



**Human
Factors
and
Ergonomics
Society**

FELLOW PROFILE

Name: David Rempel

**Degrees, certifications,
etc.:** MD, MPH, CPE

Current status: Professor of Bioengineering at
University of California,
Berkeley

Home page: <http://ergo.berkeley.edu/>

Biography (How you got involved in the field, your major career activities and milestones):

I studied physics and engineering as an undergraduate but was attracted to the complexity and value of medicine and entered medical school in 1977. Early in medical school it became clear that preventing disease has a much greater impact on societal health than treatment. So after completing a residency in internal medicine I studied epidemiology and occupational medicine. Workplace musculoskeletal disorders are a large cause of disability and morbidity, and cost the US more than \$50b per year, yet relatively little research was being done on prevention (e.g., ergonomics). Since 1990 I have been doing research and teaching graduate students and occupational medicine fellows on ergonomics and the prevention and treatment of work related musculoskeletal disorders.

Employment History (List top 5 positions):

1985-1990 Medical officer (epidemiology) California Department of Public Health.
1990-present Professor of Medicine, University of California, San Francisco.
2000-present Professor of Bioengineering, University of California, Berkeley.

What were your significant contributions to the field?

Physiologic research on carpal tunnel syndrome and implications for the design of hand tools.
Impact of alternative keyboards and computer mice on musculoskeletal health.
Workplace randomized controlled trials demonstrating effects of interventions on musculoskeletal health (garment, dental, construction, office).
Design of jigs to support drills for overhead and concrete drilling.

Did you receive any notable awards or recognition during your career?

NIH/Fogarty Senior International Fellowship Award, 1997

Jean Spencer Felton Award for Scientific Writing, WOEMA, 2000

IEA/Liberty Mutual Prize in Occupational Safety and Ergonomics, 2006

Which articles in the journal *Human Factors* would you say were the most influential to you and your research or practice?

Marras WS, Sommerich CM. A three-dimensional motion model of loads on the lumbar spine: II. Model validation. *Human Factors* 1991; 33:139-49.

Wiker SF, Langolf GD, Chaffin DB. Arm posture and human movement capability. *Human Factors* 1989; 31:421-41

Armstrong TJ, Radwin RG, Hansen DJ, Kennedy KW. Repetitive trauma disorders: job evaluation and design. *Human Factors* 1986; 28:325-36

Kroemer KH. Human engineering the keyboard. *Human Factors* 1972; 14:51-63.

Please provide any links to your online articles, essays, blogs, Wikipedia pages, etc., that pertain to your research, publications or practice.

<http://ergo.berkeley.edu/>

What advice would you give someone considering HF/E as a profession?

This is a wonderful field - you can be creative and have a positive impact on society. Go for the advanced degree.