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## Who Knows About Human Factors and Ergonomics? A Lot More People Than You Might Think

*By Wendy Rogers, Immediate Past President*

*This is a condensed version of Rogers' 2005 Presidential Address, presented on September 27 during the HFES 49th Annual Meeting in Orlando, Florida.*

I would like to make two key points:

1. A lot more people than you probably think really do know, appreciate, and respect the field of human factors and ergonomics (HF/E).
2. What our members do really makes a difference in the world.

We human factors specialists and ergonomists often lament that people do not understand what we do or that we get too little respect from industry or from government entities. However, once I started to pay attention to the prevalence of HF/E in society at large, I was struck by the magnitude of the presence that the field really has.

### Plenty of Evidence of HF/E Impact

The Department of Defense, for example, has long paid attention to the importance of matching the characteristics, capabilities, and limitations of users with the design of systems, selection of personnel, and development of training programs. In fact, the history of the HF/E field in this country has its roots in the events surrounding World Wars I and II.

A couple of years ago at the American Telemedicine Association meeting, the keynote speaker was General James Peake, then Surgeon General of the Army. The entire theme of his presentation was "It's all about the user." That level of recognition by a high-ranking officer says to me that the importance of human factors/ergonomics is being recognized.

It is also clear that a wide range of government organizations worldwide have recognized the importance of HF/E to their mission. Here are a few examples to illustrate my point:

- The Federal Aviation Administration has long recognized the importance of HF/E and has well-established processes and guidelines in place. It has a Human Factors Research and Engineering Division.
- The U.S. Nuclear Regulatory Commission has a human factors program plan that grew out of the Three Mile Island incident.

- The U.S. Food and Drug Administration has made a commitment to ensuring the application of human factors engineering to the design of new products.

Similar governmental recognition of human factors and ergonomics is evident around the world. For example, Transport Canada requires all employees with technical responsibilities to have human factors training. Great Britain's Health and Safety Initiative recognizes the broad array of human factors issues. The Petroleum Safety Authority of Norway has selected improvements related to human factors issues in drilling operations as one of its primary focus areas for the next few years.

These examples are by no means exhaustive. It is difficult to claim that "no one knows about the field of human factors and ergonomics" or why it is important when you see the range of organizations that have incorporated the discipline into their central tenets. Of course, I recognize that we still have a way to go to ensure that funds are provided to support these initiatives and to ensure that qualified individuals are hired to instantiate the guidelines and enforce the regulations. Nevertheless, being recognized and respected does not appear to be a problem.

In the courts, experts in HF/E have much to contribute to the dispute resolution process in areas such as driving accidents, product liability, and industrial accidents. Importantly, the field is increasingly being recognized by the courts and by lawyers who are hiring such experts to help jurors understand *why* events have happened. Often these cases can be explained as design-induced errors, and individuals with expertise in HF/E can help to explain the facts of the case.

Another indicator of the prevalence of HF/E is the variety of companies that HFES members work for, including transportation industries, telecommunications, health care and insurance, the computer industry broadly defined, companies that cater to the home or to leisure activities, and so many more.

In addition, the future looks bright for employment opportunities – a recent search of a popular job site revealed 337 jobs with the keywords *human factors* and 257 jobs with the keyword *ergonomics*.

*continued on page 2*

## Who Knows About HF/E?...

(continued from page 1)

There are substantial educational opportunities in the discipline. At the undergraduate level, a number of programs are offered in human factors psychology or engineering. There are even more programs at the master's and Ph.D. levels. I think we need to continue to expand HF/E education, especially in traditional engineering programs, but the growth of programs in the United States and worldwide is an excellent beginning.

My point thus far has been that we really have matured as a discipline, and one indicator is recognition by the general public. We cannot expect everyone to have a full understanding of what we do. After all, does the average person understand what a physicist does, or what it means to do research as a mathematician? Consequently, I think we have to be careful if we assume that the person on the street knows nothing about HF/E, because a number of indicators suggest that many people are familiar with the discipline.

For example, the online encyclopedia Wikipedia has excellent definitions of both *human factors* and *ergonomics*. A Google search yields nearly 3 million hits for *human factors* and more than 4.5 million for *ergonomics*. I was happy to see that HFES was listed right near the top in both of these searches!

