Submissions Invited for the HFES 2015 Annual Meeting

HFES has opened the online Call for Proposals for the 2015 Annual Meeting, which will take place October 26–30 at the JW Marriott at L.A. LIVE in Los Angeles, California. Case studies, debates, demonstrations, new methodologies, on-site experiments, and posters are welcome. Detailed instructions for submitting your work may be found in the Call for Proposals.

HFES especially invites special-format sessions and presentations from invited speakers who bring their perspectives from areas related to HF/E, identifying areas in which HF/E work is needed.

Only papers that have not been published previously or presented at another professional meeting may be submitted. All research and analyses described in a proposal must be complete at the time of the submission. Papers that do not present completed work will be rejected. The sole exception to this policy is for student work submitted for consideration in the Student Forum track, in which case the proposer may report on work in progress.

The deadline for submitting any type of proposal is March 9. Before submitting your work, please read the Call for Proposals thoroughly.

Note that for all accepted submissions, one of the authors must attend the meeting to present the work. All presenters are required to pay the meeting registration fee. For questions on the submission process, please contact Lois Smith at 310/394-1811.

INSIDE HFES

Annual Executive Council Report

The HFES Executive Council, along with division chairs and senior staff, convened for a two-day meeting immediately prior to the HFES Annual Meeting in Chicago, October 25 and 26, 2014. Members of the outgoing 2014 Council convened on Saturday, and incoming 2015 Council members met on Sunday.

Outgoing Council

The outgoing Council meeting was chaired by 2014 President Francis T. Durso, who provided an overview of the year’s accomplishments and challenges. Secretary-Treasurer Barrett S. Caldwell presented a budget summary, noting that attendance at HFES meetings would be better than forecast, which has improved the Society’s bottom line for 2014.

Caldwell also presented information on the new Scout the Future initiative, which will gather information on trends and developments that will have an impact on the Society and the disci-
pline. Such an environmental scan will enhance future strategic-planning efforts and will enable HFES to be more nimble and responsive to external forces.

President Durso thanked all members of the Council for their service during the past year and acknowledged Eduardo Salas (Immediate Past President), Kermit G. Davis (Immediate Past Secretary-Treasurer), and John F. “Jeff” Kelley and Cheryl Bolstad (members at large), all of whom completed their terms of office at the meeting.

The Council approved a revised 2014 budget, a summary of which appears below.

Revised 2014 Budget

**Income**

<table>
<thead>
<tr>
<th>Income Category</th>
<th>Amount</th>
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**Expense**

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<td>Interorganizational</td>
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<td><strong>Total expense</strong></td>
<td><strong>1,670,564</strong></td>
</tr>
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</table>

**Excess, income over expenses** (64,540)

**Outreach Division**

Outgoing Outreach Division Chair Arathi Sethumadhavan reported on the Voting Systems Design Competition, which garnered 8 finalists, all of whom presented their designs at the Annual Meeting. Judges Stanley H. Caplan and Philip Kortum selected **winners** from the Academic and Corporate categories. The Council approved a $500 prize for each winning team. Prizes were awarded to Intuitive Company, Rob Tannen, Team Leader (Corporate) and Georgia Tech, Tom Gable, Team Leader (Academic).

The Council thanked Arathi for her leadership of the Outreach Division in 2014. Karen Jacobs will be taking the helm of the division in 2015.

**Scientific Publications**

C. Melody Carswell, Division Chair for the Scientific Publications Division, reported that the *Guide to Forensic Human Factors* has been published. A second edition of *Readings in Training and Simulation* will be available in mid-2015. The final volume (Volume 10) of *Reviews of Human Factors/Ergonomics* will be published during the first quarter of 2015. Two volumes of the *Users’ Guide to Human Factors and Ergonomics Methods* series will be pub-
lished in 2016, with Frank Durso as editor. The series will provide accessible, hands-on books detailing the background, rationale, procedures, and outcome analyses associated with methodologies involved in the investigation of human involvement in complex systems within the context of a detailed work example. The first volume will be workload methodology, to be written by Gerald Matthews, and the topic of the second volume is under consideration.

Carswell reported that the impact factor for Human Factors has gone up for the first time since 2008. Submissions are up for both Human Factors and the Journal of Cognitive Engineering and Decision Making. The Council also discussed how to increase citations to standards in our periodicals and the perennial issue of publication of proceedings articles, suitably revised, in Human Factors. Both of these issues are in development and will be reported on in future issues of the Bulletin.

