhood obesity. *Statistics in Medicine*, *38*(20), 3764-3781. <https://doi.org/10.1002/sim.8179>

32. Garrett, G., Zhao, H., Pickens, A., Mehta, R., Preston, L., Powell, A., & **Benden, M. E.** (2019). Computer-based Prompt's impact on postural variability and sit-stand desk usage behavior; a cluster randomized control trial. *Applied Ergonomics*, 79, 17-24. <https://doi.org/10.1016/j.apergo.2019.04.003>.

31. Shortz, A., Mehta, R., Peres, S. C., **Benden, M. E.**, & Zheng, Q. (2019). Development of the Fatigue Risk Assessment and Management in High-Risk Environments (FRAME) Survey: A Participatory Approach. *International Journal of Environmental Research and Public Health*, 16(4), 522. <https://doi.org/10.3390/ijerph16040522>

30. Sharma, P., **Benden, M. E.**, Mehta, R. K., Pickens, A., & Han, G. (2018). A Quantitative Evaluation of Electric Sit-Stand Desk Usage: 3-Month *In-Situ* Workplace Study. *ISSE Transactions on Occupational Ergonomics and Human Factors*, 6(2), 76-83. <https://doi.org/10.1080/24725838.2018.1521351>

29. Sharma, P., Mehta, R. K., Pickens, A., Han, G., & **Benden, M. E.** (2018). Sit-Stand Desk Software Can Now Monitor and Prompt Office Workers to Change Health Behaviors. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 61(5), 816-824. <https://doi.org/10.1177/0018720818807043>

28. Towne, S. D. Jr., Li, Y., Lee, S., Smith, M. L., Han, G., Quinn, C., Du, Y., **Benden, M. E.**, & Ory, M. G. (2018). Physical activity and associated medical cost savings among at-risk older adults participating a community-based health & wellness program. *PLOS One*. <https://doi.org/10.1371/journal.pone.0198239>

27. Towne, S. D. Jr., Ory, M. G., Smith, M. L., Peres, S. C., Pickens, A., Mehta, R., & **Benden, M. E.** (2017). Accessing physical activity among young adults attending a university: the role of sex, race/ethnicity, technology use, and sleep. *BMC Public Health*, 17, 721. <https://doi.org/10.1186/s12889-017-4757-y>

26. Osofundiya, O., **Benden, M. E.**, Dowdy, D., & Mehta, R. K. (2016). Obesity-specific neural cost of maintaining gait performance under complex conditions in community-dwelling older adults. *Clinical Biomechanics*, 35, 42-48. <https://doi.org/10.1016/j.clinbiomech.2016.03.011>

25. Wendel, M., **Benden, M. E.**, Zhao, H., & Jeffery, C. (2016). Stand-Biased Versus Seated Classrooms and Childhood Obesity: A Randomized Experiment in Texas. *American Journal of Public Health*, 106(10), 1849-1854. <https://doi.org/10.2105/AJPH.2016.303323>

24. Miller, K. E., **Benden, M. E.**, Shipp, E. M., Pickens, A., Wendel, M. L., Pronovost, P. J., & Watts, B. V. (2016). Predicting violent behavior in clinical settings: a case-control study of a mental health inpatient unit. *Journal of Healthcare Protection Management*, 32(1), 106-119. <https://www.ncbi.nlm.nih.gov/pubmed/26978965>

23. Marsalia, A. C., Ferris, T. K., **Benden, M. E.**, & Zheng, Q. (2015). Evaluation of Vibrotactile Warning Systems for Supporting Hazard Awareness and Safety of Distracted Pedestrians. *IIE Transactions on Occupational Ergonomics and Human Factors*, 4(4), 222-235. <https://doi.org/10.1080/21577323.2016.1214767>

22. Pickens, A., **Benden, M. E.**, Schneider, D. E., & Zhao, H. (2016). Use of Stand-Biased Desks to Reduce Sedentary Time in High School Students: A Pilot Study. *International Journal of Child Health and Nutrition*, 5, 75-78. <http://dx.doi.org/10.6000/1929-4247.2016.05.02.4>

21. Garrett, G., **Benden, M. E.**, Mehta, R., Pickens, A., Peres, C. S., & Zhao, H. (2016). Call Center Productivity Over 6 Months Following Standing Desk Intervention. *IIE Transactions on Occupational Ergonomics and Human Factors*, 4(2-3), 188-195. <https://doi.org/10.1080/21577323.2016.1183534>

20. Mehta, R. K., Shortz, A. E., & **Benden, M. E.** (2018). Standing Up for Learning: A Pilot Investigation on the Neurocognitive Benefits of Stand-Biased School Desks. *International Journal of Environmental Research and Public Health*, 15(3), 532. <https://doi.org/10.3390/ijerph15030532>

19. Hinckson, E., Salmon, J., **Benden, M. E.**, Clemes, S. A., Sudholz, B., Barber, S. E., Aminian, S., & Ridgers N. D. (2016). Standing Classrooms: Research and Lessons Learned from Around the World. *Sports Medicine*, 46, 977-987. <https://doi.org/10.1007/s40279-015-0436-2>

18. Pickens, A. W., Kress, M. M., **Benden, M. E.**, Zhao, H., Wendel, M., & Congleton, J. J. (2016). Stand-capable desk use in a call center: a six-month follow-up pilot study. *Public Health*, 135, 131-134. <https://doi.org/10.1016/j.puhe.2015.10.024>

17. Bellingar, T. A., & **Benden, M. E.** (2015). New ANSI/BIFMA Standard for Testing of Educational Seating. *Ergonomics in Design: The Quarterly of Human Factors Applications*, 23(2), 23-27. <https://doi.org/10.1177/1064804613513899>

16. Dornhecker, M., Blake, J. J., **Benden, M. E.**, Zhao, H., & Wendel, M. (2015) The Effect of Stand-biased Desks on Academic Engagement: An Exploratory Study. *International Journal of Health Promotion and Education*, 53(5), 271-280. <https://doi.org/10.1080/14635240.2015.1029641>

15. Paterson, C., Miller, K., **Benden, M. E.**, Shipp, E., Pickens, A., Wendel, M., & Pronovost, P. (2014). The Safe Day Call: Reducing Silos in Health Care Through Frontline Risk Assessment. *The Joint Commission Journal on Quality and Patient Safety*, 40(10), 476-480. [https://doi.org/10.1016/S1553-7250\(14\)40061-8](https://doi.org/10.1016/S1553-7250(14)40061-8)

14. **Benden, M.**, Zhao, H.; Jeffrey, C.E.; Wendel, M.L.; Blake, J.J. The Evaluation of the Impact of a Stand-Biased Desk on Energy Expenditure and Physical Activity for Elementary School Students. *Int. J. Environ. Res. Public Health* 2014, *11*, 9361-9375.

