

**BIOGRAPHICAL SKETCH**

NAME Thomas M. Cook	POSITION TITLE Professor
eRA COMMONS USER NAME	

**EDUCATION/TRAINING**

INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY
Thomas More College, Ft. Mitchell, KY	B.A.	1968	Biology
US Army Engineering School	---	1969	Engineering
Duke University, Durham, NC	M.S.	1973	Physical Therapy
Drexel University, Philadelphia, PA	M.S.	1981	Biomedical Engineering
University of Iowa, Iowa City, IA	Ph.D.	1987	Human Factors Engineering

**A. Positions and Honors.****Positions**

1973-1981	Director, Biomechanics Laboratory, Rehabilitation Engineering Center, Philadelphia, PA
1987-1992	Assistant Professor, Physical Therapy Education, College of Medicine, The University of Iowa
1992-1997	Associate Professor, Physical Therapy, College of Medicine, The University of Iowa
1993-1997	Associate Professor, Preventive Medicine and Environmental Health, The University of Iowa
1997-present	Professor, Physical Therapy, College of Medicine, The University of Iowa
1997-1999	Professor, Preventive Medicine and Environmental Health, College of Medicine, The University of Iowa
1999-present	Professor, Occupational and Environmental Health, College of Public Health, The University of Iowa

**Honors and professional activities (selected)**

1982-present	Physical Therapy License (Iowa #01117)
1982-present	Reviewer, Physical Therapy
1985-present	Reviewer, Journal of Biomechanics
1985-present	Ergonomics Consultant: Everco, Inc., Chrysler Corp., Steelcase, Inc., Salsbury Labs, Rolscreen Co., Montfort Pork, UAW Local 893, Lennox Industries, Fisher Controls, Cooper Mfg., Deere & Co., Ritchie Industries, NASA, Monsanto, Iowa City Transit, Midwest Mfg., Linn County, Eaton Corp., Hallmark, Dial Corp., Climate Engrg, Exxon Corp., Amoco Oil Co., American Newspaper Assoc
1987-present	Grant Reviewer, National Institute for Disability & Rehabilitation Research
1989	American Physical Therapy Association Award for Excellence in Orthopedic Physical Therapy Research
1989	Clinical Research Award, Iowa Chapter, American Physical Therapy Association

**B. Selected Peer-Reviewed Publications.**

- Schneider S, Punnett L, Cook TM. Ergonomics: applying what we know. Occupational Medicine: State of the Art Reviews 10(2):385-394, 1995.
- Rosecrance JC, Cook TM. Ergonomics intervention in newspaper production. Orthop Phys Ther Clin North Am 5(2):273-286, 1996.
- Bork BE, Cook TM, Rosecrance JC, et al. Work-related musculoskeletal disorders among physical therapists. Phys Ther 76(8):827-835, 1996.
- Ludewig PM, Cook TM, Nawoczinski DA. Three-dimensional scapular orientation and muscle activity at selected positions of humeral elevation. J Orthop Sports Phys Ther 24(2):57-65, 1996.
- Rosecrance JC, Cook TM, Zimmermann CL. Work-related musculoskeletal symptoms among construction workers in the pipe trades. Work 7:13-20, 1996.
- Ludewig PM, Cook TM. The effect of head position on scapular orientation and muscle activity during shoulder elevation. J Occup Rehab 6(3):147-158, 1996.
- Bingham R, Rosecrance JC, Cook TM. Prevalence of median neuropathy in applicants for industrial jobs. Am J Ind Med 30:355-361, 1996.
- Cook TM, Rosecrance JC, Zimmermann CL. Work-related musculoskeletal problems in bricklaying: a symptom and job factors survey and guidelines for improvements. Appl Occup Environ Hyg 11(11):1335-1339, 1996.
- Zimmermann CL, Cook TM. Effects of vibration frequency and postural changes on human responses to seated whole-body vibration exposure. Intl Arch Occup Environ Health 69(3):165-179, 1997.
- Rosecrance JC, Cook TM, Bingham R. Sensory nerve recovery following median nerve provocation in carpal tunnel syndrome. Electromyogr Clin Neurophysiol 37(4):219-229, 1997.