Maybe the general public doesn't know exactly what we do, but our discipline and profession are showing up in daily communications throughout the world. And, importantly, "well human factored" and "ergonomically designed" are phrases viewed in a positive way – these are goals that designers and companies should have for their systems and their products.

### What We Do Makes a Difference

The work that is being done in this field by the members of HFES is truly impressive and is making a difference in the world. These differences are evidenced by safer, more effective, and more pleasurable interactions with systems and products in various aspects of our lives.

One of my favorite parts of my job is that I have had the opportunity to travel around the world and learn more about what human factors specialists and ergonomists do in various parts of the globe. I have done an especially large amount of traveling since I was elected president of HFES through kind invitations from student and local chapters. One of the things that has struck me in my travels is the range of activities that our members are involved in and the importance of the work they do. Let me try to illustrate with some examples.

Let's consider aviation. HF/E specialists are involved in all aspects of aviation, including design of the aircraft and cockpit, system maintenance, training of the flight crew, air traffic control training and system design, investigation of accidents, design of the airport terminal and wayfinding systems within the terminal, traffic management on the runways to maximize efficiency and safety, and security screening and passenger safety.

In the driving domain, our members work on important issues such as design of displays and controls; systems for getting fuel; training young drivers; understanding the distraction of cell phones, including hands-free devices, and educating the public about such distraction; design of roadways and signage; scheduling and planning truck routes and issues of fatigue and shift work and time on task; developing wayfinding systems and in-vehicle intelligent systems; and designing safety seats for children.

Health care is such a broad domain that it is not surprising to find a wide variety of areas in which HF/E research and practice are critically important. These areas include system design and communication in the operating room and trauma centers, the design of emergency vehicles, technologies used by physicians and health care providers as well as medical technologies being used by patients themselves, proper labeling of medications as well as nutrition labels to enable patients to adhere to specific dietary needs, communication between the health care provider and the patient, and education of health care providers.

And of course, our lives are not all work – HF/E is contributing to our leisure activities in areas such as the design of games and programs for children, improvement of tools such as remote controls for interacting with our toys, development of training programs to enable older adults to benefit from advances in information technologies, and design and training methods to reduce injuries that can come from playing musical instruments.

### We Are All Human Factors/Ergonomics Ambassadors


One of the other things I was impressed by when talking to members working in various industries was how they serve as ambassadors for the field. Maybe there is only one or a few human factors and ergonomics specialists in your work environment. Regardless, each of us engages in at least some of the following activities regularly in the course of our jobs:

- Educate managers, marketers, deans, funding agents, contract monitors
- Explain our perspective to programmers, designers, architects, and engineers
- Contribute to interdisciplinary team goals
- Convey passion and excitement about the field

Each of us is an ambassador for the field and for HFES. On a day-to-day basis, our members are "thinking globally and acting locally" – they are making a difference.

I am proud to have served as president of this important organization. The HFES Strategic Plan states that our purpose is "to better the quality of human life through the discipline of HF/E." Clearly, we are doing that – our efforts are being recognized, and the work of our members is making a difference. And remember that our efforts are for the good of society as a whole as well as for our loved ones.





Human Factors and Ergonomics Society

# Bulletin

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## 2005 HFES Fellows and Awardees

At this year's annual meeting in Orlando, the Society recognized the 2005 award recipients and honored the newly elected Fellow and Honorary Fellows.

The newly elected Fellow is **Glenn F. Wilson**, principal research psychologist in the Collaborative Interfaces Branch of the Warfighter Interface Division, Human Effectiveness Directorate, Wright-Patterson Air Force Base. The 2005 Honorary Fellows are **John M. Carroll**, Edward M. Frymoyer Chair Professor of Information Sciences and Technology, Pennsylvania State University, and **Hongwei Hsiao**, CDC Distinguished Consultant and Protective Technology Branch Chief, National Institute for Occupational Safety and Health.

The **Arnold Small President's Distinguished Service Award** was presented to William C. Howell, currently an adjunct professor at Arizona State University. Howell, a Fellow and past president of HFES, was recognized for career-long contributions that have brought honor to the profession and the Society.