13. **Benden, M. E.**, Pickens, A., Shipp, E., Perry, J., & Schneider, D. (2013). Evaluating a school based childhood obesity intervention for posture and comfort. *Health*, *5*(8), 54-60. <http://dx.doi.org/10.4236/health.2013.58A3008>

12. **Benden, M. E.**, Smith, M. L., Henry, M., & Congleton, J. J. (2012). Reviewing Four Decades of Cell Phone Use while Driving Literature (1970-2010): An Emphasis on Texting Behaviors, Parental Perceptions, and Methods of Control. *Journal of Health Behavior and Public Health*, *2*(2), 20-26.
<http://www.scopus.com/inward/record.url?eid=2-s2.0-84864821820&partnerID=MN8TOARS>

11. Miller, K., **Benden, M. E.**, Pickens, A., Shipp, E., & Zheng, Q. (2012). Ergonomics principles associated with laparoscopic surgeon injury/illness. *The Journal of the Human Factors and Ergonomics Society*, *54*(6), 1087-1092.
<https://doi.org/10.1177/0018720812451046>

10. **Benden, M. E.**, Wendel, M. L., Jeffery, C. E., Zhao, H., & Morales, M. L. (2012). Within-Subjects Analysis of the Effects of a Stand-Biased Classroom Intervention on Energy Expenditure. *Journal of Exercise Physiology*, *15*(2), 9-19

9. **Benden, M. E.**, Miller, K., Wilke, E., & Ibarra, E. (2012). A New Method for Selecting the Best Design. *Ergonomics in Design: The Quarterly of Human Factors Applications*, *20*(1), 11-17. <https://doi.org/10.1177/1064804611428927>

8. Dickerson, J. B., Smith, M. L., **Benden, M. E.**, & Ory, M. G. (2011). The association of physical activity, sedentary behaviors, and body mass index classification in a cross-sectional analysis: are the effect homogenous? *BMC Public Health*, *11*, 926.
<https://doi.org/10.1186/1471-2458-11-926>

7. Smith, M. L., **Benden, M. E.**, & Lee, C. (2011). Promoting active communities in a culture of distracted driving. *Preventing Chronic Disease*, *9*.
<http://dx.doi.org/10.5888/pcd9.110212>

6. **Benden, M. E.**, Mancuso, L., Zhao, H., & Pickens, A. (2011). The Ability of the SenseWear® Armband to Assess a Change in Energy Expenditure in Children While Sitting and Standing. *Journal of Exercise Physiology online*, *14*(3).
<http://www.scopus.com/inward/record.url?eid=2-s2.0-79960771946&partnerID=MN8TOARS>

5. Blake, J., **Benden, M. E.**, & Wendel, M. (2012). Using Stand/Sit Workstations in Classrooms: Lessons Learned From a Pilot Study in Texas. *Journal of Public Health Management and Practice*, *18*(5), 412-415.
<https://doi.org/10.1097/phh.0b013e3182215048>

4. **Benden, M. E.**, Congleton, J. J., & Fink, R. (2011). An In Situ Study of the Habits of Users That Affect Office Chair Design and Testing. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 53(1), 38-49. <https://doi.org/10.1177/0018720810396506>

3. **Benden, M. E.**, Blake, J. J., Wendel, M. L., & Huber, J. C. Jr. (2011). The Impact of Stand-Biased Desks in Classrooms on Calorie Expenditure in Children. *American Journal of Public Health*, 101(8), 1433-1436. <https://doi.org/10.2105/AJPH.2010.300072>

2. **Benden, M. E.**, & Pickens, A. (2009). Evaluation day: measuring office ergonomics training can show impact. *Industrial Engineer*, 41(9).

1. **Benden, M. E.** (1994). Creating the Painless Inspection Station: Reduction in cumulative trauma disorders. *Ergonomics in Design: The Quarterly of Human Factors Applications*, 2(3), 22-29. <https://doi.org/10.1177/106480469400200306>

Published Data Sets

Salzar, Tricia; Anderson, Grace; Smith, Matthew; Pickens, Adam; Han, Gang; Benden, Mark (2022): HSC Complete Dataset. figshare. Dataset. [https://urldefense.com/v3/_https://doi.org/10.6084/m9.figshare.19911547.v1_!!KwNVnqRv!HGLZMOGQrGBQlSwrw9CFqMfIR8aoIOOfx03Q9YNXkF5vi8AO6B2fJv5WceYWImFfKXBzDvcacYro103JoKQ7-HCXnUY\\$](https://urldefense.com/v3/_https://doi.org/10.6084/m9.figshare.19911547.v1_!!KwNVnqRv!HGLZMOGQrGBQlSwrw9CFqMfIR8aoIOOfx03Q9YNXkF5vi8AO6B2fJv5WceYWImFfKXBzDvcacYro103JoKQ7-HCXnUY$)

Salzar, Tricia; Benden, Mark (2020): OES_RSI Dataset. figshare. Dataset. [https://urldefense.com/v3/_https://doi.org/10.6084/m9.figshare.12753545.v1_!!KwNVnqRv!HGLZMOGQrGBQlSwrw9CFqMfIR8aoIOOfx03Q9YNXkF5vi8AO6B2fJv5WceYWImFfKXBzDvcacYro103JoKQ7eDysD_U\\$](https://urldefense.com/v3/_https://doi.org/10.6084/m9.figshare.12753545.v1_!!KwNVnqRv!HGLZMOGQrGBQlSwrw9CFqMfIR8aoIOOfx03Q9YNXkF5vi8AO6B2fJv5WceYWImFfKXBzDvcacYro103JoKQ7eDysD_U$)

Books & Book Chapters

Benden, M. E., & Smith, M. L. (2020). Student drop-off/pickup safety. In D.C. Wiley & A. C. Cory (Eds.), *Encyclopedia of School Health*. Sage Publications, Inc.