Technical Standards
Outgoing Technical Standards Division Chair Bruce Bradtmiller welcomed Robert R. Fox to the Council meeting. Robert will be assuming the position of division chair in 2015. Council thanked Bruce for his years of service, and will look forward to Bruce being cochair of the Scout the Future effort in the coming year.

Brdtmiller commented that awareness of standards in the Society has increased during his tenure, thanks to the efforts of the standards committee chairs and subject-matter experts on each committee. The division is always looking for volunteers for standards work; for more information, interested persons should review reports on ongoing national and international standards efforts in the Technical Standards section of the HFES Web site.

Internal Affairs
Chair of the Internal Affairs Division Kathleen L. Mosier reported on activities in that division. Chapter Affairs Chair S. Camille Peres has been working on administrative issues and on revitalization efforts for chapters facing challenges. Student Affairs Chair Kim-Phuong L. Vu will be transitioning out of her position, and the Council welcomed Linsey M. Barker Steege as cochair for that committee in 2015. Both the Annual Meeting and the Health-Care Symposium were quite successful in 2014, and plans for the new ErgoX conference are coming together under the leadership of Anthony D. Andre, Kermit G. Davis, and a distinguished advisory board. ErgoX will be held in mid-June 2015 in Anaheim, California.

Professionalism
Carolyn M. Sommerich, chair of the Professionalism Division, reported that as part of the program of awards and the presentation of new HFES Fellows, two new awards would be presented during the 2014 Annual Meeting Opening Plenary Session: the William C. Howell Young Investigator Award and the Bentzi Karsh Early-Career Service Award in addition to the regular program of awards and introduction of new HFES Fellows.

New developments in the division include anticipation of numerous graduate programs applying for reaccreditation; a new process for Fellows selection, which will allow the Fellows at Large to provide feedback on their choices; and the Education and Training Committee’s “My HFES Challenge,” which solicited feedback on members’ education and training needs in an interactive format at the Annual Meeting.

The Council approved a new focus for the Professionalism Division: In 2015 the division will become the Education Division and will include all meetings committees. The rationale for the change is to more sharply focus on education and training needs that have been identified by the members and to coordinate delivery of this content through meetings, webinars, and other
media. The Awards and Fellows Selection Committee will move to Council Committees. The revised organizational structure appears [here](#).

**Incoming Council**

Following an orientation session, HFES 2015 President Andrew S. Imada welcomed new members to the Council: President-Elect William S. Marras, Secretary-Treasurer-Elect Robert G. Radwin, and at-large members Ann M. Bisantz and Raja Parasuraman. They join the following returning members:

- Secretary-Treasurer James P. Bliss
- Immediate Past President Francis T. Durso
- Immediate Past Secretary-Treasurer Barrett S. Caldwell
- Members at Large: Sandra K. Garrett, M. Susan Hallbeck, Pascale Carayon, and Paul A. Green

Members of the incoming Council formalized the changes to the organizational structure discussed the previous day. They approved contract renewals with our meeting-planning firm, Prestige Accommodations International, and with Lewis-Burke Associates, our government-relations partners; the latter were on hand to present an update on their strategies for increasing awareness of the field within the federal government and its agencies.

Council members heard a presentation by Steve Marlin of Prestige Accommodations, who provided an update on the Annual Meeting and presented options for the 2019 meeting. The Council approved Seattle as the first choice, with Indianapolis as first alternate.

The Council elected Raja Parasuraman to the Executive Committee and Ann Bisantz and Camille Peres to the Finance and Budget Committee.

President Andy Imada led the Council in an exercise designed to define the foundational values that inform the Council’s decision making. (See Andy’s article in the December Bulletin describing the outcome of this discussion.)

The Council approved the 2015 budget, a summary of which appears below.

### 2015 Budget

#### Income

<table>
<thead>
<tr>
<th>Income</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Meetings</td>
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<td>Miscellaneous</td>
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#### Expense

<table>
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</thead>
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<td>Communications/publications</td>
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<td>Committees/officers</td>
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<td>Meetings</td>
<td>464,400</td>
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</table>
Technical standards 43,700
Interorganizational 20,500
Total expense 1,831,665

Excess, income over expenses 123,295

Midyear Executive Council Meeting
The next meeting of the Executive Council will be held April 25 and 26 in Baltimore, Maryland, immediately preceding the Symposium on Human Factors/Ergonomics in Health Care.

Durso Appointed Methods Book Series Editor

Francis T. (Frank) Durso has been confirmed by the Executive Council as editor of the new series, Users’ Guide to Human Factors and Ergonomics Methods. Work began last year with a survey of potential users of the books and identification of topics for development.

