What does it take to make changes at the Human Factors and Ergonomics Society?

The answer is that it depends on what type of change one wants to make. This year the IETG Business Meeting will be held on Thursday at 5:15-6:45pm. The business meeting was moved to Thursday, so that we would be able to recognize the student paper award winner at the business meeting. Moving the business meeting from Wednesday to Thursday was relatively easy. However, I did get a warning that attendance may be low so please mark your calendar for the IETG Business Meeting on Thursday, October 19 at 5:15-6:45pm.

At the 2004 IETG Business Meeting when I took over as chair, one of our members suggested shortening the proposal submissions to 500 words. The argument for shortening the submission was that we would get more cutting edge research submitted. We had a lively discussion on the topic at the meeting and finally voted to shorten the submission length. What could be easier? Well, not so fast. After sending out a newsletter announcing our change in policy, I received an email indicating that the technical group could not do this. What does it take to make this change? The HFES Executive Council would need to vote on such a change. In 2005, at the business meeting our members still wanted to pursue this change. One of the questions was how much support is there among other technical groups? During 2006 a survey was taken amongst the other technical groups. Only 12 of the technical group chairs responded to the survey on shortening the length of proposals. The results of the poll were that 3 technical groups were “yes” in support of the change and 3 technical groups were definite “no” against change, 6 technical groups were not sure or just didn’t have this issue on their radar. The results of the poll were forwarded to Marv Dainoff for the HFES Executive Council mid year meeting; however, I have not received any response. Changes in proposal submission policy are more complicated and require more time than changes in the business meeting date. If the members of the IETG want to see the change in length of proposal submissions then we need to be persistent.

I would like to thank you all for allowing me to be the Industrial Ergonomics Technical Group Chair. During my time as chair, I have learned a great deal about the Human Factors and Ergonomics Society. See you in San Francisco at the conference.

Sue Ferguson
FROM THE PROGRAM CHAIR

The 50th Annual HFES meeting is rapidly approaching and the IETG program is set. We had a significant uptick in submissions this year and reviewers have remarked on the strength of the submissions received. We have several special sessions, including our opening session examining the effectiveness and limitations of the ergonomics approach, which features Dr. Stuart McGill (University of Waterloo) and Dr. Barbara Silverstein (SHARP), an Invited Symposium- Prevention of Work-Related Musculoskeletal Injuries, and a Discussion Panel on Quality and Ergonomics. We are also trying something new in having the IETG posters presented during the social hour after the IETG meeting. In addition, we are excited about the regular IETG program, about which reviewers have remarked on the strength of submissions. Looking forward to seeing you in San Francisco in October.

Sean Gallagher

CONFERENCE PROGRAM

Tuesday, October 17

IE1 - The Promise and Limitations of Ergonomics (Invited Addresses)
10:30-12:00

Chair: Kermit Davis, University of Cincinnati
Co-Chair: Riley Splittstoesser, The Ohio State University

The Role of Ergonomics in Preventing and Reducing the Burden of Musculoskeletal Conditions
Silverstein, Barbara: Safety and Health Assessment and Research for Prevention (SHARP) Program

Beyond Ergonomics: Evolving to Achieve Fewer Back Injuries in the Future?
McGill, Stuart: University of Waterloo
IE2 - Postural Influences on Low Back Biomechanics *(Lecture)*
1:30-3:00

Chair: Maury Nussbaum, *Virginia Tech*
Co-Chair: Carol Stuart-Buttle, *Stuart-Buttle Ergonomics*

Sagittal Plane Moment Arms of the Male Lumbar Region Rectus Abdominis: Upright vs. Supine Posture
Jorgensen, Michael: *Wichita State University*; Smith, Francis: *Aberdeen Royal Infirmary*

Non-Invasive Evaluation of the Effect of Stooped Posture on Spinal Intervertebral Discs Using MRI
Reiter, David; Fathallah, Fad; Walton, Jeffrey: *University of California*

Prediction of Lumbar Motion Segment Angles Using Trunk Angle and Anthropometry
Splittstoesser, Riley: *The Ohio State University*

