

Susan P. Ashdown

*Emerita Professor
Department of Fiber Science & Apparel Design
College of Human Ecology, Cornell University*

Education

Ph.D. in Apparel from the University of Minnesota, Minneapolis, MN, 1991.

M.A. in Textiles, Apparel Design from Cornell University, Ithaca, NY, 1989.

B.A. in Theater Arts from Grinnell College, Grinnell, IA, 1971.

Employment

University Appointments

2018-present Emerita professor, Dept. of Fiber Science & Apparel Design, Cornell University

2006–2018 Helen G. Canoyer professor, Dept. of Fiber Science & Apparel Design, Cornell University

1997–2006 Associate professor, Dept. of Textiles and Clothing, Cornell University

1991–1997 Assistant professor, Dept. of Textiles and Clothing, Cornell University

1990–1991 Teaching assistant, Design, Housing, and Apparel, University of Minnesota

1989–1990 Research assistant, Design, Housing, and Apparel, University of Minnesota

1987–1988 Teaching assistant, Textiles and Apparel, Cornell University

1980–1988 Lecturer, Costume Technology, Theater Arts, Cornell University

1971–1973 Teaching assistant, Theater Arts, University of Minnesota

Theater Appointments

1980–1988 Costume shop manager, Theater Cornell

1978–1980 Costume shop manager, Milwaukee Repertory Theatre

1977–1978 Assistant designer, Milwaukee Repertory Theatre

1975–1977 Costume assistant, Milwaukee Repertory Theatre

Garment Industry

1974–1975 Production assistant, Berman Buckskin

Publications

Book

Ashdown, S. P. (Ed.). (2007). *Sizing in clothing: Developing effective sizing systems for ready-to-wear clothing*. Cambridge, UK: Woodhead Publishing.

Refereed Publications

Pei, J., Fan, J. & Ashdown, S. P. (2019). Detection and Comparison of Breast Shape Variation among Different 3D Body Scan Conditions: Nude, with a Structured Bra, and with a Soft Bra, *Textile Research Journal*, 1-12. <https://doi.org/10.1177/0040517519839398>

Pei, J., Park, H., & Ashdown, S. P. (2018). Female breast shape categorization based on analysis of CAESAR 3D body scan data. *Textile Research Journal*, 0040517517753633.

Portway, S. & Ashdown S.P., Sustainability at Appalatch: Sweater Size Customization and the Triple Bottom Line. *Bloomsbury Fashion Business Cases*, Online Collection.

Pei, J., Fan, J., & Ashdown, S. P. (2018). A novel method to assess breast shape and breast asymmetry. *The Journal of the Textile Institute*, 1-12.

Morris, K.D. & Ashdown, S. P. (2018) Partnerships in practice: Producing new design knowledge with users when developing performance apparel products, *Fashion Practice*, 10:3, 328-353, DOI: 10.1080/17569370.2018.1507149.

Bragança, S., Arezes, P., Carvalho, M., Ashdown, S.P., Leão, C. (2018) Assessment of the intraday variability of anthropometric measurements in the work environment: A pilot study, *International Journal of Occupational Safety and Ergonomics (JOSE)*, Vol.24, No.4, 516–526, <https://www.tandfonline.com/doi/full/10.1080/10803548.2017.1322803>.

Morris, K. D. & Ashdown, S.P., (2018) Expanding the concept of lead users as collaborators in functional apparel design, *Clothing and Textile Research Journal*, 36 (3), pp. 180-198.

Li, Y., Coffman, C., Ashdown, S. P., & Fan, J. A (2017). Comparative Study of Disposable Agriculture Coveralls Based on Wearer Trials. *Current Trends in Fashion Technology & Textile Engineering*. 1, (1).

Vuruskan, A & Ashdown, S. P. (2017) Modeling of half-scale human bodies in active body positions for apparel design and testing. *International Journal of Clothing Science and Technology*. Volume 29, Issue 6, pp. 807-821

Pei, J., Park, H., Ashdown, S.P., Vuruskan, A. (2017) A Sizing Improvement Methodology Based on Adjustment of Interior Accommodation Rates across Measurement Categories within a Size Chart. *International Journal of Clothing Science and Technology*, 29(4). <http://www.emeraldinsight.com/doi/full/10.1108/IJCST-03-2017-0024>

Yao, X., & Ashdown, S. P. (2016). Categorization and analysis of females' preferences for buttock shapes. *International Journal of Clothing Science and Technology*, 28(5), pp 600-611.

- Bragança, S., Arezes, P., Carvalho, M., & Ashdown, S. (2016). Current state of the art and enduring issues in anthropometric data collection. *Dyna*, 83(197), 22. Retrieved from <http://search.proquest.com/docview/1802641385?accountid=10267>
- Kim, YS, Song, H. K., & Ashdown, S. P. (2016). Women's petite and regular body measurements compared to current retail sizing conventions. *International Journal of Clothing Science and Technology*, 28 (1). <http://dx.doi.org/10.1108/IJCST-07-2014-0081>
- Bragança, S., Fontes, L., Arezes, P., Edelman, E. R., & Carvalho, M. (2015). The impact of work clothing design on workers' comfort. *Procedia Manufacturing*, 3(1), 5889–5896. doi:10.1016/j.promfg.2015.07.898
- Dunne, L. E., Morris, K., Reich, J., Ramaswamy, H., Ashdown, S. P., Kozen, F., & Coffman, C. (2015). Fashion Meets Space Travel: Engaging Girls in STEM through Functional Apparel Design. 45th International Conference on Environmental Systems. <https://repositories.tdl.org/ttu-ir/handle/2346/64376>
- Baytar, F., & Ashdown, S. P. (2015). An exploratory study of interaction patterns around the use of virtual apparel design and try-on technology. *Fashion Practice*, 7(1), 31–52.
- Song, H. K., & Ashdown, S. P. (2015). Investigation of the validity of 3D virtual fitting for pants. *Clothing and Textiles Research Journal*, 33(4), 314–330.
- Kim, H. S., Kim, J. M., & Ashdown, S. P. (2014). A Comparison Study of Brassiere Preferences and Breast Perceptions among the Middle-aged and Older US Women. *International Journal of Human Ecology*, 15(2), 33-41.
- Baytar, F., & Ashdown, S. P. (2014). Using video as a storytelling medium to influence textile and clothing students' environmental knowledge and attitudes. *International Journal of Fashion Design, Technology and Education*, 7(1), 31–41.
- Beaudette, E., Sanchez-Botero, L., Ashdown, S. P., Hinestroza, J., & Park, H. (2014). Innovative explorations in apparel design to create engineered outfits with lighting technologies. *Proceedings of the 2014 ACM International Symposium on Wearable Computers: Adjunct Program, USA*, 15–19. doi:10.1145/2641248.2641279
- Ashdown, S. P. (2013). Not craft, not couture, not "home sewing": Teaching creative patternmaking to the iPod generation. *International Journal of Fashion Design, Technology and Education*, 6(2), 112–120. doi:10.1080/17543266.2013.793747
- Boorady, L. M., Barker, J., Lee, Y.-A., Cho, E., Lin, S.-H., & Ashdown, S. P. (2013). Exploration of firefighter turnout gear, Part 1: Identifying male firefighter user needs. *Journal of Textile and Apparel, Technology and Management*, 8(1), 1–13.
- Boorady, L. M., Barker, J., Lee, Y.-A., Cho, E., Lin, S.-H., & Ashdown, S. P. (2013). Exploration of firefighter bunker gear, Part 2: Assessing the needs of the female firefighter. *Journal of Textile and Apparel, Technology and Management*, 8(2), 1–12.
- Song, H. K., & Ashdown, S. P. (2013). Female apparel consumers' understanding of body size and shape: Relationships among body measurements, fit satisfaction, and body

cathexis. *Clothing and Textiles Research Journal*, 31(3), 143–156. doi:
10.1177/0887302X13493127

- Barker, J., Boorady, L. M., Lin, S.-H., Lee, Y.-A., Esponnette, B. & Ashdown, S. P. (2012). Assessing user needs and perceptions of firefighter PPE. In A. M. Shepherd (Ed.), *Performance of protective clothing and equipment: Vol. 9. Emerging issues and technologies* (pp. 158–175). ASTM International: West Conshohocken, PA.
- Mason, A. M., De Klerk, H. M., & Ashdown, S. P. (2012). Identification of a unique African female body shape. *International Journal of Fashion Design, Technology and Education*, 5(2), 105–116.
- Petrova, A., & Ashdown, S. P. (2012). Comparison of garment sizing systems. *Clothing and Textiles Research Journal*, 30(4), 267–284.
- Song, H. K. & Ashdown, S. P. (2012). Development of automated custom-made pants driven by body shape. *Clothing and Textiles Research Journal*, 30(4), 315–329.
- Nam, J., Branson, D. H., Ashdown, S. P., Cao, H., & Carnrite, E. (2011). Analysis of cross sectional ease values for fit analysis from 3D body scan data taken in working position. *International Journal of Human Ecology*, 12(1), 87-99.
- Song, H. K., & Ashdown, S. P. (2011). Categorization of lower body shapes based on multiple view analysis. *Textile Research Journal*, 81(9) 914–931.
- Ashdown, S. P., & Loker, S. (2010). Mass customized target market sizing: Extending the sizing paradigm for improved apparel fit. *Fashion Practice*, 2(2), 147–173.
- Choi, S. Y., & Ashdown, S. P. (2010). 3D body scan analysis of dimensional change in lower body measurements for active body positions. *Textile Research Journal*, 81(1), 81–93. doi:10.1177/0040517510377822
- Choi, S. Y., & Ashdown, S. P. (2010). Application of lower body girth change analysis using 3D body scanning to pants patterns. *Journal of the Korean Society of Clothing and Textiles*, 34(6), 955–968.
- Song, H. K., & Ashdown, S. P. (2010). An exploratory study of the validity of visual fit assessment from three-dimensional scans. *Clothing and Textiles Research Journal*, 28(4), 263–278.
- Boorady, L., Rucker, P., Haise, C., & Ashdown, S. P. (2009). Analysis of active positions and PPE needs of agricultural workers. *Journal of Textile and Apparel, Technology and Management*, 6(2), 1–17. Available at <http://ojs.cnr.ncsu.edu/index.php/JTATM/article/viewFile/646/455>. ("Scholarly" category, single reviewer.)
- Paek, K. J., & Ashdown, S. P. (2009). Development and analysis of smart jacket for the elderly: Focused on American women. *Journal of the Korean Society for Clothing Industry*, 11(2), 315–325.

