

## **Contact**

(979) 436-9334 mthowdy@tamu.edu 212 Adriance Lab Rd. 1266 TAMU College Station, TX 77843-1266

## **Professional Networks**

Orcid
Research Gate
Scholars @ TAMU
Google Scholar
Google Patents

# **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 23 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 929 the top 0.003 percentile of articles all-time and #18 for TAMU all-time.

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

ETHICON, Inc.

Ergonomic Engineer

May 1992 to May 1994

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**

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

**TAMU Health Science Center** 

Mar 2018 to Dec 2023

Occupational Safety and Health Training Center

NIOSH Grant: \$750,000

PI: Benden

TAMU Center for Remote Health and Systems Technology

Aug 2017 to Aug 2022

Contract: \$10,000,000

PI: Cote; Role: Co-I Education Thrust for 3+2 BSE/MPH Occ

NSF ERC PATHS-UP

**TAMU Health Science Center** 

Jul 2014 to Dec 2017

Occupational Health & Safety Program

NIOSH Grant: \$400,000

PI: Benden

**ODOT** Sep 2016 to Dec 2017

Contract: \$65,000

PI: Pickens; Role: Co-PI

Ergonomic Evaluation of Ohio Department of Transportation Maintenance Workers

Varidesk, Inc. Sep 2017 to Dec 2017

Contract: \$50,000 *PI: Benden* 

Gamification of Software Monitored Results to Increase the Usage of Sit-Stand Desks

Office of Ergonomic Research

Jan 2016 to Dec 2017

Contract: \$35,000 *PI: Benden* 

*Use of Sit-Stand Workstations: Does the Implementation of Behavioral Interventions* 

Increase the Usage of Sit-Stand Desks?

