**Dawn C. Marshall**

Research Manager

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**EDUCATION**

M.S., Industrial Engineering, University of Iowa, Iowa City IA, 2004

B.S., Industrial Engineering, University of Iowa, Iowa City IA, 2001

B.A., Finance, University of Iowa, Iowa City IA, 1988

**EXPERIENCE**

National Advanced Driving Simulator, University of Iowa, Iowa City, IA Research Specialist, 2004 - present

Cognitive Systems Laboratory, University of Iowa, Iowa City, IA Research Assistant, 1998 – 2003

Iowa Driving Simulator, University of Iowa, Iowa City, IA Research Assistant (1997)

Clark Kenyon Decorating, Iowa City, IA Co-owner 1987 - 1997

Ms. Dawn Marshall is the director of the current SAFER-SIM UTC. A Dawn Marshall, As Research Manager with the National Advanced Driving Simulator (NADS) within the University of Iowa, she has been engaged in driving research since 1997 and has been with NADS since 2004 where she has served as Principal Investigator, Project Manager, and Data Collection Coordinator for several NHTSA funded projects as well as for the Iowa DOT, Rockwell Collins and other public and private sector clients. Most recently she has was served selected as the Director of the SAFER-SIM UTC grant awarded in 2013 after the former director, Dr. Sue Chrysler, left the University of Iowa.

Ms. Marshall’s research with NADS has spanned several topics involving simulation, including projects evaluating in-vehicle systems such as adaptive cruise control, lane departure warning, forward collision warning, intersection violation warning, and development and evaluation of situational awareness measures within a connected vehicles context. Her experience also includes the effectiveness of warning systems for older drivers, teen driving behavior near licensure, and integrated control heads for law enforcement. Ms. Marshall is currently serving as Principal Investigator for a $1.6M project that spans five data collection sites with multiple phases of data collection funded by NHTSA.

**RESEARCH CONTRACTS AND GRANTS**

Director November 2014 – present

Safety Research Using Simulation (SAFER-SIM) UTC

*Office of the Assistant Secretary for Research and Technology*, $4,200,000

Principal Investigator December 2013 – present

V2V Safety Applications Study (MiniSim Multi-site)

*National Highway Traffic Safety Administration*, $955,000

Principal Investigator & Project Manager February 2014 – present

Distracted Driving Task Acceptance Testing

*Hyundai America Technical Center, Inc.,* $232,000

Principal Investigator & Project Manager September 2010 – present

Human-Machine Interface (HMI) Analysis and Research

*Rockwell Collins,* $155,000

Project Manager September 2011 – September 2013

Human Factors of Connected Vehicles Driver-Vehicle Interface Design Research and Distraction Assessment

*National Highway Traffic Safety Administration, Task Order through Westat, Inc.*, $741,139

Task Lead September 2011 – January 2014 Crash Warning Interface Metrics – Phase 3

*National Highway Traffic Safety Administration*, *Task Order through Westat, Inc.*, $978,916

Principal Investigator September 2010 – May 2011

Simulator Test Methodology: Evaluating the Effectiveness of Persuasive Fuel Economy Systems

*General Motors*, $198,760

Task Lead September 2010 – December 2011

Advanced Countermeasures for Multiple Impairments (ACMI)

*National Highway Traffic Safety Administration*, $1,039,969

Task Lead August 2009 – March 2011

Crash Warning Interface Metrics (CWIM) Part 2

*National Highway Traffic Safety Administration*, $1,049,861

Principal Investigator & Project Manager March 2008 – August 2011

Enhancing the Effectiveness of Safety Warning Systems for Older Drivers

*National Highway Traffic Safety Administration*, $675,622

Project Coordinator November 2007 – August 2011

Advanced Vehicle-based Countermeasures for Alcohol-Related Crashes

*National Highway Traffic Safety Administration*, $2,500,000

Project Coordinator September 2008 – June 2011

Distraction Detection and Mitigation through Driver Feedback

*National Highway Traffic Safety Administration*, $1,000,000

Project Coordinator January 2006 – January 2007

SAfety VEhicle(s) using adaptive Interface Technology (SAVE-IT)