- Paek, K. J., & Ashdown, S. P. (2009). Qualitative study for user needs and acceptance of smart clothing: Focused on women aged 56 and over. *Journal of Korean Home Economics Association*, 47(3), 55–65.
- Calhoun, E., Ashdown, S. P., & Lyman-Clarke, L. (2009). Virtual fit of apparel on the internet: Current technology and future needs. In F. T. Piller & M. M. Tseng (Eds.), *Handbook of research in mass customization and personalization: Vol. 2. Applications and cases* (pp. 731–748). Hackensack, NJ: World Scientific Press.
- Ashdown, S. P., Choi, M. S., & Milke, E. (2008). Automated side-seam placement from 3D body scan data. *International Journal of Clothing Science and Technology*, 20(4), 199–213.
- Loker, S., Ashdown, S. P., & Carnrite, E. (2008). Dress in the third dimension: On-line interactivity and its new horizons. *Clothing and Textiles Research Journal*, 26(2), 164–176. (Invited paper for special issue.)
- Mason, A. M., De Klerk, H. M., & Ashdown, S. P. (2008). Sizing and fit research at grassroots level: A methodology for the identification of unique body shapes in African developing countries. *Journal of Family Ecology and Consumer Sciences*, 36, 9–21.
- Mason, A. M., De Klerk, H. M., Sommerville, J., & Ashdown, S. P. (2008). Consumers' knowledge on sizing and fit issues: A solution to successful apparel selection in developing countries. *International Journal of Consumer Studies*, 32, 276–284.
- Na, H., & Ashdown, S. P. (2008). Comparison of 3D body scan data to quantify upper body postural variation in older and younger women. *Clothing and Textiles Research Journal*, 26(4), 292–307.
- Petrova, A., & Ashdown, S. P. (2008). Three-dimensional body scan data analysis: Body size and shape dependence of ease values for pants fit. *Clothing and Textiles Research Journal*, 26(3), 227–252.
- Wells, N. M., Ashdown, S. P., Davies, E. S., Cowett, F. D., & Yang, Y. (2007). Environment, design and obesity: Opportunities for interdisciplinary collaborative research. *Environment and Behavior*, 39(1), 6–33.
- Ashdown, S. P., & Dunne, L. (2006). A study of automated custom fit: Readiness of the technology for the apparel industry. *Clothing and Textiles Research Journal, Focused Issue on Fit*, 24(2), 121–136.
- Ashdown, S. P., & O'Connell, E. K. (2006). Comparison of test protocols for judging the fit of mature women's apparel. *Clothing and Textiles Research Journal, Focused Issue on Fit*, 24(2), 137–146.
- Griffey, J. V., & Ashdown, S. P. (2006). Development of an automated process for the creation of a basic skirt block pattern from 3D body scan data. *Clothing and Textiles Research Journal Focused Issue on Fit*, 24(2), 112–120.
- Lee, Y. A., Ashdown, S. P., & Slocum, A. C. (2006). Measurement of surface area of 3D body scans to assess the effectiveness of hats for sun protection. *Family and Consumer*

Sciences Research Journal, 34(4), 366–385. Available at
<http://fcs.sagepub.com/cgi/reprint/34/4/366>

- Schofield, N. A., Ashdown, S. P., Hethorn, J., LaBat, K., & Salluso, C. J. (2006). Improving fit for women 55 and older through an exploration of two pant shapes. *Clothing and Textiles Research Journal, Focused Issue on Fit*, 24(2), 147–160.
- Ashdown, S. P., Slocum, A., & Lee Y. A. (2005). The third dimension for apparel designers: Visual assessment of hat designs for sun protection using 3D scan images. *Clothing and Textiles Research Journal*, 23(3), 151–164.
- Dunne, L. E., Ashdown, S. P., & Smyth, B. (2005). Expanding garment functionality through embedded electronic technology. *Journal of Textile and Apparel, Technology and Management*, 4(3). Available at
http://www.researchgate.net/publication/228673324_Expanding_garment_functionality_through_embedded_electronic_technology
- Lee, J. & Ashdown, S. P. (2005). Upper body change analysis using 3D body scanner. *Journal of the Korean Society of Clothing and Textiles, English Edition*, 29(12), 1595–1607.
- Loker, S., Ashdown, S. P., & Schoenfelder, K. (2005). Size-specific analysis of body scan data to improve apparel fit. *Journal of Textile and Apparel, Technology and Management*, 4(3). Available at http://www.researchgate.net/publication/251735640_Size-specific_Analysis_of_Body_Scan_Data_to_Improve_Apparel_Fit
- Nam, J., Branson, D. H., Ashdown, S. P., Cao, H., Jin, B., & Peksoz, S. (2005). Fit analysis of liquid cooled vest prototypes using 3D body scanning technology. *Journal of Textile and Apparel, Technology and Management*, 4(3). Available at
http://www.researchgate.net/publication/237462999_Fit_analysis_of_liquid_cooled_vest_prototypes_using_3D_body_scanning_technology
- Ashdown, S. P., Loker, S., Schoenfelder, K. A., & Lyman-Clarke, L. (2004). Using 3D scans for fit analysis. *Journal of Textile and Apparel, Technology and Management*, 4(1).
- Lee, J. Y., Joo, S. Y., & Ashdown, S. P. (2004). A basic study contributes to extract the standardized 3D body data for women aged 60 and older. *Journal of the Korean Society of Clothing and Textiles*, 28(2), 1–10.
- Loker, S., Ashdown, S. P., Cowie, L., & Schoenfelder K. A. (2004). Consumer interest in commercial applications of body scan data. *Journal of Textile and Apparel, Technology and Management*, 4(1). Available at
http://www.researchgate.net/publication/237262667_Consumer_Interest_in_Commercial_Applications_of_Body_Scan_Data
- Loker, S., Cowie, L. S., Ashdown, S. P., & Lewis, V. D. (2004). Consumer reactions to body scanning. *Clothing and Textiles Research Journal*, 22(4), 151–160.
- Young, C., Jirousek, C., & Ashdown, S. P. (2004). Undesigned: A study in sustainable design of apparel using post-consumer recycled clothing. *Clothing and Textiles Research Journal*, 22(1/2), 61–68.

- Choi, M. S., & Ashdown, S. P. (2002). A study of the development of work clothing for pear farmers. *International Issues Related to the Textiles, Apparel, and Related Industries*, a special publication of the International Textile and Apparel Association, 253–263.
- Choi, M. S., & Ashdown, S. P. (2000). Effect of changes in knit structure and density on the mechanical and hand properties of weft-knitted fabrics for outerwear. *Textile Research Journal*, 70(12), 1033–1045.
- Ashdown, S. P., & Paal, B. (1998). An investigation of the structure of sizing systems: A comparison of four multidimensional optimized sizing systems generated from anthropometric data with the ASTM standard D5585-94. *International Journal of Clothing Science and Technology*, 10(5), 324–341.
- Kohn, I., & Ashdown, S. P. (1998). Use of video capture and image analysis to quantify the fit of apparel. *Textile Research Journal*, 68(1), 17–26.
- McCulloch, C. E., Paal, B., & Ashdown, S. P. (1998). An optimisation approach to apparel sizing. *Journal of the Operational Research Society*, 49, 1–8.
- Ashdown, S. P., & Watkins, S. M. (1996). Concurrent engineering in the design of protective clothing: Interfacing with equipment design. In J. S. Johnson & S. Z. Mansdorf (Eds.), *Performance of protective clothing: Vol. 5* (pp. 471–485). West Conshohocken, PA: American Society of Testing and Materials.
- Ashdown, S. P., & DeLong, M. R. (1995). Perception testing of apparel ease variation. *Applied Ergonomics*, 26(1), 47–54.
- Ashdown, S. P. & Boorady, L. (1993). Re-creating history for children: An apparel reproduction project. *Ars Textrina*, 20, 133–156.
- DeLong, M. R., Ashdown, S. P., Butterfield, L., & Frost Turnblad, K. (1993). Data specification needed for apparel production using computers. *Clothing and Textiles Research Journal*, 11(3), 1–7.
- Ashdown, S. P., & Watkins, S. M. (1992). Movement analysis as the basis for the development and evaluation of a protective coverall design for asbestos abatement. In J. P. McBriarty & N. W. Henry (Eds.), *Performance of protective clothing: Vol. 4* (pp. 600–674). Philadelphia, PA: American Society for Testing and Materials.

Book Chapters

- Bragança S., Arezes P., Carvalho M., Ashdown S. (2016) Effects of Different Body Postures on Anthropometric Measures. In: Rebelo F., Soares M. (eds) *Advances in Ergonomics in Design. Advances in Intelligent Systems and Computing*, vol 485. Springer, Cham
- Ashdown, S.P. (2015). Fit and Movement, Subsection in Chapter 2: Providing Mobility in Clothing. In Watkins, S. M. & Dunne, L. E., *Functional clothing design: From sportswear to spacesuits* (pp 70-79). New York, NY: Fairchild Books, an imprint of Bloomsbury Publishing, Inc.

- Ashdown, S. P. (2014). Creation of ready-made clothing: The development and future of sizing systems. In M.-E. Faust & S. Carrier, *Designing apparel for consumers: The impact of body shape and size* (pp. 17–34). Cambridge, UK: Woodhead Publishing.
- Bragança, S., Arezes, P. M., Carvalho, M. A., Ashdown, S. P. (2014). 3D anthropometric data collection for occupational ergonomics purposes: A review. In P. Arezes, J. S. Baptista, M. P. Barroso, P. Carneiro, P. Cordeiro, N. Costa, R. B. Melo, S. A. Miguel, & G. Perestrelo (Eds.), *Occupational safety and hygiene II* (pp. 393–398). London, UK: CRC Press.
- Barker, J. F., Boorady, L. M., & Ashdown, S. P. (2012). The use and function of color in firefighter clothing. In M. DeLong & B. Martinson (Eds.), *Color and design* (pp. 110–117). London: Berg Publications.
- Ashdown, S. P. (2011). Improving body movement comfort in apparel. In G. Song (Ed.), *Comfort in clothing* (pp. 278–302). Cambridge, UK: Woodhead Publishing.
- Ashdown, S. P., Palmer, P., & Lyman-Clarke, L. (2007). Sizing for the home sewing industry. In S. P. Ashdown (Ed.), *Sizing in clothing: Developing effective sizing systems for ready-to-wear clothing* (pp. 328–347). Cambridge, UK: Woodhead Publishing Limited.
- Ashdown, S. P., Smith, J., Loker, S., & Lyman-Clarke, L. (2007). Production systems, distribution systems and sizing. In S. P. Ashdown (Ed.), *Sizing in clothing: Developing effective sizing systems for ready-to-wear clothing* (pp. 348–375). Cambridge, UK: Woodhead Publishing.
- Loker, S., & Ashdown, S. P. (2007). Virtual sensation: Dress online. In D. C. Johnson & H. B. Foster (Eds.), *Dress sense: Emotional and sensory experiences of the body and clothes* (pp. 170–182). New York, NY: Berg Publishers.
- Ashdown, S. P. (1995). Sizing and fit. Contribution to chapter on providing mobility in S. M. Watkins, *Clothing: The portable environment*, (2nd ed.). Des Moines, IA: Iowa State University Press.

Proceedings

- Ashdown, S. P. & Vuruskan, A. (2017, October). From 3D Scans to Haptic Models: Apparel Design with Half Scale Dress Forms. In *Proceedings of the 8th International Conference on 3D Body Scanning Technologies*. Zurich, Switzerland: Hometrica Consulting.
- Vuruskan, A. & Ashdown, S. P. (2017, October). Reimagining Design of Golf Clothing: Addressing the Asymmetrical Pose. In *Proceedings of the 8th International Conference on 3D Body Scanning Technologies*. Zurich, Switzerland: Hometrica Consulting.
- Bragança, S., Arezes, P., Carvalho, M., Ashdown, S. (2016). Implications of dynamic working postures in garments' comfort. In Sušić et al. (Eds). *Book of Proceedings of the 6th International Ergonomics Conference - Ergonomics 2016 – Focus on Synergy*. pp. 31-38.