The aim of the series is to provide accessible, hands-on books detailing the background, rationale, procedures, and outcome analyses associated with methodologies involved in the investigation of human involvement in complex systems within the context of a detailed worked example. Drawing an analogy to the Sage “green book” series in quantitative methods would be appropriate.

Potential topics include, but are not limited to, methods in anthropometry, charting, cognitive modeling, economic analysis, error analysis, macroergonomics, meta-analyses, signal-detection theory, simulation techniques, participatory design, prototyping, risk analysis, structured interviews, and workload measurement (subjective, objective, physiological).

Durso is professor of psychology at the Georgia Institute of Technology in the Engineering Psychology Program. He received his PhD from SUNY at Stony Brook and his BS from Carnegie-Mellon University. He was associate editor of the Journal of Experimental Psychology: Applied, senior editor of Wiley’s Handbook of Applied Cognition, and coeditor of the forthcoming Handbook of Human Systems Integration, and he has served on several editorial boards, including that of Human Factors. He is coauthor of Stories of Modern Technology Failures and Cognitive Engineering Successes. He has served as adviser and panelist for the Transportation Research Board, the National Science Foundation, the American Psychological Association (APA), and the Government Accountability Office.

Most of Frank’s research has focused on cognition in dynamic environments, especially in transportation (primarily air traffic control) and health care. He is a codeveloper of the Pathfinder scaling algorithm, the SPAM method of assessing situation awareness, and the Threat-Strategy Interview procedure. His current research interests focus on cognitive factors underlying strategy selection and discovery, especially in providers and consumers of health care. Frank is a Fellow of HFES, APA, the Association for Psychological Science, and the Psychonomic Society. He was awarded the Franklin V. Taylor award for outstanding achievements in applied experimental and engineering psychology from APA. Frank is Immediate Past President of the Human Factors and Ergonomics Society and a member of the National Research Council’s Board on Human Systems Integration.
New Outreach Brochure Available to Members

The Member Services and Communications Departments have developed a new brochure for high school and undergraduate students or anyone with an interest in HF/E, “Explore the Possibilities: Pursue a Career in Human Factors/Ergonomics.” The four-page color brochure, which can be downloaded from the HFES Web site, briefly highlights the history and contributions of HF/E, educational background needed to work in the field, and employment areas.

Members are welcome to make use of the brochure when visiting schools, participating in community events such as science fairs, or conducting National Ergonomics Month activities.

Submit Nominations for 2015 Fellows and Awards

HFES Full Members and Fellows are invited to submit nominations for new Fellows and eight Society awards, which will be presented at the 2015 Annual Meeting in Los Angeles.

Fellows

Fellow is a special class of Society membership, as established in the HFES Bylaws. Individuals may apply for Fellow status on their own behalf, or they may submit a nomination on behalf of another.

The Fellow nomination package (including instructions, nomination and recommendation forms, and supporting information) may be obtained from the Fellows page. You may also contact HFES Director of Member Services Carlos de Falla. Completed Fellow nomination packages must be received at the HFES office on or before February 2.

Awards

Nominees are not required to be HFES members, but only members may submit nominations. Submissions are due on or before March 27. To nominate,

- submit the candidate’s résumé or curriculum vitae, a nominating letter, and at least two but not more than three letters of support from individuals who know the candidate well enough to assess his or her candidacy in terms of the award’s criteria; and
- send all nomination packages via e-mail to Lynn Strother. Please submit the package as a single file in PDF format.

For more information on the scope and criteria for HFES awards, please view the HFES Awards Web page.

STANDARDS UPDATE

ISO/TC 159 Standards Update for January
By Daryle Gardner-Bonneau, Chair, U.S. TAG to ISO/TC 159

The items presented in this article concern news relevant to ISO/TC 159 standards activities and include upcoming meetings, newly published standards, new standardization projects, and draft standards currently being balloted.

Except for newly published standards, titles of standards are abbreviated in this listing, but you can obtain the complete title for any standard by visiting the HFES Standards Web page and then clicking on the Subcommittee (SC) Technical Advisory Group (TAG) that is involved with the standard in which you’re interested. Clicking that link will display a graphic of the SC’s
structure and a listing of all the projects and standards of that subcommittee. You can also purchase standards and search full titles and abstracts by going to the ANSI Store or the ISO Store and searching by the document’s number (e.g., ISO 24504).

