

Should Human Factors/Ergonomics Go to Therapy?

By Patricia R. DeLucia & Stephanie A. Harold

One does not have to look far to see the increasing role of human factors/ergonomics (HF/E) in health care. There is the 2012 Symposium on Human Factors and Ergonomics in Health Care: Bridging the Gap; the next volume of *Reviews of Human Factors and Ergonomics*, which will focus on health care; and special issues/sections on health care that were published in *Human Factors*, *Applied Ergonomics*, and *Journal of Experimental Psychology: Applied*.

A survey of the literature on HF/E in health care indicates a focus on physical health (e.g., medication errors, patient handling). However, the use of technology is increasing in another area of health care: mental health. Is HF/E relevant to the care of an individual's emotional and mental condition? Should HF/E practitioners care about this application? In this article, we argue that not only must HF/E professionals answer these questions affirmatively, but also that the HF/E discipline must play an instrumental role in the use of technologies to aid mental health treatment.

The stereotype of a client lying on a couch to discuss problems with a therapist does not reflect the many different types of treatment that providers use, particularly treatments aided by technology. In fact, numerous technologies are already being used to provide psychological services, known as *telepsychology*, *e-therapy*, *telehealth*, and *tele-mental health* (Novotoney, 2011). Examples include the use of videoconferencing to provide mental health services to those without access, such as those in rural areas (Simpson, 2009), text-messaging to monitor clients' symptoms (Boschen, 2009), and virtual environments to treat military personnel who have post-traumatic stress disorder (Reger et al., 2011). Relatedly, the treatment of veterans has become a pressing concern because thousands of them commit suicide each year (Miles, 2010), and the Internet and other digital tools are being used increasingly to assess and treat members of the military (Daniel, 2010).

The use of technologies to achieve successful treatment requires effective design based on an understanding of human-technology interaction, a key component of HF/E. Numerous studies of the impact of technologies on behavior have important implications for the use of technology in mental health treatment (DeLucia, 2011). For example, the design of videoconferencing technology can affect collaboration, communication, and trust (Bradner & Mark, 2002; Driskell et al., 2003; Suwita et al., 1997), which are important for the provider-client relationship (i.e., therapeutic alliance) and, thus, treatment effectiveness (Horvath & Greenberg, 1989; Simpson, 2009). The design of digital communications such as e-mail and text messaging can affect persuasion, credibility, and self-disclosure (Moon, 1999; Robinson & West, 1992). The design of virtual environments can affect presence (Sadowski & Stanney, 2002), which is assumed to be important for some treatments (Lewis & Griffith, 1997), and adverse side effects (e.g., nausea, fatigue), which decrease a client's ability to use virtual environments for treatment (Stanney, Graeber, & Kennedy, 2006). The HF/E literature has identified numerous factors that contribute to presence and adverse side effects (e.g., Stanney, Graeber, & Kennedy, 2006).

In conclusion, technologies are becoming an integral part of mental health services (Bray, 2010; Novotoney, 2011). HF/E offers a large knowledge base and skilled experts who can help design technologies to aid mental health treatment. Moreover, HF/E has methodologies to study factors that contribute to treatment effectiveness and offers the potential to generate designs that can improve treatment compared with traditional methods. A key challenge will be to reach out to mental health providers and educate them about the benefits of HF/E. Collaboration between

HF/E specialists and providers of mental health care will be necessary to achieve effective treatment with the aid of technologies.

Technology will be used to treat mental health with or without HF/E. Thus, our answer to the question posed in the title of this article is yes, HF/E *should* go to therapy. For the sake of the millions of people who are affected by mental disorders (NIMH, 2011), we cannot afford to wait until mental health service providers seek our help.

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Patricia R. DeLucia is an HFES Fellow and immediate past president of Division 21 (Applied Experimental and Engineering Psychology) of the American Psychological Association. This topic was the focus of her Division 21 presidential address at the annual APA convention in August 2011. Stephanie A. Harold is a doctoral student in clinical psychology at Texas Tech University.

