# CARR ENGINEERING, INC.

12500 CASTLEBRIDGE DRIVE HOUSTON, TEXAS 77065-4532 TELEPHONE 281-894-8955

## Curriculum Vitae for Kathleen Rodowicz, Ph.D., P.E.

# **Education and Licensing**

- o Bachelor of Science in Mechanical Engineering, Drexel University, 2004
- o Doctor of Philosophy in Mechanical Engineering, Drexel University, 2008
- o Registered Professional Engineer in the State of Maryland, 2014 to present
- o Certified lift truck operator

# **Specialized Professional Competencies**

- Biomechanical investigation, reconstruction, and failure analysis for a variety of situations and environments
- o Analysis of human kinematics, injury potential, and injury mechanisms in motor vehicle crashes, sporting incidents, slip-and-fall events, and matters involving industrial equipment
- o Design, implementation, and execution of vehicle and vehicle component testing
- o Analysis of real-world accident and injury data
- Human surrogate testing and analysis

## **Professional Experience and Qualifications**

- o Principal Engineer, Carr Engineering, Inc., July 2024 to present
- o Principal Engineer & Practice Director, Exponent, Inc., July 2021 to June 2024
- o Principal Engineer, Exponent, Inc., April 2018 to July 2021
- o Managing Engineer/Senior Managing Engineer, Exponent, Inc., April 2013 to April 2018
- Associate/Senior Associate, Exponent, Inc., September 2008 to April 2013

## **Research Activities**

- o Influence of restraint use and various restraint technologies on occupant kinematics, injury potential, and injury mechanisms in motor vehicle and heavy truck crashes
- o Effect of disease on spine biomechanics and injury tolerance
- o Injury risk and injury mitigation in industrial settings
- o Balance retention and postural control strategies following postural disturbances
- o Effectiveness of headgear in preventing injury in a variety of sporting environments

#### **Professional Associations**

- Society of Automotive Engineers
- o American Society of Mechanical Engineers