The recipients of the **Jerome H. Ely Human Factors Article Award** were Marcus Watson and Penelope Sanderson, both now at the University of Queensland, for the article "Sonification Supports Eyes-Free Respiratory Monitoring and Task Time-Sharing." Published in the Fall 2004 issue of *Human Factors*, the article represents a significant contribution to the understanding of the utility and effectiveness of sonification, in this case as an adjunct to visual monitoring in a high-workload medical setting.

J. T. Bryant, J. M. Stevenson, L. L. Bossi, S. A. Reid, R. P. Pelot, and E. L. Morin, the authors of "Optimizing Load Carriage Systems," were the recipients of the **2005 Best Ergonomics in Design Article Award**. The article, which appeared in the Winter 2004 issue of *EID*, explains how biomechanical assessment tools have provided designers with quick feedback on design and human comfort tolerances of backpacks. The authors applied their research to the design of a personal load carriage system for the Canadian military.

Emily Muthard of the University of Illinois at Urbana-Champaign was the recipient of the **Alphonse Chapanis Student Paper Award** for "The Contaminating Influence of Display Size



Glenn F. Wilson



Hongwei Hsiao



William C. Howell



Penelope Sanderson



L. L. Bossi



Emily Muthard



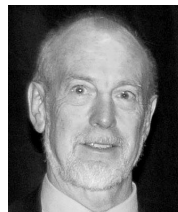
Y. Ian Noy



Peter A. Hancock



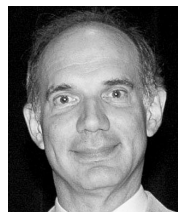
Joel S. Warm



Colin G. Drury



Bryce G. Rutter



Ronald G. Shapiro

on Flight Control, Risk Assessment, and Route Selection."

Y. Ian Noy of Transport Canada received the **Distinguished International Colleague Award**. Noy is an exceptionally productive and influential researcher on issues related to transportation, particularly highway transportation. A leader and pioneer on driver aspects of advanced assistive technologies, he has also been very active in leadership roles both in Canada and internationally.

Peter A. Hancock, a professor at the University of Central Florida, was recognized with the **Jack A. Kraft Innovator Award**. Hancock was honored for innovation and achievement in many areas, including the design and evaluation of human-machine systems, situational awareness, human stress, decision making, system automation, and workload assessment, and for the integration of the multidisciplinary approaches within the HF/E field.

Joel S. Warm from the University of Cincinnati was given the **Paul M. Fitts Education Award**. He was honored for his numerous distinguished scientific and academic accomplishments and for his unfailing dedication to his students and to the many professionals in the human factors/ergonomics field whom he has mentored over his 40-year career.

The **A. R. Lauer Safety Award** was presented to **Colin G. Drury** from the State University of New York at Buffalo. Drury is acknowledged for a career that not only covers traditional areas of safety but also extends its practical application to such areas as consumer products, medical systems, nuclear materials, and transportation.

The **Alexander C. Williams, Jr., Design Award** was given to Bryce G. Rutter. Through a 4.5-year research, ergonomics, and design program that integrated the science of human factors with the creativity of industrial design, Bryce Rutter and his company, Metaphase Design Group, redesigned Bayer Healthcare Diagnostic Division's Ascensia BREEZE blood glucose monitoring system.

The **Oliver Keith Hansen Outreach Award** was given to Ronald G. Shapiro of IBM Corporation. Shapiro was honored for his untiring service and excellence in outreach on behalf of the Society and the profession. His efforts in organizing National Ergonomics Month are particularly recognized, as they have extended the awareness of human factors/ergonomics to thousands of members of the general public. ☉

## Executive Council Meeting Report

On September 24–25, the HFES Executive Council met to consider policies and budget matters. Following is a summary of the actions taken at that meeting.

### Subcouncils

The new chairs of the six subcouncils are as follows:

- Arthur D. Fisk, Communications/Publications Subcouncil
- Marvin J. Dainoff, Corporate Activities Subcouncil
- Carol Stuart-Buttle, External Relations Subcouncil
- Kathleen Mosier, Internal Relations/Membership Services Subcouncil
- Wendy A. Rogers, Professionalism Subcouncil
- Valerie J. Rice, HFES Institute Subcouncil

### Membership

New members and changes of status were approved as follows: 92 Full Members, 30 Associates, 5 Affiliates, 111 Students; 3 Associate to Full Member, 2 Transitional Associate 1 to Transitional Associate 2, 1 Transitional Associate 2 to Associate, 7 Affiliate to Associate, 9 Affiliate to Member, 1 Full Member to Emeritus Member, 29 Student to Transitional Associate 1, and 1 Fellow to Emeritus Fellow.