Defining HFES: The Time Is Now

By Anthony D. (Tony) Andre, Immediate Past President

Following is an edited version of the 2011 Presidential Address, presented at the 55th Annual Meeting in Las Vegas, Nevada.

I would like to take a moment to thank the Society leadership, to include the members of Executive Council and the division chairs, for supporting and enabling me to carry out a variety of new initiatives over the past year, on behalf of you, our members. It truly has been a rewarding and memorable year for me. I have been inspired by your insights and dedication.

I also would like to sincerely thank the HFES staff, with whom I have worked closely all year and whom I now consider a part of my extended family. They are an incredible group of dedicated people who do more than just the job they are paid for. They have a true commitment to the Society, and the profession as a whole, that extends way beyond their job responsibilities. To Lynn, Lois, Carlos, Cameron, Cara, Stefanie, and Susan—thank you for supporting me throughout the year and for our many enjoyable interactions.

As for my presidential address, I simply want to make a request. A request for all members to answer one question, and to take the next year in doing so. It is, admittedly, not new to question who we are and who we want to be as a Society—and, indeed, several past presidents have touched on this very subject.

You might wonder why, at this point in time, I ask you to revisit this question. The answer is simple. As president of the Society over the last year, and a member of the leadership for the past 5 years, I have witnessed a growing number of important efforts that are stymied by our inability to articulate who should and who shouldn't be a part of our membership and/or who we are trying to reach with our science, standards, and application principles.

From accreditation, publications, outreach, diversity, conference content, and more, the Society's leaders often struggle to make decisions due to this very issue of self-identification. As one example, consider the simple case of the HFES online directory of academic programs. Not too long ago, a university that had started a new human factors–related graduate program contacted HFES with the simple request of being listed in our directory of graduate programs. Mind you, being listed in our directory is not an endorsement; rather, the directory is a factual list of graduate education opportunities within our field for prospective students to view and ponder.

Yet, this simple request produced a provocative and heated debate among the members who are responsible for reviewing such requests. Some thought the program should be listed without reservation; it was, after all, a human factors–related design program, the program contact person asked to have it listed in our directory, and there seemed little reason not to add the program to the list of educational opportunities already listed. Others did not think the program should be listed; they were offended by the lack of certain courses or topics represented in the program, as well as the focus on design over research.

My point is not to suggest that one position was right over the other but to highlight the problems caused by the lack of a consensus view of what constitutes the portion of the incredibly broad field of human factors and ergonomics that we wish to represent in HFES.

Note that what any individual believes is, or is not, human factors is not the issue at hand. Instead, it is the understanding, among us all, of what this particular Society represents that is in desperate need of critical thinking and consensus development.

This is no easy task. One the one hand, we can't—or perhaps better stated, needn't—be all things to everyone within the broadest definition of our field. Yet, on the other hand, it is not healthy to so narrowly define ourselves that we become more and more susceptible to attrition toward other factions of our broader field that we have ignored, are ignorant about, or—worse yet—have purposely shunned.

We must approach this like any other human factors problem. Who are the users? What are their needs? What are the metrics? What is the desired impact? What will yield success and satisfaction? Simply stated, we should not aim to grow our membership if we are happy with who is in this room. But we shouldn't resist growth if our end goals are better achieved by having

others join us. Only when we answer these questions about our membership, and thus the purpose of our Society, can we apply a consensus vision to HFES operations and governance.

As you think about this issue, I will attempt to bias you with one premise: that the unique core of HFES is and should always be the science of human factors and ergonomics. We must remain the creators, protectors, and promoters of our science. The more difficult question, then, is what are we, as a Society, beyond that? Will our science be used and adopted if the intended audience isn't here to experience the excitement of our new findings and to continually motivate the directions of needed scientific endeavors?

I stated at the start that others have posed this question before. But while I'm using similar words, it is no doubt a new world—our field has grown in popularity, specialty subfields have emerged, and due to the present era of technology, the applicability of our discipline to both unique and everyday product interaction contexts has gone sky high. Thus, the answer today might not be the same as it was in yesteryear. I hope you will help me answer these questions in the next year.

