SUMMER, 2010

Special Points of Interest:

- A message from Richard Pak, ATG Chair
- Call for officer nominations
- ATG Scholarship
- Using eye tracking with elderly participants

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MESSAGE FROM THE CHAIR

With only a few short weeks of summer left it is already time to look toward the next HFES Annual Meeting.

In this issue of the newsletter we have a preview of the ATG program thanks to our program chair Kari Babski-Reeves.

Our Business Meeting Lunch will be held at the traditional day and time of Wednesday at Noon of conference week (September 29th, 12 pm). If you have any agenda items you would like to discuss during the business meeting, please send me a note (<u>richpak@clemson.edu</u>). I will send out another reminder and draft agenda shortly before the conference. Hope to see you there! ⊙

CALL FOR ATG OFFICER NOMINATIONS

It is time to solicit nominations for the officers for the HFES Aging TG. The list of offices available is below along with a description of the duties of each position. Please send nominations (of others or for yourself) for each of the following offices to me (richpak@clemson.edu) by Friday, August 27, 2010. The ballot is still wide open!

The chair is a 2-year term (of which I'm halfway through). Usually the chair-elect is a one-year term but we elected Anne McLaughlin for that position last year so she will continue to be chair-elect into 2011 (Las Vegas meeting) until she assumes chair duties in 2012 (Boston meeting).

The current roster of officers is listed in the table at the top of page 6.

Please consider serving in any capac-

ity you wish but note that all nominees (except for newsletter editor and webmaster) must be full members of HFES. Per our discussion at the last business meeting, the length of service begins with the 2011 Annual Meeting and will expire at the 2012 Annual Meeting. You can also find information about the elections at the Aging TG web site at:

http://www.psychology.gatech.edu/atg. The actual commitment is quite minimal and your service to the society is essential.

The following positions up for nominations:

- Secretary/Treasurer
- Program Chair Elect (for Boston 2012)
- Newsletter Editor
- Web Master/Blogger

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ATG PRESENTATIONS AT HEES 2010

Tuesday, September 28, 2010, 15:30 - 17:00

Title: A Low-Cost Intervention to Prevent Falls in Active Older Women **Author**(s): Robert Hall¹, Paul Componation², Sandra Carpenter², Pamela O'Neal² Self Employed, ² University of Alabama Huntsville

Abstract: One-third of the entire elderly population falls one or more time annually. Falls are the greatest killer of those 75 years of age and older. Older adults are more susceptible to falling and are more susceptible to serious injury. More specifically, active older women are more likely to fall and are twice as likely to experience serious injury from a fall. Methods used to prepare individuals to avoid falls—from an economic point with no consideration for the emotional cost—are breakeven at best when comparing the cost of preventing a fall to the medical costs of a resultant fall. This paper reports on a 10-month intervention study of 121 women, 65 years of age and older, to determine if a low-cost repetitive intervention consisting of visualization and repetition could be used to decrease the occurrence of falls. In the study, the number of falls in the treatment group, exclusive of repeat fallers, was slightly less than the control group but not to a level of statistical significance. Nevertheless, secondary benefits were gained from the study. For example, many of the participants reported an elevated sense of awareness of their potential for falls and judged themselves as more alert to potential fall situations after the study. The women almost exclusively reported that their awareness to hazardous situations was heightened by the study. Some reported changing their approach to hazardous situations in order to decrease their exposure to harm. The full value of the method used in the study may not be realized for some time as the women in the study continue to modify their lifestyle to factor in the benefits from the materials of the study.