The Effects of a Stooped Work Task on the Muscle Activity and Kinematics of the Lower Back
Miller, Brandon; Fathallah, Fadi: *University of California*

Development And Evaluation Of Ergonomic Interventions For Bucket Handling On Farms
Tang, Steven; Fathallah, Fadi: *University of California*; Waters, Thomas: *NIOSH*

Trunk Stability in Dynamic Movement
Granata, Kevin; England, Scott: *Virginia Tech*

Wednesday, October 18

IE3 - Prevention of Work-Related Musculoskeletal Disorders *(Discussion Panel)*
8:30-10:00

Chair: Sue Ferguson, *The Ohio State University*
Co-Chair: Fadi Fathallah, *UC-Davis*

Panelists:
Barbara Silverstein, *Safety & Health Assessment and Research for Prevention (SHARP) Program, Washington State Department of Labor and Industries*

Martin Cherniack, *Ergonomics Technology Center Univ. of Connecticut Health Center*

Arun Garg, *Ind. & Manufacturing Eng. Dept, University of Wisconsin-Milwaukee*

Steve Lavender, *Institute for Ergonomics, The Ohio State University*
IE4 - The Neck and Upper Extremity (Lecture)
10:30-12:00

Chair: Jack Dennerlein, Harvard University
Co-Chair: Tom Albin, Auburn Engineers

Effects of Pace and Work Stress on Upper-Extremity Kinematic Responses in Sign Language Interpreters
Qin, Jin; Marshall, Matthew; Mozrall, Jacqueline: Rochester Institute of Technology; Marschark, Marc: National Technical Institute for the Deaf

An Investigation of Complaints of Shoulder Pain and Discomfort from Library Workers and the Redesign of a Circulation Desk
Wick, John: J and J Consulting; Woodford, Susanne: King County Library System

Efficacy of Using Thermography to Assess Shoulder Loads during Overhead Intermittent Work
Barker, Linsey; Hughes, Laura; Babski-Reeves, Kari: Virginia Tech

Developing a non-human primate experimental model for studying carpal tunnel syndrome
Sommerich, Carolyn; Lavender, Steve; Buford, John; Pease, William; Banks, Jacob; Vatan-Korkmaz, Sahika; Moran, Stephanie: The Ohio State University

A Randomized Controlled Trial Evaluating the Effects of a Two Task Chair Designs on Shoulder and Neck Pain among Sewing Operators
Rempel, David: University of California, San Francisco; Wang, Pin-Chieh: University of California, Los Angeles; Janowitz, Ira: UCSF; Harrison, Robert: UCSF; Ritz, Beate: UCLA

Thursday, October 19

IE5 - Slips, Trips, and Falls (Lecture)
8:30-10:00

Chair: Wen Chang, Liberty Mutual Research Institute for Safety
Co-Chair: Thurman Lockhart, Virginia Tech

Midfoot shape when standing on soft and hard footbeds
Goonetilleke, Ravindra; Witana, Channa: Hong Kong University of Science & Technology

Gait Asymmetry: Factors Influencing Slip Severity and Tendency among Older adults
Kim, Sukwon; Lockhart, Thurman: Virginia Tech

Reliability of COP-based Postural Sway Measures
Lin, Dingding; Seol, Hyang; Nussbaum, Maury; Madigan, Michael: Virginia Tech

Aging Effect on Initial Postural Responses of Unperturbed Foot to Unexpected Slips
Liu, Jian; Lockhart, Thurman: Virginia Tech

Accommodating Slips and Falls Hazards Using Anticipatory Locomotor Adjustments
DiDomenico, Angela: Liberty Mutual Research Institute for Safety
IE6 - Ergonomics of Computer Use (Lecture)  
1:30-3:00

Chair: Carolyn Sommerich, The Ohio State University  
Co-Chair: Angela DiDomenico, Liberty Mutual Research Institute for Safety

Measuring computer style: The frequency and distribution of computer keyboard behaviors  
*Baker, Nancy; Redfern, Mark: University of Pittsburgh*