Finally, I wish to thank all of you for allowing me, over the last year, to represent the Society and the special people who are its members. It has been both an honor and a pleasure.

ANNUAL MEETING

Student Chapters and Members Honored in Las Vegas

By Kim-Phuong L. Vu, Student Affairs Committee Chair



I am pleased to announce the recipients of the 2011 HFES Student Member With Honors designation and Student Chapter Awards. The awards were presented during the Student Reception on September 20, 2011, at the Red Rock Hotel in Las Vegas.

Student Member With Honors

The following student members made outstanding contributions to the HF/E discipline and/or to HFES, as evidenced by accomplishments such as publication in an approved journal, presentations at national or international conferences, contributions to industry projects, and significant service to the Society:

- Felix Portnoy, University of North Carolina at Chapel Hill
- Joel Suss, Michigan Technological University
- Grant Taylor, University of Central Florida
- Rupa Valdez, University of Wisconsin-Madison

Best Student Chapter Award

Three levels of recognition for this award are based on contributions and achievements in 12 areas of recruitment, guest speakers, field trips, outreach, collaboration, service to HFES, exploration, social events, information dissemination, mentorship, and creativity. The **Gold** level requires excellence in at least eight categories, and at least 50% of the chapter's members must be HFES Student Affiliate members. **Silver** requires excellence in at least five categories with at least 40% of the chapter's members being HFES Student Affiliates. **Bronze** requires excellence in at least three categories and at least 25% of the chapter's members being HFES Student Affiliates. The following student chapters were honored (listed in alphabetical order):

Gold

California State University, Long Beach
Clemson University
Embry-Riddle Aeronautical University
George Mason University
Pennsylvania State University
Purdue University
San Jose State University
Texas Tech University
University of Central Florida
University of Idaho
University of Queensland
Wichita State University

Silver

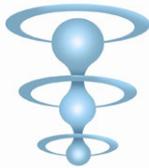
Georgia Institute of Technology
Old Dominion University
University of Houston-Clear Lake
University of Virginia
University of Wisconsin-Madison
Virginia Tech

Bronze

Mississippi State University
University of Toronto

Congratulations to the 2011 awardees! I encourage members of student chapters to think about your activities in the coming year and share your achievements by submitting an application for 2012 honors. The call for applications will be published in the April 2012 *HFES Bulletin*.

PDTG User-Centered Product Design Awardees



The HFES Product Design Technical Group (PDTG) presented its 10th Annual User-Centered Product Design Awards on September 20 in Las Vegas, Nevada. The award, given for innovative and user-centered approaches to human factors and industrial design, was presented to Fisher-Price, Inc. The VA Medical Center received an honorable mention award. The dramatically different nature of the winning products shows that human factors/ergonomics principles and research can be applied across a wide range of products.

At a well-attended special PDTG session, HFES then-President Anthony D. Andre presented the award to Kathleen Kremer, senior manager of Child Research at Fisher-Price for the company's iXL Learning System. Kremer described the electronic educational toy, which has six types of learning experiences for children aged 3–7.

Frank Drews, director, Center for Human Factors in Patient Safety at the VA Medical Center in Salt Lake City, Utah, accepted the honorable mention award for MEDClick – Medical Central Line Catheter Care Kit. The kit is used for performing weekly procedures on a central line, which is used to infuse medication and draw blood.

PDTG thanks the panel of judges: David N. Aurelio, Teresa Bellinger, Ila Elson, Jean Schiller, William Vigilanti, and Dan Nathan-Roberts.

The call for nominations for the 11th Annual User-Centered Product Design Award will be posted on the PDTG Web site (tg.hfes.org/pdtg) in early 2012. For more information, contact Dianne McMullin (dianne.l.mcmullin@boeing.com) or Stan Caplan (scaplan@usabilityassociates.com).