Benden, M. E. (2008). *Could You Stand to Lose? Weight Loss Secrets for Office Workers* (2nd ed.). Trinity River Publishing

Benden, M. E. *Could You Stand to Lose? Weight Loss Secrets for Office Workers* (1st ed.). Trinity River Publishing

Benden, M. E. (2001). Use of Three-Dimensional Fabric Yields Ergonomics Benefits in Upholstery Work. In D. Alexander & R. Rabourn (Eds.) *Applied Ergonomics* (pp. 326-332). CRC Press.

Benden, M., & Smith, M.L. (2013). Student drop-off/pick-up safety. In Wiley, D. C. & Cory, A.C. (Ed.). *Encyclopedia of School Health*. Sage Publications: Thousand Oaks, CA. ISBN: 9781461459989

Published Technical Reports & Editorials

Finley, M. D., Theiss, L., Ulman, G. L., Pickens, A., **Benden, M.**, & Jenkins, J. (2017). *Evaluation of Safety Practices for Short Duration Work Zones* (State Job Number 135201, Final Report). The Ohio Department of Transportation, Office of Statewide Planning & Research. <https://ohiomemory.org/digital/collection/p267401ccp2/id/15346>

Benden, M., Fink, R., & Stafford, J. (2012). *Teen Driver Cell Phone Blocker* (Final Report; UTCM Project #10-15-47). Texas Transportation Institute, University Transportation Center for Mobility, Research and Innovative Technology Administration Department of Transportation.

https://utcm.tti.tamu.edu/publications/final_reports/Benden_10-15-47.pdf

Benden, M. (2007 March) *Selecting Seating for 9-1-1 Communications Centers; Emergency Number Professional Magazine S12 ENPM*.

Selected Conference Papers

Parker, M., Douphrate, D., & Benden, M. (2025). Stress Measurement in Office Workers—A Scoping Review. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 0(0). <https://doi.org/10.1177/10711813251369781>

Chung, W., Kew, C. L., Bergeron, C., Parker, M., Oloruntoba, O., Aguilar, K., Benden, M., & Merianos, A. (2022). EXPLORING ADJUSTMENT TO RETIREMENT: LEISURE IN THE LIVES OF FIRST-GENERATION KOREAN IMMIGRANT MEN. INNOVATION IN AGING. 6, 680-681.

Towne, S., Li, Y., Lee, S., Smith, S., Han, G., Du, Y., **Benden, M.**, & Ory, M. (2018) Changes in Physical Activity Associated with a Novel Health and Wellness Program for At-Risk Older Individuals, *Innovation in Aging*, 2(1), 739. <https://doi.org/10.1093/geroni/igy023.2726>

Benden, M., Mehta, R., & Shortz, A. (2018, Jun 3-6) *A three year randomized controlled trial of a standing desk intervention in a high school of 450 students to evaluate the impact on sedentary behavior, cognition and test scores* [Conference session]. International Society of Behavioral Nutrition and Physical Activity Annual Meeting, Hong Kong, China. <https://www.isbnpa.org/files/articles/2018/07/04/102/attachments/5b3d0ebde1d22.pdf>

Benden, M. (2018, Jun 3-6) *1-year RCT of Sedentary Behavior with Computer based monitoring and prompting* [Conference session]. International Society of Behavioral

Nutrition and Physical Activity Annual Meeting, Hong Kong, China.
<https://www.isbnpa.org/files/articles/2018/07/04/102/attachments/5b3d0ebde1d22.pdf>

Benden, M., Zhao, H., & Schneider, D. (2015, Jun 3-6) *A 2-year evaluation of a high school standing desk intervention to reduce sedentary behavior in US children* [Conference session]. International Society of Behavioral Nutrition and Physical Activity Annual Meeting, Edinburgh, Scotland, 2015.
https://www.isbnpa.org/files/annual_meetings/2015/06/10/16/attachments/557869344fefe.pdf

Pickens, A. W., & Benden, M. E. (2013). Curriculum Development for HF/E Graduate Students. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, Proceedings of the Human Factors and Ergonomics Society*. 57(1), 452-456

Benden, M., Congleton, J.J. (2007, Mar 13) *Chair Specifications and Testing for Big & Tall Seating* [Conference session]. Tenth Annual Applied Ergonomics Conference.

Benden, M. (2003, Oct 15-18) *Use of Three Dimensional, Knitted Fabric Yields Ergonomic Benefits in Upholstery Work – A Two Year Follow Up Study* [Conference session]. Annual Association of Canadian Ergonomist's Conference, Toronto, Canada.

Benden, M. (2003, Mar) *The Patent Process for Ergonomic Products* [Conference session]. Annual Applied Ergonomics Conference, Dallas, TX, USA.

Patents

U.S. Patents

Benden, M., “Ergonomic Footrest Apparatus for a Chair,” United States Patent, No. 6142571.

Benden, M., Boenigk, R.C., Belt, K.A., Ebner, D.W., “Lumbar Pump Assembly for a Chair,” United States Patent, No. 6220663.

Congleton, J.J., Boenigk, R.C., Boenigk, B.A., **Benden, M.**, “Ergonomic Armrest Assembly,” United States Patent, No. 6296312.

Benden, M., Smithey, N.M., “Air Pump Assembly for a Chair,” United States Patent, No. 6290295.

Benden, M., Smithey, N.M., “Onboard Instruction Guide,” United States Patent, No. D458777S.

Benden, M., Smithey, N.M., “Computer Accessories and Mouse Deck,” United States Patent, No. D463441S.

Benden, M., Congleton, J.J., Smithey, N.M., “Support Apparatus for a Chair and Keyboard,” United States Patent, No. 6604786.

Benden, M., “Improved footrest for a Chair – Fring™,” United States Patent, No. 6607246.

Congleton, J.J., **Benden, M.**, Boenigk, R.C., Guillen, J.C., “Support for a Seating Device – Abstool™,” United States Patent, No. 6877812.

Benden, M., Smith, C.A., Congleton, J.J., Johnson, L., “Support Assembly for a Seating Device – NeXtep™,” United States Patent, No. 7036886.

Benden, M., Congleton, J.J., Smtih, C.A., “Vertical Adjustment Apparatus for a Keyboard – StandUp™,” United States Patent, No. 7048236.