- Cook TM, Farrell K, Carey IA, Gibbs JM, Wiger GE. Effects of restricted knee flexion and walking speed on the vertical ground reaction force during gait. *J Orthop Sports Phys Ther* 25(4):236-244, 1997.
- Zimmermann CL, Cook TM, Rosecrance JC. Work-related musculoskeletal symptoms and injuries among operating engineers: A review and guidelines for improvement. *Appl Occup Environ Hyg* 12(7):480-484, 1997.
- Zimmermann CL, Cook TM, Rosecrance JC. Operating engineers: Work-related musculoskeletal disorders and the trade. *Appl Occup Environ Hyg* 12(10):670-680, 1997.
- Hatiar K, Baláž J, Madajová A, Cook TM, Rosecrance JC, Zimmermann CL. Výskum v Stavebníctve (Research in Construction). Ústav Preventívnej a Klinickej Medicíny, and Odborový Zväz STAVBA Slovenskej Republiky, Biomechanics and Ergonomics Facility, The University of Iowa; Dec 1997.
- Ludwig PM, Cook TM. Contribution of selected scapulothoracic muscle forces to the control of accessory scapular motions. *J Orthop Sports Phys Ther* 25(1):77, 1997.
- Rosecrance JC, Cook TM, Zimmermann CL. A comparison of musculoskeletal symptom profiles among workers from various occupations. In: Proceedings of the 13th Triennial Congress of the International Ergonomics Assoc., Vol. 4. Seppala P, Luopajavi T, editors. Finnish Institute of Occupational Health, pp. 103-105, 1997.
- Cook TM, Zimmermann CL, Rosecrance JC. Self-reported musculoskeletal symptoms and job factors among unionized electricians. In: Proceedings of the 13th Triennial Congress of the International Ergonomics Association, Vol. 6. Seppala P, Luopajavi T, editors. Tampere, Finland: Finnish Institute of Occupational Health, pp. 81-83, 1997.
- Cook T, Rosecrance J, Zimmermann C, Gerleman D, Ludwig P. Electromyographic analysis of a repetitive hand gripping task. *Intl J Occup Safety Ergonomics* 4(2):185-198, 1998.
- Rosecrance JC, Cook TM. Upper extremity musculoskeletal disorders: occupational association and a model for prevention. *Cent Eur J Occup Environ Med* 4(3):214-231, 1998.
- Zimmermann CL, Hatiar KM, Cook TM. A comparison of work-related musculoskeletal disorders among operating engineers in the United States and Slovakia. *Cent Eur J Occup Environ Med* 4(3):232-246, 1998.
- Hatiar K, Balaz J, Madajova A, Zimmermann, CL, Rosecrance JC, Cook TM. Ergonomicky vyskum v Stavebnictve na Slovensku. *Bull Slov Anthrol Spoloc*, 1:36-40, 1998.
- Cook TM, Ludwig PM, Rosecrance JC, Gerleman DG. Electromyographic effects of ergonomic modifications in selected meatpacking jobs. *J Appl Ergonomics* 30:229-233, 1999.
- Cook TM, Kross BC, Ciznar I, Ungar R. International training and research in Central and Eastern Europe: The University of Iowa model. *Intl J Occup Environ Health* 5:234-236, 1999.
- Rosecrance JC, Cook TM. The use of participatory action research and ergonomics in prevention of work-related musculoskeletal disorders in the newspaper industry. *Appl Occup Environ Hyg* 15(3):255-262, 2000.
- Cook TM, Hatiar KM, Rosecrance JC. A model for participatory ergonomics in the Slovak Republic. *Ergonomics for Global Quality, Safety and Productivity*, Central Institute for Labor Protection, Warsaw, Poland, 2000.
- Ludwig PM, Cook TM. Alterations in shoulder kinematics and associated muscle activity in persons with shoulder impingement symptoms. *Phys Ther* 80(3):276-291, 2000.
- Rosecrance J, Pórszász J, Cook T, Fekecs E, Karácsnyó T, Merlino L, Anton D. Musculoskeletal disorders among construction apprentices in Hungary. *Cent Eur J Public Health* 9:183-187, 2001.
- Anton D, Shibley LD, Fethke NB, Hess J, Cook TM, Rosecrance J. The effects of overhead drilling position on shoulder movement and electromyography. *Ergonomics* 44(5):489-501, 2001. Trnovec T, Cook T, Nyulassy S. Civilization as a threat to human health. *Cent Eur J Public Health* 9(1):49-52, 2001.
- Ludwig P, Cook T, Shields R. Comparison of surface sensor and bone-fixed measurement of humeral motion. *J Appl Biomech* 18:163-170, 2002.
- Ludwig PM, Cook TM. Translations of the humerus in persons with shoulder impingement symptoms. *J Orthop Sports Phys Ther* 32(6):248-259, 2002.
- Rosecrance JC, Cook TM, Anton D, Merlino LA. Carpal tunnel syndrome among apprentice construction workers. *Am J Ind Med* 42:107-116, 2002.
- Rosecrance JC, Ketchen KJ, Merlino LA, Anton DC, Cook TM. Test-retest reliability of a self administered musculoskeletal symptoms and job factors questionnaire used in ergonomics research. *Appl Occup Environ Hyg* 17(9):613-621, 2002.
- Anton D, Rosecrance JC, Merlino LA, Cook TM. Prevalence of musculoskeletal symptoms and carpal tunnel syndrome in dental hygienists. *Am J Ind Med* 42:248-257, 2002.
- Ludwig PM, Cook TM, Shields RK. Comparison of Surface Sensor and Bone-Fixed Measurement of Humeral Motion. *Journal of Appl Biomechanics* 18, 163-170, 2002
- Ludwig PM, Cook TM. Translations of the Humerus in Persons with Shoulder Impingement Symptoms. *J Orthop Sports Phy Ther*, Volume 32, Number 6, (248-259) June, 2002.
- Merlino LA, Rosecrance JC, Anton D, Cook TM. Symptoms of musculoskeletal disorders among apprentice construction workers. *Appl Occup Environ Hyg* 18(1):57-64, 2003.
- Anton D, Cook TM, Rosecrance JC, Merlino LA. Method for quantitatively assessing physical risk factors during variable noncyclic work. *Scand J Work Environ Health* 29(5): 354-362, 2003.
- Hatiar K, Cook TM. Participatory Ergonomics in Slovakia. *EruoRehab* 3: 162-167, 2003.

