

Molly Follette Story

3717 Deauville Place, Santa Rosa, California 95403-0980

Telephone: (707) 578-6839, Fax: (707) 578-9435, Email: molly@humanspectrumdesign.com

Education

Doctor of Philosophy: *Environmental Health Sciences, minors in Ergonomics and Biostatistics*
University of California, Berkeley – 2008

Master of Science: *Environmental Health Sciences, School of Public Health*
University of California, Berkeley – 2008

Master of Science: *Mechanical Engineering, Product Design Program*
Stanford University – 1983

Bachelor of Science in Engineering: *Civil Engineering, concentration in Architecture & Engineering*
Princeton University – 1978

Work Experience

1984-present	Independent Consultant
2002-present	Principal Human Spectrum Design, L.L.C. Santa Rosa, California
1999-2004	Coordinator of Research
2000 & 1996	Interim Executive Director
1994-1999	Research Associate/Product Design Coordinator The Center for Universal Design, College of Design North Carolina State University Raleigh, North Carolina
1994-2004	Research Associate Professor Department of Industrial Design, College of Design North Carolina State University Raleigh, North Carolina
1984-1993	Adjunct Associate Professor Industrial Design Department, College of Architecture Georgia Institute of Technology Atlanta, Georgia
1983-1984	Product Design Engineer Raychem Corporation Advanced Development Group, Research and Development Division Menlo Park, California
1978-1981	Structural Design Engineer GFDS Engineers San Francisco, California

Awards

Awards

International Ergonomics Association (IEA) *K.U. Smith Student Award*, 2009

Faculty Research Award with Ronald L. Mace, School of Design, NC State University, 1998

Pin Dot Outstanding Paper Award from *Assistive Technology*, with Jon A. Sanford and Michael L. Jones, for "An analysis of the effects of ramp slope on people with mobility impairments," 1997

Industrial Designers Society of America (IDSA) *Student Merit Award* for Stanford University, 1983

Research Grants and Consulting Work

Co-Principal Investigator, *Rehabilitation Engineering Research Center (RERC) on Accessible Medical Instrumentation*: National Institute on Disability and Rehabilitation Research (NIDRR), 2002-2008; Total Funding: \$4.5 million

Principal Investigator, *Rehabilitation Engineering Research Center (RERC) on Universal Design and the Built Environment at NCSU*: NIDRR, 1999-2003; Total Funding: \$2.4 million

Principal Investigator, *Universal Design Education Materials Online*, Field-Initiated Project: NIDRR, 2000-2003; Total Funding: \$450,000

Principal Investigator, *Promoting the Practice of Universal Design*, Field-Initiated Project: NIDRR, 1998-2003; Total Funding: \$375,000

Independent Consultant and Principal, *Human Spectrum Design, LLC*: Human factors research and product development for: Abbott Diabetes Care, Inverness Medical Innovations, Sunrise Medical, Midmark Corp., Kaiser Permanente, Maytag Corp., MasterCard Worldwide – 1984-present

Developed user testing protocols, conducted usability testing and product evaluation sessions, reviewed products under development and made design recommendations, developed new products, and advised on product research and development and procurement programs.

Selected Publications

- Story, MF (2010, in draft). Medical Devices in Home Healthcare, invited paper for National Academies, National Research Council, Div. of Behavioral and Social Sciences and Education, Committee on Human-Systems Integration workshop on *The Role of Human Factors in Home Healthcare*
- Story, MF, Winters, JM, Lemke, MR, Barr, A, Omiattek, E, Janowitz, I, Brafman, D & Rempel, DM (in press, *Applied Ergonomics*). A method for evaluating accessibility of medical equipment for patients with disabilities
- Story, MF, Schwier, E & Kailes, JI (2009). Perspectives of patients with disabilities on the accessibility of medical equipment: Examinations tables, imaging equipment, medical chairs and weight scales. *Disability and Health Journal*, 2(4), 169-179
- Story, MF, Luce, A, Leung, A, Omiattek, E, Lemke, MR & Rempel, DM (2008). Accessibility of radiology equipment for patients with mobility disabilities. *Human Factors*, 50(5), 801-810
- Story, MF, Luce, A, & Rempel, DM (2009). Accessibility of diabetes management devices for users with vision disabilities. *Proceedings of Human Factors and Ergonomics Society's 53rd Annual Meeting*, San Antonio, TX
- Story, MF (2009). Effects of table height and handholds on accessibility of medical examination tables for ambulatory elder patients with mobility disabilities. *Proceedings of 17th World Congress on Ergonomics*, International Ergonomics Association, Beijing, China
- Story, MF, Lemke, MR, MacDonald, C, Kailes, JI, Rempel, DR & Winters, Jack M (2008). Guidelines for designing and selecting accessible medical equipment. *Proceedings of RESNA 2008 Annual Conference*. Washington, DC
- Winters, JM & Story, MF, Eds. (2007), *Medical Instrumentation: Accessibility and Usability Considerations*. Boca Raton, FL: CRC Press
- Story, MF (2007). Emerging Human Factors and Ergonomics Issues for Healthcare Professionals. In Winters, JM & Story, MF, Eds., *Medical Instrumentation: Accessibility and Usability Considerations*. Boca Raton, FL: CRC Press, 29-40
- Story, MF (2007). Applying the Principles of Universal Design to Medical Devices. In Winters, JM & Story, MF, Eds., *Medical Instrumentation: Accessibility and Usability Considerations*. Boca Raton, FL: CRC Press, 83-92