Title: Developing a New Driving Simulator Task to Assess Aging Driver's Functional Field of View **Author**(s): Richard Goodenough¹, Johnell Brooks¹, Matthew Crisler¹, William Logan²
¹ Clemson University, ² Palmetto Health

Abstract: A new driving simulator task was developed with the long-term goal of aiding medical professionals in assessing aging drivers. This simulated driving task is designed to evaluate the drivers' ability to respond to two types of visual stimuli. Drivers responded to the brake lights of a lead vehicle as well as targets presented at different lateral eccentricities along the horizon of the driving environment. While developing the task, two scenarios were used so target locations were chosen to examine the effect of A-pillar occlusion on target detection. This information will be used in selecting target locations to be used in future design iterations of the task. The target locations used in the third scenario were chosen to describe the effect of eccentricity on target reaction time when the participant is required to make head movements to locate and respond to targets. This particular task also reflected age-related differences in the capability to locate and respond to visual stimuli in the periphery of the driving environment. This effect is thought to be due to the decrements in psychomotor ability observed in older adults. This type of evaluation's utility in a clinical setting as well as future research is also discussed.

Title: Comparative Analyses of Functional Reaches of Older Mexican American Adults

Abstract: Older Mexican American adults have greater difficulty in performing activities of daily living compared to other older adult groups. Differences in functional upper extremity anthropometry measures may help explain higher incidences of ADL difficulties among older Mexican American adults. Hence, as a first step, the objectives of this study were to compare baseline limiting outer fingertip and grip reaches of older Mexican Americans with published and available functional anthropometry data from other older adult groups. Older Mexican American females and males, aged 60-85+, recruited from Senior Centers in the City of El Paso, participated in the study. Stature, vertical fingertip and grip reaches, and horizontal fingertip and grip reaches, among other dimensions, were measured. Summary statistics, percentiles, and correlations between dimensions were generated for elderly Mexican American females and males. For overall comparison of Mexican American older adult anthropometry with other older adult groups, data available in several other studies and reported in the Older Adult Data compendium was used. Overall comparisons of weighted means of available reach dimensions between older Mexican Americans and other older adult groups showed significant differences in most functional reach dimensions. Older Mexican American adults were found to have significantly different functional anthropometry than other groups.

Title: Older and Younger Drivers' Perceptions of Motor-Vehicle Features Concerning Safety **Author**(s): Soyun Kim, Michael Wogalter & Christopher Mayhorn, North Carolina State University

Abstract: Because there are age-related perceptual, motor, and cognitive declines and because people are living longer, there has been increased concern about older drivers' ability to operate motor vehicles safely. This research examined a sample of older and younger adults' perceptions regarding a set of motor vehicle features. Participants evaluated 28 motor vehicle features/aspects according to the extent to which they may help their safe driving. Results revealed that some features are judged as more important than others in affecting safe driving. Although both age groups predominately gave similar evaluations, some features/aspects differed between older and younger adults. Older adults believed that vehicle door openings should be easier to get in and out of, preferred analog displays and labels on the dash that were bigger and brighter, and had less strong beliefs that current vehicle controls and displays are easy to use than did younger adults. Implications and design recommendations are discussed including the presentation of a potential list of vehicle features that would be beneficial to older drivers.

Title: Examination of older females' grip characteristics

Author(s): Curt Irwin, Craig Kage, Kreg Gruben, Mary Sesto, University of Wisconsin-Madison

Abstract: Loss of grip strength due to aging has been widely reported by researchers but other factors may also be influential in age-related hand function declines. For instance, older adults have demonstrated a propensity to orient fingertip forces in a manner different from younger adults. Additionally, a slowing in the maximal rate of force development due to aging has been found in muscle groups ranging from the biceps to the quadriceps. These grip characteristics may independently, or concurrently, affect hand function. Using the Multi-axis (MAP) dynamometer, we evaluated the ability of younger and older adult female participants to rapidly generate a maximal voluntary grip exertion. The maximum grip force, rate of force development (N/sec) and grip force vector orientation were measured. Older participants had 69% the grip force, 62% the rate of force development, and had grip force vector orientations shifted 5.9 degrees as compared to younger participants. The ability to use one's hands is critical for completing activities of daily living and retaining independence. The differences in grip characteristics measured in this study may improve our understanding of the loss of function in older adults' hands more than the decline in grip strength alone.