Gender Differences in the Relationship Between Daily Computer Usage And Musculoskeletal Symptoms Among Undergraduate Students  
*Chang, Che-hsu (Joe): Harvard School of Public Health*

Computing-related Postural Angles Related to Upper Extremity Musculoskeletal Symptoms in a College Student Population  
*Chaumont Menendez, Cammie: University of Texas at Houston School of Public Health; Chang, Che-Hsu: Harvard School of Public Health and Occupational Biomechanics Laboratory; Amick, Benjamin: University of Texas at Houston School of Public Health; Dennerlein, Jack: Harvard University School of Public Health Occupational Biomechanics Laboratory; Robertson, Michelle: Liberty Mutual Research Institute for Safety; Jenkins, Mark: Rice University Student Health Services; Katz, Jeff: Brigham & Women's Hospital*

Prevalence of Lifted Finger Behavior and Postures During Two-Button Computer Mouse Use  
*Lee, David: Harvard School of Public Health*

The Effect of Six Keyboard Designs on Wrist and Forearm Postures  
*Barr, Alan; Rempel, David; Young, Edmund; Brafman, David: UCSF Ergonomics Program*

IE7 - Workplace Design Issues (Lecture)  
3:30-5:00

Chair: Michael Jorgensen, Wichita State University  
Co-Chair: Susan Hallbeck, University of Nebraska

Musculoskeletal Stress on Miners Performing Roof Screening Operations  
*Kotowski, Susan: University of Cincinnati; Gallagher, Sean: NIOSH, Pittsburgh Research Laboratory; Davis, Kermit: University of Cincinnati; Baron, Kelly; Compton, Craig: NIOSH, Pittsburgh Research Laboratory*

The Impact of Work Scheduling On Injury Risk  
*Brogmus, George: Liberty Mutual*

Three-Dimensional Variability of Static Anthropometric Dimensions: Considering Anatomy, Behavior and Process  
*Feathers, David; Paquet, Victor: University at Buffalo*

An Approach For Evaluating 3-D Workspace Using Photogrammetry And CAD Software  
*Chang, Ji Hong; Fathallah, Fadi: University of California*

Adapted Torso-Hand Coordination in Workers with Spinal Cord Injury or Low Back Pain  
*Kim, K. Han; Martin, Bernard: The University of Michigan*
Friday, October 20

IE8 - Evaluation of Industrial Tasks *(Lecture)*
8:30-10:00

Chair: Steve Lavender, *The Ohio State University*
Co-Chair: Sean Gallagher, *NIOSH*

Interaction Between Trunk And Wrist Kinetics And Kinematics During A Simulated Pruning Task
*Kung, John; Fathallah, Fadi: University of California*

Differences Between Male and Female Psychophysically Determined Maximum Acceptable Forces of a Cart Pushing Task
*Ciriello, Vincent: Liberty Mutual Research Institute for Safety*

The Effects of Scaling Height and Scaling Bar Design on Applied Forces and Bilateral Muscle Activity of the Back and Shoulders
*Porter, William; Gallagher, Sean; Reinholtz, Carrie; Torma-Krajewski, Janet: National Institute for Occupational Safety and Health*

Impact to the Base of the Palm
*Cochran, David; Shinde, Pramod; Ding, Xuedong; Wiley, Matt; Stentz, Terry: University of Nebraska-Lincoln*

Effects of Spatial Constraints on Trunk Kinematics During A Dependent Transfer On An Aircraft
*Higginson, Brian; Pavol, Michael: Oregon State University*

IE9 - Quality and Ergonomics *(Discussion Panel)*
10:30-12:00

Chair: Dr. M. W. Riley, *University of Nebraska*
Co-Chair Ram Bishu, *University of Nebraska*

Panelists:
Dr. Pascale Carayon, *University of Wisconsin*
Dr. Karwowski, *University of Louisville*
Dr. Kerm Henriksen, *Agency for Health Research and Quality*
Dr. Gramopadhyay, *Clemson University*
Dr. Ram Bishu, *University of Nebraska*
IE10 - Analysis of Job Risks *(Lecture)*
1:30-3:00