The contacts whose e-mail addresses are provided below (i.e., Daryle Gardner-Bonneau, Robert Fox, and Jim Williams) welcome your inquiries and your participation in these activities. The listings use the following ISO abbreviations:

TC = Technical Committee
SC = Subcommittee
WG = Working Group
CD = Committee Draft
DIS = Draft International Standard
FDIS = Final Draft International Standard
TR = Technical Report
NWIP = New Work Item Proposal
PAS = Publically Available Specification

**Items new this month are preceded by ***.**

**Special Solicitation**

The U.S. TAG to ISO/TC159/SC4 (Ergonomics of Human System Interactions) seeks new TAG members and/or U.S. experts to review documents and participate in projects in the following working groups:

- WG6 (Human-Centered Design Processes for Interactive Systems)
- WG9 (Haptic and Tactile Interaction Systems)
- WG10 (Accessible Design for Consumer Products).

Because more and more international meetings are taking place via WebEx, travel is not a requirement for participation as a U.S. expert in a working group. If you are interested in participating in standards work in any of the above-listed topical areas, please contact Jim Williams at ergojim@earthlink.net.

**Draft Documents Released for Comment and Vote**


***SC4 – ISO/CD 9241-11 – Usability definitions and concepts; due February 20, 2015. Contact ergojim@earthlink.net.

**Upcoming Meetings**

<table>
<thead>
<tr>
<th>Standard/Group</th>
<th>Date</th>
<th>Location/Description</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISO/TC159/WG2</td>
<td>February 24–26</td>
<td>Seoul, South Korea – Work on revision of ISO/TR 22411 (ergonomic data for acces-</td>
<td><a href="mailto:JDNBonneau@charter.net">JDNBonneau@charter.net</a></td>
</tr>
</tbody>
</table>
### ISO/TC159/SC4/WG5
March 2–4
San Francisco, CA
Continue work on ISO 9241-112 (presentation of information) and ISO 9241-125 (visual presentation of information)
[ergojim@earthlink.net](mailto:ergojim@earthlink.net)

### ISO/TC159/SC4/WG6
March 16–18
Berlin, Germany
Process comments on revisions of ISO 9241-11 (usability) and ISO 9241-220 (human-centered design process)
[JDNBonneau@charter.net](mailto:JDNBonneau@charter.net)

### ISO/TC159/SC1/WG5
March 19–20
Berlin, Germany
Continue development of ISO 27501 (management-level ergonomics process standard) and begin development of NWIP for a specialist-level ergonomics process document
[JDNBonneau@charter.net](mailto:JDNBonneau@charter.net)

### ***ISO/TC159/SC3/WG4
March 30–31
Brussels, Belgium
[robert.r.fox@gm.com](mailto:robert.r.fox@gm.com)

### ISO/TC159
April 23–24
Baltimore, MD
Plenary meeting
[JDNBonneau@charter.net](mailto:JDNBonneau@charter.net)

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## OPINION

**The Future of Driving: Reflections on Deborah Hersman’s Annual Meeting Keynote Address**

*By Marvin J. Dainoff, Director, Center for Behavioral Sciences, Liberty Mutual Research Institute for Safety*

Like many others in attendance, my attention was riveted to Deborah Hersman’s keynote address at the Opening Plenary Session of the HFES Annual Meeting on October 28. She gave a lucid description of the ways in which operators of cars, trains, buses, and aircraft get themselves and their passengers in trouble—sometimes fatally—by becoming distracted from their primary task by texting or talking on a smartphone.

The former Chair of the National Transportation Safety Board and current president and CEO of the National Safety Council, Hersman has been a strong advocate for public safety. During her talk, she asked the HF/E community to help her organization better advocate for safety by educating the public and legislators about the science regarding safety in transportation and technology use.

As I thought about this request, it occurred to me how central the distraction issue is to the core scientific foundations of HF/E, and how concepts and issues that have resided in the pages...
of our journals and meeting presentations are emerging into very public discussion (e.g., situation awareness, vigilance decrement, automation trust, supervisory control, automation surprise, attention allocation strategy).

In brief, driving is a highly overlearned task that leaves much spare capacity under normal circumstances. That capacity is quickly absorbed by the availability of mobile phones, which allow us to be connected to our network of family, colleagues, and friends at all times. Large numbers of people now seem to expect and demand this capability of continuous connectivity. In an emergency, however, the attention allocated to the secondary task is not likely to reallocate quickly enough, and a crash is likely. This kind of analysis will not be news to *HFES Bulletin* readers.

However, it is not an exaggeration to argue that driving is undergoing rapid transformation, reflecting the incorporation of information and robotic technologies into automotive engineering. With regard to safety innovations, the second half of the 20th century saw progress in passive protection. This included interior design, crashworthiness, seat belts, and air bags. Exceptions, which segue into automation issues, are antilock brakes and electronic stability control. Here, the coupling between the driver’s action and the vehicle’s response is no longer direct but is mediated by an automated system.