Congleton, J.J., **Benden, M.**, Boenigk, R.C., Guillen, J.C., “Support for a Seating Device – AbStool™, Dual Use, 4 positions,” United States Patent, No. 7104606.

Benden, M., Chapman, A.K., Sanchez, M.R., “Seating Device – Balance™ Chair Ergo,” United States Patent, No. D541061.

Benden, M., Chapman, A.K., Sanchez, M.R., “Support for a Seating Device – Balance™ Conference,” United States Patent, No. D543038.

Benden, M., Smith, C.A., “Nposition Footrest for Ntune Seating System,” United States Patent, No. D557513.

Benden, M., Chapman, A.K., Smithey, N.M., “Elemental Aluminum Keyboard Tray,” United States Patent, No. D588145.

Benden, M., “Student Desk with Stool,” United States Patent, No. D649369.

Benden, M., “Student Desk with Seat,” United States Patent, No. D649368.

Benden, M., Wilke, E., “Lightweight Transportation Device,” United States Patent, No. 8303011.

Benden, M., “Versatile Student Desk,” United States Patent, No. 9254037.

Benden, M., “Adjustable Footrest for Adjustable-Height Desk,” United States Patent, No. 9961990.

Benden; Mark E., “Adjustable Height Desk having a Deployable Floor Mat,” United States Patent, No. 10426260

Benden; Mark E., “Adjustable Height Desk having a Deployable Floor Mat,” United States Patent, No. 11,006,744 B2

Benden: Mark E., Jarman, Jack; “Deployable Backrest, Footrail and Anti-Fatigue Mat Ergonomic Office Stool” United States Patent No. 12,226,031

As of **Jul. 1, 2024**, three additional US patent applications were pending

International Patents:

Benden, M., Smith, C.A., Congleton, J.J., Johnson, L., “Support for a Seating Device,” CA 2505225.

Benden, M., Smith, C. A., Congleton, J.J., “Vertical Adjustment Apparatus for a Keyboard,” CA 2486459.

Disclosures to Texas A&M:

Benden, M., Wilke, E., “AmbiCycle – Novel Patient Transport,” TAMU 2830.

Benden, M., Fink, R., “Child/Pet Present Sensing and Fail Safe Control System,” TAMU 2956.

Benden, M., Fink, R., “Cell Phone Interruption Device,” TAMU 2957.

Benden, M., Pickens, A., Hamid, K., “Surgical Exoskeleton Support Device,” TAMU 2949.

Benden, M., Miller, K., Speer, B., “Low Force, Rapid Deployment Tool for Closure of QD Hose Valve,” TAMU 3014.

Benden, M., “Ergonomic Holder for Tablet Reading and Computerized Devices,” TAMU 3172.

Burdine, J., **Benden, M.**, “Adult Walk or Sit,” TAMU 3230.

Burdine, J., **Benden, M.**, “Waterfall Pool Chlorinator,” TAMU 3271.

Benden, M., “Stand-Biased Desk for Schools,” TAMU 3058.

Benden, M., “Young Adult, Stand-Biased School Desk,” TAMU 3399.

Benden, M., "Height Adjustable Desk with Integrated, Automatically Deployable Footrest and Privacy Screen for Sitting and Standing Positions," TAMU 3468.

Benden, M. "Adjustable Height Desk Having a Deployable Floor Mat TAMU 4533

Benden, M., Aguilar K., Jebson, L.; Digital Human-Work Force Solution for Healthcare Clinical Practices TAMU 6171HSC23

Benden, M., Jarman, J.; "Deployable Backrest, footrail and Anti-fatigue mat ergonomic office stool, TAMU 13260-P274V1

Benden, M., Rhee, J., "Passive Biometric Sensor for Computer Users via Keyboard and Peripheral Input Device Monitoring," TAMU 5224

Presentations and Invited Lectures

Keynote Addresses

Benden, M. (2025, October) *Why we do what we do*, TAMU Innovation Conference College Station, Tx

Benden, M. (2025, October) *Technological Disruptions in Ergonomics*, ERGO-X at HFES Aspire Chicago, Illinois

Benden, M. (2019, August). *The Wedge Formation for Entrepreneurs* [Keynote address]. McFerrin Center Entrepreneurship Bootcamp for Veterans, College Station, TX, USA.

Benden, M. (2019, August). *Sedentary Behavior and Air Quality of Home Office Workers* [Keynote address] Office Relief Summer Lecture Series, San Leandro, CA, USA.

Benden, M. (2017, March). *The State of the Science in Sedentary Behavior Research* [Keynote address]. Arizona State University Wellness Summit, Tempe, AZ, USA.

Benden, M. (2016, February). *Occupational Health Updates* [Keynote address]. ORCHSE Washington, D.C., USA.

Benden, M. (2014, October) Advances in Ergonomics Monitoring and Assessment, Puget Sound Ergonomic Roundtable

Invited Lectures and Featured Speeches

Benden, M. (2019, August). *California Suitable Seating Case Law Experiences* [Featured speaker]. Sacramento Ergonomics Roundtable, Sacramento, CA, USA.

Benden, M. (2018, March). *State of the Science of Sedentary Behavior Research* [Featured speaker]. Applied Ergonomics Conference, Atlanta, GA, USA.

Benden, M. (2017, July). *Computer Prompts for Reducing Sedentary Behavior* [Invited lecture]. Ergo X of HFES, Tampa Bay, FL, USA.

Benden, M. (2017, January). *School PA Research* [Invited lecture]. Charter Schools Conference Washington, D.C., USA.

Benden, M. (2017, January). *Research Methods for Computer Tracking of Office Worker Behaviour* [Invited lecture]. OERC Marconi Conference, Galveston, TX, USA.

Benden, M. (2016, August). *Invited lecture*. Austin Ergonomic Round Table, Austin, TX, USA.

Benden, M. (2016, August). *Invited Lecture*. Sacramento Ergonomic Round Table, Sacramento, CA, USA.

Benden, M. (2016, August). *Invited Lecture*, Bay Area Ergonomic Round Table, San Francisco, CA.

Benden, M. (2016, May). *Invited Lecture*. AIHA Conference, Baltimore, MD, USA.

Benden, M. (2012, September). *Stand-biased Classrooms* [Invited lecture]. CDC, Atlanta, GA, USA.

Benden, M. (2010, March). *Ambicycle Development and Testing* [Invited lecture]. Applied Ergonomics Conference, San Antonio, TX, USA.