*National Highway Traffic Safety Administration*, $300,000

Project Coordinator October 2004 – June 2010

Novice Driver

National Science Foundation, $300,000

Collaborator August 2001- December 2004

Human Performance Issues Associated with Adaptive Cruise Control and Forward Collision Warning

*National Highway Traffic Safety Administration,* $500,000

**PROFESSIONAL AFFILIATIONS AND AWARDS**

Member Human Factors and Ergonomics Society 2000 – present

Research Professional Development Series, University of Iowa 2011

New Program Initiation – NADS Safe Driver Training Award, Center for Computer Aided Design 2010

**PROFESSIONAL SERVICE**

Reviewer for Human Factors and Ergonomic Society Annual Meeting 2006 – 2016

Reviewer for Transportation Research Board 2011 – 2016

Reviewer for Driving Assessment Conference 2006 – 2016

Member State Traffic Records Coordinating Committee, State of Iowa, 2010 - present

Engineering Staff Advisory Council, College of Engineering, University of Iowa

Secretary 2006-2007, Executive Committee At-Large Member 2007-2008, Vice-President 2008-2009, and President 2009-2010

**PUBLICATIONS, TECHNICAL REPORTS, AND PRESENTATIONS**

Wu, X., Boyle, L.N., Marshall, D.C., (2015) Sampling Biases Associated with Driver Distraction Tasks in a Simulated Environment. Human Factors and Ergonomics Annual Meeting

Brown, T., Marshall, D., Chrysler, S., Schmitt, R., (2014) Final Report: Crash Warning Interface Metrics: Protocol Completion. Washington, DC: National Highway Traffic Safety Administration

Brown, T., Marshall, D., (2014) Crash Warning Interface Metrics: Protocol Completion: Forward Crash Warning Simulator Protocol. Washington, DC: National Highway Traffic Safety Administration

Brown, T., Marshall, D., (2014) Crash Warning Interface Metrics: Protocol Completion: Forward Crash Warning Test Track Protocol. Washington, DC: National Highway Traffic Safety Administration

Brown, T., Marshall, D., (2014) Crash Warning Interface Metrics: Protocol Completion: Lane Departure Warning Simulator Protocol. Washington, DC: National Highway Traffic Safety Administration

Lee, J., Moeckli, J., Brown, T., Roberts, S., Victor, T., Marshall, D., Schwarz, C.,& Nadler, E. (2013). Detection of Driver Distraction Using Vision-Based Algorithms. 23rd International Technical Conference on the Enhanced Safety of Vehicles. Seoul, South Korea.

Marshall, D., Muller, D., (2013) Evaluation of Dashboard Mounted Emergency Vehicle Warning System (N13-001). Iowa City, IA: National Advanced Driving Simulator, The University of Iowa

Lee, J. D., Moeckli, J., Brown, T. L., Roberts, S. C., Schwarz, C., Yekhshatyan, L., Nadler, E., Liang, Y., Victor, T., Marshall, D., & Davis, C. (2013, May). Distraction Detection and Mitigation Through Driver Feedback. (Report No. DOT HS 811 547A). Washington, DC: National Highway Traffic Safety Administration.

Gawron, V., Brown, T., Marshall, D., (2012) Differences in Degree of Conflict Accepted in Younger and Older Drivers with a Lane Change Collision Avoidance System. National Research Council (U.S.). Transportation Research Board. Meeting (91st : 2012 : Washington, D.C.). Preprint CD-ROM. Paper No. 12-4376

Marshall, D., Wallace, R., Torner, J., (2011) Effectiveness of an Intersection Violation Warning System. 6th International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design 2011, Lake Tahoe, CA.

Brown, T. Schwarz, C. & Marshall, D. (2011). Evaluating Forward Crash Warning on the NADS for CWIM (N11-001). Iowa City, IA: National Advanced Driving Simulator, The University of Iowa.