- Winters, JWM, Story, MF, Barnekow, K, Kailes, JI, Premo, B, Schwier, E, Danturthi, S & Winters, JM (2007). Results of a National Survey on Accessibility of Medical Instrumentation for Consumers. In Winters, JM & Story, MF, Eds., *Medical Instrumentation: Accessibility and Usability Considerations*. Boca Raton, FL: CRC Press, 13-28
- Winters, JM, Rempel, D, Story, MF, Lemke, ML, Barr, A, Campbell, S & Danturthi, S (2007). The Mobile Usability Lab Tool for Accessibility Analysis of Medical Devices: Design Strategy and Use Experiences. In Winters, JM & Story, MF, Eds., *Medical Instrumentation: Accessibility and Usability Considerations*. Boca Raton, FL: CRC Press, 173-190
- Rempel, DM, Story, M, Luce, A, Leung, A, Lemke, M, & Winters, J (2007). Reducing patient handling: Accessibility barriers for radiology equipment for patients with mobility impairment. *ICOH International Conference on the Health of Healthcare Workers*, Vancouver, Canada
- Story, M (2007). Patient unhandling: Facilitating independent transfer. Interagency Committee on Disability Research conference: *Technologies and Strategies for the Physical Transfer of Individuals with Motor Impairments*, Arlington, VA
- Story, MF, Winters, JM, Lemke, MR & Rempel, DM (2007). Evaluating the Accessibility of Medical Equipment. *Proceedings of 2007 Include Conference*, London, UK
- Story, MF & Mueller, JL (2001). Universal Design Performance Measures for Products: A Tool for Assessing Universal Usability. In Winters, J, Robinson, C, Simpson, R, & Vanderheiden, G (eds.), *Emerging and Accessible Telecommunications, Information and Healthcare Technologies – Emerging Challenges in Enabling Universal Access*. Arlington: RESNA Press, 19-28
- Story, MF, Winters, JM, Lemke, MR & Rempel, DM (2007). Evaluating the Accessibility of Medical Equipment. *Proceedings of Include Conference*, London, UK
- Story, MF (2005). Focus Groups with Participants Who Have Disabilities. *Proceedings of 2005 International Conference on Human-Computer Interaction*, Las Vegas, NV
- Story, MF, Winters, JWM, Premo, B, Kailes, JI, Schwier, E & Winters, JM (2005). Focus Groups on Accessibility of Medical Instrumentation. *Proceedings of RESNA 2005 Annual Conference*, Atlanta, GA
- Winters, JWM, Story, MF, Barnekow, K, Premo, B, Kailes, JI, Schwier, E, Rempel, D & Winters, JM (2004). Problems with Medical Instrumentation Experienced by Patients with Disabilities. *Proceedings of Human Factors and Ergonomics Society 48th Annual Meeting*. New Orleans, LA
- Story, MF & Mueller, JL (2004). Universal Design Performance Measures for Products to Support the Practice of Universal Design. *Proceedings of Human Factors and Ergonomics Society 48th Annual Meeting*. New Orleans, LA
- Story, MF (2002). Distance Education in Universal Design. Christophersen, J (ed.): *Universal Design: 17 Ways of Thinking and Teaching*. Oslo: Norwegian State Housing Bank, 243-268
- Mueller, JL & Story, MF (2002). Universal Design: Principles for Driving Growth into New Markets. Griffin, A (ed.) *The PDMA Toolbook for New Product Development*. New York: John Wiley & Sons, 297-326
- Story, MF (2001). Principles of Universal Design. Preiser, WFE & Ostroff, E (eds.), *Universal Design Handbook*. New York: McGraw-Hill, 10.1-10.19
- Story, MF & Mueller, JL (2001). Universal Design of Products. In Preiser, WFE & Ostroff, E (eds.), *Universal Design Handbook*. New York: McGraw-Hill, 49.1-49.14
- The Center for Universal Design (2000). *Evaluating the Universal Design Performance of Products (Universal Design Performance Measures for Products)*. Raleigh, NC: NC State University
- Story, MF (2000, uncredited). NIDRR Research Example: Combined Use of Usability Tests and Surveys in Assessing Universal Product Design. *The Research Exchange*, Volume 5, Number 2. Austin, TX: NCDDR, Southwest Educational Development Laboratory
- Sanford, JA, Story, MF, Ringholz, D (1998). Consumer Participation to Inform Universal Design. *Technology and Disability*, Volume 9, Number 3, 149-162