ATG PRESENTATIONS AT HFES 2010

Thursday, September 30, 2010, 08:30 - 10:00

Title: Exploring age-related differences in prospective memory inside and outside of the lab

Author(s): Paul Kim & Christopher Mayhorn, North Carolina State University

Abstract: Age differences in the performance of two prospective memory tasks (activity-based and event-based) were investigated both in laboratory and naturalistic settings. Forty young and 40 older adults participated. First, the participants came to the lab and answered ninety trivia questions with embedded prospective memory tasks. Second, they were required to come to a local mall (naturalistic setting) a few days later to complete various prospective memory tasks. Results indicated that both age groups performed the event-based task followed by activity-based task better in the lab than in the naturalistic setting. The young performed the tasks better than their older counterparts in both contexts, though the effects failed to reach statistical significance. An interesting finding was that older participants performed the naturalistic event-based task better than the young participants. These findings suggest that converting activity-based tasks into event-based tasks may help people accomplish their daily prospective memory tasks more successfully.

Title: Feedback Requirements for Older Adult Learning: Do Cognitive Abilities Matter?

Author(s): Christopher Kelley & Anne McLaughlin, North Carolina State University

Abstract: A century's worth of research has failed to identify the amount of feedback necessary to learn a new task (cf. (Schmidt & Bjork, 1992; Van Merrienboer & Sweller, 2005). Some argue less feedback is beneficial in acquisition as it provides conditions similar to those needed for retention (Schmidt & Bjork, 1992); others advocate more feedback will reduce the cognitive load of the learner thus freeing up the resources needed for learning (McLaughlin, 2007; McLaughlin, Rogers, & Fisk, 2006; Sweller, 1988). To test the model feedback requirements are determined by the cognitive resources of the learner and the demands imposed by the task (McLaughlin et al., 2006), a simple cue-based learning exercise was created. Cognitive resources was controlled for by using participants with documented declines in cognitive resources, older adults (Horn & Cattell, 1967; Salthouse & Babcock, 1991). Results indicated feedback requirements for a cue that drew from fluid abilities differed from a cue that drew from crystallized intelligence suggesting feedback requirements may be based on individual ability levels. Theoretical and applied contributions are also discussed.

Title: Using an Automated System: Do Younger and Older Adults Differentially Depend?

Author(s): Sara McBride, Wendy Rogers & Arthur Fisk, Georgia Institute of Technology

Abstract: Various factors, including trust, system reliability, and error type have been found to affect how people interact with automated systems. Another important variable that is becoming increasingly important is the role of age in human-automation interaction. As automation continues to emerge in numerous domains, including the home, older adults will likely interact with these types of systems to a greater extent than ever before. Therefore, understanding if agerelated changes in cognition, such as diminished working memory capacity or processing speed, affect how older adults use automated systems is critical to ensure these systems are designed and implemented effectively. This study sought to examine the role of age in a simulated dual task environment using an automated aid. Younger adults outperformed older adults in the both tasks. When the automation was incorrect, younger adults exhibited less dependence than older adults. Further, when older adults verified the automation's suggestion, they took significantly more time doing so than younger adults. Additionally, older adults reported greater trust in the automation and higher workload compared to younger adults.

Title: Impact of Health Knowledge on Older Adults' Comprehension of Multimedia Health Information

Author(s): Laura D'Andrea¹, Jessie Chin¹, Daniel Morrow¹, Elizabeth Stine-Morrow¹, Katie Kopren¹, Matthew Shake², Thembi Conner-Garcia³, James Graumlich³, Michael Murray⁴

¹University of Illinois at Urbana-Champaign, ²St. Bonaventure University, ³University of Illinois College of Medicine, Peoria, ⁴University of North Carolina Eshelman School of Pharmacy

Abstract: We studied hypertensive older adults' processing of multimedia (text and picture) displays of hypertension-related information, and how their reading patterns related to hypertension knowledge and passage comprehension. Eye movements of 23 older adults were tracked as they studied 4 text-picture hypertension passages. Eye movements were analyzed during or after participants first read the passage. Compared to the less knowledgeable participants, more knowledgeable participants spent a greater proportion of time looking at the text than the pictures when first reading passage, but focused more on pictures than text afterwards. This pattern of fixation time was also associated with more accurate passage comprehension.