- Ashdown, S. P., Devine, C., & Erickson, P. D. (2010). Research in body/garment relationships. In *Proceedings of the International Conference on 3D Body Scanning Technologies*. Zurich, Switzerland: Hometrica Consulting.
- Ashdown, S. P., & Loker, S. (2007). Mass customized target market sizing: Extending the sizing paradigm for improved apparel fit. In *Proceedings of the 2007 World Congress on Mass Customization and Personalization*.
- Calhoun, E. L., Lyman-Clarke, L., & Ashdown, S. P. (2007). Virtual fit of apparel on the internet: Current technology and future needs. In *Proceedings of the 2007 World Congress on Mass Customization and Personalization*.
- Ng, R., Ashdown, S. P., & Chan, A. (2007). Intelligent size table generation. In *Proceedings of the Asian Textile Conference (ATC)*.
- Loker, S. & Ashdown, S. P. (2005). The body scanner: Mass customization technology applied to ready-to-wear. In *Proceedings from the 2005 World Congress on Mass Customization and Personalization*. (Abstract refereed, paper with editorial review.)
- Dunne, L., Toney, A., Ashdown, S. P., & Thomas, B. H. (2004). Subtle integration of technology: A case study of the business suit. In *Proceedings of the First International Conference on Applied Wearable Computing*. Available at http://www.lucydunne.com/subtle_integration.pdf
- Toney, A., Dunne, L., Thomas, B. H., & Ashdown, S. P. (2003). A shoulder pad insert vibrotactile display. In *Proceedings of Seventh IEEE International Symposium on Wearable Computers*. Available at <http://www.lucydunne.com/Dunne-iswc2003.pdf>
- Dunne, L., McDonald, E., & Ashdown, S. P. (2002). "Smart systems": Wearable integration of intelligent technology. In *Proceedings of International Center for Excellence in Wearable Computing and Smart Fashion Products*. Available at <http://www.lucydunne.com/SmartSystemsICEWES2002.pdf>

Encyclopedia Entry

Ashdown, S. P. (2003). Susan Watkins. In J. M. Miller, R. M. Lerner, L. B. Schiamberg, & P. M. Anderson (Eds.), *Encyclopedia of human ecology: I-Z* (pp. 705–708). Santa Barbara, CA: ABC-Clio.

Wikipedia Article

https://en.wikipedia.org/wiki/Susan_Margaret_Watkins

In Press

Vuruskan, A., Ashdown, S.P., Half scale dress forms from 3D body scans in active poses.

In Preparation

Pei, J., Ashdown, S. P., & Fan, J., A Novel Optimization Approach to Minimize Aggregate-Fit-loss for Improved Bra Sizing. Submitted to *Computer-Aided Design*.

- Song, H.K., Ashdown, S. P., Expert Versus Novice Assessment of Clothing Fit; An Exploratory Study using Eye Tracking Technology
- Song, H.K., Baytar, F., Ashdown, S. P., 3D Anthropometric Analysis of Women's Aging Bodies: Upper Body Shape and Posture Changes," submitted to CTRJ-19-141
- Ashdown, S.P. Full Body 3D Scanners, chapter for Anthropometry for the Apparel Industry, Editor Gupta.
- Ashdown, S. P., Xiao, P.X, Fang, F., & Yoa, X.F., Jumpstarting creativity in the university setting: An exercise in creative silhouettes, *International Journal of Fashion Design, Technology and Education*.
- Cendegar, N., & Ashdown, S. P. (n.d.). A framework for draping course based on participant observation in fashion design education (A case study: Cornell University Fiber Science & Apparel Design Department).
- Morreale, J. L., Ashdown, S. P., & Sobal, J. Perceived fit of denim jeans and body satisfaction.

Patent

- Song, H. K., Ashdown, S., & Reeves, A. (2011). Body shape analysis method and system, International Application Number PCT/US11/62904, Issued Feb 2, 2016, Patent No. 9,251,591

Websites

- Ashdown, S. P., & Çeğindir, N. (2015). Halfscale Forum—Creative patternmaking: Conversations among apparel designers. Available at <http://www.human.cornell.edu/fsad/halfscale.cfm> and <http://halfscale.human.cornell.edu>
- Coffman, C., Ashdown, S. P., Morris, K., Dunne, L., Kozen, F. & Green, D. (2015). Style engineers. Available at <http://styleengineers.org>
- Ashdown, S. P., & Loker, S. (2002/2009). 3D body scanner. Available at <http://www.bodyscan.human.cornell.edu>
Description of the work of the Cornell Body Scan Research Group
- Ashdown, S. P., & Macpike, R. (2005). Patternmaking/draping: The body, the patternmaker, and clothing in 3D. Available at <http://fit.cit.cornell.edu/textiles/>
Teaching support for apparel patternmaking/draping
- Ashdown, S. P. (2001). Sizing systems in the apparel industry. Available at <http://sizingsystems.human.cornell.edu>
Reference list of publications on sizing and fit of apparel
- Ashdown, S. P., & Polvinen, E. (1999). Formerly at <http://www.human.cornell.edu/txa/usda>
Student designs from a USDA Higher Education Challenge Grant

Curated Displays

- Ashdown, S.P. Shadow, Light, and Life: Color and Design. Four display cases, T Level, Human Ecology Building. October 18th – November 25th, 2018.

Ashdown, S.P. Half Scale, Full Engagement: Art Deco Patternmaking Project Exhibit, 2018. 3rd annual display, 1st floor case, Human Ecology Building.

Ashdown, S.P. Half Scale, Full Engagement: Art Deco Patternmaking Project Exhibit, 2017. 2nd annual display, 1st floor case, Human Ecology Building.

Ashdown, S.P. Half Scale, Full Engagement: Art Deco Patternmaking Project Exhibit, 2016. 1st annual display, 1st floor case, Human Ecology Building.

Juried Designs

Cegindir, N., & Ashdown, S. P. (2014). The way to market: Inspired by "Au Bounheur des Dames." International Textile and Apparel Association Conference, Charlotte, NC, November 11–17. Abstract in the 2014 ITAA Proceedings.

Ashdown, S. P. (1991). Crappie chapeau. Points of Departure, Goldstein Gallery. Piece purchased, Goldstein Gallery.

Ashdown, S. P. (1990). Oriental comfort. American College Professors of Textiles and Clothing (ACPTC) Design Exhibit.

Ashdown, S. P. (1990). Orientation: Comfort. Finalist in Lifestyles '90 Design Competition sponsored by the Fashion Institute of Technology and the Underfashion Club.

Industry Reports

Yu, D., Greder, K., Pei, J., Mahapatra, S., Guria, S., Shenandoah, L., Shi, M.Y., Chung, Y.J., & Ashdown, S.P., (2017, December 14). Custom Fit Analysis: Special Report for Graupel.

Portway, S. & Ashdown, S.P. (2015, December 23). Hard to Fit: Developing Patterns for Mass-Customized Blue Jeans for Athletic and Plus Size Figures. Special Report for Q-cut.

Esponette, E., & Ashdown, S. P. (2009, December 23). Three case studies to determine issues with fit and function of firefighter turnout gear. Special Report for Globe Manufacturing.

Nsor, J., Seriki, O., & Ashdown, S. P. (2009, December 7). Bra sizing and fit. Special report for Maidenform.

Baytar, F., Erickson, P. D., & Ashdown, S. P. (2009, October 2). Investigation of visual and physiological indicators of comfort and effectiveness related to the design of firefighter uniforms. Special report for Globe Manufacturing, addendum December 12, 2009.

Hyde, E., & Ashdown, S.P. (2009). Comparison of sizing systems using 3D body scanning. Special report for Nike Apparel.

Buckner, K., Lyman-Clarke, L., & Ashdown, S. (2007, August 3). Nike lifestyle jacket 251314: Sizing, fit and design features for a younger demographic. Special report for Nike Apparel.

Ashdown, S.P., Lyman-Clarke, L., DeVirgilio, A., & Na, H. (2003, October 28). An exploration of laser body scanning as a tool for customization. Special report for Nike Apparel.

Student Designs Mentored

- Chung, Y.J., The Structure of Truth. International Textile and Apparel Association Conference, Cleveland, OH, November 6-9, 2018. Abstract in the 2018 ITAA Proceedings.
- Guria, S. & Chung, Y.J., AfterLife. International Textile and Apparel Association Conference, Cleveland, OH, November 6-9, 2018. Abstract in the 2018 ITAA Proceedings.
- Champagne, A. (2018) Sugar Coated. International Textile and Apparel Association Conference, Cleveland, OH, November 6-9, 2018. Abstract in the 2018 ITAA Proceedings.
- Cernauskas, L. (2017) Strong Dancer, Graceful Warrior. International Textile and Apparel Association Conference, St. Petersburg, FL, November 14-18. Abstract in the 2017 ITAA Proceedings.
- Laginestra, S.(2017) Ring Leader. International Textile and Apparel Association Conference, St. Petersburg, FL, November 14-18. Abstract in the 2017 ITAA Proceedings.
- Williams, K. (2017) Spirit of the Fun House. International Textile and Apparel Association Conference, St. Petersburg, FL, November 14-18. Abstract in the 2017 ITAA Proceedings.
- Wild, D., & Ashdown, S. P. (2015). Change. Work. Persevere. International Textile and Apparel Association Conference, Santa Fe, NM, November 25–27. Abstract in the 2015 ITAA Proceedings.
- Fong, L., & Ashdown, S. P. (2013). Elevation. Accepted for the International Textile and Apparel Association Design Show, International Textile and Apparel Association conference, New Orleans, LA, October 15–18.
- Sohn, J., & Ashdown, S. P. (2009). Undulations in white: Wedge dress with fluted dolman sleeves. International Textile and Apparel Association Mounted Design Exhibit, International Textile and Apparel Association conference, Bellevue, WA, October 28–31.
- Golden, S., Ashdown, S. P., & Lewis, V. D. (2005). Convertible nomad: A line of clothes for transients. Finalist in the Design Show at the International Textile and Apparel Association Conference, Alexandria, VA, November 1–6. Abstract in the ITAA 2005 Proceedings.

Awards and Honors

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| 2018 | Teaching Scholar Certificate, Active Learning Initiative, Center for Teaching Innovation, Cornell University |
| 2016 | International Textile and Apparel Association Fellow |
| 2011 | Empey Lecturer, University of Alberta, Edmonton, Canada |
| 2009 | Distinguished Scholar, International Textile and Apparel Association |

- 2006 Helen G. Canoyer Professorship, Cornell University
- 2005 Faculty Fellowship, Hong Kong Polytechnic Institute
Two-week program, lecture series and research consultation
- 2005 Faculty Fellowship, National Aeronautics and Space Administration Summer Faculty Research, Houston
Ten-week program, Anthropometry and Biomechanics Facility
- 2000 Invited lecture, Sonia Wolf Wilson Lectureship in Human Ecology at the University of Texas at Austin
- 1998 Faculty Fellowship, Textile Clothing Technology Corporation, Cary, NC
Twelve-week program
- 1990 Winner, Association of College Professors of Textiles and Clothing (ACPTC) Graduate Student Paper Competition

Grants Obtained

- 2017-2020 Cornell Agricultural Experiment Station Regional Research Project NC-170, Personal protective technologies for current and emerging occupational hazards. \$25,500 for year 1; \$20,000 for year 2; and \$15,500 for year 3.
- 2013-2017 Cornell Agricultural Experiment Station Regional Research Project NC-170, \$34,000 per year. S. P. Ashdown & J. Fan, Personal protective technologies for current and emerging occupational hazards.
- 2013-2016 National Science Foundation, \$748,282. S. P. Ashdown, C. Coffman, & L. Dunne, Smart clothing, smart girls: Engineering via apparel design.
- 2015 REU supplement to National Science Foundation grant 1139501, \$12,999.
- 2015 Faculty Innovation in Teaching, Cornell University, \$15,000. S. P. Ashdown, Online creative patternmaking: Global collaborations among scholars of apparel design.
- 2013 Bridging Grant, College of Human Ecology and Department of Fiber Science and Apparel Design, \$19,200 (January-October).
- 2007-2012 Cornell Agricultural Experiment Station Regional Research Project NC-170, \$34,000 per year. S. P. Ashdown, S.K. Obendorf, & C. Coffman, Personal protective technologies for current and emerging occupational hazards.
- 2010-2011 College of Human Ecology Pilot Award Program to Encourage Multi-Departmental Research Activities, \$50,000. D. Feathers, S. P. Ashdown, & J. Hinestroza, Human-centered physical interaction modeling for personal protective equipment.