Call Off the Dogs, the Hunt Is Over

By Tiffany Poole Wilson, 2011 Philanthropy Committee Chair, and Kermit G. Davis, 2011 Annual Meeting Host Committee Chair

The inaugural HFES Scavenger Hunt was a success on many levels. For a first-time event, it drew 116 participants, who made up 29 teams. The sponsors' response was also excellent; contributions by 16 sponsors helped to underwrite the purchase of T-shirts and other operating

costs, as well as supplementing the student fund. Overall, more than \$1,200 was received, which helped to support student activities at the 2011 Annual Meeting.

Further, based on responses from the teams, the event was very successful in encouraging participants to network with HFES leaders, Fellows, and staff. They also said they learned about the facilities and, most important, had fun doing it.

The winning team—made up of Chris Cabrall, Celeste Adamson, Katie Ek, and Jake Hercules—accumulated 56 out of 66 points. For those who participated, below are some of the answers to the scavenger hunt questions.

| | |
|---|------------------------------------|
| What is the total number of lanes in the bowling alley? | 72 |
| Where is a clock in the casino? | There are no clocks in the casino. |
| What are the presentation names of the person who is on the most abstracts? | Wendy Rogers |
| How many palm trees are in the pool area? | Between 195 and 215 |
| Where is the largest TV located in the casino? | Race and Sports Book |
| How many beers are sold in the Yard House? | 130 |
| How many treadmills are in the fitness center? | 10 |
| How many restaurants are in the Red Rock Resort? | 18 |

We have developed a PowerPoint presentation (<http://www.hfes.org/Web/HFESMeetings/hfes2011scavengerhunt.pdf>) that provides a flavor of the challenges with some great pictures of the participants.

The 2012 Annual Meeting Host Committee will continue the tradition by hosting the 2nd HFES Scavenger Hunt in Boston. Please contact Marc Resnick (mresnick@bentley.edu) to donate or assist in the development of the 2012 event.

Invited Speaker Highlights “Supporting Activity Awareness in Computer-Mediated Collaboration”

By Jonathan M. Ross

I attended the HFES 55th Annual Meeting invited speaker session organized by the Computer Systems Technical Group, “Supporting Activity Awareness in Computer-Mediated Collaboration,” presented by John M. Carroll. Carroll is the Edward M. Frymoyer Chair Professor of Information Sciences and Technology at the College of Information Sciences and Technology, Pennsylvania State University. He researches methods and theory in human-computer interaction, particularly for networking, collaborative learning and problem solving, and the design of interactive information systems. During his highly distinguished career, he has published numerous books and papers and is the recipient of major awards in his field of expertise.

Computer-mediated collaboration involves using linked computers to support team communication among participants who are in different locations. This remote collaboration is quite different from traditional face-to-face communication, and the change leads to awareness issues. Participants become acutely attuned to primitive awareness (whether anyone else is present and what the participants can see on the computer screen), synchronous awareness (what is happening now), and passive notification (awareness of other participants’ action through their alterations to the screen presentation). Because the only communication is through the computer screen with a mouse and keyboard, and perhaps an audio link, participants may wonder what their partners are doing, who is participating online, and what their partners are planning or evaluating.

The goal of Carroll’s research is to enable participants to advance beyond basic levels of awareness in the computer-mediated environment. He noted that a number of methodologies and software tools have enabled progress to be made toward achieving this goal, including Chat Circles, GroupLab, Clearboard, BRIDGE, and MOOsburg. In recent years, his research has

culminated in a ground-breaking approach to planning for emergency responders who are using computer-mediated collaboration. Carroll initially conducted a paper-based experiment using maps and information lists with 18 three-person teams. He determined that by assigning roles—mass care, public works, and environment—and letting each team practice a series of emergency scenarios, the teams improved their communication skills and overall performance. Importantly, participants shared more and more information without being asked by other participants. They also developed their own compact terminology; management guidance became less necessary; and participants did not interrupt each other.

In two follow-up experiments, Carroll led the development of prototype and second-generation software tools that computerized the maps and lists from the paper study. Using these tools, team participants viewed computer screens divided into windows that contained lists, relationship diagrams, and annotated maps. Participants could change window size and could annotate the maps and lists for the entire team to view. A valuable innovation in the advanced version of the software was a record of annotations. This feature enabled participants to readily identify trends in recent and past communications among participants. The feature also complemented a compelling characteristic of the map: Concentrations of annotations (or icons, in the case of the map) can stand out from the myriad data points to indicate areas where the team should focus their attention.