Title: The Roles of Working Memory Capacity, Visual Attention and Age in Driving Performance

Author(s): Ann Lambert, Jason Watson, Joel Cooper, David Strayer, University of Utah

Abstract: Older adult drivers' disproportionate involvement in traffic fatalities coupled with population projections for this age group present a need for public policy that regulates the safety of our roadways. Before such a policy can be developed, a highly predictive model of the cognitive factors responsible for successful driving performance is necessary. The present study investigated the relationship between age and cognitive control on simulated driving performance to develop a predictive model for individual driving ability. Visual attention and working memory capacity of young adult college students and community dwelling older adults were tested using Useful Field of View® and Operation Span which are thought to merge aspects of attention. These scores were correlated with participants' simulated driving performance. Preliminary results indicated that attentional measures are important predictors of driving performance. Results are discussed in terms of implications for public policy related to driving and aging.

Early Lessons from Eye-tracking Elderly Participants

By Gisela Susanne Bahr, PhD

In December 2009, Frank Webbe (Neuropsychology), William Allen (Computer Sciences) and I (Experimental Psychology-Cognition) decided to embark on a project that combines art appreciation, eye movements, Alzheimer's Disease (AD) and computer-based cognitive tools. We called the project IOnArt. Our motivation for IOnArt has been two-fold: First, we seek answers to the question how people with AD see and learn about fine art, and second, we plan to develop cognitive fitness training that combines art appreciation with a personal computing game. These are the long term objectives, but it early days and this report is about the lessons learnt from pilot testing.

As a member of the research committee of the East Central Florida Memory Disorder Clinic (ECFMDC), I have several benefits: One is the access to a sample of elderly participants; the other benefits take the various forms and shapes of my multi-disciplinary colleagues on the committee and the experienced staff at the clinic. When we proposed i, the team raised issues related to eye-tracking the elderly and in particular, individuals with cognitive impairment associated with the various stages of dementia. For example, how do you help a patient with severe dementia to remember the appointment, the experimental procedure, etc.? How do ensure that participants are not intimidated by the computer and the technology involved? How do you keep elderly participants comfortably seated at the computer? Other questions that were perhaps more directly related to eye-tracking included: How do you facilitate the participant's continued attention to the screen? Can the system handle glasses and cataracts (both common in our sample population)? Faced with the unknown, we preferred rolling up our sleeves to the prospect of endless hypothesizing and second guessing. Hence, we seized this perfect opportunity to learn more about the practical aspects of our intended research and conducted pilot testing at the ECFMDC. (Of course, we obtained approval of institutional reviews for the pilot.)

Equipment:

For context, here is a quick summary of our system: The Florida Tech Cognition Applied Research Lab (CARL) is equipped with FaceLab 5.0 and EyeWorks client software to conduct eye-tracking studies. Our systems are laptop based and easily portable. FaceLab uses infra-red, corneal reflection tracking and hence is a non-contact, optical system. The cameras that capture stereo-images of face and eyes are relatively small (mounted 5cm x 7cm x 20 cm wide) and unobtrusively located below the monitor

"...we preferred rolling up our sleeves to the prospect of endless hypothesizing and second guessing."

that is viewed by the participant. The sampling rate is 60 Hz and the typical gaze position accuracy has less than $.5^{\circ} - 1^{\circ}$ rotational error. The system was relocated for the study to the Memory Disorder Clinic.

Sample:

We limited our pilot sample to 4 participants. However, the recruiting process created an expected amount of interest and we had to refer volunteers to future sessions. Three participants with mild cognitive impairment arrived as planned (two males, age 80 and 73, one female, age 67) with their respective caregivers. One person did not show up.