### Operating Rules

Council approved a change to O.R. 2.3 in which members as well as HFES leaders are required to “act in the best interests of the Society.” The O.R. now reads as follows:

Members and leaders of HFES avoid any discussion or activities as a member or leader of the Society that might be construed as an agreement or understanding involving or affecting the price fixing or fee setting; allocation of markets, customers, or clients; boycotts of buyers or sellers; or other illegal antitrust restraints.

### Publications

In 2006, issues of *Human Factors* will be expanded in length to accommodate more papers. This will reduce the production backlog and speed the publication process.

Council approved the renewal of Raymond Nickerson’s term as editor of the *Reviews of Human Factors and Ergonomics* series. He will serve another three-year term at the conclusion of the current term.

The Society will conduct a publications survey in 2006 to determine members’ level of satisfaction and preferred delivery methods.

### Chapters

The Council discussed requirements for HFES chapters and efforts to revitalize a number of inactive chapters. The Council affirmed the policy that chapters are obligated to provide to HFES the names and contact information of all chapter members, including those who are not members of HFES.

### BCPE Task Force

The Council approved the formation of a task force to examine the strategic and financial benefits and costs to HFES of an

association with the Board of Certification in Professional Ergonomics (BCPE).

### 2009 Annual Meeting

San Antonio, Texas, was provisionally approved as the location of the 2009 Annual Meeting, pending review of proposed contractual arrangements with the designated headquarters hotel.

### Standards

The Council approved extending an invitation to the International Standards Organization’s Technical Committee 159, Subcommittee 3 to hold its 18th plenary meeting in conjunction with the HFES Annual Meeting in Baltimore in 2007.

### 2006 Budget

The estimated income, expenses, and surplus for 2006 are as follows:

<i>Estimated Income</i>	
Membership Dues . . . . .	\$659,500
Membership Services . . . . .	63,050
Communications/Publications . . . . .	396,550
Annual Meeting . . . . .	308,500
HFES Institute . . . . .	29,600
Miscellaneous . . . . .	10,450
<b>Total estimated income . . . . .</b>	<b>\$1,467,650</b>
<i>Estimated Expenses</i>	
Membership Services . . . . .	\$ 73,145
Publications . . . . .	353,295
Administrative . . . . .	732,862
HFES Institute . . . . .	47,300
Committees, Officers . . . . .	157,88
Annual Meeting . . . . .	85,000
Interorganizational . . . . .	15,150
<b>Total estimated expenses . . . . .</b>	<b>\$1,464,637</b>
<b>Estimated surplus . . . . .</b>	<b>\$ 3,013</b>

## MEMBERSHIP

## Renew Your Membership for 2006!

HFES is grateful for your membership and looks forward to continuing to serve you in 2006. By November 18 your membership dues renewal packet for 2006 should be in your mailbox. (If you’ve already renewed, you will not be getting a dues statement.) Please renew by *January 31, 2006*, to ensure that your contact information appears in the *2006–2007 HFES Directory and Yearbook* and to avoid the \$15 postage surcharge.

Although you have the option to fill out and return the paper renewal forms, you may want to consider the convenience of renewing online via the HFES Web site with its secure transaction capabilities. To do so, simply log on as a member at <http://hfes.org>, and click on “Renew Membership for 2006.” The system will take you through a few simple steps and you’ll be done. You can add or change your membership in any of the

## MEMBERSHIP, cont.

HFES Technical Groups, and the system will recalculate the dues amounts for you.

If you have forgotten your password, you can retrieve it via the Web site by clicking the “Forgot your password?” link, located below the login fields. If you need assistance with your username and password, please contact us at [membership@hfes.org](mailto:membership@hfes.org) or 310/394-1811.