- 2010 Cornell Center for Materials Research, \$15,000. M. Frey & S. P. Ashdown, Jumpstart: ZetrOZ ultrasonic skin patch design (January–May).
- 2007–2010 National Science Foundation, \$811,504. S. Marschner, D. James, & S. P. Ashdown, Accurate and efficient visual simulation of fiber-based mechanical structures.
- 2004–2005; 2007–2010 National Textile Center, \$121,152. S. Loker, S. P. Ashdown, & F. Mete, Commercializing the mathematical model for apparel fit.
- 2008–2009 Globe Manufacturing, \$16,139. S. P. Ashdown, Investigation of visual and physiological indicators of comfort and effectiveness related to the design of firefighter uniforms.
- 2004–2007 National Textile Center, \$220,000/\$213,384/\$200,000. S. P. Ashdown, S. Loker (co-PIs), & C. Adelson, Improved apparel sizing: Fit and anthropometric 3D scan data.
- 2002–2006 Cornell Agricultural Experiment Station Regional Research Project NC-170, \$15,000 per year. S. P. Ashdown, Occupational safety and health through the use of protective clothing.
- 2002–2005 Faculty Innovation in Teaching Grants (FABIT) Program, Cornell University Grant, \$55,000. S. P. Ashdown, & R. Macpike (co-PIs), Technological solutions to teaching three-dimensional concepts: Apparel and costume patternmaking and fit.
- 2001–2004 National Textile Center, \$183,724/\$163,462/\$185,000. S. P. Ashdown, S. Loker (co-PIs), & C. Adelson, Use of body scan data to design sizing systems based on target markets.
- 2001–2002 National Textile Center, Auburn University project, \$8,000. L. J. Connell (PI) & S. P. Ashdown (subcontractor), Methods and system development for body scan analysis of posture and body shape for reengineering women’s patterns.
- 1999–2002 Cornell Agricultural Experiment Station Regional Research project W-194, \$10,000. S. P. Ashdown, Community development by merchandising, producing, and distributing textiles and sewn products.
- 2001 Cornell Council for the Arts Visiting Artist, \$5,000. S. P. Ashdown, Apparel: Design for the environment; Patagonia lecture.
- 2001 Apparelkey, Hong Kong. \$10,758. S. Loker (PI) & S. P. Ashdown, Apparel manufacturing knowledge portal site <http://www.apparelkey.com> (January–July).
- 1995–2000 Cornell Agricultural Experiment Station Regional Research Project, \$12,000 per year. S. P. Ashdown, Physiological and perceptual relationships between textiles and human health.

- 1995–1998 USDA Higher Education Challenge Grant, \$158,000. S. P. Ashdown (PI), E. Polvinen, & W. Wolfgang, Interactive apparel design: Collaborative learning through the internet.
- 1996 Pallflex Products Corporation, \$5,297. S. K. Obendorf (PI), P. Schwartz, & S. P. Ashdown, A program to develop test methods of microporous repellent materials to pathogenic fluids (May–August).
- 1996 President’s Council of Cornell Women, \$2,497. S. P. Ashdown, Body configuration as a factor in the fit and sizing of clothing for mature women (June–September).
- 1995–1996 Custom Clothing Technology Corporation, Industrial Extension Program, \$3,000. S. P. Ashdown, Investigation of sizing issues.
- 1993 Laivan Corporation, \$1,276. S. P. Ashdown, Design development of a protective gown for the health care industry (June–July).
- 1993 U.S. Army Natick Research, Development, and Engineering Center, \$9,998. S. P. Ashdown (PI) & B. Paal, Development of a statistical method of size categorization.
- 1992–1993 College of Human Ecology, \$5,500. S. P. Ashdown, Computer analysis of video images as a means of assessing the fit of apparel on the human form.
- 1992 Venture Fund for Instruction, College of Human Ecology, \$500. S. P. Ashdown, Changing aesthetics and design.
- 1992 Hydroplane Services, Industrial Extension project, \$1,200. S. P. Ashdown & S. Watkins (co-PIs), Seaplane pilot survival vest (May–June).
- 1992 Chemfab Industrial Extension project, \$14,246. S. P. Ashdown & S. Watkins (co-PIs), Chemical protective suit design modifications and sizing (June–November).

Gifts and Donations

- 2013-2015 International Personnel Protection, Inc., gift, \$11,500 support for undergraduate research assistants on protective clothing.
- 2009 Adidas, gift, \$3,700 for pilot test of body scan technology for made-to-measure clothing and virtual fit testing.
- 2002 Lectra, Inc. industry donation, \$600,000 for computer-aided design software for apparel patternmaking, grading, and custom fit, 18 stations, online software support.
- 2001 Rebecca Quinn Morgan Alumna Donation, \$50,000 for three-dimensional full body scanner.

Refereed Professional Presentations and Posters

- Phoenix, K.A., Doty, K. N. & Ashdown, S.P., (2018, November), Waffle Structure Display Mannequins Produced using Rhino Software. International Textile and Apparel Association Conference, Cleveland, OH, November 6-9, 2018. Abstract in the 2018 ITAA Proceedings.
- Phoenix, K.A. & Ashdown, S.P. (2018, November), Half-Scale Dress Form as a Design and Fit Tool for Young Designers. International Textile and Apparel Association Conference, Cleveland, OH, November 6-9, 2018. Abstract in the 2018 ITAA Proceedings.
- Morris, K. D. & Ashdown, S.P. (2017, November) Design of a Functional Running Garment. Presentation at the International Textile and Apparel Association Conference, St. Petersburg, FL. Abstract in the 2017 ITAA Proceedings.
- Wu, Y.Y. & Ashdown, S.P. (2017, November) A Cross-Cultural Study of Consumer Perceptions of Clothing Fit. Presentation at the International Textile and Apparel Association Conference, St. Petersburg, FL. Abstract in the 2017 ITAA Proceedings.
- Griffin, L., Sokolowski, S., Ashdown, S.P., LaBat, K., & Morris, K. (2017, November) Special Topic Session: Future Practices and Technologies in Anthropometrics and Body Scanning. Presentation at the International Textile and Apparel Association Conference, St. Petersburg, FL. Abstract in the 2017 ITAA Proceedings.
- Ashdown, S. P. & Vuruskan, A. (2017, October). From 3D Scans to Haptic Models: Apparel Design with Half Scale Dress Forms. Paper presented at the 8th 3DBODY.TECH International Conference on 3D Body Scanning Technologies, Montreal, Quebec, Canada.
- Vuruskan, A. & Ashdown, S. P. (2017, October). Reimagining Design of Golf Clothing: Addressing the Asymmetrical Pose. Paper presented at the 8th 3DBODY.TECH International Conference on 3D Body Scanning Technologies, Montreal, Quebec, Canada.
- Gordon, L., & Sokolowski, S., Ashdown, S., LaBat, K., Morris, K. (2017). Future Practices and Technologies in Anthropometrics and Body Scanning Workshop. Presented at the 2017 Transgender Spectrum Conference. St. Louis, MO.
- Vuruskan, A. and Ashdown, S. P. (2016, November). Fit analysis of bicycle clothing in active body poses. Presentation at the International Textile and Apparel Association Conference, Vancouver, B.C., Canada. Abstract in the 2016 ITAA Proceedings.
- Ashdown, S. P. and Phoenix, K. (2016, November). Half scale, full engagement: Uniting art, history and technology to teach patternmaking. Presentation at the International Textile and Apparel Association Conference, Vancouver, B.C., Canada. Abstract in the 2016 ITAA Proceedings.
- Ashdown, S.P., Maldonado, M. and Stull, J.O. (2016, July). Analysis of fit and sizing of firefighter gloves using 3D data. Presentation at the 4th International Conference on

Ergonomics in Design held in conjunction with the 7th International Conference on Applied Human Factors and Ergonomics, Orlando, FL.

- Ashdown, S.P., (2015, February) Jumpstarting creativity in the University setting: An exercise in creative silhouettes. Paper presented at the Creative Cut Symposium, Huddersfield, UK.
- Morris, K., & Ashdown, S. P. (2015, November). *Perceptions of user involvement in the activewear industry*. Poster presented at the International Textile and Apparel Association Conference, Santa Fe, NM. Abstract in the 2015 ITAA Proceedings.
- Morris, K., Ashdown, S. P., Coffman, C., Kozen, F., Dao, K., Green, D., Dunne, L. E., & Reich, J. (2015, November). *Exploring naïve spatial understanding in patternmaking*. Poster presented at the International Textile and Apparel Association Conference, Santa Fe, NM. Abstract in the 2015 ITAA Proceedings.
- Morris, K., Coffman, C., Kozen, F., Dao, K., Green, D., Ashdown, S. P., Dunne, L. E., & Reich, J. (2015, November). *Sketching as a tool to measure concept application in an informal learning environment*. Poster presented at the International Textile and Apparel Association Conference, Santa Fe, NM. Abstract in the 2015 ITAA Proceedings.
- Vuruskan, A., & Ashdown, S. P. (2015, November). *Development of half scale dress forms in active body positions for bicycle clothing design and fit*. Poster presented at the International Textile and Apparel Association Conference, Santa Fe, NM. Abstract in the 2015 ITAA Proceedings.
- Ashdown, S. P., Devine, C., Barker, T., & Rouff, J. F. (2014, November). *Development of half-scale forms for the apparel industry*. Presentation at the International Textile and Apparel Association Conference, Charlotte, NC. Abstract in the 2014 ITAA Proceedings.
- Dunne, L., Ramaswamy, H., Reich, J., Ashdown, S. P., Coffman, C., Kozen, F., Morris, K., & Ruehlow, S. (2014, November). *Smart clothing smart girls: Teaching special manipulation through garment patterns*. Presentation at the International Textile and Apparel Association Conference, Charlotte, NC. Abstract in the 2014 ITAA Proceedings.
- Hyosook K., Ashdown, S. P., & Kim, J. M. (2014, November). *A survey analysis on bra wearing behaviors of US women over 40 years old*. Presentation at the 2nd ITAA-KSCT Joint Symposium; The Culture of Collaborations: New Directions in Clothing and Textiles Teaching and Research, Charlotte, NC.
- Morris, K., & Ashdown, S. P. (2014, November). *The ideal user: A pilot study to find apparel collaborators*. Presentation at the International Textile and Apparel Association Conference, Charlotte, NC. Abstract in the 2014 ITAA Proceedings.
- Ramaswamy, H., Dunne, L., Reich, J., Ashdown, S. P., Coffman, C., Kozen, F., Morris, K., & Ruehlow, S. (2014, November). *Smart clothing smart girls: Teaching wearable electronics*. Presentation at the International Textile and Apparel Association Conference, Charlotte, NC. Abstract in the 2014 ITAA Proceedings.