Carroll's ongoing and future research encompasses additional field experiments with emergency responders, the development of an information analysis domain, and the investigation of activities that entail significant spans of time. He notes that his approach to design is two-sided, one side being ameliorating problem areas (such as the lack of a face-to-face condition) and the other side being to enhance and facilitate what is already good about computer-mediated collaboration (such as the availability of numerous records in different formats on a single screen). He pointed out that although the current software is excellent for planning, a different tool would likely be needed for use in an actual emergency, when seconds matter.

Jonathan Ross is a principal in High Ground Initiatives, LLC, where he conducts projects in human factors, naval architecture, and computer-aided design. He is the author of Human Factors for Naval Marine Vehicle Design and Operation.

Networking On- and Offline: Guidance for Students and Professionals

By Ariana Kiken

This article is a brief summary of a panel discussion that took place at the 55th Annual Meeting in Las Vegas, Nevada. Part of Student Career and Professional Development Day, the panel, "From Facebook to LinkedIn: Proper Etiquette and Networking Skills Needed for Rising Professionals in the Virtual Era," was chaired by Rowdy Hope and Joseph Vargas, University of Idaho. Panel members included Lauren Reinerman-Jones, University of Central Florida; Ronald G. Shapiro, Consultant; Kim-Phuong L. Vu, California State University, Long Beach; and Sandra Garrett, Clemson University.

Networking Online

Networking and socializing online is far-reaching and has been greatly facilitated by social networking Web sites such as Facebook and LinkedIn. However, it is important to keep in mind that the way in which you represent yourself personally can impact you professionally. LinkedIn is best used for professional networking because that is its focus; Facebook can be used for personal networking. Facebook's privacy controls allow you to differentiate between your professional and personal contacts, ensuring that only those close to you are privy to more detailed information.

Being aware of how you are represented online is critical in the age of online networking. Search for your name on a regular basis, and think before posting anything, because once it's online, it's difficult to remove. Along the same lines, be aware of who is linking to your Web pages, and be cautious about the Web pages you are linking to, because their content reflects who you are.

When networking online, set yourself apart from the crowd by personalizing invitation messages. Consider building a professional profile that includes information about what makes you unique, what you are looking for in a job, and several key words that will help your name appear in searches. Participating in discussions on LinkedIn and other professional Web sites is also recommended, because through these discussions your name may be recognized, which could open up job opportunities down the road.

Networking in Person

The Internet can make networking very convenient, but face-to-face meetings are still preferred when possible.

The Annual Meeting is a great place for students to network because it offers several formal and informal opportunities to interact with human factors/ergonomics professionals and with other students. Formal networking opportunities include receptions, student mentoring lunches, technical group business meetings, and the On-Site Career Center. Informal networking opportunities include refreshment breaks and the Student Lounge. Make it a point to sit with people you don't already know during sessions and other events to exchange business cards and introduce yourself.

Networking is all about building relationships, and all relationships begin with a connection that must be nurtured. It is possible to network nearly anywhere. In order to ensure that you are ready to network, practice your 10-second "elevator speech," identifying who you are, where you're from, and what you do. Networking is important whether it comes naturally to you or not. If you are nervous or shy, networking with a friend by your side may make approaching new people easier. Take advantage of your friends' connections to meet new people. When someone introduces you, be sure that your actions reflect positively on that person.

Staying involved in HFES is also a great way to network, and establishing a history of membership is highly encouraged. Members want to hear from students and see them involved in the Society. Volunteering in HFES enables you to meet new people all year long. For example, within the technical groups, consider volunteering to serve as the newsletter editor or Webmaster. Before volunteering for a position, consider whether you have time to help.

Conclusion

The Internet has provided exciting opportunities to connect with people around the world. To get the most out of online networking, think about how your online actions affect your real-life connections. Also keep in mind that the Internet cannot replace the connections you make in person. Networking opportunities exist at every turn, so take advantage of them.

