

Professor

- o [Industrial and Operations Engineering](#)
- o [Biomedical Engineering](#)

Director:

- o [Center for Ergonomics](#)

Biographical information:

- o [Brief Biographical Sketch](#)
- o [NIH Format Biographical Sketch -- pdf](#)

Research

- o Measurement & design of manual work
- o Biomechanical models for analysis and design of objects that are held or manipulated with the hands
- o Ergonomic solutions for preventing disability
- o Analysis and design tools for control of work-related musculoskeletal disorders of the hand and wrist, e.g., fatigue, tendinitis, & carpal tunnel syndrome
- o [Selected publications](#)

Teaching

- o [Department of Industrial and Operations Engineering](#)
- o [Biomedical Engineering](#)
- o [Horace H. Rackham School of Graduate Studies](#)(All MS and PhD applications go here)
- o [Doctoral dissertations chaired or co-chaired](#)
- o Academic Courses:
 - [IOE 463 Measurement and Design of Work](#)
Analysis of human-machine system, methods analysis, workplace layout, motion economy, time study, predetermined time systems, allowances, fatigue, musculoskeletal disorders
 - [IOE 491 Applied Physical Ergonomics](#)
 - [IOE 567: Work Related Musculoskeletal Disorders](#)
- o [Short Course Directory, Schedule & Registration](#)

Contact:

- o Telephone: (734) 763-3742
- o FAX: (734) 764-3451
- o E-mail: tja@umich.edu
- o G656 IOE Building, 1205 Beal Ave., Ann Arbor, MI 48109-2117
- o [Center for Ergonomics Directions](#)
(the Center for Ergonomics is located in the Industrial and Operations Engineering Building on North Campus)

Professional Societies

- o [American Society of Biomechanics](#)
- o [American Conference of Governmental Industrial Hygienist](#)
- o [American Industrial Hygiene Association \(Fellow\)](#)
- o [The American Institute for Medical and Biological Engineering](#)
- o [Ergonomics Society GB](#)
- o [Human Factors & Ergonomics Society US](#)
- o [International Commission on Occupational health](#)
- o [Rehabilitation Engineering and Assistive Technology Society of North America \(RESNA\)](#)

Scientific Journals

- o [Assistive Technology](#)
- o [Ergonomics*](#)
- o [Human Factors and Ergonomics*](#)
- o [American Industrial Hygiene Association Journal*](#)
- o [American Journal of Industrial Medicine](#)
- o [Scandinavian Journal of Work, Environment and Health**](#)
- o [Journal of Occupational Rehabilitation**](#)
- o [International Journal of Industrial Ergonomics*](#)
- o [Applied Ergonomics*](#)
- o [Journal of Biomechanics*](#)

* Occasional Reviewer

** Editorial board member

Some Tools & Software (use at your own risk):

- o [Physical job stress ratings](#)
- o [Task, Force and Posture Analysis -- Handout](#)
- o [Time-based Task, Force and Posture Analysis Program -- Beta Version \(Right click and "save as"\)](#)
- o [Reach Analysis Program -- Beta Version \(Right click and "save as"\)](#)

Some General Ergonomic Resources (Not endorsed):

- o [Darnell, M., *BadHuman Factors Designs*](#)
- o [FAA Human Factors Design Guide -- a great resource, but poorly referenced](#)
- o [Bernard, B. \(ed.\) *Musculoskeletal Disorders \(MSDs\) and Workplace Factors*](#)
- o [NIOSH Homepage](#)

- [Work-Related Musculoskeletal Disorders: Report, Workshop Summary, and Workshop Papers --- the first definitive statement on work and musculoskeletal disorders 1999](#)
- [Work-Related Musculoskeletal Disorders: Report, Workshop Summary, and Workshop Papers --- the second definitive statement on work and musculoskeletal disorders 2001](#)

Regulations/guidelines

- [Americans with Disabilities Act](#)
- [ADA Accessibility Guidelines for Buildings and Facilities \(ADAAG\)](#)
- [World Wide Web consortium, W3C](#)
- [OSHA Homepage](#)
- [OSHA Ergonomics Standard](#)
- [State Ergonomic Standards](#)
- [ACGIH TLVs](#)

Internet Resources

- [PubMed -- National Library of Medicine's search service](#)

Health Statistics

- [Bureau of Labor Statistics -- access latest data on musculoskeletal disorders](#)
- [National Health Survey Statistics](#)

Rehabilitation

- [Job Accommodation Network](#)
- [National Rehabilitation Information Center](#)
- [National Institute on Disability and Rehabilitation Research RERCs and RTCs](#)

U Mich Resources

- [Universtiy of Michigan Library](#)
- [UM Staff Directory](#)
- [CoE Exchange Server](#)
- [UM Occupational Safety and Environmental Health](#)

Ann Arbor, MI

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