**Current and Emerging in-Vehicle Technologies**

Hersman explicitly mentioned autonomous vehicles as a possible solution to the distraction problem. Let’s explore this in some detail. Although autonomous road vehicles have been of interest to the U.S. military for some time (i.e., DARPA Challenges), the emergence of the Google car triggered a rapid response from the automotive community. The National Highway Transportation Safety Administration and the Society of Automotive Engineers have parallel classification systems for levels of automation in motor vehicles. These range from no automation (human driver in control) to full automation (human driver not required). At present, there are experimental vehicles on public highways, such as the Google car, that can operate in a fully autonomous mode but require a human driver to be available to take control. Several states have passed legislation regarding the conditions under which autonomous vehicles can be operated on public roads.

At the same time, various combinations of partial automation, in which some but not all driving functions are under automatic control, are already on the market. My own car has adaptive cruise control, which automatically maintains a safe distance from the car ahead as long as I am traveling faster than 20 mph. Lane-departure devices, which nudge the car back into its lane if necessary, exist. In addition to devices that take over control from the driver, there are other devices, often based on the same sensor technology, that detect blind spots and provide collision and lane-departure warnings.

But this is only the beginning. A second dimension of the automotive technology landscape relates to what is being called the “connected car.” Many of us are familiar with the first generation of connectivity in the form of GPS units as a component of the vehicle. However, the real activity at the moment—involving interplay between the automotive manufacturers and information technology giants such as Apple and Google—involves the effort to display all the bandwidth of a smart phone in the center console of the vehicle. I can actually do this now with my own 2014 model car. If I’m reckless, I can check Facebook, review my e-mail, or work with other apps I have on my phone while driving. If I were driving a Tesla, I would have access to a large 17-inch display. These apps will be activated and controlled through voice commands. Will this be less distracting? This is now a major area of HF/E concern.
Another aspect of connectivity is vehicle-to-vehicle (V2V) and vehicle-to-infrastructure (V2X) communication. This is already available in products like OnStar, smartphone apps like Waze, and electronic toll collection. In the future, V2V and V2X will presumably be linked to individual vehicle automation systems, allowing for control of traffic flow without human intervention.

The HF/E implications of this new landscape are enormous. Full automation, at least for the next 10–20 years, will likely still require that a human driver is available to intervene if necessary. In HF/E terms, this means the primary task for the driver will essentially be that of vigilance/monitoring by controlling the status of the automated systems. At the same time, the secondary task embodies the whole wealth of distraction potential in the onboard infotainment system. If a situation requiring intervention occurs, the critical issue will be how quickly the driver can achieve enough situation awareness to regain control of the vehicle. This, in turn, relates to the type and likelihood of automation failure and, crucially, how much advanced warning the automation system itself can provide regarding its own limitations.

Role of HF/E

We had several papers presented at this and previous Annual Meetings on this topic, and our journals and conference proceedings also provide a wealth of relevant information. In addition to the driving literature, much data from military and aviation studies could be applied.

As an example, consider my own experience using a partially automated system. I have received no training using automated cruise control other than a 15-minute test drive at the dealership. The manual contains instructions for operating the system. What I have had to consciously learn is the limits of the system and the points at which I lose trust in it and have to regain control. This occurs because the safe gap programmed into the system is often violated by impatient drivers who cut in front of me. The rate of deceleration performed by the automated system is too slow for my taste, so I intervene, which may or may not be necessary.

I bring this up because I believe my experience is a microcosm of the types of interactions drivers will have with automated technology in the near future. Will this automation improve safety? Perhaps. My car does have an additional feature, collision avoidance, which, even if adaptive cruise control is not enabled, will automatically brake if I get too close to an obstacle. This certainly should reduce crashes.

There is yet another dimension to the technology landscape. A variety of telematics devices are now available that allow online tracking of vehicle dynamics and location. These devices can be used as the basis for safety performance improvement systems in which drivers receive coaching feedback as to safe or risky actions.

What I have described is a world in the midst of rapid technological transformation with broad impacts on almost everyone and with important HF/E issues at the forefront. There are different time horizons for market penetration of partial automation, full automation, telematics, and vehicle-based infotainment and connectivity. New government regulations and infrastructure will need to be developed to accommodate these changes. Can the safety benefits of automation and telematics overcome the strong distraction gradient generated by the apparent individual need for continuous connectivity? We in the HF/E community are in perhaps the best position to provide scientifically based answers.