Marshall, D., Wallace, R., Torner, J., (2010) Final Report: Enhancing the Effectiveness of Safety Warning Systems for Older Drivers. Contract No. DTNH22-06-D-00043, Task Order 3. Iowa City, IA: National Advanced Driving Simulator.

Brown, T., Marshall, D. Dow, B. (2010). Validation of the National Advanced Driving Simulator For the Study of Young Driver Risk for the Center for Child Injury Prevention Science I/UCRC. (N10-017). Iowa City, IA: National Advanced Driving Simulator.

Brown, T., Moeckli, J., & Marshall, D. (2009). Use of a High-Fidelity Simulation to Evaluate Driver Performance with Vehicle Automation Systems. Paper presented at the HCI International 2009. San Diego, CA.

Marshall, D. (2008) HMI Analysis for Rockwell Collins iForce™ Vehicle Computer System (N2011-003), Iowa City, IA: National Advanced Driving Simulator

Dow, B., Brown, T., Marshall, D. (2008) Characterization of novice driver response to critical driving events research experiences for undergraduates. Washington, DC: National Science Foundation

Brown, T., Benn, C., Marshall, D., Moeckli, J. (2008) Heavy Truck ESC Effectiveness Study Using NADS. Washington, DC: National Highway Traffic Safety Administration

Dow, B., Brown, T., Marshall, D. (2008) Response to Intersection Conflict Situations Across Driver Age. Human Factors and Ergonomics Annual Meeting

Brown, T., Marshall, D., Moeckli, J., Smyser, T. (2007) SAfety VEhicle(s) using adaptive Interface Technology (SAVE-IT) Program: Task 14 Evaluation. (N2007-018) Iowa City, IA: National Advanced Driving Simulator

Brown, T., Marshall, D. (2007) Validation of the National Advanced Driving Simulator for the Study of Young Driver Risk for the Center of Child Injury Prevention Science I/UCRC (N2007-003) Iowa City, IA: National Advanced Driving Simulator

Brown, T., Dow, B., Marshall, D., & Allen, S. (2007). Validation of stopping and turning behavior for novice drivers in the National Advanced Driving Simulator. Driving Simulation Conference North America 2007, Iowa City, IA.

Senserrick T., Brown T., Marshall D., Quistberg D., Dow, B., & Winston F. (2007) Risky Driving by Recently Licensed Teens: Self-Reports and Simulated Performance. 4th International Driving Symposium on Human Factors in Driver Assessment, Training, and Vehicle Design 2007, Stevenson, WA

Senserrick TM, Brown T, Quistberg DA, Marshall D, Ahmad O, & Winston FK. (2007). Validation of simulated assessment of teen driver speed management on rural roads. 51st Annual Scientific Conference of the Association for the Advancement of Automotive Medicine (AAAM), Melbourne, Australia.

Marshall, D., Lee, J.D., & Austria, P.A. (2007). Alerts for In-Vehicle Information Systems: Annoyance, Urgency, and Appropriateness. Human Factors, 49, pp. 145-157.

Lee, J., McGehee, D., Brown, T., and Marshall, D. (2006). Effects of Adaptive Cruise Control and Alert Modality on Driver Performance. Transportation Research Record, n 1980, 49-56.

Lee, J.D., Stoner, H., Marshall, D., (2004). Enhancing Interaction with the Driving Ecology through Haptic Interfaces. IEEE International Conference on Systems, Man and Cybernetics

Lee, J. D., Marshall, D., Austria, P. A., Wiese, E., and Williams, E. (2002). In-vehicle display icons and other information elements. Task E, Experiment 3. Urgency and annoyance of auditory alerts (Final Report). Iowa City, IA: University of Iowa.

Marshall, D., Lee, J. D., & Austria, A. (2001). Annoyance and urgency of auditory alerts for in-vehicle information systems. Human Factors and Ergonomics Annual Meeting, 2, 1627-1631.