Ariana Kiken is a student in the MSHF program at California State University, Long Beach. She is working on her thesis, examining training methods for NextGen tools for air traffic control students. She expects to complete her degree in Spring 2012.

INSIDE HFES

Executive Council Meeting Report

The HFES Executive Council met on September 17–18, 2011, at the Red Rock Hotel in Las Vegas, Nevada. Following is a summary of actions taken at the meeting.

Graduate Program Accreditation

The revised guidelines for universities requesting HFES accreditation of their human factors/ergonomics graduate programs (see the June 2011 *HFES Bulletin*) have been approved. The updated self-report guide is available at <http://bit.ly/oBn9vF>.

Revised 2011 Budget

Estimated Income

| | |
|-------------------------------|--------------------|
| Dues | \$648,300 |
| Membership Services | 42,250 |
| Publications | 403,331 |
| Meetings | 327,875 |
| HFES Institute | 31,400 |
| Misc | 2,600 |
| Total Estimated Income | \$1,455,756 |

Estimated Expense

| | |
|--------------------------------|--------------------|
| Member Services | \$25,700 |
| Publications | 183,713 |
| General/Admin | 888,496 |
| Committees/Officers | 124,110 |
| Meetings | 85,000 |
| HFES Institute | 44,035 |
| Interorganizational | 38,701 |
| Total Estimated Expense | \$1,389,755 |

ESTIMATED SURPLUS \$66,001

2012 Budget

Estimated Income

| | |
|-------------------------------|--------------------|
| Dues | \$653,300 |
| Membership Services | 47,100 |
| Publications | 391,200 |
| Meetings | 351,075 |
| HFES Institute | 23,500 |
| Misc | 2,300 |
| Total Estimated Income | \$1,468,475 |

Estimated Expense

| | |
|--------------------------------|--------------------|
| Member Services | \$39,986 |
| Publications | 148,645 |
| General/Admin | 926,157 |
| Committees/Officers | 136,290 |
| Meetings | 84,500 |
| HFES Institute | 49,600 |
| Interorganizational | 39,750 |
| Total Estimated Expense | \$1,424,928 |

ESTIMATED SURPLUS \$43,547

Committees and Task Forces

Council approved the formation of a new committee to identify and recommend topics for conferences, symposia, or workshops. The Special Meetings Committee is chaired by Barrett S. Caldwell.

In addition, a new committee for the webinar series has been established and is chaired by Anthony D. Andre.

A number of task forces were formed:

- Design Competition Task Force (Anthony D. Andre, chair) will develop the details for an annual design competition to promote the HF/E field
- Federal Spending Impact Task Force (Ronald G. Shapiro, chair) to assess the impact of research funding cuts on the field and HFES
- Web Site Redesign Task Force (John F. “Jeff” Kelley, chair) to provide recommendations for the revision or replacement of hfes.org
- Student Support Task Force (Kermit G. Davis, chair) to provide guidance about establishing a fund for student initiatives and ways the fund may be used
- HFES Apps Task Force (Mica R. Endsley, chair) to explore the feasibility of creating mobile apps
- Awards Review Task Force (Michelle M. Robertson, chair) to establish new awards, eliminate old ones, and periodically review awards administration

The full 2012 Organizational Chart may be viewed at <http://bit.ly/s8ckyw>.

Outreach

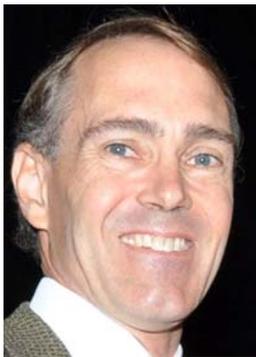
Council approved funding for a short film, intended for outreach purposes, to be produced by a group of students at George Mason University.

Bylaws Revisions Approved by Membership

In the July *HFES Bulletin*, then President-Elect and Policy and Planning Committee Chair Mica Endsley discussed proposed changes to the HFES Bylaws, which were unanimously approved by the Executive Council. Voting members received a ballot in August, and 97% of those voting approved the proposed changes.

