## Maureen Ann Linden

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#### **Education**

The University of Virginia Charlottesville, VA

Master's of Science, Biomedical Engineering Bachelor's of Science, Electrical Engineering

Aug 1993 May 1991

## Experience

Georgia Institute of Technology - Atlanta, GA

Center for Assistive Technology & Environmental Access Aug 04–Jul 08; Jun 09-present Research Focuses: Vocational Rehabilitation, Seating system development, support surfaces characterization, pressure sore detection and prevention, mobility device use characterization.

**MAX Mobility -** Nashville, TN

Jun 08 – May 09

Research Focus: Biomechanics of wheelchair propulsion.

Service Delivery: Development of system to startup a durable medical equipment service provision

Ohio Valley Goodwill Industries - Cincinnati, OH

Mav~01 - Aug~04

Service Delivery: Managed service provision program in vocational rehabilitation. Direct caseload services provided to approximately 100 clients annually.

Miami Valley Medical Equipment – Dayton, OH

*Nov 00 – Apr 01* 

Service Delivery: Client services for wheelchair and seating interventions for medical model.

Helen Hayes Hospital- West Haverstraw, NY

May 96-Sep 00

Center for Rehabilitation Technology

Research Focuses: Tissue tolerance to load, pressure sore prevention, gait parameters for amputees.

Service Delivery: Managed the Special Apparatus Clinic in a medical model specialized rehabilitation hospital.

Cleveland Clinic Foundation – Cleveland, OH

Apr 94- May 96

Department of Physical Medicine and Rehabilitation

Research Focus: Transportation safety for individuals with disabilities.

## Research Support

#### **Ongoing Support**

# National Institute on Disability and Rehabilitation Research (NIDRR) DRRP on Universal Design

2012-2017

Role: Co-Investigator

The project aims to increase knowledge about, availability of, and access to Universal Design Accommodations that will enable employees with disabilities to participate fully in the workplace.

## **National Science Foundation (NSF)**

## Materials Research Science & Engineering Center (MRSEC) SUPPLEMENT

2012-2014

Role: Co-Investigator

The supplement enhances the MRSEC's mission to train a diverse population of students through the inclusion of students with disabilities in the MRSEC's education and outreach efforts.

## National Institute on Disability and Rehabilitation Research (NIDRR)

2009-2013

**RERC on Work Accommodations;** User Needs Study

Role: Co-Investigator

The project aims to determine the accommodation needs of people with disabilities in the workplace.

## National Institute on Disability and Rehabilitation Research RERC on Wheeled Mobility

2009 - 2013

Role: Co-Investigator

The project examines activity and participation levels of wheelchair users in different environments and identifies barriers and facilitators to activity and participation, examining the relationship between wheelchair type and environmental modifications as they impact activity performance and participation home, workplace, and community.

## **Completed Support**

## National Institute on Disability and Rehabilitation Research

2004-2008

**RERC for Wheeled Mobility**; *Clinical & Functional Implications of Seating Standards & Guidelines* Role: Co-Investigator

Standardized measures of wheelchair cushion performance where developed and the actual impact on wheelchair users investigated.

#### **Rehabilitation Services Administration**

2007-2010

## **National Public Internet Site on Assistive Technology**

Role: Project Manager

The project addressed the priority of providing the public with comprehensive, current information on resources related to assistive technology and assistive technology programs supported under the AT Act

## **Professional Affiliations**

## **Standards Development Activities**

2004-2008	International Standards Organization (ISO) WorkGroup: Seating Components and
	Support Surfaces. Working with an international team, developed standards addressing
	wheelchair seating system performance and characteristics.
2004-2009	ANSI/RESNA Technical Guidelines Committee
2004-2009	Subcommittee on Wheelchair Seating In harmonization with the ISO Group, developed
	standards addressing wheelchair seating system performance and characteristics with
	consideration to national issues
1994-2000	Subcommittee on Wheelchairs and Transportation Developed standards addressing
	transportation safety for wheelchair seated passengers with specific focus on crash
	worthiness of wheelchairs and wheelchair components.
1994-1996	Society of Automotive Engineers
	Developed performance standards for crashworthy securement and occupant restraint