**C. Research Support.  
ONGOING**

T42/CCT722958-02 (Sprince, PI) CDC/NIOSH Occupational Safety and Health Training Grant - Education and Research Center (ERC) Heartland Center for Occupational Safety and Health The major goal of the Center will be to provide graduate training, continuing education and outreach in occupational safety and health to serve Federal Region VII (IA, KS, MO, NE). -Ergonomics Program (Core Director)	07/01/00-06/30/08
Pilot Project: (Nonnenmann) Assessment of Knee Flexion During the Work Tasks of Dairy Farmers (Mentor)	06/01/04-05/31/05 \$15,000
R49/CCR721682-03 (Zwerling, PI) CDC The University of Iowa Injury Prevention Research Center The UI IPRC aims to control and prevent injuries, especially in rural high-risk populations, through research, training, and public policy. Administrative Core (Associate Center Director) Training Core (Instructor)	09/01/02-08/31/07 (continuation of Center begun 09/28/90)
1 R01 OH007945-02 (Gerr) NIOSH/CDC Prospective Study of UEMSD and Physical Job Stressors	9/1/03-8/31/07
U07/OH07548-04 (Sanderson, PI) CDC/NIOSH Great Plains Center for Agricultural Health To conduct multidisciplinary research; to develop and evaluate novel disease and injury prevention models and outreach intervention programs in Federal Region VII; to train health professionals; to provide technical assistance and consultation to Federal Region VII; and to maintain and strengthen linkages with agricultural health and safety professions in the state, the region, nationally, and internationally. Ag Research Translation Core (Project Director)	09/30/01-09/29/06 (continuation of center begun 09/30/90)
4469700 (Cook, PI) Pioneer Hi-Bred International Rural Community Health and Safety Communications - Program in a Global Society To design and direct rural health and safety outreach programs in U.S.A.	10/01/95-present
5 D43 TW00621-09 (Cook, PI) Fogarty International Center / NIH Iowa International Research & Training in Environmental & Occupational Health The overall purpose of this project is to build global capacity and collaboration to better understand, investigate, control and prevent environmental and occupational health problems in developing countries and the United States.	09/30/95-04/30/06
Supplement: Iowa Int'l Research and Training in Environmental & Occupational Health	5/1/04-4/30/05
Supplement: A Demonstration of Distance On-line Training (DOT) for ITREOH Programs	5/1/04-4/30/05 \$30,695
Supplement: The eGranary Digital Library and the ITREOH Program in West Africa.	5/1/04-4/30/05 \$34,283

U60/CCU317202-03 (Cook, PI)

09/30/99-06/30/05

Center to Protect Workers Rights

Intervention Research in the Construction Industry

The purpose of this 5-year research program is to better understand work-related musculoskeletal disorders (WMDs) among construction workers and to develop and evaluate interventions to reduce occupational musculoskeletal and neurovascular disorders of the upper limb.

Role: Principal Investigator

U54 OH08307-01 (Stafford, PI)

09/01/04-07/30/09

Center to Protect Workers Rights

The Construction Centers for Safety and Health

The purpose of this 5-year research program is improve interventions designed to reduce musculoskeletal disorders among the masonry trades

Role: Co-Investigator for subcontract: PI: Anton

### **COMPLETED**

5 P30 ES05605-12 (Thorne, PI)

09/29/90-03/31/04

NIEHS

Environmental Health Science Research Center

The main goal of the EHSRC is to promote research interactions among environmental health researchers at the UI, enhancing ongoing environmental health research and facilitating initiation of new collaborative and interdisciplinary environmental health research.

Community Outreach & Education Core

The primary goal of the COEC is the translation of research results into knowledge applied to public health, as a local, state, national and international resource, and assisting community organizations and populations with special needs.

Role: Steering Committee

T42/CCT722958-01 (Sprince, PI)

07/01/00-06/30/03

CDC/NIOSH

Occupational Safety and Health Training Grant - Education and Research Center (ERC)

Heartland Center for Occupational Safety and Health

The major goal of the Center will be to provide graduate training, continuing education and outreach in occupational safety and health to serve Federal Region VII (IA, KS, MO, NE).

-Industrial Hygiene Training Program (Professor, Ergonomics)

-Agricultural Training Program (Program faculty, Ergonomics)