Marvin Dainoff is a past President and Fellow of HFES. The opinions in this article are his own and are not intended to reflect policies and practices of the Liberty Mutual Research Institute for Safety or the Liberty Mutual Insurance Group.
Finding Internship and First-Job Opportunities
By Terri Dunbar, Texas Tech University

For many HF/E students, getting an internship or their first job is an overwhelming process with several obstacles. Networking, finding available positions, creating a résumé that best represents one’s skills, learning new skills, and performing well in interviews can all be immense challenges that students must overcome. The “Finding Internship Opportunities and Getting the First Job” panel, part of 2014 Student Career and Professional Development Day, aimed at informing students about preparing for and acquiring a first job or internship. Chaired by Paul Derby of Honeywell, the panel included Jennifer Teves (Honeywell), Anand Tharanathan (Accenture), Susan Stevens-Adams (Sandia National Labs), and Dhvani Patel-Smith (Google [x]).

Networking Successfully

A source of trepidation for many students is networking – how should students network, especially if they are nervous? Panelists agreed that networking is the best way for students to get an internship; however, not all networking opportunities are equal. Before networking, the panelists suggested that students research the company and the person they are going to contact, be able to summarize their skills and weaknesses, learn how to sell themselves, and determine why they want to work for that company. Tharanathan recommended not just engaging in small talk when meeting a person for the first time (e.g., at the HFES Annual Meeting) but also asking about the person’s work and research at that company.

Another way to stand out while networking is to be genuine, according to Patel-Smith. It is easy for students to feel that they have to overcompensate for a lack of experience, but people understand that students often do not have an extensive background. Try to relax, and bring a friend with you if it makes you more comfortable.

Developing an Honest Résumé

Nowadays, the specific degree earned is less important than the skills acquired as a student. Although not explicitly available on a résumé, communication skills were listed as the most important skill the panelists look for when interviewing someone for an internship or entry-level job. Including projects working with a diverse team is one possible way to show communication skills on your résumé.

Another important aspect listed by the panelists was honesty. It is frustrating to deal with candidates who misrepresent skills and experiences on their résumé or during an interview. Tharanathan recommended listing only accomplishments you feel comfortable discussing. It is also important to get feedback on and then edit your résumé. Teves recommended getting this feedback from peers and advisers.

Learning new skills to add to your résumé can be a daunting task. Plenty of YouTube videos and blogs are available to teach you how to use various design tools and software used by industry professionals. Keep in mind that it might not be a beneficial use of time to learn to use tools that are not within your capabilities; focus on tools that will enhance the strengths you already have. Essentially, determine your strengths now and make them stronger by choosing relevant complementary programs and tools.

Creating Internship Opportunities

Opportunities for internships can be created. By networking, you not only increase your visibility within the HF/E community but also allow future opportunities for internships to be created based on your relationship with people in the company. All panelists agreed that networking...
is the best way to get an internship. The HFES Annual Meeting provides a Career Center where companies come to interview students and professionals for internships and jobs.

Internships may also be acquired through the alumni of your school. Contact advisers or other graduate students to see if a list of alumni contacts in your program is available, and consider contacting those individuals to learn about internships within their companies. Contact people through LinkedIn about internships, especially people you have met at the HFES Annual Meeting. Finally, consider contacting a company directly rather than waiting for job postings to be available. This approach may not be appropriate for all companies; however, it is better to take action than to sit on the sidelines.

Succeeding in the Interview

After an interview is scheduled, what are some ways to better ensure that you are accepted for the internship? The panelists suggested that you convey confidence in your qualifications but be honest about your skill set. Both Tharanathan and Patel-Smith mentioned honesty as an important quality in interviews as well. As mentioned previously, communication skills were listed as the most important quality in candidates, followed by education, knowledge of tools (e.g., statistical training, programming, and design programs), deliverables, and publications.

It is okay to mention if you are nervous or if you do not know the answer to a question. Panelists noted that sometimes questions asked during interviews are designed to test your ability to think on your feet, rather than actual knowledge in a given subject area. Come prepared with a list of questions of your own to convey your interest in the company and the position.

To summarize the advice of the panelists, spend time looking for the right internship and job. The job market for HF/E is booming. Research companies and positions, network with professionals within those and other companies, and spend time developing your skills (communication and what you do best). Networking and interviews can be a scary process for many; however, preparing yourself now will provide a strong boost to your application when you enter the job market!

Terri Dunbar is working toward her PhD in the human factors section of the experimental psychology program at Texas Tech University.