Session overview:

The session was scheduled for 30 minutes. This time window included the following tasks: introductions, completion of the statement of consent, a brief survey, viewing of 20 art stimuli from impressionist and cubist painters, identifying 10 art stimuli by style, and debrief.

Physical set-up:

Prior to the session the experimenter met with the participant and the caregiver in the lobby of the memory clinic. The experimenter escorted the participant to the research area that usually serves as a interview and testing room whose door can be closed. The experimenter and participant both stayed in the research area during the session and the door remained closed.

Lessons learnt

The recruiting process, introducing new technology, sharing a room with a participant, creature comforts, presbyopia, cataracts and our participants all provided us with excellent learning opportunities:

Recruiting: Create materials that effectively communicate the purpose of the study. Remember to use elderly friendly fonts, font sizes and imagery. Be prepared to follow up with the participant and the caregiver repeatedly to facilitate attendance. Our recruiting results and show-ups were above expectations because we had the input and support of the clinic director Farah Sivolella, geriatrician Dr. Visa Srinivasan, and social worker Jennifer Paranhos, who planned and executed the sample recruiting. This reminded us as experimenters to stay close to our clinician and practitioner colleagues who have invaluable experience and prior knowledge of the

individuals who may participate in the study.

Introducing new technology: Volunteer participation in a study is a positive, perhaps enjoyable event. At the same time, the technology aspects of our study left the participants unsure and the caregivers curious about the technology. As the experimenter always plan for time to give a brief tour and overview of the system. Be social, be nice and be patient to diffuse mild anxiety when participants or caregivers experience "tech-shock".

Sharing a room: Collocating experimenters and participants is likely a problem for non-contact evetracking in general. The main reason is that noncontact tracking provides freedom of movement and some (perhaps most) people enjoy talking during an experiment. Communication often involves the allocation of visual attention: When we converse our eves tend to wonder to the person we are addressing. The regular set-up in CARL provides a separate room for the participant that is video monitored by the experimenter from a room across the hall, within ear shot. Our on-site and temporary set-up limited us to collocation. Hence during the pilot session, participants directed their attention the experimenter, mostly to discuss and interpret the art stimuli. A conversation was natural; silence would have been awkward and likely as confounding as insistence on silence during the session. If at all possible, we recommend creating physical separation between the participant and the experimenter. Take enough time and establish social rapport during the initial interaction and when briefing the study. During the session remove the opportunity for 'chitchat'.

Creature Comforts: Being seated at the computer elderly individual may be more likely to experience discomfort than their younger counterparts. Discomfort is a task distracter and affects motivation. Consider adjustable chairs and tables that can be fitted to the participant's ergonomic needs.

Dealing with Bifocals and Trifocals: Glasses and contact lenses are usually tolerated by the system we used. However, bi- and trifocals pose a challenge. The difference in refractions, within the same lens, confuses the optical analytics because the image of the eye is horizontally sliced into different refractory zones, unlike an image through a simple lens whose refraction is consistent. The presence of multiple refractions was the most critical issue we encountered. One solution is careful placement of the optical equipment at an angle that minimizes the capture of refractory zones. This may require additional calibration and time but eliminates low quality and low confidence of tracking. This is not an option with a system whose camera mount is in a fixed position.

Another, system independent, solution is to is to ask the participant whether they can see without their glasses. While this suggestion may seem tongue-in-cheek at first, depending on the stimulus viewed, uncorrected vision may be sufficient. Moreover, the distance between screen and seated participant can be adjusted until the participant is

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Did you know that the ATG has a scholarship to help students pay for research-related expenses?

The ATG's goal is to provide scholarships (up to \$500) to students to conduct their research (1-2 scholarships per year based on resources; open to MS or PhD level).