Presentation

Oloruntoba, O., Parker, M. K., Maddock, J., Benden, M. E. Prevalence and correlates of musculoskeletal discomfort among remote office workers in the United States. Applied Ergonomics Conference. March 27- 30, 2023. New Orleans, LA.

Smith ML, Kew CL, Bergeron CD, Parker MK, Oloruntoba O, Aguilar K., Benden ME, Wilson, MG, Merianos, AL. Correlates of job satisfaction among full-time employed older adults with chronic conditions. Gerontological Society of America Annual Conference. November 2-6, 2022. Indianapolis, IN.

Sarnosky, K., Cizmas, L., & **Benden, M.** (2019, March) *Indoor Quality Impact on Ergonomics & Productivity in the Remote Work Force* [Paper presentation]. Applied Ergonomics Conference, New Orleans, LA, USA.

Benden, M. (2018, August) *One-year workplace interventions using software prompts to increase and sustain electric sit-stand desk utilization via objectively monitored desk*

utilization software [Paper presentation]. International Ergonomics Association, Florence, Italy.

Sharma, P. & **Benden, M.** (2018, March) *6 Month Evaluation of Computer Prompts and Gamification of Sit/Stand Data* [Paper presentation]. Applied Ergonomics Conference, Atlanta, GA, USA.

Sharma, P., Owen, W. & **Benden, M.** (2017, March) *Sit-Stand Desks: Can We Increase Their Use with Computer Software?* [Paper presentation]. Applied Ergonomics Conference, Orlando, FL, USA.

Bridges, L. & **Benden, M.** (2017, March) *Remedy Interactive Study to Determine Musculoskeletal Issues from Desktop Software* [Paper presentation]. Applied Ergonomics Conference, Orlando, FL, USA.

Garrett, G., Mehta, R. & **Benden, M.** (2017, March) *Cognitive Benefits of Sit-Stand Desk Workstation* [Paper presentation]. Applied Ergonomics Conference, Orlando, FL, USA.

Garrett, G. & **Benden, M.** (2015, March 17th) *Thinking on your feet can be productive* [Paper presentation]. Applied Ergonomics Conference, Nashville, TN, USA.

Pickens, A. W. & **Benden, M.** (2013, September-October). *Curriculum Development for HF/E Graduate Students: Lessons Learned in an Ongoing Effort to Educate and Meet Industry Demands* [Paper presentation]. 57th HFES Conference, San Diego, CA, USA.

Kress, M. & **Benden, M.** (2013, March) *6-Month Follow-Up: Comparison of Sit-to-Stand and Stand-biased Desks in a Call Center* [Paper presentation]. Applied Ergonomics Conference, Orlando, FL, USA.

Benden, M., Ekelund, E., Hinkley, T., & Hinkson, E. (2012, May) *A Behavioral Epidemiological Perspective on Sedentary Behavior in Children: Health, Measurement, Correlates, Interventions, & Advanced Measurement Methods for Sedentary Behavior in Children* [Paper presentation]. International Society of Behavioral Nutrition and Physical Activity, Austin, TX, USA.

Miller, K. & **Benden, M.** (2012, March) *Industry/University Collaborative* [Paper presentation]. Applied Ergonomics Conference, Nashville, TN, USA.

Benden, M. & Bosen, D. (2012, March) *Obesity in the Workplace: Changes and Solutions* [Paper presentation]. Mastertrack for Applied Ergonomics Conference, Nashville, TN, USA.

Smith, M.L., **Benden, M.**, Lindner, J. R., Cotton, C. P., Henry, M., Dickerson, J. B., & Congleton, J.J. (2012, March) *Perceptions of texting while driving among parents of teen drivers: Does terminology make a difference?* [Paper presentation]. Academy of Health Behavior Annual Conference, Austin, TX, USA.

Benden, M., Morales, M., & Wendel, M. (2011, October-November) *Dynamic Classrooms Utilizing Stand-biased Desks to Reduce Childhood Obesity* [Paper presentation]. 139th APHA Annual Meeting in Washington, D.C., USA.

Morales, M., **Benden, M.**, & Jones, P. (2011, April) *Dynamic Classroom Environments to Reduce Childhood Obesity* [Paper presentation]. Regional HRES Conference, Houston, TX, USA.

Benden, M. (2000, April) *A new vehicle design for rural and urban patient transport* [Paper presentation]. UTCM Mobility Colloquium, College Station, TX, USA.

Benden, M. (2010, March) *A Case Study In The Design And Development of An Ergonomic Vehicle For The Transport of Rural Patients* [Paper presentation]. Applied Ergonomics Conference, Mar 2010.

Benden, M. (2009, April) *Stand to Lose* [Paper presentation]. Salud Y Seguridad Laboral, Panama.

Benden, M. (2009, April) *Industrial Ergonomics* [Paper presentation] Salud Y Seguridad Laboral, Panama.

Benden, M. (2009, March) *Stand-Biased Workstations for Control of Office Worker Obesity* [Paper presentation]. Applied Ergonomics Conference, Reno, NV, USA.

Benden, M. (2009, March). *Ergonomic Expert Roundtable Lecture – Occupational Obesity* [Paper presentation]. Applied Ergonomics Conference, Reno, NV, USA.

Benden, M. (2009, November). *Lean Patient Handling* [Paper presentation]. National Ergonomics Conference, Las Vegas, NV, USA.

Benden, M., & Parker, M. K. (2000, March). *Benefits of Three Dimensional Knitted Fabric on Chair Manufacturing* [Paper presentation]. Applied Ergonomics Conference, Orlando, FL, USA.

Selected Poster Presentations

Maddock, J.E., Chen, Y., Yeh, S.Y., Oloruntoba, O., & Benden, M. (2023). Nature contact and active living among remote workers. Poster presented at the Annual Active Living Conference, Bethesda, MD

Smith, M. L., Kew, C. L., Bergeron, C. D., Parker, M. K., Oloruntoba, O., Aguilar, K. N., **Benden, M.** E., Wilson, M. G., & Merianos, A. L. (2022). Correlates of job satisfaction among full-time employed older adults with chronic conditions. Gerontological Society of America Annual Conference. November 2-6, 2022. Indianapolis, IN.