PUBLIC POLICY MATTERS

Congressional Update

By Lewis-Burke Associates LLC

On January 6, new Members of Congress and those who were reelected were sworn in to serve in the 114th Congress. Lewis-Burke Associates joined the swearing-in day celebrations on Capitol Hill to welcome the Members of Congress and to share a few of HFES’s legislative priorities for the upcoming year, including reauthorizing legislation for the Federal Aviation Administration and surface transportation, as well as voting technology. Complementing these initial advocacy activities on swearing-in day, Lewis-Burke continues to meet with congressional staff to discuss their priorities for the year and opportunities for engagement on these issues. As reported in November, Republicans took the majority in the Senate and expanded their major-ity in the House of Representatives. Republican congressional leaders have indicated their desire to use their unified majority to move away from brinkmanship, prove they can govern effective-ly, and pass legislation meant to showcase their differences with President Obama.

Additionally, prior to the conclusion of the 113th Congress, members passed the final Continuing Resolution (CR) and Omnibus appropriations bill, known as the CRomnibus, to fund government agencies for the remainder of the fiscal year (FY) 2015. The President signed the
bill, which sustains federal investments in research, education, and health-care programs important to research universities and nonprofit research institutions, into law shortly after. The CRomnibus includes funding for 11 of the 12 annual appropriations bills; the Department of Homeland Security received a short-term CR due to partisan disagreement over the president’s recent Executive Order on immigration. Lewis-Burke’s Analysis of the FY 2015 CRomnibus Appropriations Bill provides details of the major federal research, education, and health-care programs funded through the CRomnibus.

Lewis-Burke Associates LLC, a leading Washington, D.C.-based government relations and consulting firm, represents the public policy interests of scientific societies and institutions of higher education. Lewis-Burke’s staff of about 20 government relations professionals work to promote the federal research and policy goals of HFES and the HF/E community.

OTHER NEWS

IEA K. U. Smith Student Award Call For Papers

Submissions are welcome for the International Ergonomics Association (IEA) K. U. Smith Student Award. The award, which honors two deserving students responsible for contributions to HF/E, will be presented in August during the IEA 2015 19th Triennial Congress in Melbourne, Australia. Each award recipient will receive a cash award of $3,000. A travel stipend also may be awarded. Any student enrolled in an accredited postsecondary institution worldwide is eligible.

To enter, e-mail the following documents to IEA Student Award Committee Chair Pascale Carayon before February 16, 2015:

1. A full copy of a paper that the student has authored, documenting an HF/E contribution. The student should be first author on a coauthored paper.
2. A résumé (4-page limit, including student’s name, address, e-mail, phone, institution, experience, publications, and HF/E accomplishments and contributions).
3. A letter from the student’s academic adviser on institutional letterhead certifying that (1) the paper was written by the student; (2) the student was primarily responsible for the work described in the paper; (3) the student was enrolled in the academic program when this work was carried out; (4) the period during which the work was carried out; (5) the work described was completed after August, 2012; and (6) the paper is being submitted for the IEA Student Award.

Two awardees will be selected based on a review of the submitted documentation and the nature/quality of HF/E contributions/accomplishments. Notification of results will be sent on March 16.

2014 Dieter W. Jahns Student Practitioner Award Winner

Congratulations to Denny Yu, winner of the 2014 Dieter W. Jahns Student Practitioner Award from the Foundation for Professional Ergonomics, a nonprofit organization dedicated to advancing professionalism in ergonomics. Yu, a PhD student in industrial and operations engineering at the University of Michigan, is the fifth recipient of the award, which was created in honor of Dieter Jahns, a lifelong advocate of the practice of ergonomics and a leader in ergonomics certification. The award was presented to Yu by Dieter’s wife, Karel, at the 2014 HFES An-
Yu’s project is titled “Understanding the Effects of Alternative Displays on the Work Demands in Microsurgery.” Musculoskeletal symptoms are major concerns in microsurgery, where surgeons are required to operate with surgical microscopes that fixate their postures over optical eyepieces, constrain their eye locations, reduce comfort, and force them to stand in awkward positions. Yu’s research applies ergonomics practice areas of analysis, design, and evaluation to quantify surgeons’ exposure to postural risk factors in the operating room, design new visualization equipment that reduces postural constraints, and evaluate the displays’ effectiveness using biomechanics and qualitative metrics.

Yu stated, “It was an immense honor to receive the Dieter W. Jahns Student Practitioner Award. This award has been highly inspirational and will continue to drive my passion for translating ergonomics research into health-care practice throughout my career.”

**MEMBER MILESTONES**

**Courtney Receives Excellence in Science Award; Appointed to CDC-NIOSH Board of Scientific Counselors**

The Injury Control and Emergency Health Services Section of the American Public Health Association (APHA) presented HFES member Theodore K. Courtney, director of the Liberty Mutual Research Institutes’ Center for Injury Epidemiology, the 2014 Excellence in Science Award at the APHA 142nd Annual Meeting in New Orleans. The Award recognizes an individual, frequently at midcareer, for outstanding dedication and leadership in the science of injury/violence prevention and control and emergency health services with contributions and achievements that have a significant and long-term impact on the field.