- Wu, Y., & Ashdown, S. P. (2014, November). *A pilot study investigating 35–55 year old Chinese female's body image and adoption of clothing as a body and appearance management strategy*. Presentation at the International Textile and Apparel Association Conference, Charlotte, NC. Abstract in the 2014 ITAA Proceedings.
- Kim, Y. S., & Song, H. K. & Ashdown, S. P. (April, 2014). Comparison of petite size body figures between USA and Korean women. Proceedings of the Korean Society of Clothing and Textiles Conference, Seoul: South Korea.
- Brownbridge, K., Gill, S., & Ashdown, S. P. (2013, November). *Effectiveness of 3D scanning in establishing sideseam placement for pattern design*. Paper presented at the 4th International Conference on 3D Body Scanning Technologies, Long Beach, CA.
- Baytar, F., & Ashdown, S. P. (2013, October). *Exploring consumption intentions of customized apparel*. Presentation at the International Textile and Apparel Association Conference, New Orleans, LA. Abstract in the 2013 ITAA Proceedings.
- Morris, K., Moukperian, M., Campbell, C., Dorn, J., Trejo, H., Goodnow, L., Schultz, S., Wu, J., & Ashdown, S. P. (2013, October). *Exploring a process: Using technology to define firefighter glove fit preference*. Presentation at the International Textile and Apparel Association Conference, New Orleans, LA. Abstract in the 2013 ITAA Proceedings.
- Wu, Y., Pribil, J. L., & Ashdown, S. P. (2013, October). *The influence of 3D body scans on body image for 18–22 age women*. Presentation at the International Textile and Apparel Association Conference, New Orleans, LA. Abstract in the 2013 ITAA Proceedings.
- Ashdown, S. P. (2013, February). *Not craft, not couture, not "home" sewing: Teaching creative patternmaking to the iPod generation*. Paper presented at the Creative Cut Symposium, Huddersfield, UK.
- Kim, Y. S., Song, H. K., & Ashdown, S. P. (2012, November). *Analysis of petite sized women's figures based on SizeUSA data: An assessment of petite sizing systems used in the U.S. apparel industry*. Presentation at the International Textile and Apparel Association Conference, Honolulu, HI. Abstract in the 2012 ITAA Proceedings.
- Song, H. K., & Ashdown, S. P. (2012, November). *Exploring the discrepancies between perceived body and actual body structure*. Presentation at the International Textile and Apparel Association Conference, Honolulu, HI. Abstract in the 2012 ITAA Proceedings.
- Kim, Y. S., & Song, H. K., & Ashdown, S. P. (October, 2012). Categorization of petite size women's body figures based on SizeUSA data. Proceedings of the Korean Society of Clothing and Textiles Conference, Seoul: South Korea.
- Ashdown, S. P., & Miltz, L. (2011, November). *Designing in 3D: An in-class draping exercise*. Presentation at the International Textile and Apparel Association Conference, Philadelphia, PA. Abstract in the 2011 ITAA Proceedings.
- Barker, J., Boorady, L., Lin, S.-H., Lee, Y. A., Esponnette, B., & Ashdown, S. P. (2011, June). *Assessing user needs and perceptions of firefighter gear*. Paper presented at the ASEM

International – The 9th Symposium on Performance of Protective Clothing and Equipment: Emerging Issues and Technologies in Anaheim, CA.

Baytar, F., Ashdown, S.P. (2011, March). *Fashion design students' reflections on using virtual fit for designing for themselves: An exploratory study*. Poster presented at the AATCC International Conference, Charleston, SC.

Ashdown, S. P., Devine, C., & Erickson, P. D. (2010, October). *Research in body/garment relationships*. Paper presented at the International Conference on 3D Body Scanning Technologies, Lugano, Switzerland.

Baytar, F., & Ashdown, S. P. (2010, October). *Employing video clips as persuasion agents for sustainability education in apparel design*. Presentation at the International Textile and Apparel Association Conference, Montreal, QC. Abstract in the 2010 ITAA Proceedings.

Barker, J., Lee, Y. A., Boorady, L., Ashdown, S. P., & Lin, S. H. (2009, October). *Firefighter turnout gear: Assessment of user needs*. Presentation at the International Textile and Apparel Association Conference, Bellevue, WA. Abstract in the 2009 ITAA Proceedings.

Mastamet-Mason, A., De Klerk, H. M., & Ashdown, S. P. (2009, October). *A comparison between the Kenyan-African and Western distinctive female body shapes*. Presentation at the International Textile and Apparel Association Conference, Bellevue, WA. Abstract in the 2009 ITAA Proceedings.

Ashdown, S. P. (2008, November). *"Sew Green" manufacturing exercise*. Presentation at the International Textile and Apparel Association Conference, Schaumburg, Chicago, IL. Abstract in the 2008 ITAA Proceedings.

Ashdown, S. P. (2008, November). *Use of half scale forms and computer technology in teaching product development*. Presentation at the International Textile and Apparel Association Conference, Schaumburg, Chicago, IL. Abstract in the 2008 ITAA Proceedings.

Ashdown, S. P., Mukhejee, S., Loker, S., Baytar, F., & Lyman-Clarke, L. (2007, November). *Consumer judgment of virtual fit in an online environment*. Presentation at the International Textile and Apparel Association Conference, Los Angeles, CA. Abstract in the ITAA 2007 Proceedings.

Mason, A. M., de Klerk, H. M, Ashdown, S. P., & Sommerville, J. (2007, November). *Consumers' knowledge on sizing issues: A solution to successful apparel selection in developing countries*. Presentation at the International Textile and Apparel Association Conference, Los Angeles, CA. Abstract in the ITAA 2007 Proceedings.

Song, H. K., & Ashdown, S. P. (2007, November). *Development of visual fit assessment tool from 3D scans*. Presentation at the International Textile and Apparel Association Conference, Los Angeles, CA. Abstract in the ITAA 2007 Proceedings.

Ashdown, S. P., & Loker, S. (2007, October). *Mass customized target market sizing: Extending the sizing paradigm for improved apparel fit*. Paper presented at the 2007 World Congress on Mass Customization and Personalization, Massachusetts Institute of Technology, Cambridge, MA.

- Calhoun, E. L., Lyman-Clarke, L., Ashdown, S. P. (2007, October). *Virtual fit of apparel on the internet: Current technology and future needs*. Paper presented at the 2007 World Congress on Mass Customization and Personalization, Massachusetts Institute of Technology, Cambridge, MA.
- Ashdown, S. P., Loker, S., & Carnrite, E. (2006, June). *Digitizing the fit model using 3D body scanning technology*. Presentation at the International Foundation of Fashion Technology Institutes Conference, Raleigh, NC.
- Ashdown, S. P., Macpikie, R., & Choi, M. S. (2005, November). *Interactive 3D internet site to teach apparel draping, patternmaking, and fitting*. Presentation at the International Textile and Apparel Association Conference, Alexandria, VA. Abstract in the ITAA 2005 Proceedings.
- Lyman-Clarke, L., Ashdown, S. P., Loker, S., Lewis, V. D., & Schoenfelder, K. (2005, November). *A comparison of visual analysis rating systems*. Poster presented at the International Textile and Apparel Association Conference, Alexandria, VA. Abstract in the ITAA 2005 Proceedings.
- Nam, J., Branson, D., Cao, H., Ashdown, S. P., & Schoenfelder, K. (2005, November). *3D body scanning: Methods and data analysis development for quantifying ease*. Presentation at the International Textile and Apparel Association Conference, Alexandria, VA. Abstract in the ITAA 2005 Proceedings.
- Loker, S., & Ashdown, S. P. (2005, September). *The body scanner: Mass customization technology applied to ready-to-wear*. Presentation at the 3rd Interdisciplinary World Congress on Mass Customization and Personalization, Hong Kong.
- Loker, S., & Ashdown, S. P. (2005, September). *Virtual sensations: How we perceive dress on-line*. Paper presented at The Senses and Sentiments of Dress, Symposium honoring JoAnne Eicher on her retirement, Minneapolis, MN.
- Ashdown, S. P., Loker, S., Lyman-Clarke, L., & Petrova, A. (2005, June). *Three dimensional body scanning, body image, and obesity*. Poster presented at the Ecology of Obesity Conference, Cornell University, Ithaca, NY.
- Ashdown, S. P., Petrova, A., & Loker, S. (2005, June). *A comparison of body variation among women with different BMI scores, and implications for sizing of apparel*. Poster presented at the American Association of Family and Consumer Science, Minneapolis, MN.
- Lee, J. R., & Ashdown, S. P. (2005). *Body surface change analysis using 3D body scanning*. Poster presented at the 2005 Seoul International Clothing and Textiles Conference, Seoul, South Korea. Abstract in Proceedings.
- Ashdown, S. P., Choi, M. S., Raymond, D., & Milke, E. (2004, November). *Automated side seam placement from 3-D body scan data*. Presentation at the International Textile and Apparel Association Conference, Portland, OR. Abstract in the ITAA 2004 Proceedings.
- Nam, J., Branson, D., Ashdown, S. P., Cao, H., & Jin, B. (2004, November). *Fit analysis of liquid cooled vest prototypes using the 3D body scanner*. Presentation at the International

- Textile and Apparel Association Conference, Portland, OR. Abstract in the ITAA 2004 Proceedings.
- Nam, J., Branson, D., Ashdown, S. P., Cao, H., & Peksoz, S. (2004, November). *Anthropometric data: Input for cooling garment prototype and sizing system development*. Presentation at the International Textile and Apparel Association Conference, Portland, OR. Abstract in the ITAA 2004 Proceedings.
- Petrova, A., & Ashdown, S.P. (2004, November). *Analysis of body scan data for best fit of pants*. Presentation at the International Textile and Apparel Association Conference, Portland, OR. Abstract in the ITAA 2004 Proceedings.
- Ashdown, S. P., Loker, S., Lyman-Clarke, L., & Schoenfelder, K. (2004, October). *Visual fit analysis from 3D scans*. Poster presented at the Fiber Society Annual Meeting, Ithaca, NY.
- Ashdown, S. P., Loker, S., Schoenfelder, K., & Petrova, A. (2004, October). *Comparison of sitting and standing 3D body measurements of the lower body*. Presentation at the Symposium on Advanced Materials and Processes, Fiber Society Annual Meeting, Ithaca, NY.
- Lee, J. R., & Ashdown, S. P. (2004, October). *A comparison of body surface change to evaluate traditional and 3D body scan anthropometric measures for dynamic postures*. Poster presented at the Fiber Society Annual Meeting, Ithaca, NY.
- Ashdown, S. P. & Dunne, L. (2003, November). *An evaluation of automated custom fit: Is the technology ready for the apparel industry?* Presentation at the International Textile and Apparel Association Conference, Savannah, GA. Abstract in the ITAA 2003 Proceedings.
- Loker, S., Ashdown, S. A., Petrova, A., Cowie, L., & Schoenfelder, K. (2003, November). *Body scan data applied: Evaluation of misfit to improve an apparel company's sizing system*. Presentation at the International Textile and Apparel Association Conference, Savannah, GA. Abstract in the ITAA 2003 Proceedings.
- Petrova, A., Ashdown, S. P., Loker, S., & Schoenfelder, K. (2003, November). *Anthropometric analysis of the seated body with respect to fit of apparel*. Presentation at the International Textile and Apparel Association, Savannah, GA. Abstract in the ITAA 2003 Proceedings.
- Ashdown, S., Petrova, A., Loker, S., & Cowie, L. (2002, August). *Using body scan technology to achieve objective fit*. Presentation at the International Textiles and Apparel Association, New York, NY. Abstract in the ITAA 2002 Proceedings.
- Loker, S., Cowie, L., & Ashdown, S. (2002, August). *Consumers and body scanning: Will they do it?* Presentation at the International Textiles and Apparel Association, New York, NY. Abstract in the ITAA 2002 Proceedings.