Benden, M. (2017, March). *Ergonomic Expert Roundtable Lecture – Occupational Obesity* [Poster presentation]. Applied Ergonomic Conference, Orlando FL

Smith, M. L., **Benden, M.**, Cotton, C. P., Henry, M., & Congleton, J. J. (2012, January). *Texting while driving behaviors and related influences: Parent-teen concordance from the parental perspective* [Poster presentation]. Annual International Conference on the Health Risks of Youth, San Juan, Puerto Rico.

Benden, M., Wendel, M. L. & Smith, M. L. (2011, January). *Modifying classroom environments to reduce health risk among elementary students* [Poster presentation]. Annual International Conference on the Health Risks of Youth, Cancun, Mexico.

Congleton, J. J., Craig, B., **Benden, M.** & Parker, M. (2003, October). *Current and Future Office Ergonomic Trend* [Poster presentation]. 47th Annual Human Factors and Ergonomics Conference, Denver, CO, USA.

Teaching Experience

Texas A&M University, College Station, TX 77843
Environmental & Occupational Health Department

July 2008 to Present

Courses Taught:

PHEO 655 – Human Factors
PHEO 682 – System Safety
PHEO 679 – Upper Extremity Ergonomics
PHEO 678 – Low Back/Whole Body Ergonomics

PHEO 681 – EOH Seminar
PHEO 680 – Capstone
PHEO 691/791 – Research/Doctoral Study
PHEO 685 – Directed Study
PHLT 445 – Senior Capstone

Doctoral Students Advised/Mentored

Dr. Kristen Miller, DrPh
Chair, graduated 2012

Chair, graduated 2014

Dr. Meghan Wernicke, DrPh

Dr. Parag Sharma
DrPh Chair, graduated 2018

Dr. Greg Garrett, DrPh
Chair, graduated 2019

Dr. Kamrie Sarnosky, DrPh
Chair, graduated 2019

Dr. Tricia Salazar, DrPh
Chair, graduated 2020

Dr. Paul Ritchey, DrPh
Committee member, graduated 2018

Dr. NoYoung Yu, DrPh
Committee member, graduated 2018

Dr. Elizabeth Cuevas, PhD
BMES
Committee member, graduated 2018

Dr. Trey Roady, PhD ISEN
Committee member, graduated 2018

Dr. Dawn Dakuri, DrPh
Committee member, 2020

Dr. William Johnson, DrPh
Committee member, graduated 2019

Dr. Juha Baek, DrPh
Committee member (graduated 2020)

Dr. Linda Bridges, DrPh
Chair (2022)

Dr. Kaysey Aguilar, DrPh
Chair (2022)

Ashley Shortz, DrPh

*Current committee member
(expected graduation 2022)*

Dr. Junho Park -PhD ISEN
Committee member (2022)

Lauren Williams - DrPh *Current committee member (expected graduation 2024)*

Dr. Yibo Zhu, PhD ISEN
Committee member (2021)

Sloane Hoyle, DrPh
Current committee member (expected graduation 2024)

Yu Zhou, PhD ISEN
Current committee member (expected graduation 2023)

Dr. Whitney Mantooth, PhD
ITDE - chair

Yehee Park ISEN PhD
Committee Member expected graduation 2025

Ariel Tokarz, PhD ITDE
Committee Member expected graduation 2026

Niosh Basnet ISEN PhD
Committee Member expected graduation 2025

Pronob Biswas PhD ITDE
Current chair (expected graduation 2026)

Dr. Andrea Porter PhD ITDE
Chair

Adam Neiss PhD ITDE chair
(expected graduation 2025)

Dr. Vanessa Nasr PhD ISEN
Committee member

*Committee Member expected
graduation 2025*

Ashif Hossain ISEN PhD

Masters Thesis Students Advised

Vicki Torres, MSPH
Committee member, 2010

Drew Schneider, MSPH
Chair, 2014

John Smith, MSPH
Committee member, 2010

Gulberg Ergin, MS (ISEN)
Co-chair, 2019

Lexie Mancuso, MSPH
Chair, 2010

Gilson Honvoh, MSPH
Committee member, 2017

McKenzie Henry, MSPH
Chair, 2010

Cullen Brown, MS (CPSC)
Committee member, 2017

Kristin Miller, MSPH
Chair, 2011

Jason Noriega, MS (STAT)
Committee member, 2019

Megan Morales, MSPH
Chair, 2011

Rowland Ramos MS (ETID)
Committee member, 2020

Jase Perry, MSPH
Chair, 2012

Ricardo Munoz Castillo MS
(ETID)*Committee member, 2022*

Angela Marsalia, MSPH
Chair, 2013

Allison Schuelke, MSPH
Chair, 2014

Student Awards

Applied Ergonomics Creativeness in Ergonomics Student Award

Kaysey Aguilar, 2023
Tricia Salazar, 2020
Kamrie Sarnosky, 2019
Ashley Shortz, 2018

Greg Garrett, 2015
Meghan Wernicke, 2013
James Stafford, 2012
Kristen Miller, 2011

Ergo Cup – Student Design Award

Honors and Awards

New Ventures Competition – First Place, Humanate Inc.	2025
National Academy of Inventors, Fellow	2023
Applied Ergonomics Conference & Exposition, Conference Chair	2023
National Academy of Inventors, Senior Member	2019
Inc 5000 VET50 List, #35 for Stand2Learn	2019
Inc 5000 Company Honor, Stand2Learn, #567	2018
Innovation Award, Texas A&M System	2018
Aggie 100, Stand2Learn, #5	2018
Delta Omega, Alpha Tau chapter, Public Health Honor Society	2015
EOH Teaching Award, Rural Public Health Student Association	2013-14
Gold Design Award at NeoCon, <i>Guardian</i>™ chair	2013
EOH Teaching Award, Rural Public Health Student Association	2009-10
Platinum ADEX Award, <i>Elemental</i>™ in <i>Design Journal</i>	2008-09
Top 10 Most Innovative Product Designer, <u>Healthcare Design Magazine</u>	2008
NECE Attendees Choice Award, <i>Ntune</i>™ Seating System	2007
Editor's Top 100, <u>Buildings Magazine</u> for <i>Ntune</i>™ Seating System	2007
NECE Attendees Choice Award, Pipette Arm™	2006
Platinum ADEX Award, NeXtep™ and Balance™ char in Design Journal	2005-06
NECE Attendees Choice Award, NeXtep™	2005
Platinum ADEX Award, AbStool™ and StandUp™ in <i>Design Journal</i>	2004-05
NECE Attendees Choice Award, StandUp™	2004