Chair: Patrick Dempsey, *Liberty Mutual Research Institute for Safety*
Co-Chair: Jim McGlothlin, *Purdue University*

Evaluation of Seat Designs Relative to Transmitted Vehicle Vibration on Underground Mine Transport Vehicles
*Jobes, Christopher, Mayton, Alan: NIOSH*

Ergonomic Evaluation of Manual Weeding Practice and Development of an Ergonomic Solution
*Ramahi, Amjad; Fathallah, Fadi: University of California*

Evaluating the Effect of Fatigue on Cognitive and Visual/Perceptual Performance at the Beginning and End of Each Shift in a 12-Hour Five-Day Rotating Workweek
*Alkhouri, Othman: UAE Air Force and Air Defense; Hall, Steve: SRA International*  
*Wise; John: Honeywell AES; Smith, Marvin: Embry-Riddle Aeronautical University*

Injury Risk By Day Of The Week
*Brogmus, George: Liberty Mutual*

Noise and Cyclic Loading Effects on Performance and Operator Functional State
*Conway, Gareth: University of Central Florida*

Effect of Rater Background on Objectivity of the Rapid Upper Limb Assessment
*Hixson, Virginia: City of San Jose*
PRACTITIONERS’ AWARD

Practitioners’ Award -- Making a Difference

Nominees now being accepted for the IETG Practitioners’ Award. Nominees should have made a significant contribution toward increasing the awareness and acceptance of ergonomics, and promoting changes through research or workplace activities, providing a more "productive, safe, comfortable and effective human functioning" (Chapanis 1988).

Submissions should include a summary of contributions in the field of 500 words or less detailing the reasons for nominating the candidate.

Deadline for submissions: October 1st.
Email submissions to Karen Cooper at karen.cooper@kohler.com.

Karen Cooper

STUDENT PAPER AWARD

This year’s Industrial Ergonomics Technical Group Best Student Paper Award will be announced at the IETG Business Meeting at the HFES Conference in San Francisco on Thursday October 19, 2006. There are seven student papers that will be judged based on the written paper and the oral presentation. One award for the top paper will be given this year, along with a check for $500.

Michael Jorgensen

WEBSITE AND LISTSERV

I hope you are enjoying your summer and trying to stay cool. A few reminders…

1. The IETG website, http://ietg.hfes.org/, is up-to-date with the latest announcements and information on upcoming conferences so check it out when you have a minute.

2. I have posted a link on the website to a one page survey (http://ietg.hfes.org/Website%20Survey.doc) to get a better idea of what information is most useful to you and what you would like to see added or changed on the website. Please take a few minutes to fill out the survey and return it to me at kotowsse@email.uc.edu. Your input will only make the website better!

3. Don’t forget to send me conference announcements, interesting links, or other information you would like to share so I can post it.

Susan Kotowski
ANNOUNCEMENTS

HFES is pleased to announce that a new area of the HFES Web site is now available, which includes TV news clips developed from human factors/ergonomics work by our outreach partners at the American Institute of Physics’ Discoveries and Breakthroughs Inside Science (DBIS) program. At hfes.org, you’ll find the link “Human Factors/Ergonomics in the News” in the HFES Newsroom area of the home page.

HFES is always looking for HF/E research and application work that we can submit to DBIS and would appreciate your help to get the word out to your colleagues. We seek story ideas that meet the following criteria:

a. describes new, unique, cutting-edge, or similarly newsworthy research or practice;
b. will have an impact on a large segment of the general public;
c. might be implemented within one year; and
d. lends itself to visual depiction on television

Please send story ideas to me directly (lois@hfes.org) and include

1. a description of the work,
2. the category it best fits (science, medicine, or engineering),
3. the names and contact information of those doing the work and one or two independent technical evaluators not involved with the work described, and
4. which aspect(s) of the work are particularly new, unique, cutting-edge, and newsworthy.