- Vass, D. & Ashdown, S. P. (2001, November). *Industry and student contact using video conferencing*. Presentation at the International Textile and Apparel Association Conference. Abstract in the ITAA 2001 Proceedings.
- Ashdown, S. P. (2000, November). *Addressing consumer needs in the areas of clothing sizing and fit*. Presentation at the International Textile and Apparel Association Conference, Cincinnati, OH. Abstract in the ITAA 2000 Proceedings.
- Ashdown, S. P. (2000, November). *Inclusion of fit preference information and self-measurement in an ordering model for mass customized apparel*. Presentation at the International Textile and Apparel Association Conference, Cincinnati, OH. Abstract in the ITAA 2000 Proceedings.
- Ashdown, S. P. & O'Connell, E. (2000, November). *Comparison of test protocols to assess the fit of mature women's apparel*. Presentation at the International Textile and Apparel Association Conference, Cincinnati, OH. Abstract in the ITAA 2000 Proceedings.
- Ashdown, S. P. (1999). *Design collaboration between industry and academia and campus to campus*. Presentation at the International Textile and Apparel Association. Abstract in the ITAA 1999 Proceedings.
- Ashdown, S. P. (1999). *Mass customization – An experiment in design and production*. Presentation at the International Textile and Apparel Association. Abstract in the ITAA 1999 Proceedings.
- Ashdown, S. P. (1998, May). *Interactive textile and apparel design: Collaborative interaction in the electronic age*. Presentation at the SUNY FACT Conference on Instructional Technologies.
- Ashdown, S. P. (1997, November). *A research framework for sizing and fit of apparel*. Presentation at the International Textile and Apparel Association, Knoxville, TN. Abstract in the ITAA 1997 Proceedings.
- Ashdown, S. P., & Polvinen, E. (1997, June). *Interactive apparel design: Collaborative learning through the internet*. Presentation at the FabriCAD Forum, New York, NY.
- Ashdown, S. P., & Polvinen, E. (1996, June). *External integration: Interactive design via the internet*. Presentation at the Fourth Annual Computer Integrated Textile Design Association, Greensboro, NC.
- Ashdown, S. P. (1995, October). *Future fit—Apparel sizing and apparel design in the new century*. Presentation at the International Textile and Apparel Association, Pasadena, CA. Abstract in the ITAA 1995 Proceedings.
- Ashdown, S. P. (1995, October). *Speaking of clothes, speaking of problems: Older women get a voice*. Presentation at the International Textile and Apparel Association, Pasadena, CA. Abstract in the ITAA 1995 Proceedings.
- Ashdown, S. P. (1993, November). *The interaction between designers and technology: Preparing apparel designers for the future*. Presentation at the International Textile and Apparel Association, Greenbriar, WV. Abstract in the ITAA 1993 Proceedings.

- Ashdown, S. P., & Boorady, L. (1993, June). *Re-creating history: Teaching children about the past using apparel reproductions*. Paper presented at the 11th Conference on Textiles, Ars Textrina, Madison, WI.
- Ashdown, S. P., & Kohn, I. (1992, October). *A method for testing perception of fit based on ASTM sensory perception methods*. Presentation at the International Textile and Apparel Association, Columbus, OH. Abstract in the ITAA 1992 Proceedings.
- Ashdown, S. P. (1991, June). *Movement analysis as the basis for the development and evaluation of a protective coverall design for asbestos abatement*. Paper presented at the ASTM Symposium on Protective Apparel, Montreal, QC.
- Ashdown, S. P. (1991). *Quality design: Sizing considerations in the design of protective apparel*. Presentation at the American Society for Quality Control (ASQC) Meeting.
- Ashdown, S. P. (1990, November). *The analysis of task-related movement of asbestos abatement crews as a basis for the design of protective coveralls*. Presentation at the ACPTC International Meeting. Abstract in the ACPTC 1990 Proceedings.

Invited Lectures, Teaching, and Outreach Presentations

Lectures

- 2018 3D Imaging and Fitting. Presentation to Human Ecology employee group CHEER. (December 2018).
- 2016 Why ready-to-wear clothing is not ready to wear: The 'wicked' design problem of clothing fit. Keynote talk, 75th Anniversary Fiber Society Meeting, Ithaca, NY, (October 12)
- 2015 The use of half scale dress forms in the classroom and in professional development, presentation with Susana Charm of Alvanon to ITAA, Santa Fe, NM (November 12)
- 2014 3D scanning opportunities for custom manufacturing. Presentation to Luthai Textile Company, Zibo City, Shandong Province, China (October 20).
- 2014 3D scanning opportunities for custom manufacturing. Roundtable Meeting, Cornell Institute of Fashion and Fiber Innovation, New York, NY (October 8–9).
- 2014 Body shape analysis: Knowing your target market and finding your fit model. Presentation at the Joint ASTM/WEAR Conference on Anthropometry and Fit, Toronto, ON (June 24–25).
- 2013 Cornell University Department of Fiber Science & Apparel Design, presentation of student work using technology, Optitex Vision Conference 2013, New York, NY. (October 30)
- 2012 The study SizeBR sizing. Roundtable presentation and discussion, SENAI / CETIQT Riachuelo Campus, Rio de Janeiro, Brazil (March 23).

- 2012 Cornell 3D Body Scan Research Group. SENAI / CETIQT Riachuelo Campus, Rio de Janeiro, Brazil (March 22).
- 2011 New dimensions in apparel: Research on, with, and around 3D body scanning. Empey Lecture, University of Alberta, Edmonton, AB (September 24).
- 2011 Use of new technologies in apparel research. Donghua University, Shanghai, China (May 30).
- 2011 Use of 3D body scanning in apparel research and the apparel industry. Keynote speech, Textile Bioengineering and Informatics Symposium 2011, Beijing, China (May 26–27).
- 2011 Body shape analysis & automated custom fit patternmaking. Invited presentation for the Cornell Center for Technology, Enterprise, and Commercialization (CCTEC) (with H. K. Song, April 14).
- 2010 Apparel fit analysis: Fitting the active body, Adidas, Portland, OR (December 14).
- 2009 Technology in research and teaching: Exploring novel landscapes. Distinguished Scholar lecture, International Textile and Apparel Association, Bellevue, WA (October 28–31). Abstract in the 2009 ITAA Proceedings.
- 2009 Introduction to issues in apparel sizing. Lecture to the Vietnam Textile Institute (May).
- 2009 Apparel fit; custom fit; 3D body scanning. Lecture to the Vietnam Textile Institute (May).
- 2009 3D body scanning: Bringing new dimensions to research. Lecture given at the Tianjin Polytechnic University School of Textiles and the Beijing Institute of Fashion Technology (May).
- 2008 Research in apparel sizing and fit at Cornell. Video conference presentation to fit specialists, technical designers, and division managers at Lands' End (November 17).
- 2008 3D bodyscan research. Presentation to representatives for Adidas, Cornell University, Ithaca, NY (September 17).
- 2007 Finding new dimensions in clothing fit: The Cornell body scan research group. Presentation to Alumni, Boston, MA, and Rhode Island (May 24–25).
- 2006 Collaborative project on sizing and fit using Lectra technology: Nike and Cornell University. Presentation at the symposium Sizing: The Solution. Sponsored by the American Apparel & Footwear Association and the Fashion Institute of Technology, New York, NY (with J. Moss, October 11).
- 2006 Apparel and the 3D scanner: The art and science of measuring bodies and clothing. Science Cabaret, sponsored by Boyce Thompson Institute for Plant Research, Ithaca, NY (October 3).

- 2006 Technology and design: New tools for the apparel industry. Presentation at the Cornell's Silicon Valley 7th Annual Presidential Event, "Design," The Computer History Museum, Mountain View, CA (March 28)
- 2005 Functional apparel design: A case study in spacesuit design and testing. Hong Kong Polytechnic University, Institute of Textiles and Clothing, Hong Kong, China (September 8).
- 2005 Anthropometry, movement, sizing and fit, and design. Hong Kong Polytechnic University, Institute of Textiles and Clothing, Hong Kong, China (September 6).
- 2005 Cornell Body Scan Research Group. Hong Kong Polytechnic University, Institute of Textiles and Clothing, Hong Kong, China (with S. Loker, September 5).
- 2005 Introduction to apparel research in the USA and at Cornell University. Hong Kong Polytechnic University, Institute of Textiles and Clothing, Hong Kong, China (August 31).
- 2005 Anthropometry, tailors, and technology: Issues in spacesuit sizing. Exit presentation, Faculty Fellow Program, National Aeronautics and Space Administration, Habitability and Human Factors, Houston, TX (August 26).
- 2005 Sizing studies from SizeUSA data at Cornell University. Presentation at the Textile Clothing Technology Corporation [TC]² user group meeting (with S. Loker, June 29).
- 2005 Body scan research at Cornell. Presentation to the Habitability and Human Factors Research Group, Johnson Space Center, Houston, TX (June 21).
- 2005 Body scan research at Cornell University. Invited lecture, University of Pretoria, Pretoria, South Africa (January).
- 2004 Technological solutions to teaching 3D concepts: Apparel and costume patternmaking and fit. Faculty Innovation in Teaching Grants Lunchtime Speaker Series, Ithaca, NY (with R. Macpike, September 28).
- 2004 Body scan research at Cornell University. Presentation to 3D Direct, the London College of Fashion, London, UK (June).
- 2002 Fit and finish. Presentation at the annual conference of the Textile and Needle Trades division of the American Society for Quality, New Orleans, LA (April 2–5).
- 2000 What is a size 10? Invited lecture, Sonia Wolf Wilson Lectureship in Human Ecology at the University of Texas at Austin, Austin, TX (October 27).
- 2000 Introduction to sizing and fit research. Presentation at The Fit Symposium, FIT 2000, Clemson University, Clemson, SC (May 19–20).
- 2005 3D body scan research: New initiatives for clothes that fit. Presentation to Alumni, Cape Cod, MA (March 17).

- 1999 Sizing and fit. Discussant for research session on apparel sizing at the International Textile and Apparel Association.
- 1998 How can distance learning enhance university outreach efforts. Presentation to the Cornell University Outreach Council Meeting (April 4).
- 1998 Use of electronic communication in apparel design curriculum. Presentation at Evaluation and Assessment of Academic Technologies meeting sponsored by the Distance Learning committee, Cornell Campus.
- 1997 Sizing and fit of apparel for older women. Presentation at the Conference on Aging, Charleston, WV, (September 30).
- 1997 Competition and technology: Understanding the effects of U.S. and international developments on inbound apparel manufacturing. Presentation to industry, ITESM Campus Laguna, Torreon, Mexico (August 8).
- 1991 The power of advertising. Presentation in conjunction with the symposium Critical Science: An Alternative Mode of Inquiry, at the annual meeting of the International Textile and Apparel Association (ITAA) (October).

Teaching and Outreach Presentations

- 2019 The science of clothing. Presentation at Columbia College, Science Seminar. Columbia, SC (February 4)
- 2019 Technical design and new technologies in the world of fashion. Presentation to the Business of Fashion class, Columbia College, Columbia SC (January 30)
- 2018 Why Ready-to-Wear is not Ready to Wear: the Failure of Standard Sizing Systems. Internet lecture and discussion with University of Minnesota graduate class. (December 2018).
- 2013 Understanding body variation and issues in apparel sizing. Master class for third-year students. Manchester Metropolitan University, Manchester, UK (February 3).
- 2013 New dimensions for the industry: 3D body scan research into apparel sizing and fit. Lecture, Manchester Metropolitan University, Manchester, UK (February 3).
- 2011 Clothing our spindle shanks: Thoughts on how we clothe ourselves. Lecture to Material Culture class, University of Alberta, Edmonton, AB (September 23).
- 2008 Mathematical issues in 3D body scan research. Presentation to the Mathematics Department Graduate Seminar (March 10).
- 2004 3D body scan research, apparel sizing, and fit. Presentation to Cornell undergraduate students, Tatkon Center, Ithaca, NY (March 8).

- 2003 3D body scan research in the college of human ecology. Presentation to Emeritus Professors (August 13).
- 2003 3D body scan research in the college of human ecology. Presentation to Alumni (June 7).
- 1998 Sizing in the apparel industry. Presentation to students at the University of North Carolina, Greensboro, NC (November 9).