Your dues during 2006 will support a number of critical initiatives, both new and ongoing. As described on page 2 in the Executive Council meeting report, HFES will continue to engage in a significant outreach activity through partnership in the American Institute of Physics program, Discoveries and Breakthroughs Inside Science. The Society will launch a year-long celebration of its 50th year with many commemorations of the Society’s history and milestones of the human factors/ergonomics discipline.

Please encourage your colleagues to join HFES. This is now a much simpler process. Applicants are no longer required to obtain the signatures of endorsers – they merely provide their qualifications on the application form. ☒

## NATIONAL ERGONOMICS MONTH

### National Ergonomics Month – Awards and Special Recognition

*By Haydee M. Cuevas, NEM Committee Cochair*

At the HFES 49th Annual Meeting in Orlando, HFES President-Elect Marvin J. Dainoff kicked off National Ergonomics Month (NEM) 2005 at a special session by inspiring a packed room with his vision for the future of our profession. He cited the need to attract new, young members to the Society and to encourage them to become actively involved in the field. He also emphasized the need for every Society member to get the word out to the public on the importance of human factors and ergonomics (HF/E) through outreach initiatives such as NEM and through more effective efforts to translate research into practice.

Keynote speaker Mark Lee Edwards, formerly managing director for Traffic Safety Programs at the American Automobile Association and now working as an independent consultant, provided valuable advice on how to work with government representatives. He recommended that you know their mission, speak their language, address an existing/known problem, stifle your scientific curiosity about related topics, and relate your proposal to their mission.

Awards were presented for two contests designed to encourage HFES members to become more actively involved in promoting HF/E in their local communities. The NEM 2005 Best Action Plan Contest first place award (plaque and \$100) went to the HFES Virginia Tech Student Chapter. Special recognition was given to HFES student chapters at Georgia Tech and the University of Central Florida, and to Hugo Bertolotti from the HFES Cal State

Long Beach Student Chapter for their excellent action plans (see the October *HFES Bulletin* for summaries).

The NEM 2005 Best Action Plan Implementation Contest recognized HFES members who successfully implemented the activities they proposed in the previous year. First place went to the HFES University of Central Florida Student Chapter. In second place was the HFES Old Dominion University Student Chapter. The NEM Committee thanks the members of the selection committee for both contests: Arnold M. Lund, Christina Costanzo Mendat, Ellen M. Carpenter, and Monica Philippart.

During the “Games to Explain Human Factors” session, the prize for “hardest-working volunteer” went to Linda Upham-Ellis (University of Central Florida). Beth Meyer (Semilla Consulting) came in second, and Julie Naga (George Mason University) placed third. All attendees received a small gift for sharing their ideas and were encouraged to take special stickers and custom bookmarks to distribute during their activities for NEM in October. ☒

## SCIENCE FORUM

### HFES Sponsors Homeland Security Forum

On November 17, 2005, HFES will cosponsor a day-long Science Forum in Washington, D.C., on the topic of homeland security. Recent events have demonstrated a clear and obvious need for research in the behavioral sciences to be considered and properly applied to policies, procedures, and technology related to the nation’s security. However, there are many obstacles in getting that work funded and applied to policy.

This year’s forum, “Human Factors Research and Homeland Security: Current and Future Applications,” will serve to inform agencies such as the National Science Foundation, Department of Defense, and Department of Homeland Security about important work being done by HF/E professionals.

The morning session will feature a panel in which human factors researchers describe both the potential applications of their research toward the improvement of the nation’s homeland security and the need to increase the presence of human factors research within the Department of Homeland Security and related agencies. The afternoon session will highlight a panel of federal agency representatives offering perspectives on opportunities for human factors research within their respective agencies. Panel members and meeting attendees will have several opportunities for group discussions, with an emphasis on the future role of human factors research within those federal agencies dedicated to homeland security.

This forum is second in what is envisioned to be an annual collaborative event with the Federation of Behavioral, Psychological, and Cognitive Sciences. Such science forums are designed to raise awareness of human factors research and applications and to educate the human factors community about the best ways to approach funding opportunities.