NECE Attendees Choice Award, AbStool™	2003
IINDEX NeoCon Canada Bronze Award, Most Innovative Product	2003
U.S. Army Distinguished Military Graduate	1990
Distinguished Texas A&M Engineering Student	1988-89
National Distinguished Military Student	1988-89

**Complete list of US Army awards and decorations are available separately*

American National Standard for Human Factors	1988
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Member of the Canvass Committee for BSR/HREX 100

Professional Affiliations

The Texas A&M Telehealth Institute	2023-Present
<i>Founding Member</i>	
Center for Remote Health Technologies & Systems	2013-Present
<i>Member</i>	
Center for Population Health & Aging	2017-Present
<i>Member</i>	
Center for Health Systems & Design	2017-Present
<i>Member</i>	
Center for Community Health Development	2008-Present
<i>Member</i>	
Ergonomics Center	2015-Present
<i>Executive Director</i>	
Office of Ergonomic Research Center	1999-2001
<i>Industry partner</i>	
NSF Industry University Cooperative Research Center in Ergonomics	1996-1998
<i>Industry Partner</i>	

Professional Service

Committee Membership

TAMUS Council of Inventors

Member 2023 – Present

Department PhD Committee

Member, 2016-Present

Department Undergraduate Minor Committee

Member, 2016-Present

TAMU Council of Principal Investigators

Representative for SPH, 2018-2019

NEW CEPH Core Phase 2 Committee

Representative for SPH, 2018-Present

SPH Research Committee

Chair, 2012-2016 and 2018-Present

HSC Technology Commercialization Advisory Committee

Chair, 2016-2017; Member, 2016-Present

TAMU System Intellectual Property Constituent Committee

Chair, 2015-2016

TAMU 2030 Vision Committee

Member, 2017-Present

TAMU 2030 Vision – Research Committee

Chair, 2018-Present

TAMU Innovation School

Advisory board and founding member, 2016-Present

Applied Ergonomics Conference Presentations Program

Chair, 2015-2018

Applied Ergonomics Poster Program

Chair, 2018-Present

ANSI/HFES 100 Standards Committee

Member, 2016-2018

ANSI/BIFMA 5.1 Office Seating Standard Committee
Member, 2008-Present

ANSI/HFES 100 Caucus Voting Committee
Appointed member, 2019-Present

ANSI/BIFMA Student Furniture Standards Committee
Member, 2014-2016

BIFMA – G1 Ergonomic Furniture Standard Committee
Member, 2008-Present

BSR/BIFMA X10.1-202X Ergonomics Requirements for Furniture Designed for Computer Use – Voting member, 2019-Present

Stand2Learn, Inc.
CEO & Chairman of the Board, 2012-2018

AEC Conference
Abstract Reviewer, 2008-2015

StandUpKids.org
Advisory Board, 2015-Present

IISE
Member, 2000-Present

HFES
Member, 1992-Present

ASSP
Member, 1992-Present

Grant Reviews

NIOSH – ERC Review Panel
Washington D.C., Spring 2018

NSF, S-STEM Review Panel
Washington D.C., Fall 2012

NSF, S-STEM Review Panel
Washington D.C., Fall 2010

NSF, S-STEM Review Panel
Washington D.C., Fall 2009

NSF, S-STEM Review Panel
Washington D.C., Fall 2008

International – External Dissertation Reviewer

Aminian, S. (2016). *Sedentary Behavior in New Zealand Primary School Children*. [Doctoral Thesis, Auckland University of Technology].
<https://pdfs.semanticscholar.org/a60a/68c8aa6e3309ab897999c8638f478961a4a9.pdf>

Contardo Ayala, A. M. (2019). *The influence of sitting and standing on young people's health*. [Doctoral Thesis, Deakin University]

Contributions to Law in Patent Infringement and Occupational Health

Marshall, Gerstein & Borun LLP Broan-Nutone LLC vs. Conglom Hong Kong Limited (2025)
regarding Kitchem Vent Hood patent litigation (expert witness)

Marshall, Gerstein & Borun LLP EP Family Corp vs. Office Kick Inc, (2025)
regarding adjustable desk patent litigation (expert witness)

Gibson & Dunn LLP Amazon vs. OSHA (2024) regarding Warehouse distribution center OSHA citations, ergonomic consultant

Marshall, Gerstein & Borun LLP FDW vs. Office Kick (2024) regarding adjustable desk patent litigation (deposed expert witness)

Marshall, Gerstein & Borun LLP Sanodesk Co, Ltd Vovomart Ltd vs. Office Kick Inc, (2023) regarding adjustable desk patent litigation (expert report)

Foley & Lardner LLP Hydrow Inc, vs. iFit Health & Fitness Inc.(NordicTrack) 2022 Patent Infringement Case regarding Rowing machines for fitness (expert report)

Dickinson Wright LLP Sky Enterprises vs. Herman Miller Inc (2021)
Patent Infringement Case regarding Ergonomic Seating - expert

McInerney Law, Canela vs. Costco (2021)
Expert witness for greeter and exit checker employees seeking suitable seating options per California wage orders. Including deposition & trial testimony

Williams Hart Boundas Easterby, LLP, Stacy Smith v Mansfield Montessori (2021) Consultant on occupational injury case involving an employee performing lifting tasks with children in a daycare environment

Moss Bollinger, LLP, Silvestro vs. Kaiser Pharmacy (2021) Expert witness for pharmacists and pharmacy tech employees seeking suitable seating options per California wage orders

Clapp & Lauinger, LLP, Eden Smiles vs. Walgreen Co (2018-2021) *Expert witness for the class action suit by cashiers seeking suitable seating options per California wage orders.*

Garland, Samuel & Loeb, P.C., Clonts vs. Reddy (2020) *Elevator Shaft fall case*

Boucher, LLP, Northgate Market (2019) *Suitable seating case*

Sanford A. Kassel, APLC, Rodriguez vs. Walmart (2019) *Greeters & suitable seating case.*

Clapp & Lauinger, LLP, Hall vs. RiteAid (2018) *Research, simulations, and deposition given in this case of clerks versus their company for the right to be seated for part of the work day as needed for their health.*

Erise IP, PA, Ironburg vs. Collective Minds (2018) *Expert for Ironburg in a patent infringement case involving hand-held video game controllers.*