Non-Refereed Presentations and Posters

- Charm, S., & Ashdown, S.P. (2015, November). *The use of half-scale dress forms in the classroom and in professional development*. Presentation at the International Textile and Apparel Association Conference, Santa Fe, NM.
- Ashdown, S.P. (2011, October). *Development of visual fit assessment tool for apparel firms*. Poster presented at the National Textile Center, Charleston, SC.
- Ashdown, S.P. (2010, September). *Development of visual fit assessment tool for apparel firms*. Poster presented at the National Textile Center, Greenville, SC.
- Ashdown, S.P. (2009, October). *Development of visual fit assessment tool for apparel firms*. Poster presented at the National Textile Center, Greenville, SC.
- Ashdown, S. P. (2008, August). *Bodyscan research at Cornell*. Poster and exhibit presented in main floor exhibit case, Cornell University, Ithaca, NY.
- Song, H. K., & Ashdown, S. P. (2008, June). *Development of visual fit assessment tool for apparel firms*. Poster presented at the National Textile Center, AATCC Advances in Colorants, Chemicals, Finishes, & Fibrous Materials Symposium, Greenville, SC.
- Ashdown, S.P. & Loker, S. (2006, February). *Improved apparel sizing: Fit and anthropometric 3D scan data*. Presentation at the National Textile Center Forum, Hilton Head, SC.
- Wells, N. M., & Ashdown, S. P. (2005, June). *Environment, design, and obesity*. Presentation at the Ecology of Obesity Conference, Cornell University, Ithaca, NY.
- Ashdown, S. P., & Loker, S. (2005, March). *Use of body scan data to design sizing systems based on target markets*. Poster presented at the National Textile Center Forum, Raleigh, NC.
- Ashdown, S. P. & Loker, S. (2004, November). *Improving apparel fit using target market body scan data: Statistical and visual analyses*. Presentation at the Forum at NIKE, The International Textile and Apparel Association Conference, Portland, OR.
- Ashdown, S. P., Loker, S., Adelson, C., Kozen, D., & Schoenfelder, K. (2004, February). *Use of body scan data to design sizing systems based on target markets*. Poster presented at the National Textile Center Forum, Hilton Head, SC.

Ashdown, S. P., and Loker, S. (2003, February). *Use of body scan data to design sizing systems based on target markets*. Poster presented at the National Textile Center Forum, Hilton Head, SC.

Ashdown, S. P., & Loker, S. (2002, February). *Use of body scan data to design sizing systems based on target markets*. Poster presented at the National Textile Center Forum, Charlotte, NC.

Campus and Departmental Talks

Graduate Research Seminars, Department of Fiber Science & Apparel Design, Cornell University

- 2006 Out of This World Clothing: Sizing and Fit of Spacesuits
- 1998 Travels in the Southeast: In Search of Mass Customization in the Apparel Industry
- 1998 Panel Discussion: Reviewing Proposals and Papers
- 1997 So What's a Size 10? Research as the Key to Improve the Sizing and Fit of Apparel
- 1994 Anthropometrics in Apparel
- 1993 A Method for Testing Perception of Fit Based on ASTM Sensory Perception Methods
- 1990 Powerful Partners: Academia and Industry Form a Research Team to Unite Computers and Apparel Design
- 1988 Using Research Tools to Expand a Designer's Creativity
- 1987 Protective Apparel for Glassworkers

Noon Forum Series, Dept. of Design, Housing, and Apparel, University of Minnesota

- 1990 Panel Discussion: Critical Theory
- 1989 The Design of Protective Coveralls for the Asbestos Abatement Industry

Dissertations, Theses, and MPS Projects Supervised

Kimberly Phoenix. (2018) *Custom Half Scale as a Patterning Tool* (Master's thesis)

Yingying Wu. (2016) *A cross-cultural study of ready-to-wear clothing in relation to women's body image, appearance management strategies, and experience of 3d technology* (Doctoral Dissertation)

- Blumenkamp, Catherine. (2015). *Explorations in creative patternmaking in relation to craft, tool, technology, and material* (MPS project).
- Couch, Jessica. (2015). *A comparison study of male denim shopping behaviors and fit perception in-store and in the virtual world* (MPS project).
- Morris, Kristen. (2015). *Implications of users and facilitators on collaborative innovation in functional apparel design* (Doctoral dissertation).
- Baytar, Fatma. (2011). *Understanding the effects of digital apparel technologies and online collaboration on environmentally sustainable consumption behaviors* (Doctoral dissertation).
- Pribil, Jacqueline. (2011). *Relationships between perceived fit of denim jeans and body satisfaction* (Master's thesis).
- Song, Hwa Kyung. (2010). *Categorization of women's lower body shapes using multi-view 3D body scan measurements, and development of shape-driven automated custom patterns* (Doctoral dissertation).
- Petrova, Adriana. (2008). *Ease values in garment sizing: Analysis and application for the princess style jacket* (Doctoral dissertation).
- Dunne, Lucy E. (2004). *The design of wearable technology: Addressing the human-device interface through functional apparel design* (Master's thesis).
- Petrova, Adriana (2003). *Analysis of body scan data for best fit of pants* (Master's thesis).
- Luan, Nan. (2001) *Body cathexis, general satisfaction with garment fit, and exposure to western culture of Chinese and Chinese American women aged 18 to 30* (Master's thesis).
- Ahrens, Sean. (2000). *Optimization of fit for mass customized apparel ordering using fit preference and self measurement* (Master's thesis).
- Joiner, Carol. (1999). *Impact of choosing two-dimensional versus stereoscopic self images in a computer driven mode of presentation for the apparel industry* (MPS project).
- Kuan, Yuchun. (1998). *A comparison of three different patternmaking methods for the princess seam dress* (MPS project).
- O'Connell, Elizabeth Kress. (1998). *Comparison of test protocols to assess the fit of mature women's apparel* (Master's thesis).
- Voellinger, Julia Greve. (1998). *Incorporating three-dimensional body scan data into apparel pattern development: Exploring a new methodology* (Master's thesis).
- Kohn, Inez L. (1996). *Importance of posture and changed body configuration for garment fit for women aged 55 to 65* (Master's thesis).
- Boorady, Lynn Marie. (1993). *Historic and anthropometric research as a basis for the re-creation of children's garments from 1860 for use in elementary school classrooms* (MPS project).

Undergraduate Honors Theses

Dunne, Lucy. (2002). "*Smart system*": *Wearable integration of intelligent technology* (Bachelor's thesis).

Turrell, Marybeth. (1997). *Designing apparel for the mature woman* (Bachelor's thesis).

Consulting Activities

2018	Size Saudi: Anthropometric study of Saudi women. Size system development
2017	Graupel: Custom fit from body scan data
2016	Target: Sizing for plus size women
2016	VF Corporation: Creative solutions to sizing issues
2013	Honeywell: Recommendations for firefighter glove design
2012	Expert witness for apparel company defending the concept of apparel research to the IRS
2009	Hong Kong Polytechnic University: Review of applicant for professorial position
2009	Fashion Institute of Technology: Assessment of new program
2009	Adidas: Consultant on scanner types, capabilities, and research
2007	Dove: Segment on body acceptance and sizing
2007	PBS Kids: Segment on clothing
2004	Fit Technologies: Consultant on sizing
1997	Custom Clothing Technology Corporation: Consultant on sizing
1992	Chemfab: Design consultant, sizing and design of a chemical protective suit
1990	Scott Paper Company: Consultant on the design of protective coveralls
1990	DuPont, Tyvek® Division: Consultant on sizing and quality control of coveralls
1986	University of North Carolina Theater Department: Assistant to visiting designer Patricia Zipprodt
1977	Indiana Repertory Theater: Specialist on men's tailoring for designer Susan Tsu

Teaching

1991–2018: Department of Fiber Science and Apparel Design, Cornell University

- 1991–2018 Fashion Draping (FSAD 2640). Twenty-eight semesters; 8–34 students per semester.
- 2017 Textiles, Apparel, and Innovation (FSAD 4660). Co-taught. Introduced, consulted with students, and graded Reverse Engineering project.
- 1992–2017 Human Factors: Anthropometrics and Apparel (FSAD 6640). Eighteen semesters; 4–17 students per class.
- 1991–2017 Apparel Research Seminar (FSAD 6370). 6–10 students per semester. Organized every four semesters in rotation with apparel graduate faculty.
- 2013 Agriculture in the Developing Nations (IARD 4020). One semester; 11 students. Requirement for students on India trip; FSAD representative and grader for FSAD students.
- 2011–2015 Collections for the Fashion Industries (FSAD 4770). Five semesters. Support faculty for team-taught course.
- 2004–2013 Product Development (FSAD 2660). Nine semesters; 13–23 students per semester.
- 2003–2006 Textiles, Apparel, and Innovation (TXA 466). Three semesters; 11–28 students per semester. Also Co-taught once with Juan Hinestroza.
- 1993–2002 Apparel Design and Development for Production (TXA 465). Nine semesters; 8–20 students per semester.
- 1999–2001 Introduction to Functional Apparel Design (TXA 346). Two semesters; 11–18 students per semester.
- 1999 Apparel Design: Product Development and Presentation (TXA 468). One semester; 8 students. One-time course developed for student needs.
- 1997–1998 Apparel Design III - Draping (TXA 367). Two semesters; 5–13 students per semester. Temporary experiment in sequence of apparel design courses; reverted to TXA 264 in Fall 1999.
- 1992–1994 Introduction to Computer-Aided Design (TXA 114). Two semesters; 17–29 students per semester.
- Various Research Seminar in Textiles and Apparel (TXA 637). Responsible for organizing five times in rotation with all TXA faculty.

Advising, Supervision, and Independent Study at Cornell

- 1991–2018 Empirical Research (TXA 401). Supervising 1-3 students per semester.
- 1991–2018 Supervised Fieldwork (TXA 402). Supervising 1–2 students per year.
- 1991–2018 Teaching Apprenticeships (TXA 403). Supervising 1-2 students per year, teaching assistants for TXA 264.
- 1997, 2002 Honors Theses (TXA 499). Advised 2 undergraduate students.