Thanks, and I look forward to hearing from you.
Lois Smith

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This year marks the beginning of celebrations in honor of the 50th Anniversary of the Human Factors and Ergonomics Society. It is also the 40th anniversary of the Product Design Technical Group.

In celebration of these events, we have scheduled a session, "Forty Years of Product Design," on Thursday, October 19th from 8:30 until 10AM. The purpose of this session is to highlight superior – indeed some of the best - commercial, personal, or military designs of the last 40-50 years.

For this session, we are soliciting members of the Society to present a vignette or "shorts" - each lasting 3-5 minutes - highlighting the contributions made by HFES to product design during the past 40 years.

One such example will be presented by Andy LeCocq. Andy worked for Texas Instruments and has several interesting stories to share surrounding the development of the Speak and Spell - a revolutionary toy when it was released in the late 1970's.

Presentation slots are limited, and if some of the early entries are indicative of what is to come, this promises to be a very enjoyable session.

Please FORWARD your response to Steven Belz (stevenbelz@gmail.com) by September 15 with the product you would like to present. It is our goal to include as many of these as possible, however, we also need to ensure that the same product is not represented multiple times. Presenters will be notified the first week in October as to the order of presentation.

Steven M. Belz
Program Chair, Product Design Technical Group

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All IETG members are invited to submit announcements, news, information, etc. to be included in the IETG newsletter. All announcements of general interest to the IETG will be included in the next newsletter. Submissions may include accepted grant proposals, promotions, awards, retirements etc. Please send announcements to the newsletter editor, Angela DiDomenico at angela.didomenico@libertymutual.com.
CONFERENCE ANNOUNCEMENTS

AMERICAN SOCIETY OF BIOMECHANICS
September 6-9, 2006
Virginia Tech, Blacksburg, VA
Information: http://asb2006.org/

HUMAN FACTORS AND ERGONOMICS SOCIETY 50TH ANNUAL MEETING
October 16-20, 2006
San Francisco Hilton, San Francisco, CA
Information: http://www.hfes.org/Web/HFESMeetings/06annualmeeting.html

TWELFTH ANNUAL NATIONAL ERGONOMICS CONFERENCE AND EXPOSITION
November 22-December 1, 2006
Caesars Palace, Las Vegas, NV
Information: http://www.ergoexpo.com

WWCS 2007 INTERNATIONAL CONFERENCE ON COMPUTING SYSTEMS FOR HUMAN BENEFITS
21–24 May 2007
Stockholm, Sweden
Information: www.wwcs2007.se

The WWCS 2007 conference is unique in that it is organised by representatives of both theory and practice, by promoters of knowledge on sound and usable computing systems and by those who implement this knowledge in actual working life.

The overall objectives of the WWCS 2007 Conference are to advance knowledge about:

• Developing computing systems that promote health, competency and efficiency
• Making the systems available for beneficial use in the labour market, organisations, workplaces, and by individual users
• Increasing user involvement in the development of computing systems in working life

The deadline for abstracts is 20 October 2006. Abstracts may be submitted in electronic form only. For further information see the conference website: www.wwcs2007.se

PREMUS 2007: SIXTH INTERNATIONAL SCIENTIFIC CONFERENCE ON PREVENTION OF WORK-RELATED MUSCULOSKELETAL DISORDERS
Main Conference: 27-30 August 2007 with Workshops on Sunday 26 August 2007
Boston, MA
Information: www.premus2007.org

Proposals for symposium and workshops are due 1 October 2006. Abstracts are due 15 January 2007.
APPLICATION FOR MEMBERSHIP

Industrial Ergonomics Technical Group of the Human Factors and Ergonomics Society

Membership in the IETG does not require membership in the Human Factors and Ergonomics Society (HFES). Readers of the newsletter who are not members of the HFES, but would like to join the IETG, should send the following information along with a check for $4.00 in dues to the address below. (Members of the HFES may pay their IETG dues with their HFES dues).

Human Factors and Ergonomics Society • P.O. Box 1369 • Santa Monica, CA  90406

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