Additionally, U.S. Secretary of Health and Human Services Sylvia Mathews Burwell appointed Courtney to the Board of Scientific Counselors at the National Institute for Occupational Safety and Health (NIOSH), Centers for Disease Control and Prevention. He began his three-year term on January 1.

The 15-member national board advises the director of NIOSH on its research and prevention programs and provides guidance on NIOSH research activities related to developing and evaluating hypotheses, systematically documenting findings, and disseminating results.
Stephan A. Konz, 81, professor emeritus of industrial engineering at Kansas State University, distinguished HFES Fellow, and recipient of the HFES Paul M. Fitts Education Award, died on December 2, 2014. His wife and family were by his side.

Konz began his teaching and research career as an assistant professor at Kansas State University after earning a PhD in industrial engineering at the University of Illinois in 1964. He received a BS in industrial engineering and an MBA from the University of Michigan in 1956, and an MS in industrial engineering from the University of Iowa in 1960. He retired as a professor after more than 30 years of dedicated service at Kansas State University.

His industrial work experience included employment with Westinghouse Electric Corporation, Collins Radio Company, Lockheed, Western Electric Company, the Chamber of Mines of South Africa, and Saginaw Steering Gear. Over the four decades that spanned his career, Konz contributed greatly to the global growth and advancement of HF/E. He was a strong leader in originating many avenues of research and establishing industrial ergonomics as a vital discipline for achieving improved worker safety, comfort, and productivity.

His contributions to the advancement of HF/E include developing new methods of training for manufacturing assembly; designing better manufacturing-assembly workstations; developing alternatives to conventional automotive controls; designing effective personal protective equipment for workers in hot, humid environments; investigating new physiological measures of work; describing dynamics of lifting; designing better hand tools; developing better mathematical models of human thermoregulation; developing an improved force platform as a research tool; and leading research of office lighting, thermal comfort, industrial inspection tasks, carpal tunnel syndrome, work with visual displays, quality circles, macroergonomics, and many other ergonomics topics. His hallmark was to address important industrial engineering and ergonomics problems with the discipline of a creative analytical scientist and to translate the findings of his research into innovative, practical solutions that improve work environments.

Konz was very active in the international ergonomics community as a visiting professor, researcher, lecturer, editor, and author. He served for many years as editor of the International Ergonomics Association newsletter, Ergonomics International. His textbook, Work Design: Industrial Ergonomics, perhaps the most widely read text on industrial ergonomics, has been published in several languages and is used by more than 50 universities throughout the world.

Internationally recognized for his broad knowledge of HF/E and his contributions in advancing the science, Konz may be remembered best for his devotion as a professor and mentor to hundreds of students. Graduate students whom he mentored learned the importance of research in informing human-system design decisions. They learned how to explore a research question, conduct a study to answer the question, and translate results of the study into meaningful solutions of value to decision makers. These students (now engineers, professors, ergonomists, managers, and consultants) are using the knowledge and skills developed under Konz’s guidance every day, and they continue to promote the advancement and expansion of HF/E.
If I may speak for all of his former students and colleagues, we will miss Steve Konz, and we will always remember the lessons he taught us and the devotion he gave to his family, which includes a world community of ergonomists.

Jerry R. Duncan
Retired Deere & Company engineer

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I very much enjoyed working with Steve through the years and on later editions of his book, *Work Design*. His goal, which he unquestionably achieved, was to offer an easy-to-understand book that can be effectively used by practicing engineers. He took no greater pride than in hearing from a reader of his book that he or she was able to use the information that Steve provided to make improvements in people’s lives. I appreciated the opportunity to contribute to Steve’s book and, like others, learned a lot from him. His teaching and writings exemplified his philosophy that the knowledge of facts is important, but the wisdom required to effectively use those facts is critical. He will be missed.

Steven L. Johnson
President, Ergonomic Analysis, Inc.
Retired Professor of Industrial Engineering, University of Arkansas

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**CALENDAR**

*Featured Events*


**2015 International Annual Meeting**, October 26–30, 2015, Los Angeles, CA.


**May 2015**

**18th International Symposium on Aviation Psychology**, May 4–7, 2015, Dayton, OH.

**2015 IFAC Symposium on Information Control in Manufacturing (INCOM 2015)**, May 11–13, 2015, Ottawa, Canada.