A full version of the updated Bylaws can be found at <http://bit.ly/rTkt03>.

November 14 Webinar: Making the Human-Technology Marriage Work



Register today for the November 14 webinar, “**Making the Human-Technology Marriage Work**,” presented by John D. Lee, University of Wisconsin-Madison. Registration is available at <https://www2.gotomeeting.com/register/875703282>. The webinar will be held at the following times:

9:30–11:00 a.m. Pacific
10:30 a.m.–12:00 noon Mountain
11:30 a.m.–1:00 p.m. Central
12:30–2:00 p.m. Eastern
5:30–7:00 p.m. GMT

HFES webinars are free for members. Recommend this webinar to your nonmember colleagues! Nonmember registration is available for \$125 at <http://www.hfes.org/web/EventDetails.aspx?EventID=14>.

About the Webinar

The relationship between people and technology has become increasingly intimate and pervasive as technology touches many aspects of our work and leisure time. From persuasion and recommendation systems to warnings, decision aids, and vehicle control, technology is becoming an inescapable part of modern life. A large body of research shows that people respond socially to technology, and the concept of trust and metaphor of supervisory control have been adopted to describe factors affecting technology reliance and acceptance. Automation has moved from servo mechanisms and clearly subordinate systems to what might eventually be considered peers in some respects. The increasing capacity of emerging technology might make metaphors beyond supervisory control useful, such as marriage. Such metaphors and models of automation interaction that consider dynamic coadaptation may prove useful in designing relationships with increasingly capable technology.

About the Presenter

John D. Lee is the Emerson Electric Professor in the Department of Industrial and Systems Engineering at the University of Wisconsin, Madison, and director of the university's Cognitive Systems Laboratory. Previously, he was a professor at the University of Iowa and director of human factors research at the National Advanced Driving Simulator. Lee is a coauthor of the textbook, *An Introduction to Human Factors Engineering*, and is the author or coauthor of more than 170 articles. He has served on the National Academy of Sciences Board of Human-System Integration and the Committee on Electronic Vehicle Controls and Unintended Acceleration, among others. Lee's research focuses on the safety and acceptance of complex human-machine systems by considering how technology mediates attention. Specific research interests include trust in technology, advanced driver assistance systems, and human interaction with mixed-initiative systems.

Member Milestones: Daniel B. Jones



Daniel Burr Jones died at home on October 5, 2011. Dan was a Fellow of the Human Factors and Ergonomics Society and an Honorary Fellow of the Institute of Aeronautics and Astronautics.

Dan was born in Nebraska on August 20, 1922, and served as an artillery officer in the Army, retiring as a lieutenant colonel. He graduated from the University of Florida in 1943 and received an MS at Tulane in 1952 and a PhD in psychology from the University of Missouri, Kansas City, in 1963.

Dan worked in research and development at the Pentagon, as Division Staff with the 25th Infantry Division "Tropic Lightning" in Hawaii, and as a faculty member at the U.S. Army Command and General Staff College (Leavenworth, Kansas), where he retired from active duty in 1963. Following his Army retirement, he was a human factors program manager at Douglas Missiles Systems in Los Angeles, California, and at Martin in Orlando, Florida. Dan also worked for the Army Research Institute in Norfolk and Alexandria, Virginia, and the Nuclear Regulatory Commission as a civil service senior executive until he retired in 1997 and moved to Winter Park, Florida.

Some of the projects and programs on which Dan worked include the "Long Tom" (an Army effort to develop a cannon-fired tactical nuclear warhead); Project Apollo (the lunar lander and rover); shoulder-mounted microphones, speakers, and radios for use by police and firefighters; and Disney's Flight to the Moon attraction at Disneyland and Walt Disney World. Dan had extensive dealings with Russian nuclear agencies and the International Atomic Energy Agency to extend human factors awareness and training.

—Todd Jones

Member Milestones: Jennifer Veitch



Jennifer Veitch, an environmental psychologist and researcher at the National Research Council of Canada, was awarded the Waldram Gold Pin Award by the International Commission on Illumination (CIE) at its 27th session in July 2011 in Sun City, South Africa.