Frito Lay Jan 2017 to May 2017

Contract: \$5,000 *PI: Benden* 

Distribution Center Ergonomic Evaluation

Virgi & Associates Jun 2017 to Aug 2017

Contract: \$20,000 *PI: Benden* 

Sit-Stand Checkout Clerks Evaluation

Clapp & Lauinger LLP

Jun 2017 to Aug 2017

Contract: \$25,000 *PI: Benden* 

Sit-Stand 3D Rendering and Biomechanical Review

**Haworth** Feb 2017 to Aug 2018

Contract: \$5,000 *PI: Benden* 

Expert Report on State of the Science in Sedentary Behavior

**CDC** to Positive Motion

Sep 2017 to Sep 2018

Grant: In-Kind

PI: Westbrook; Role: Subcontract PI

NIH Commercialization Accelerator Program Grant – Marketing Consultations

**Herman Miller** Feb 2017 to Sep 2017

Contract: \$65,000

PI: Mehta; Role: Co-I

Cognitive ergonomics assessment of office furniture

Holly Frontier Jan 2016 to Dec 2016

Contract: \$35,000 *PI: Benden* 

Ergonomic assessment of Asphalt Refineries in New Mexico

**Johnson & Johnson** Feb 2017 to Dec 2017

Contract: \$5,000 *PI: Benden* 

Ergonomics Buying Guide

**Linak** Jan 2016 to Sep 2016

Contract: \$25,000 *PI: Benden* 

Software Support for Ergonomic Sit-Stand Study

**TAMUS Chancellor's Office** Feb 2017 to Aug 2017

Grant: \$25,000 *PI: Benden* 

Oil & Water Sourcing

CDC to Positive Motion Sep 2013 to Sep 2016

Grant: \$1,000,000

PI: Westbrook: Role: Subcontract PI

Development of a Stand-Biased School Desk to Reduce Childhood Obesity

ExxonMobil Apr 2013 to Apr 2014

Contract: \$25,000 *PI: Benden* 

Cataloging Modern Office Jobs via ACGIH, TLV-HAL Ratings

# NIH – Eunice Kennedy Shriver National Institute

Jan 2012 to Dec 2012

of Child Health & Human Development

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** 

## **For Community Health Development**

Feb 2009 to Sep 2009

Grant: \$5,000

PI: McLeroy; Role: PI

Investigational pilot grant on Ambicycle development and use

# **Publications**

#### **Peer Reviewed Journal Publications**

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). <a href="https://doi.org/10.1186/s12889-021-11975-3">https://doi.org/10.1186/s12889-021-11975-3</a>; <a href="https://rdcu.be/cA5Sp">https://rdcu.be/cA5Sp</a>
- 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. ahead-of-print No. <a href="https://doi.org/10.1108/JPBM-07-2019-2481">https://doi.org/10.1108/JPBM-07-2019-2481</a>
- 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. <a href="https://doi.org/10.3390/ijerph17010037">https://doi.org/10.3390/ijerph17010037</a>
- 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. <a href="https://doi.org/10.3390/ijerph16132438">https://doi.org/10.3390/ijerph16132438</a>
- 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. <a href="https://doi.org/10.1002/sim.8179">https://doi.org/10.1002/sim.8179</a>
- 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. <a href="https://doi.org/10.3390/ijerph16040522">https://doi.org/10.3390/ijerph16040522</a>
- 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. <a href="https://doi.org/10.1080/24725838.2018.1521351">https://doi.org/10.1080/24725838.2018.1521351</a>
- 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. <a href="https://doi.org/10.1177/0018720818807043">https://doi.org/10.1177/0018720818807043</a>
- 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. <a href="https://doi.org/10.1186/s12889-017-4757-y">https://doi.org/10.1186/s12889-017-4757-y</a>
- 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. <a href="https://doi.org/10.1016/j.clinbiomech.2016.03.011">https://doi.org/10.1016/j.clinbiomech.2016.03.011</a>

- 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. <a href="https://doi.org/10.2105/AJPH.2016.303323">https://doi.org/10.2105/AJPH.2016.303323</a>
- 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. <a href="https://doi.org/10.1080/21577323.2016.1214767">https://doi.org/10.1080/21577323.2016.1214767</a>
- 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. <a href="http://dx.doi.org/10.6000/1929-4247.2016.05.02.4">http://dx.doi.org/10.6000/1929-4247.2016.05.02.4</a>
- 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. <a href="https://doi.org/10.1080/21577323.2016.1183534">https://doi.org/10.1080/21577323.2016.1183534</a>
- 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. <a href="https://doi.org/10.3390/ijerph15030532">https://doi.org/10.3390/ijerph15030532</a>
- 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. <a href="https://doi.org/10.1080/14635240.2015.1029641">https://doi.org/10.1080/14635240.2015.1029641</a>
- 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
- 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. <a href="http://www.scopus.com/inward/record.url?eid=2-s2.0-84864821820&partnerID=MN8TOARS">http://www.scopus.com/inward/record.url?eid=2-s2.0-84864821820&partnerID=MN8TOARS</a>
- 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. <a href="https://doi.org/10.1177/0018720812451046">https://doi.org/10.1177/0018720812451046</a>
- 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. <a href="https://doi.org/10.1177/1064804611428927">https://doi.org/10.1177/1064804611428927</a>
- 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. <a href="https://doi.org/10.1186/1471-2458-11-926">https://doi.org/10.1186/1471-2458-11-926</a>
- 7. Smith, M. L, **Benden, M. E.**, & Lee, C. (2011). Promoting active communities in a culture of distracted driving. *Preventing Chronic Disease*, 9. <a href="http://dx.doi.org/10.5888/pcd9.110212">http://dx.doi.org/10.5888/pcd9.110212</a>

- 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). <a href="http://www.scopus.com/inward/record.url?eid=2-s2.0-79960771946&partnerID=MN8TOARS">http://www.scopus.com/inward/record.url?eid=2-s2.0-79960771946&partnerID=MN8TOARS</a>
- 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. <a href="https://doi.org/10.1177/106480469400200306">https://doi.org/10.1177/106480469400200306</a>

## **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* (2<sup>nd</sup> ed.). Trinity River Publishing
- **Benden, M. E.** Could You Stand to Lose? Weight Loss Secrets for Office Workers (1<sup>st</sup> 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**

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

## Selected Conference Papers

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. <a href="https://doi.org/10.1093/geroni/igy023.2726">https://doi.org/10.1093/geroni/igy023.2726</a>

**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. <a href="https://www.isbnpa.org/files/articles/2018/07/04/102/attachments/5b3d0ebde1d22.pdf">https://www.isbnpa.org/files/articles/2018/07/04/102/attachments/5b3d0ebde1d22.pdf</a>

**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. <a href="https://www.isbnpa.org/files/annual\_meetings/2015/06/10/16/attachments/557869344">https://www.isbnpa.org/files/annual\_meetings/2015/06/10/16/attachments/557869344</a> fefe.pdf

**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<sup>TM</sup>," United States Patent, No. 6607246.

Congleton, J.J., **Benden, M.,** Boenigk, R.C., Guillen, J.C., "Support for a Seating Device – Abstool<sup>TM</sup>," United States Patent, No. 6877812.