McInerney Law, Eden Smiles vs. Walgreens (2018) *Expert witness for the class action suit by employees seeking suitable seating options per California wage orders.*

Righetti Glugoski, P.C., Brown vs. Walmart (2018) *Expert witness for the class action suit by employees seeking suitable seating options per California wage orders.*

Finnell Firm: Milton Finnel Esq., Longhorn Steakhouse vs. Customer (2017) *Represented injured customer in a case involving damaged seating that failed and resulted in significant personal injury.*

Righetti Glugoski, P.C., Pickett vs. 99 Cents Only Store (2017) *Expert for checkout clerks versus the company for their right to be seated for part of the work day.*

Adam R. Hess, Esq. | Venable, LLP, Varidesk vs. ErgoTron (2016)

Expert for Varidesk in patent infringement case. Testified at Markman Federal Hearing in Washington D.C., Varidesk secured royalties from ErgoTron on all involved patents.

Gark K. Smith Law, PLC, Furlong vs. Fed X (2016)

Expert for employee in occupational injury case. Employee was injured while exiting a plane and lost the ability to be a pilot.

Magenheim & Associates, Monterey Mushroom vs. Holcomb (2016)

Expert for Monterey Mushroom in occupational injury case involving a finger amputation on mushroom processing machinery. Gave report and investigation, along with deposition and testimony at arbitration hearing.

Simmons & Fletcher, (2014)

Deposition, simulations, and case report in forklift decapitation case at central warehouse distribution center.

Banner & Witcoff, LTD, Humanscale vs. Comp X (2011)

Expert consultant in ergonomic patent case involving keyboard tray mechanisms.

Apperson Crump & Maxwell, PLC, (2010)

Expert consultant on personal injury case at a Verizon store involving defective adjustable height stool, resulting in critical injuries to an elderly man.

McCoy Law, PC, (2010)

Witness on occupational injury case involving CNA back injury.

McCoy Law, PC, (2010)

Witness on occupational injury case involving back injury to an oil field drilling rig operator.

McCoy Law, PC, (2010)

Witness on occupational injury case involving acute trauma to a hotel maid.

McGuire Woods, LLP, Rubbermaid vs. Ergotron (2009)

Served as an expert witness in ergonomic patent case involving computer on wheels used in medical facilities.

Licensing of Technology

AmbiCycle to ARV, Inc.

First commercial license secured by a School of Rural Public Health faculty member.

Integrated, Automatically Deployable Foot Rest to NextDesk, Inc.

I license for US Patent No. 9961990.

IP to Positive Motion, LLC., DBA, and Stand2Learn, LLC. (A faculty lead startup) 4 licenses; *More than \$100,000 in royalties have been returned to TAMU for these licenses.*

School desks and footrests patents to Varidesk

1 license (master with 5 parts of IP); *More than \$100,000 in royalties have been returned to TAMU for these licenses.*

Mouse and algorithm AI for detecting health status IP licensed to Well Being Code LLC

Digital Human IP License to Digital Humanate Inc

Testimony to Texas House of Representatives

House Committee on Public Health, Mar 8, 2010

Research Features

Podcasts

[INTERVIEW: The truth about working from home - and should we work on Friday afternoons? Player FM - Internet Radio Done Right](#)

EP. 1: THE FUTURE OF ERGONOMICS AND WORKPLACE SAFETY

TAMU Center for Worker Health

<https://www.youtube.com/watch?v=RI5f1NMo8bk>

KAMU/NPR - 12/17/2023: Guest- Mark Benden, PhD, CPE, Director of the Ergonomics Center at the Texas A...

<https://www.npr.org/podcasts/1212982454/brazos-matters>

#AppliedErgo2022: Ergonomics to keep workers safe at home

Problem Solved: The IISE Podcast: #AppliedErgo2022: Ergonomics to keep workers safe at home on Apple Podcasts

ErgoExpo

Movement at Work, Guest

An exploration of new standards, developments, and trends

IISE: Problem Solved Guest

Implementing AI and machine learning to build living systems that can prompt the workforce to move while on the job to achieve optimal productivity on an individual basis, within different types of workspaces. <https://podcast.iise.org/episodes/sit-stand-shake-adjustability-and-ergonomics-with-mark-benden>

Science Sound Off

Episode 1 – Stand for Your Health, Guest

Explaining the science of how people work and how we can all be healthier doing so.

The Ready State

Season 3, Episode 6 – Sedentary Lifestyles, Guest

Talking about activity permissive offices and schools with StandupKids.org founders, Kelly and Juliet Starrett

Video

TAMU Foundation

[Mark Benden – Taking a Stand](#)

KBTX

[Texas A&M Sit-Stand App](#)

KAGS

[Standing Desks Newscast](#)

Brazos Valley Magazine

[Standing Desks – Then and Now](#)

BVM1:

[Interview with Dr. Mark Benden](#)

School of Rural Public Health:

[Dr. Mark Benden – Standing Desk](#)

KRHD:

[KRHD Newscast – Standing Desk](#)

Texas A&M School of Public Health:
Computer Use Ergonomics

Stand2Learn, Inc.:
Pros and Cons of School Desk Ergonomics

Media coverage

ABC	MMQB
Amazon News	Mobility WOD Podcast
Arstechnica	MSN
Austin American Statesman	NBS
BBC	New York Times
BioSpace	NewsMax
Bloomberg	Newswise
Business Standard	NPR
Care 2	Outside
CBS	Parade Magazine
Chicago Tribune	Parents Magazine
CNN	Reuters
Dallas Morning News	Science Daily
DieWelt	Seattle Times
EdNews Daily	State Times India
EurekAlert!	TagesAnzeiger
Examiner	Teacher Magazine
Fast Company	TechTimes
Forbes	Texas Standard
Fox News Health	Texas Tribune
Futurity	The Eagle
Good Housekeeping	The Express Tribune
GQ	The Medical News
Healio	The New Indian Express
Houston Chronicle	The Siasat Daily
HSC/TAMU Podcast	Shape Magazine
Huffington Post	Time Magazine
IIES Magazines	Today Parenting
Inc Magazine	Waco Tribune Herald
KAGS	Wall Street Journal
KBTX	Washington Post
LA Times	Women's Health
Martha Stewart Living	Yahoo News
Men's Health	