If you are interested in attending the forum, please contact HFES Executive Director Lynn Strother at 310/394-1811, [lynn@hfes.org](mailto:lynn@hfes.org). ☒

## Calendar Fundraiser Features Famous HF/E Faces

By Jennifer Ross, HFES UCF Student Chapter Public Affairs Chair

Last June, members of the HFES University of Central Florida (UCF) Student Chapter were wracking their brains for an activity that would allow them to be creative, learn more about some of the major players in the human factors/ergonomics field, and provide a vehicle to raise money for a small student research award. In response, members dreamed up the idea of creating the first calendar to highlight the famous faces of human factors.

Twelve big names in the field agreed to let chapter members manipulate photographs of them. The pictures were morphed into famous movie stills, which slyly highlight each pioneer's area of research interest. For example, in the calendar you can see Joel Warm starring in "The Hunt for Critical Signal," a parody of the movie *The Hunt for Red October*. Other HF/E personalities in the calendar are Melody Carswell, Haydee Cuevas, Marvin Dainoff, Mica Endsley, Peter Hancock, Donald Norman, Raja Parasuraman, Wendy Rogers, Kay Stanney, Eduardo Salas, and Chris Wickens.

The calendars were unveiled at the HFES 49th Annual Meeting and were such a success that the student chapter has increased the print run. All additional profits from the calendar will be sent to the Red Cross relief effort for victims affected by Hurricanes Katrina and Rita. If you would like to order your very own "Famous Faces of Human Factors," please complete the order form at <http://www.psych.ucf.edu/hfes/2006calendar.php> and include a check, cash, or money order for the calendars to HFES UCF Student Chapter, c/o Jennifer Ross, University of Central Florida, 3100 Technology Pkwy., Ste. 335, Orlando, FL 32826-0544.

## NCSU Students Plan Mentoring Program with IBM

The HFES North Carolina State University (NCSU) Student Chapter will partner with IBM to provide a professional mentoring program for students in both the Psychology and Industrial Engineering Departments at NCSU.

The chapter's newly formed subgroup, NCSU Human Factors Business Outreach Program, formed an alliance with IBM-Research Triangle Park. With the aid of IBM's Linda Brown and Chris Pepper, the chapter is pairing students with IBM employees to provide a close mentoring relationship, allowing students insight into the application of human factors/ergonomics principles in an industrial setting.

IBM employees taking part in the program include both human factors hardware and user interface software specialists. In addition, students will be invited to the IBM Research Triangle Park campus to take part in a number of activities, including tours of facilities otherwise inaccessible to the public.

For more information on this exciting opportunity, please contact HFES NCSU Student Chapter President David Windell at [dwindell@gmail.com](mailto:dwindell@gmail.com). ☒

## Puget Sound Chapter Outreach Activities

For the second year in a row, HFES Puget Sound Local Chapter members volunteered to help with the School-to-Work session at the Washington state governor's Industrial Safety and Health Conference in Tacoma, WA. Members taught ergonomics principles to more than 80 local high school students through hands-on activities that included how to set up a computer workstation, hand tool versus power tool use in a repetitive task, posture and lifting demonstrations, and how to design the control knob-burner relationship for a stove top. The students especially seemed to enjoy being hooked up to the Pocket Ergometer, which converts the electrical activity associated with muscle use into sound. Students were able to hear the difference between neutral and awkward postures and between wearing a backpack with one strap or with two. Anyone looking for ideas about demonstrating ergonomics to students can get more details on these activities, as well as a copy of an ergonomics video appropriate for high school students, by contacting Rick Goggins at [pastpresident@pshfes.org](mailto:pastpresident@pshfes.org).

Goggins was also the featured presenter at an HFES Puget Sound Chapter dinner meeting focusing on ergonomics in schools. Topics included statistics on student injuries, current information available for school ergonomics, and what teachers want to know about ergonomics. ☒

## SHORT COURSES

**27th Annual Occupational Safety and Health Update**, December 8-9, 2005, Chapel Hill, NC. Occupational Safety and Health Education and Research Center, University of North Carolina, 3300 Hwy. 54 West, Chapel Hill, NC 27516-8264, 888/235-3320, fax 919/966-7579, [oshercww@sph.unc.edu](mailto:oshercww@sph.unc.edu), <http://www.sph.unc.edu/osherc/>.

