

# APPLIED BIOMECHANICS

## Curriculum Vitae

### **Renate Schmidt-Hargrave, MSME, R.N.**

#### **Summary**

Senior Engineer, specializing in impact injury and human tolerance. Experience includes accident reconstruction, and analysis of injury biomechanics and occupant dynamics in motor vehicle accidents, soft and hard tissue injuries, and scalding burns. Also knowledgeable in adult medicine and nursing, repetitive strain injury, occupational injury assessment, and computer analysis of forces on the body.

#### **Education**

M.S., Mechanical Engineering, University of California, Berkeley, 1987

B.S., Mechanical Engineering, University of California, Berkeley, with Honors, 1986

B.S., Nursing, San Jose State University, with Distinction, 1980

#### **Professional Experience**

Senior Engineer, Applied BioMechanics, Alameda, California, 1999 – present.

Senior Engineer, FTI / Anamet, Hayward, California, 1997 – present.

Engineer and Senior Engineer, Failure Analysis Associates, Inc., 1990 – 1997.

Clinical Engineer and Product Development Engineer, Cardiovascular Imaging Systems, Inc., 1988 – 1990.

Coronary Care Unit/Cardiac Surveillance Unit Nurse and Medical/Surgical Intensive Care Nurse, Stanford Hospital, 1981 – 1986.

#### **Professional Honors**

Tau Beta Pi, Pi Tau Sigma

Society of Women Engineers Scholarship

Graduate Opportunity Program Fellowship

2156 CENTRAL AVENUE  
ALAMEDA, CA 94501

TELEPHONE: (510) 747-1947  
FACSIMILE: (510) 747-1943  
EMAIL: [RSCHMIDT@APPLIEDBIOMECH.COM](mailto:RSCHMIDT@APPLIEDBIOMECH.COM)

### **Conferences Attended**

EDCRASH Training Course, Northridge, California, January 1998.

40th Stapp Car Crash Conference, "Biomechanics of Side Impact," November 1996.

University of California Center of Occupational and Environmental Health and University of Michigan Center for Occupational Health and Safety Engineering Course on "Occupational Ergonomics: Control of Work Related Upper Limb Disorders," April 1996.

University of California, San Diego School of Medicine Conference on "Accidental Injury: Biomechanics and Prevention," November 1995.

Ninth Annual Stanford Trauma Symposium on "Evolutions and Revolutions," July 1995.

University of California Center for Occupational and Environmental Health and University of Michigan Center for Occupational Health and Safety Engineering Course on "Cumulative Trauma Disability and Rehabilitation in the Workplace," December 1992.

### **Registrations and Certifications**

Board of Registered Nursing License, California, #RN319795

Public Health Nurse Certificate, California, #31215

### **Selected Publications and Presentations**

Donelson, A., Schmidt-Hargrave, R., Kennett, K., Ramachandran, K., Cheng, L., and Thibault, L. Alcohol As An Injury-Aggravating Factor. Conference on Alcohol, Drugs, and Traffic Safety, 9/97.

"Biomechanics in Accident Reconstruction," Presentation, Ninth Annual Stanford, Trauma Symposium, July 1995.