## **Memberships**

1992 – present RESNA

## **Publications**

- Linden, MA, Milchus, KL, Haynes, SA (*Pending*) "Workplace Accommodation Use Patterns by Individuals with Vision Impairments in Different Age Groups." Disability and Rehabilitation: Assistive Technology.
- Linden, MA, Milchus, KL (*Pending*) "Teleworkers with Disabilities: Characteristics and Accommodation Use." Work: A Journal of Prevention, Assessment and Rehabilitation.
- Haynes, SA, Linden, MA. (2012) "Workplace accommodation and unmet needs specific to individuals who are deaf or hard of hearing." Disability and Rehabilitation: Assistive Technology, 7(5): 408-415.
- Sprigle SH, Linden MA, Riordan BM, "Analysis of Localized Erythema Using Clinical Indicators and Spectroscopy." Ostomy Wound Management. 49 (3): 18-26 (2003).
- Sprigle SH, Linden MA, Riordan BM, "Characterizing reactive hyperemia via tissue reflectance spectroscopy in response to an ischemic load across gender, age, skin pigmentation, and diabetes." Medical Engineering & Physics 24(2002): 651-661.
- Sprigle SH, Linden MA, McKenna DM, Davis KA, Riordan BM, "Skin Temperature Measurement to Predict Incipient Pressure Ulcers." Advances in Wound Care. 14(3): 133-138 (2001)
- Riordan BM, Sprigle SH, Linden MA, "Testing the Validity of Erythema Detection Algorithms." Journal of Rehabilitation Research and Development. 38 (1):13-22 (2001).
- Kamper DG, Adams TC, Reger SI, Parnianpour M, Barin K, Linden MA. A technique for quantifying the response of seated individuals to dynamic perturbations. J Rehabil Res Dev. 2000 Jan-Feb;37(1):81-8.
- Kamper DG, Adams TC, Reger SI, Parnainpour M, Barin K, Linden MA "A Low-cost, Portable System for the Assessment of the Postural Response of Wheelchair Users to Perturbations." IEEE Transactions on Rehabilitation Engineering. 7(4): 435-442 (1999).
- Adams TC, Reger SI, Kamper DG, Linden MA, Sahgal V: A clinical tool to predict dynamic seated stability. Ann. Biomed. Eng. 1998, 26: S129.
- Linden MA, Sprigle SH, "Development of Instrumentation and Protocol to Measure the Dynamic Environment of a Modified Van." Journal of Rehabilitation Research and Development. 33(1), 1996.
- Kamper DG, Reger SI, Adams TC, Linden M, Sahgal V: Effects of seating type and disability on stability during driving. Rehab R&D progress Reports 32" 311-312, 1995.
- Sprigle SH, Linden MA, "Accelerations Experienced by Wheelchair Users with SCI in a Moving Van." Technology and Disability, 5:81-91, 1996.

## Conference Proceedings

- Haynes, Scott and Linden, Maureen, "Workplace Accommodations for Individuals Who are Deaf or Hard of Hearing," RESNA 2012 Conference, Baltimore, MD, June 28 July 3, 2012.
- Linden, Maureen and Milchus, Karen, "Characteristics of Workplace Accommodation Use for those with Physical Limitations: Updates from the RERC on Workplace Accommodations." RESNA/FICCDAT 2011 Conference, Toronto, June 5-8, 2011.
- Linden, M. and Milchus, K. "Workplace Accommodation Use for Individuals with Mental Function Limitations: Updates from the RERC on Workplace Accommodations." NARRTC 2011 Conference, Bethesda, MD, April 27-28, 2011.
- Linden, Maureen "Workplace Accommodation Use for Individuals with Vision Impairment" 26th

- International Technology & Persons with Disabilities Conference (CSUN), San Diego, CA, March 14-19, 2011.
- Linden, M, Accommodation Use and the Aging Worker, ICADI 2010 Conference Proceedings, Newcastle, September 8 10, 2010, CD-ROM.
- Sprigle S, Yi D, Caspall J, Linden M, Kong L, Multispectral Image Analysis of Bruise Age, SPIE 2007 Conference Proceedings, San Diego, February 17-22, 2007, CD-ROM.
- Linden M, Sprigle S, Changes in Wheelchair Cushions as a Result of Simulated Use Protocols; RESNA 2006 Conference Proceedings, Atlanta, June 22-26, 2006, CD-ROM
- Linden MA, Sprigle SH, "Skin Temperature Measurement to Predict Incipient Pressure Ulcers." Proceedings of the RESNA 1998 Annual Conference, Minneapolis, Minnesota, pp 116-118.
- Riordan BM, Sprigle SH, Linden MA, "Testing of an activity monitor with below knee prosthesis users." Proceedings of the RESNA 1998 Annual Conference, Minneapolis, Minnesota, June 1998.
- Kamper DG, Linden MA, Adams TC, Reger SI, "Seated Postural Stability of Wheelchair Passengers in Motor Vehicles." Proceedings of RESNA 1996 Annual Conference, Salt Lake City, Utah, 46-48.
- Linden MA, Kamper DG, Adams TC, Reger SI, "Transportation Needs: A Survey of Individuals with Disabilities." Proceedings of the RESNA 1996 Annual Conference, Salt Lake City, Utah, 52-54.
- Linden MA, Sprigle SH, "Development of Instrumentation and Protocol to Measure the Dynamic Environment of a Modified Van." Proceeding of the RESNA 1994 Annual Conference, Nashville, Tennessee, 52-54, 1994.
- Sprigle SH, Linden MA, "Accelerations experienced by wheelchair users with SCI in a moving van." RESNA '94 Annual Conference, Nashville, June 1994.