Requirements:

- 1) Students must be members of the aging technical group and agree to submit their research to the HFES conference within 2 years of receiving the award.
- 2) Students must submit a 1-2 page description of their project and request for funds.
- 3) The applicants must provide a letter of support from faculty stating:
 - a) how the funding from the aging technical group is critical to the research,
 - b) what the student's academic/scholarship record is, and
 - c) an endorsement of the student's research plan.
- 4) Students should also present a timeline for their research leading up to graduation.

Proposals are due August 15th and awards will be made by September 15th.

Submit your application to Kari Babski-Reeves, PhD at kari@ise.msstate.edu.

Early Lessons (continued)

(Continued from page 5)

comfortable. In our pilot, one participant actually preferred to look at the computer screen without glasses but did not remove the glasses until we suggested that glasses are optional.

Cataracts: The cloudiness of the pupil in individuals with cataracts is visible to the naked eye. The opaqueness is also present in the images captured by optical eye-tracking system. Likewise, the cloudiness reduces the visual contrast between the pupil outline and the iris. For eye-tracking systems that rely on corneal reflection tracking in reference to the pupil this can pose an unsolvable problem. Our system allows us to choose between the pupil or the iris reference, hence the presence of cataracts that we observed in one participant was a non-issue for eye-tracking.

Participants: Most of our experimental work involves college student populations. Our elderly participants distinguished themselves from our average subject in a number of ways. For instance, they seemed more relaxed and patient. They participated because they liked art! Most notably they were not in a hurry but enjoyed the experience, they laughed and they seemed to have fun. Our last lesson learnt was "be more like our elderly participants." ⊙

G. Susanne Bahr is Associate Professor of Experimental Psychology at the Florida Institute of Technology, Melbourne, Florida. She is the founder and director of CARL (Cognition Applied Research Laboratory) and the Executive Center Head of CIRCUA (Collaborative International Research Centre for Universal Access) based in Middlesex, London, UK.

For more info please see http://research.fit.edu/carl/ or contact Susanne at bahr@fit.edu.

"...they were not in a hurry but enjoyed the experience, they laughed and they seemed to have fun."



ATG Officer nominations (continued)

(Continued from page 1)

For reference, here is a list of officer positions and the responsibilities associated with those offices.

Chair (2-year term)

The TG chair has overall responsibility to ensure that the group meets its minimum requirements. The chair works with the HFES executive director in scheduling the TG's annual business meeting and arranging other events; with the newsletter editor regarding timing, content, distribution method, and cost of newsletters; and with other officers to ensure that TG activities are being carried out. The chair also represents the TG as a member of the Council of Technical Groups.

Chair-Elect (1-year term usually, but we elected a year early last time)

The chair-elect usually assists the current chair, though ultimate responsibility for the TG's operation lies with the current chair. The current chair-elect will move into the office of chair at the end of the chair's 2-year term.

Secretary-Treasurer (1-year term)

In some groups, these offices are separated: one person is secretary and another is treasurer. Although the secretary-treasurer may be responsible for the TG's finances, the Operating Rules stipulate that this is ultimately the chair's responsibility. Therefore, close coordination between these offices is essential. All financial records (checkbook, bank statements, etc.) for TGs are held in the HFES central office. Invoices should be sent to Lynn Strother at the central office for payment.

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Program Chair (1-year term)

The program chair is responsible for over-seeing the technical review of proposals submitted for the HFES Annual Meeting. See Appendix E in the "Handbook for Program Chairs" for detailed guidelines. The Aging TG program chair is also responsible for coordinating the Arnold Small Award for outstanding student paper.

Program Chair-Elect (1-year term)

The program chair-elect may assist the program chair with the technical review of papers for the annual meeting. The program chair-elect will move into the position of program chair for the subsequent term.

Newsletter Editor (1-year term)

The newsletter editor is responsible for producing at least two newsletters per year and distributing them to TG members. The newsletter is the vital link between a TG's officers and its members, and its quality and frequency are often associated with members' level of satisfaction with their TG affiliation.

