

# Aging Technical Group Newsletter

Fall 2018



## Inside this issue:

<i>Message from the Chair</i>	1
<i>ATG Officers</i>	2
<i>New Edited Book Named Aging, Health and Technology</i>	2
<i>The NHanCE Research Laboratory has Openings for PhD Students Starting Fall 2019</i>	2
<i>Aging Sessions at HFES Annual Meeting 2018</i>	3-4

## Message from the Chair

Dear ATG members,  
Greetings as the fall season takes us into the next HFES meeting in Philadelphia. I hope to see many of you at the conference and to learn from the research and other activities that you've been undertaking in the past year.

As you'll see in the newsletter highlights about Aging research being presented this year at the conference, we've seen quite a diversity of topics that are helping to spread the contributions into other TG's. Please make a note of these presentations (poster and lecture) as they might be a bit harder to catch given that they are labeled with other TG's. Thanks to our TG Program Chair, Anne Adams, for also convening the special panel on Aging and Emerging Technologies Thursday morning. Besides briefing us on these technologies, the panel will also describe special considerations for these technologies for older adults and propose implications for design, training, ethics and policies.

I hope you can join us for our TG Networking and Business Meeting held at its traditional date and time on Wednesday, October 3 at 12:30 for lunch. Besides enjoying a meal together, we'll also recognize new officers, share information about our financial status, and announce the student winner of our TG award. Please encourage interested colleagues to join us to learn about common objectives, help generate ideas for new activities, and develop professional relationships. They need not be TG members to come. The luncheon cost is \$45, but we are subsidizing student costs so that they will only have to pay \$20. If you have agenda items for the business meeting, please email me at [maobrien@franciscan.edu](mailto:maobrien@franciscan.edu).

Lastly, please note announcements about the new book edited by TG members Richard Pak and Anne McLaughlin as well as openings for new doctoral students in this newsletter. Thanks to our newsletter editor, Maurita Harris, for pulling all of this together.

I'm looking forward to seeing you next week! Safe travels and good luck finishing up your final preparations.

Marita



---

## ATG Officers

### Current Officers:

Chair: Marita O'Brien  
Program Chair Elect: Jenay Beer  
Secretary/Treasurer: Laura Barg-Walkow  
Program Chair: Anne Adams  
Newsletter Editor: Maurita Harris

### BYK CZWfg.Á

President elect (taking office after HFES 2019 in Seattle): Dr. Jing Feng, NC State  
Program chair for Seattle: [unreadable text]

---

## New Edited Book Named *Aging, Health and Technology*

Written by ATG members Dr. Richard Pak of Clemson and Dr. Anne McLaughlin of NC State, *Aging, Health and Technology* takes a problem-centered approach to examine how older adults use technology for health. It examines the many ways in which technology is being used by older adults, focusing on challenges, solutions and perspectives of the older user. Using aging-health technology as a lens, the book examines issues of technology adoption, basic human factors, cognitive aging, mental health, aging and usability, privacy, trust and automation. Each chapter takes a case study approach to summarize lessons learned from unique examples that can be applied to similar projects, while also providing general information about older adults and technology.

You can buy this book here:  
<https://www.amazon.com/Aging-Technology-Health-Richard-Pak/dp/0128112727>

---

## The NHanCE Research Laboratory at Purdue has Openings for PhD Students Beginning in Fall 2019

Dr. Brandon J. Pitts is an assistant professor in Industrial Engineering at Purdue University – West Lafayette, IN and a faculty associate with the Center on Aging and the Life Course (CALC). At Purdue, he directs the Next-Generation Human-systems and Cognitive Engineering (NHanCE) Laboratory. NHanCE has particular interests in aging populations and work to better understand the implications that perceptual and cognitive challenges have on the development of future human-machine interfaces. Through interface (re)design, the primary goals of the lab are to enhance (1) the performance of (older adult) operators in complex environments (e.g., automotive, aviation, healthcare, and manufacturing), as well as (2) interactions with everyday technologies.

- NHanCE has on-going research projects in the areas of:
1. Multimodal, adaptive, and speech recognition interface design
  2. Assisted- and autonomous driving systems
  3. Self-perception of driving abilities
  4. Technology trust and acceptance

Interested students should contact Dr. Pitts at [bjpitts@purdue.edu](mailto:bjpitts@purdue.edu) and/or should plan to meet with him at the 2018 HFES Annual Meeting in Philadelphia. The application deadline to begin the Industrial Engineering PhD program in Fall 2019 is December 15, 2018 (for funding considerations).