**Benden, M.,** Smith, C.A., Congleton, J.J., Johnson, L., "Support Assembly for a Seating Device – NeXtep<sup>TM</sup>," United States Patent, No. 7036886.

**Benden, M.,** Congleton, J.J., Smtih, C.A., "Vertical Adjustment Apparatus for a Keyboard – StandUp<sup>TM</sup>," United States Patent, No. 7048236.

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

**Benden, M.,** Chapman, A.K., Sanchez, M.R., "Seating Device − Balance<sup>TM</sup> Chair Ergo," United States Patent, No. D541061.

**Benden, M.,** Chapman, A.K., Sanchez, M.R., "Support for a Seating Device – Balance<sup>TM</sup> 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

As of Jul. 1, 2021, two 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.,** 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.** (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

- 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]. 57<sup>th</sup> 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]. 139<sup>th</sup> 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**

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.

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

Congleton, J. J., Craig, B., **Benden, M.** & Parker, M. (2003, October). *Current and Future Office Ergonomic Trend* [Poster presentation]. 47<sup>th</sup> 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 681 – EOH Seminar

PHEO 682 – System Safety

PHEO 680 – Capstone

PHEO 679 – Upper Extremity

PHEO 691/791 –

Ergonomics

Research/Doctoral Study

PHEO 678 – Low Back/Whole

PHEO 685 – Directed Study

PHLT 485 – Senior Capstone

## **Doctoral Students Advised/Mentored**

**Dr. Kristen Miller,** DrPh

Chair, graduated 2012

Dr. Greg Garrett, DrPh

Chair, graduated 2019

**Dr. Meghan Wernicke,** DrPh

Chair, graduated 2014

Dr. Kamrie Sarnosky, DrPh

Chair, graduated 2019

**Dr. Parag SharmaDr. Tricia Salazar**, DrPhDrPh Chair, graduated 2018Chair, 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, graduated 2020

Dr. William Johnson, DrPh

Committee member, graduated 2019

Dr. Juha Baek. DrPh

Committee member (graduated 2020)

Linda Bridges, DrPh

Current chair (expected graduation 2020)

Kaysey Aguilar, DrPh

Current chair (expected graduation (2022)

Martha Parker, PhD ITDE

Current chair (expected graduation 2023)

Ashley Shortz, DrPh

Current committee member (expected graduation 2022)

Junho Park -PhD ISEN Current

committee member (expected graduation Dec 2022)

Lauren Williams - DrPh Current

committee member (expected graduation 2024)

Yibo Zhu, PhD ISEN

Current committee member (expected graduation 2021)

Sloane Hoyle, DrPh

Current committee member (expected graduation 2021)

Yu Zhou, PhD ISEN

Current committee member (expected graduation 2022)

Whitney Mantooth, PhD ITDE

Current chair (expected graduation 2024)

Masters Students Advised

Vicki Torres, MSPH

Committee member, 2010

John Smith, MSPH

Committee member, 2010

Lexie Mancuso, MSPH

Chair, 2010

McKenzie Henry, MSPH

Chair, 2010

Kristin Miller, MSPH

Chair, 2011 Gulberg Ergin, MS (ISEN)

Co-chair, 2019

Megan Morales, MSPH

Chair, 2011 Gilson Honvoh, MSPH
Jase Perry, MSPH
Committee member, 2017

Chair, 2012

**Cullen Brown,** MS (CPSC) **Angela Marsalia,** MSPH

Committee member, 2017

Chair, 2013

Allison Schuelke, MSPH

Chair, 2014

Jason Noriega, MS (STAT)

Committee member, 2019

**Drew Schneider**, MSPH

Chair, 2014

Rowland Ramos MS (ETID)

Committee member, 2020

#### **Student Awards**

## **Applied Ergonomics Creativeness** in Ergonomics Student Award

Tricia Salazar, 2020 Meghan Wernicke, 2013 Kamrie Sarnosky, 2019 James Stafford, 2012 Ashley Shortz, 2018 Kristen Miller, 2011 Greg Garrett, 2015