Web Master (1-year term)

The web master is responsible for maintaining current information on the Aging TG website. •

Graduate Students Wanted at Ohio University

Human Factors and Ergonomics Laboratory Ohio University, Athens OH Director: Diana J. Schwerha, PhD

Nestled in the beautiful hills of southeastern Ohio is the campus of Ohio University (OU). OU was founded in 1804 and was the first university established in the Northwest Territory. Dr. Diana Schwerha began teaching in the Department of Industrial and Systems Engineering at the Russ College of Engineering and Technology at OU in 2006, and she currently runs a busy HFE laboratory. The department has an undergraduate program in ISE, graduate programs in ISE and Engineering Management, and participates in the doctoral program in Mechanical and Systems Engineering.

Dr. Schwerha's research is focused in two primary areas: 1) Successful Aging and Ergonomics, and 2) Use of technology to improve learning of technical concepts (both student and professional). Her current projects include:

- 1) The role of human factors in the retention of older workers (funded by the NIOSH Pilot Research Program)
- 2) The development of heuristics to evaluate website usability for older adults (funded by the NIOSH Pilot Research Program)
- 3) The role of distraction in the design of workspaces for older workers
- 4) The role of ergonomics in improving the quality of life and promoting cost savings in home health care and independent living for seniors
- 5) The use of virtual worlds (e.g. Second Life) in improving statistics education and promoting social networks/mentoring (funded through the Ohio Learning Network).

Dr. Schwerha is currently looking for students who have a passion for aging and ergonomics. Students may apply at the MS and/or PhD level, and do not necessarily need to have an ISE undergraduate degree. Funding is available.

Ohio University has a campus that captivates many students upon their first visit—maybe it (along with Dr. Schwerha's research interests) can interest you, too!

Email her at Schwerha@ohio.edu or check out the lab website at http://www.ohio.edu/industrial/ergonomics.

2009-2010 Aging Technical Group Officers

Offices shown in *italics* are open for nominations

Chair (expires after 2011 meeting)	Richard Pak	richpak@clemson.edu	
Chair-Elect (assumes duties after 2011 meeting)	Anne Collins McLaughlin	anne_mclaughlin@ncsu.edu	
Program Chair (San Francisco, 2010)	Kari Babski Reeves	kari@ise.msstate.edu	
Program Chair-elect (Las Vegas, 2011)	Richard Pak	richpak@clemson.edu	
Secretary/Treasurer	Kelly Caine	caine@indiana.edu	
Technical Webmaster	Cory-Ann Smarr	cory-ann.smarr@gatech.edu	
Newsletter Editor	Nicholas Cassavaugh	cassa1nd@cmich.edu	

ISAP 2011 CALL FOR PROPOSALS

You are invited to participate in the 16th International Symposium on Aviation Psychology, to be held in Dayton Ohio, May 2 – May 5, 2011. Proposals are sought for posters, papers, sessions, panels, and workshops. Any topic related to the field of aviation psychology is welcomed. Topics on human performance problems and opportunities within the aviation systems, and design solutions that best utilize human capabilities for creating safe and efficient aviation systems are all appropriate. Any basic or applied research domain that generalizes from or to the aviation domain would be welcomed also. The deadline for proposals is October 15, 2010. Instructions for submission can be found at www.wright.edu/isap.

Program Co-Chairs (isap2011@psych.wright.edu): Pamela Tsang and Michael Vidulich

COMING EVENTS AND CONFERENCES

54th Annual Meeting HFES (2010)

September 27 - October 1, 2010 San Francisco, CA

http://www.hfes.org/web/HFESMeetings/meetings.html

63rd Annual Scientific Meeting of the Gerontological Society of America

November 19-23, 2010 New Orleans, LA

http://www.geron.org/Annual Meeting (note space in URL)

18th Congress of the International Ergonomics Association (2012)

February 12-16, 2012 Recife, Brazil

http://www.iea2012.org

Visit the ATG web site for more information:

http://www.psychology.gatech.edu/atg/index.html