- Story, MF and Mueller, JL (1998). Measuring Usability: The Principles of Universal Design. *Proceedings of Designing for the 21st Century: An International Conference on Universal Design of Information, Products, and Environments*. Long Island, New York
- Story, MF & Mace, RL (Guest Eds.) (1998). Special Feature: Universal Design. *Assistive Tech.*, Vol. 10.1
- Story, MF (1998). Assessing Usability: The Principles of Universal Design. *Assistive Technology*, Vol. 10.1, 4-12
- Mueller, JL, Story, MF & Mace, RL (1998). *The Universal Design File: A Guide to Designing for People of All Ages and Abilities*. Raleigh: NC State University
- Sanford, JA, Story, MF & Jones, ML (1997). An Analysis of the Effects of Ramp Slope on People with Mobility Impairments. *Assistive Technology*, Volume 9.1, 22-33
- Connell, BR, Jones, ML, Mace, RL, Mueller, JL, Mullick, A, Ostroff, E, Sanford, JA, Steinfeld, E, Story, MF, & Vanderheiden, GC (1995). *The Principles of Universal Design* (Versions 1.0 & 2.0). Raleigh: NC State University
- Story, MF and Jones, ML (1995). Universal Product Design Through Consumer Product Evaluations. *Connecting Value, Symposium Proceedings of Design Management Institute's 7th International Forum of Design Management Research & Education*. Boston: Design Management Institute
- Story, MF, Jones, ML, Sanford, JA & Guerette, P (1995). Technical Requirements for Ramps: Human Subjects Testing. *RECREAbility: Recreation and Ability: Explore the Possibilities! Proceedings of RESNA 1995 Annual Conference*. Arlington: RESNA Press

Selected Presentations

- "Accessibility of diabetes management devices for users with vision disabilities," paper presentation at Human Factors and Ergonomics Society 53rd Annual Meeting, San Antonio, TX, Oct. 22, 2009
- "Medical Devices in Home Healthcare," invited presentation to National Academy of Sciences (Division of Behavioral and Social Sciences and Education, Committee on Human-Systems Integration) workshop on *The Role of Human Factors in Home Healthcare*, Washington, DC, October 1, 2009
- "Technology Solutions for Outpatient Settings," invited presentation with Kurt Forsthoefel (Midmark Corporation) to 9th Annual Safe Patient Handling and Movement Conference, Lake Buena Vista, FL, April 1, 2009
- "Adaptive Technology Healthcare Seminar," invited facilitator for seminar at San Francisco Lighthouse for the Blind and Visually Impaired, San Francisco, CA, September 5, 2008
- "What is the difference between accessibility and usability?," panel moderator with panelists Bradley Hodges, Patricia A. Moore, James L. Mueller, William Peterson and Jack M. Winters, at RESNA 2008 Conference, Washington, DC, June 29, 2008
- "Involving People with Disabilities in User Research and Development," invited presentation to Federal Lab Consortium National Meeting, Portland, OR, May 6, 2008
- "RERC-AMI: Patient Transfer Issues," invited presentation to American Institute of Architects' *Assisted Transfer Roundtable*, Washington, DC, April 1, 2008
- "Patient Unhandling: Facilitating Independent Transfer," invited presentation to Interagency Committee on Disability Research conference: *Technologies and Strategies for the Physical Transfer of Individuals with Motor Impairments*, Arlington, VA, September 11, 2007
- Accessible Interfaces for Medical Instrumentation: Draft Guidelines and Future Directions*, co-coordinator with Jack M. Winters of workshop held for the RERC on Accessible Medical Instrumentation, at the U.S. Food and Drug Administration (Parklawn Building), Rockville, MD, October 21-22, 2005
- "Focus groups with participants who have disabilities," paper presentation at session on *Usability Testing for People with Disabilities* at International Conference on Human-Computer Interaction, Las Vegas, NV, July 25, 2005
- "Research Symposium at RESNA 2002: Universal Design," invited presentation at *Envisioning Universal Design: Creating an Inclusive Society*, NEA Headquarters, Washington, DC, October 2-3, 2003

“A Conversation on Access to Medical Devices and Services,” invited seminar at Joint Session of the California Council of the Blind Committee on Access and Transportation and the California Council of Citizens with Low Vision; Sacramento, CA, April 11, 2003