#### **Ergo Cup – Student Design Award**

Meghan Wernicke, Jeff Bauml, Katie Connell, Anthony Onowoku, 2011

# **Honors and Awards**

Applied Ergonomics Conference & Exposition, Incoming Chair	2020
National Academy of Inventors, Senior Member	2019
Inc 5000 VET50 List, #35	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, Guardian <sup>TM</sup> chair	2013
EOH Teaching Award, Rural Public Health Student Association	2009-10
Platinum ADEX Award, Elemental <sup>TM</sup> in Design Journal	2008-09
Top 10 Most Innovative Product Designer, Healthcare Design Magazine	2008
<b>NECE Attendees Choice Award,</b> <i>Ntune</i> ™ Seating System	2007
Editor's Top 100, Buildings Magazine for Ntune <sup>TM</sup> Seating System	2007
NECE Attendees Choice Award, Pipette Arm <sup>TM</sup>	2006
Platinum ADEX Award, NeXtep <sup>TM</sup> and Balance <sup>TM</sup> char in Design Journal	2005-06
<b>NECE Attendees Choice Award, NeXtep</b> <sup>TM</sup>	2005
Platinum ADEX Award, AbStool <sup>TM</sup> and StandUp <sup>TM</sup> in Design Journal	2004-05
NECE Attendees Choice Award, StandUp <sup>TM</sup>	2004
NECE Attendees Choice Award, AbStool <sup>TM</sup>	2003
IIDEX 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 *Complete list of US Army awards and decorations are available separately	1988-89
American National Standard for Human Factors Member of the Canvass Committee for BSR/HREX 100	1988

# **Professional Affiliations**

Center for Remote Health Technologies & Systems Member

2013-Present

Center for Population Health & Aging  Member	2017-Present
Center for Health Systems & Design Member	2017-Present
Center for Community Health Development  Member	2008-Present
Ergonomics Center  Executive Director	2015-Present
Office of Ergonomic Research Center Industry partner	1999-2001

# **Professional Service**

## Committee Membership

## **Department PhD Minor Committee**

Member, 2016-Present

**Center in Ergonomics** 

Industry Partner

## **Department Undergraduate Minor Committee**

**NSF Industry University Cooperative Research** 

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

1996-1998

#### **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

#### 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

#### **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

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

McInerney Law, Canela vs. Costco (2021)

Expert witness for greeter and exit checker employees seeking suitable seating options per California wage orders.

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 front register employees 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, 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.

#### McCov Law, PC, (2010)

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

#### McCov 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.

1 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.

## Testimony to Texas House of Representatives

House Committee on Public Health, Mar 8, 2010

# **Research Features**

#### **Podcasts**

## **ErgoExpo**

Movement at Work, Guest

An exploration of new standards, developments, and trends

#### **IISE: Problem Solved**

<u>Sit, Stand & Shake: Adjustability and Ergonomics with Mark Benden</u>, 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. <a href="https://podcast.iise.org/episodes/sit-stand-shake-adjustability-and-ergonomics-with-mark-benden">https://podcast.iise.org/episodes/sit-stand-shake-adjustability-and-ergonomics-with-mark-benden</a>

#### **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 Houston Chronicle
Amazon News HSC/TAMU Podcast
Arstechnica Huffington Post
Austin American Statesman IIES Magazines
BBC Inc Magazine

BBC Inc Magazi
BioSpace KAGS
Bloomberg KBTX
Business Standard LA Times

Care 2 Martha Stewart Living

CBS Men's Health Chicago Tribune MMQB

CNN Mobility WOD Podcast

Dallas Morning News MSN
DieWelt NBS

EdNews Daily New York Times

EurekAlert! NewsMax
Examiner Newswise
Fast Company NPR
Forbes Outside

Fox News Health Parade Magazine Futurity Parents Magazine

Good Housekeeping Parents Maga

GQ Science Daily Healio Seattle Times State Times India The New Indian Express

TagesAnzeigerThe Siasat DailyTeacher MagazineShape MagazineTechTimesTime Magazine

Texas Standard
Texas Tribune
The Eagle
Today Parenting
Wall Street Journal
Washington Post

The Express Tribune Women's Health
The Medical News Yahoo News