1990–1991: Department of Design, Housing and Apparel, University of Minnesota
Apparel Design I

Special Topics in Apparel: Computer Aided Design

1980–1988: Theater Department, Cornell University

Stagecraft: Costumes

Fundamentals of Theater Design and Technology (team taught)

Costume Design (team taught)

Production Laboratory—Costume Crew, Wardrobe Crew

Production Laboratory—Special Costume Projects, Wardrobe Supervision

Production Laboratory—Assistant to the Costume Designer (team taught)

Production Laboratory—Undergraduate Costume Design (team taught)

Advanced Costume Technology

Advanced Principles of Theater Design: Graduate Costume Design

Professional Training Courses Taken

2009	Optitex 3D virtual design training
2008	Gerber Web PDM training
2007	CU-ADVANCE Career Stage Retreat (professional development)
2007	Optitex training (PDS, advanced training, and version 10 update)
2007	Lectra Fit Net training (automated custom fit patternmaking)
2006	Optitex Modarus automated pattern development training
2006	Optitex Pattern Design System and Marker training
2005	[TC] ² NX12 Body Measurement Software training
2005	[TC] ² Body Scanner set-up and operation training
2004	Lectra Gallery training (apparel product development database)
2004	Tru-Cost training (apparel industry costing software)
2003	Polyworks Inspect training (3D analysis and measurement)
2002	Lectra FitNet advanced training (automated custom fit patternmaking)
2001	Polyworks IMEdit training (3D analysis and measurement)
2001	ScanWorx training (3D body scanner and automated measurement)
1999	Lectra FitNet training (automated custom fit patternmaking)

1998	Lectra advanced training (apparel patternmaking)
1998	Faculty internship, VF Jeans, Greensboro, NC
1993/1997	Investronica training (apparel patternmaking)
1996	Course in anthropometry, Anthropology Research Project
1995/1996	Info Design training (apparel patternmaking)
1974/1975	Garment industry training in the operation of specialized equipment (overlock, blindstitch, chainstitch, furstitch, lockstitch, and walking foot)
1972/1973	Minneapolis College of Art and Design (apparel design, draping, flat pattern)
1972	Minneapolis Technical Institute (tailoring, power machine operation)

Teaching – Projects, Workshops, and Tours Organized

2016-2018	Faculty advisor to Fashion Scholarship Fund (formerly YMA) students
2017	Collaborative project on automated custom fit clothing, FSAD6640 class and Graupel, start-up company for custom fitted women's blouses and pencil skirts
2015	Collaborative project on jeans fit for plus size and atheletic women, FSAD 6640 class and QCut, startup company for custom fitted jeans for women
2014	Project exploring selection and use of fit models in the industry, FSAD 6640 class
2011 - 2015	Organized the Days for Girls Saturday Factory, with Andrea Parrot from PAM
2012	Design project for firefighter gloves with Honeywell, FSAD 6640 class
2010	Math and Apparel Design seminar, with William Thurston
2010	Proejct to develop methods of communicationg size information to consumers, FSAD 6640 class
2009 - 2010	Saturday Factory, undergraduate mass customization production exercise
2009	Organized High School Cornell Design Award, for recruitment, with Van Dyk Lewis. Continued to direct and co-direct this program 2009-2018
2009	Collaborative project with Nike and FSAD 664 class: Fit test of shirts and t-shirts for two different sizing systems
2006-2018	Half-day Optitex workshops conducted once or twice a year
2008	One day workshop to create a "factory" and produce sustainable grocery shopping bags
2007	3D body scan demonstration at the ScienCenter—scanner set up and free scans taken

- 2007 Collaborative project with Nike Apparel and FSAD 664 class: automated custom fit of women's jackets
- 2006 Collaborative project with local menswear shop Benjamin Peters and Endurance LLC from New York City (manufacturer of Joseph Abboud Jeanswear) and TXA 664 class: automated custom fit of men's dress shirts
- 2002–2006 Student tours of Material ConneXion, The Museum at FIT, for TXA 446 class
- 2005 Research project for AccuMed, independent student study to investigate transdermal delivery of pain medications from knee braces
- 2005 Half-day weekend workshop conducted on patternmaking and construction of knit garments
- 2004 Half day weekend workshop conducted on design and patternmaking of handbags
- 2004 Video conference of six lectures from TXA 466 to designers and product developers at Nike, Portland Oregon
- 2003 Collaborative project with Nike Apparel and TXA 664 class: automated custom fit of women's pants
- 2002 Collaborative project with Kenyon King, Log House Designs, and TXA 664 class: automated custom fit of an outerwear jacket
- 2001 Organized a lecture by Michael W. Crooke, CEO of Patagonia
- 2001 Collaborative project with Tilley Catalog and TXA 664 class: study to improve sizing and fit of women's shorts
- 2001 Collaborative design project with Raceface and TXA 346 class, student project to develop protective vests for bicyclists
- 2000 Design project with Gala on the Commons (local retail store) and a group of independent study students, organized and directed with Suzanne Loker: development of a line of formalwear for college students, patterns professionally graded, garments produced by local seamstresses
- 2000 Collaborative project with Milia Mills and TXA 664 class, study investigating sizing and fit of bathing suits, conducted using videoconferencing
- 1999 Design project with Cornell Athletic Department and TXA 346 class to develop new hockey uniforms for the Cornell women's hockey team
- 1998 Collaborative design project with TXA 465 class, Buffalo State College, Philadelphia College of Textiles and Science, and Liz Claiborne using electronic distance learning technologies
- 1997 Collaborative design project with TXA 465 class, Buffalo State College, Philadelphia College of Textiles and Science, and JC Penney using distance learning technologies

- 1996 Collaborative design project with TXA 465 class, Buffalo State College, and Melton Company using electronic distance learning technologies
- 1995 Collaborative project with Vesta and TXA 664 class, investigation of sizing and design of plus-size bras
- 1987 Tour of the New York garment district for apparel students, Department of Textiles and Apparel, Cornell University
- 1985 Millinery workshop taught by a professional theater technician, for undergraduate students
- 1984 Make-up technique workshop taught by a professional theater technician, for graduate and undergraduate theater students
- 1984 Tours of New York fabric retailers and study visits to the Metropolitan Museum costume collection for graduate theater students (organized with the costume designer)

Service

Service to Profession

- 2017-present Member of Advisory Board, International Fashion and Science Innovation Project, Shanghai International Fashion and Science Innovation Center
- 2016-present Member of the Legacy Committee, International Textile and Apparel Association
- 2008–2018 Objective 1 leader, NC-170 Regional Research Group
- 2007 Acting secretary, NC-170 Regional Research Group
- 2007 Editor, NC-170 Regional Research Project proposal, “Personal protective technologies for current and emerging occupational hazards”
- 2006 Member, task group for work item WK10555—Performance Specifications for Protective Clothing for Horticultural and Agricultural Pesticide Applicators, F-23 Committee on Personal Protective Clothing and Equipment, American Society for Testing and Materials International.
- 2005 Chair, NC-170 Regional Research Project, Occupational safety and health through the use of protective clothing
- 2005 Co-guest editor with Suzanne Loker, *Journal of Textile and Apparel Technology and Management*, Interface: Apparel, Materials, and Technology, May 2005 issue
- 2004 Co-organizer with Suzanne Loker, Interface: Apparel, Materials, and Technology, a Forum at Nike for the International Textile and Apparel Association Conference, Portland, Oregon

- 1993–1997 Member, International Textile and Apparel Association Design and Aesthetics Committee
- 1994 Co-chair, International Design Competition, Minneapolis International Textile and Apparel Association Conference; with Elizabeth Bye, conceived the concept of a “live gallery” in place of a traditional runway show
- 1992–1993 Objective leader, Objective 3, W-175 Regional Research Project
- 1991–1992 Recording secretary, W-175 Regional Research Project
- 1992 National representative, United States team of student designers, Concours International des Jeunes Createurs de Mode, Paris, France

Service to Cornell University

- 2008–2011 Chair, Faculty Advisory Committee on Athletics and Physical Education
- 2005 Member, Faculty Advisory Committee on Athletics and Physical Education
- 1991–1992 Member, Council for the Creative and Performing Arts

Service to College of Human Ecology

- 2010–2017 Member, CAD Management Team and Operations Team
- 2010–2018 Member, Committee on shared facilities, HEB shared anatomy/physiology/neuroscience/human factors teaching lab
- 2010–2017 Member, HE Shop Management Committee
- 2006–2017 Exchange program advisor, Department of Fiber Science & Apparel Design
- 1993–2017 Member, Computer Lab Governance Committee
- 2017 Chair, Ad hoc committee, Human Ecology
- 1992–2014 Member, Executive Committee Gerontology Concentration
- 2011 Faculty advisor, Days for Girls, Cornell Chapter
- 2011 Member, FSAD chair search committee
- 2008 Chair, review committee for advancement to full professor, College of Human Ecology
- 2004–2007 Member, Grievance Committee, College of Human Ecology
- 2004 Member, Obesity Conference Planning Committee
- 2000–2003 Member, Educational Policy Committee
- 1997–1999 Member, College Grants Committee
- 1998 Member, Master Plan Committee
- 1995–1997 Member, Admissions Policy Committee
- 1995 Member, Mann Library Committee

Service to the Department of Fiber Science & Apparel Design

- 2015-2018 Member, mentoring committee for junior apparel design faculty (Shin)
- 2014–present Member, mentoring committee for junior apparel design faculty (Green)
- 2016—2018 Faculty Support, Kuhlman Scholars
- 2016—2018 Faculty advisor, Level I designs, Cornell Fashion Collective
- 2011–2014 Faculty advisor, Pendleton Fellowship
- 2011–2016 Member, mentoring committee for junior apparel design faculty (Park)
- 2009–2018 Faculty organizer for the Cornell Design Award, an undergraduate recruitment initiative
- 2005–2018 Organizer, student design entries to ITAA competition
- 1994–2014 Member, Cornell Costume Collection De-accession Committee
- 1993–2018 Member, Design Curriculum Review Committee
- 2015 Faculty lead, Engage Cornell proposal
- 2013 Member, faculty team for January 2014 tour of India
- 2013 Chair, search committee, Apparel Design
- 2011 Member, committee for Agit Khaitani apparel factory proposal
- 2011 Member, committee to develop NYC initiative
- 2011 Chair, committee for organizing, packing, and supervising transfer of apparel design shared materials to HEB
- 2010 Interim chair, Department of Fiber Science & Apparel Design (March 8 to June 15)
- 2007–2010 Member, mentoring committee for junior apparel design faculty
- 2003–2010 Chair, Mentoring committee for junior fiber science faculty member
- 2005–2009 Member, mentoring committee for junior fiber science faculty
- 2008 Member, committee for Textile/Apparel Management curriculum review
- 2006 Chair, search committee, Apparel Design
- 2003–2006 Member, committee for development of an Apparel PhD program
- 2004–2005 Faculty advisor, TXA Student Association
- 2004 Committee member, TXA NYC Study Trip Planning Committee
- 2003–2004 Member, curriculum committee to reorganize apparel design sequence
- 2001–2002 Member, Search committee, Textile Science
- 1998 Organizer, Graduate Research Seminar Series

- 1995–1996 Member, Search committee, Apparel Extension position
- 1992–1993 Faculty advisor, Cornell Design League
- 1991–1992 Member, Graduate Admissions Committee
- 1991 Search committee, Apparel Design position

Service to the Theater Department, Cornell University

- 1985–1986 Coordinator, Design/Technology Division
- 1981–1986 Member, Play Selection Committee
- 1982, 1985 Member, search committee for costume design faculty positions
- 1984 Chair, search committee, Costume Design Position
- 1981–1983 Member, Program and Curriculum Development Committee (planning committee for graduate program in theater design and technology)
- 1982 Member, Building Specification Committee (planning committee for theater built in 1987)

Service to University of Minnesota

- 1990 Vice-president, Design, Housing, and Apparel Graduate Student Organization
- 1990 Member, Program Committee, Design, Housing, and Apparel Graduate Student Organization
- 1990 Member, Publicity Committee, Phi Upsilon Omicron

Community Service

- 2018 Member, Rail Trail Task Force, Dryden Rail Trail
- 2011–2015 Co-organizer, Days for Girls Saturday Factory, town/gown collaborative project
- 2009 Chair, committee to restore Varna and Turkey Hill Road bus 43 to TCAT planned routes
- 2003–2004 Member, neighborhood committee to develop Varna Rail-to-Trail
- 1998–1999 Dryden representative, Ithaca-Tompkins County Transportation Council Planning Committee
- 1993 Assisted with design of wooden sections of George Rhoads sculpture on display in Ithaca ScienceCenter
- 1980–1988 Set policies and organized resources to make the Theater Cornell Costume Collection available to community, school, church, and campus theater groups

Press

Quoted in articles in American Demographics, The Economist, Women's Wear Daily, Atlantic Monthly, multiple newspaper articles, radio interviews, and blogs. Featured on Discovery Canada television show, National Public Radio.

Professional Memberships

1989–present International Textile and Apparel Association

2008–present Editorial Board, *Fashion Practice*

2015-2018 Faculty Fellow, Cornell Institute for Fashion and Fiber Innovation

1995-present NC170 Multi-State Research Group