**Ergonomic Interventions and Research: Preventing Musculoskeletal Disorders in Healthcare, Construction, and Other Industries**, December 8-9, 2005, Berkeley, CA. COEH Continuing Education, U. C. Berkeley, Mailcode 5120, 2233 Fulton St., 2nd Floor, Berkeley, CA 94720-5120, 510/643-7277, fax 510/643-7291, <http://ist-socrates.berkeley.edu/~coebe/courses/ergointervention.htm>. ☒

## CALL FOR PAPERS

### 2006 SID Symposium

The Society for Information Display (SID) invites papers on all aspects of research, engineering, application, evaluation, and utilization of displays for the 2006 SID International Symposium, Seminar, and Exhibition, which will take place June 4-9, 2005, in San Francisco, CA.

Abstracts are due by *December 1, 2005*. For more information about SID 2006, go to <http://www.sid2006.org>. ☒

**Celestine A. Ntuen** was honored by North Carolina A&T State University as a Distinguished University Professor. Ntuen, director of the university's Center for Human-Machine Studies, was cited for guiding the human factors engineering education from its infancy to a full-fledged Ph.D. program. Ntuen may be reached at North Carolina A&T State University, Dept. of Industrial Engineering, 405 McNair Hall, Greensboro, NC 27411, fax 336/334-7729, ntuen@ncat.edu.


**Kim J. Vicente's** latest book, *The Human Factor: Revolutionizing the Way People Live With Technology* (Routledge, 2004), received Canada's National Business Book Award and the Science in Society General Audience Book Award, and was a finalist for the Canadian Booksellers Association Libris Award, Nonfiction Book of the Year. He may be contacted at the University of Toronto, Dept. of Mechanical and Industrial Engineering, 5 King's College Rd., Toronto, ON M5S 3G8, Canada, 416/978-7399, fax 416/978-3453, vicente@mie.utoronto.ca.

**Gavin S. Lew** was selected by the Illinois Information Technology Association (ITA) to represent User Centric at a gala event in Chicago honoring User Centric as one of three Rising Star award finalists. Lew, the managing director of User Centric, may be reached at 2 Trans Am Plaza Dr., Suite 105, Oakbrook Terrace, IL 60181, 630/376-1180, glew@usercentric.com.

**Jesse L. Walker**, a second-year student at the University of Dayton, won the Graduate Student Sigma Xi Award for the best presentation at the University of Dayton's Stander Symposium. He may be reached at Human Factors Group, University of Dayton

Research Institute, 300 College Park, Dayton, OH 45469-0158, 937/229-4083, jesse.walker@udri.udayton.edu.

**Larry W. Avery, Michael E. Maddox, and Barry H. Beith** have launched a spinoff from HumanCentric Technologies called HumanCentric Research, LLC. HumanCentric Research provides human factors services to government and quasi-government agencies. For more information, please contact Larry Avery at 919/481-0565 or lavery@humancentricresearch.com.

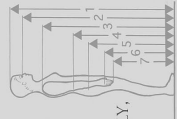
**Frederick J. Diedrich** was appointed a director of Aptima, Inc.'s newly formed Human Performance Division. He may be contacted at Aptima, Inc., 12 Gill St., Ste. 1400, Woburn, MA 01801, 781/496-2421, fdiedrich@aptima.com. 

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*This book makes a compelling argument that within the ergonomics community there needs to be a much greater emphasis on extreme variations in population attributes. It very nicely illustrates how combinations of age, gender, and common sensory and motor impairments alter the performance capability of various groups. Some quantitative design recommendations are included, though it also is made clear that much more needs to be learned about “extraordinary” populations to substantiate specific intervention strategies in the future.*

– Don B. Chaffin, Distinguished University Professor, University of Michigan

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Features Editor: Pamela Savage-Knepshield  
Student Views Editor: Melanie Diez  
Communications Director: Lois Smith  
Assistant Editor: Jeremy Loudenback  
Advertising: R. C. Bublitz & Associates,  
800/485-5029; [dick-rcb@juno.com](mailto:dick-rcb@juno.com)

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General Information: [info@hfes.org](mailto:info@hfes.org)  
Editorial/Advertising: [lois@hfes.org](mailto:lois@hfes.org)  
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Annual Meeting: [lois@hfes.org](mailto:lois@hfes.org)

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