CIE is an international organization devoted to information exchange, scientific consensus, and standards documents in all matters related to the science and art of light and lighting. The Waldram Award is given every four years for exceptional contributions to applied illuminating engineering research and practice. Veitch was recognized for her scientific contributions to understanding lighting quality, health, and well-being and the application of this information in lighting and architectural design. The meeting also began her four-year term as director of CIE Division 3 (Interior Environment and Lighting Design).

OTHER NEWS

SEANES 2012 Conference: July 9-12, 2012

The Second International Conference of the South East Asian Network of Ergonomics Societies (SEANES) will be held July 9–12, 2012 on the island of Langkawi, Malaysia. The theme is “Ergonomics Innovations for Leveraging Sustainability and User Experience.” The conference is a leading regional forum on recent and relevant research, theories and practices in ergonomics, human factors engineering, and human-computer interaction.

For more information, please visit the event Web site at <http://www.seanes.net/seanes2012>.

CALENDAR

November 2011

Defence Human Sciences Symposium, November 16-17, Melbourne, Australia, <http://www.dsto.defence.gov.au/dhss2011/>.

AutomotiveUI11 - 3rd International Conference on Automotive User Interfaces and Interactive Vehicular Applications, November 29-December 2, Salzburg, Austria, <http://www.auto-ui.org>.

Bulletin



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PLAN TO ATTEND!



2012

Symposium on Human Factors and Ergonomics in Health Care: B R I D G I N G T H E G A P

March 12–14, 2012
Baltimore Marriott Waterfront Hotel
Baltimore, Maryland

The Human Factors and Ergonomics Society invites you to attend the 2012 Symposium on Human Factors and Ergonomics in Health Care, to be held March 12–14 at the Baltimore Marriott Waterfront Hotel in Baltimore, Maryland. Mark your calendars!

The objective of the symposium is to bring together professionals and other stakeholders in both the scientific and practice realms of the health-care community and to bridge knowledge gaps among them. HF/E professionals will present the latest research, best practices, and case histories.

Unique to this symposium is the inclusion of manufacturers, health-care providers (physicians, nurses, administrators, etc.), and policy makers, who will discuss their experiences in using HF/E processes and principles. The symposium will also enable them to communicate their need for additional collaboration with the HF/E community.

Presentations will address three topical tracks:

- Patient and Health-Care Provider Safety
- Health-Care Information Technology
- Medical Device Design

Lucian L. Leape, MD, kicks off the symposium with the opening plenary address on Monday, March 12. Leape was a founder of the National Patient Safety Foundation. The closing session, on March 14, features a panel presentation by the FDA Human Factors Group.

The symposium will conclude on Wednesday, March 14 with the Food and Drug Administration Human Factors Group as the closing plenary panel.

General information
<http://bit.ly/omoeTV>

Register
<http://bit.ly/pFn3D0>

Book your room
<http://bit.ly/qLmMhb>

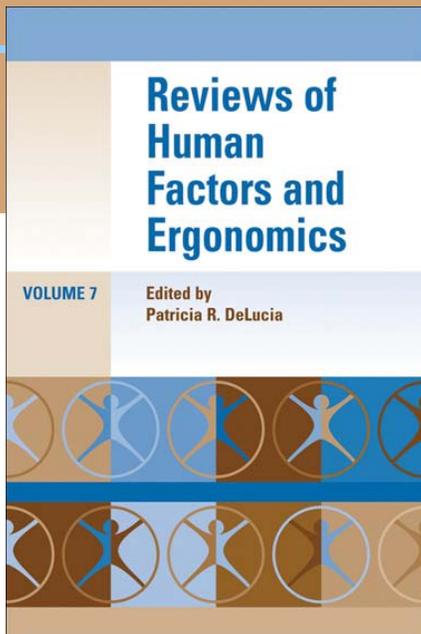
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Volume 7

Published by SAGE for the Human Factors and Ergonomics Society

Edited by Patricia R. DeLucia



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