---

## Annual HFES Conference Preliminary Program Featuring ATG & Aging-Relevant Sessions

### Tuesday, October 2

1:30-3:00 p.m.

1. **"Informational Needs of Urinary Incontinent Patients on Online Peer Support Groups: A Pilot Study."** E. Scharett, S. Narasimha, K. Chalil Madathil, M. Wilson, N. Davis  
Franklin 7 (Level 4)

### Tuesday, October 2

5:00-7:00 p.m.

1. **"Modeling Personas for Older Adults with Heart Failure"** R. Holden, P. Joshi, K. Rao, A. Varrier, C. Daley, D. Bolchini, J. Blackburn, T. Toscos, S. Wagner, E. Martin, A. Miller, M. Mirro  
Salon E (Level 5)
2. **"User Insights for Design of an Antihypertensive Medication Management Application."** K. Blocker, K. Insel, J. Lee, Q. Nie, W. Rogers  
Salon E (Level 5)

### Wednesday, October 3

8:00-9:30 a.m.

1. **"Development and Usability of a Novel Holographic 3-Dimensional User Interface Using Hand-Gesture Control for a Future Vehicle Application by Older Adults."** B. Schwambach, J. Brooks, P. Venhovens, R. Knizek, L. Mims, C. Jenkins, S. McDonomy, Y. Yang, J. Karg, J. Weber, J. Schulte  
Salon C (Level 5)

### Wednesday, October 3

12:30-2:00 p.m.

1. **Aging Technical Group Networking/Business Meeting**  
Room 411 (Level 4)

### Wednesday, October 3

2:00-3:30 p.m.

1. **"Older Adult Preferences for Robot Care Providers."** R. Stuck, E. McDonald, W. Rogers  
Salon C (Level 5)
2. **"Understanding User Requirements for the Design of a Home-Based Stroke Rehabilitation System."** L. Cavuoto, H. Subryan, M. Stafford, Z. Yang, S. Bhattacharjya, W. Xu, J. Langan  
Salon C (Level 5)
3. **"Developing Video or Multimedia Instructions for Older Adults."** M. Pryor, A. McLaughlin  
Franklin 7 (Level 4)

## Annual HFES Conference Preliminary Program Featuring ATG & Aging-Relevant Sessions (Continued)

**Thursday, October 4**  
**10:45-12:15 a.m.**

1. **"Age-Related Considerations for Emerging Technologies."** Discussion Panel  
Chair: M. Rupp; Panelist: K. Steelman, J. Beer, K. Caine, A. McLaughlin, R. Pak  
Franklin 8 (Level 4)
2. **Naturalistic Decision Making by Older Adults with Chronic Heart Failure: An Exploratory Study Using the Critical Incident Technique."** C. Daley, D. Bolchini, A. Varrier, K. Rao, P. Joshi, J. Blackburn, T. Toscos, M. Mirro, S. Wagner, E. Martin, A. Miller, R. Holden  
Salon D (Level 5)

**Thursday, October 4**  
**2:00-3:30 p.m.**

1. **"Investigating Age-Related Differences in Spatial Presence in Virtual Reality."** S. McGlynn, R. Syndaresan, W. Rogers  
Franklin 10 (Level 4)
2. **"Effect of Driver Age and Distance Guide Format on Driver Attention Allocation and Performance."** M. Zahabi, P. Machado, M. Lau, Y. Deng, C. Pankok, J. Hummer, W. Rasdorf, D. Kaber  
Franklin 6 (Level 4)
3. **"Callibration in Older and Middle-Aged Drivers: Relationship Between Subjective and Objective Glance Performance at Complex Intersections."** T. Benn-Bassat, D. Shinar  
Franklin 6 (Level 4)
4. **"Texting While Walking Induces Gait Pattern Alterations in Healthy Older Adults."** M. Pau, M. Porta, G. Pilloni, F. Corona, M. Fastame, P. Hitchcott, M. Penna  
Franklin 6 (Level 4)

**Friday, October 5**  
**8:30-10:00 a.m.**

1. **"Comparative Workflow Analysis: Case Study of Antibiotic Prescribing in Nursing Homes"**  
M. Tong, C. Crnich, J. Ford, S. Bodnar, E. Ramly  
Salon D (Level 5)