

# HFES Health Care Technical Group

NEWSLETTER

November 2025

## IN THIS ISSUE:

Message from the Chair

HFES Health Care Technical Group (HCTG) Board

Highlights of ASPIRE Health Care Technical Group Meeting

ASPIRE Health Care Technical Group Awards

Health Care Technical Group Mentorship Program

Health Care Technical Group X Human Factors Transforming Healthcare Webinar

Practitioner's Corner

Academic's Corner

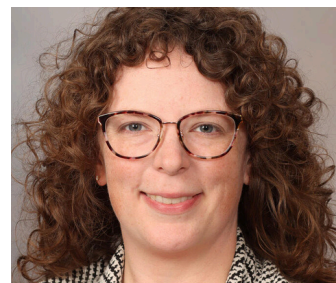
Student's Corner

Kid's Submission

The Fun Corner

## MESSAGE FROM THE CHAIR

Hi there everyone! This is my last message as the Health Care Technical Group Chair, and it is definitely bittersweet. I have really enjoyed serving all of you HCTG members and getting to know more of you. Thank you again for the opportunity! I would also like to thank all my colleagues in the leadership group for all their hard work – it made my time a pleasure!



Abigail R. Wooldridge, PhD  
arwool@illinois.edu

I am really proud of what we have done and have been working on for you! We will be holding our second joint webinar with the [Human Factors Transforming Healthcare Network](#) on November 21, 2025 at 12 pm central time, "Connecting Human Factors/Ergonomics Theory with Applications in Health Care: Physical Ergonomics and Exoskeletons in Surgery." The [Society of Surgical Ergonomics](#) is partnering with us as a co-sponsor and we will have a surgeon who uses exoskeletons as a guest! Register [here](#). We are also developing a mentoring program with details following in the newsletter. We hope you are as excited as we are!

We had a great time at the annual meeting of HFES (ASPIRE) in Chicago last month and enjoyed getting to see many of you at our business meeting. Here is a quick summary if you missed it.

- We welcome Dr. David Neyens as vice chair (chair-elect) of the technical group! He will take over in January 2025.
- We have 464 members in the TG and dues are only \$4. We have a healthy financial reserve currently.
- We had a great program and gave many awards – these are summarized in the rest of the newsletter!
- We also partnered with the product design technical group and user experience technical group to host our annual networking event. Thanks again to the sponsors.

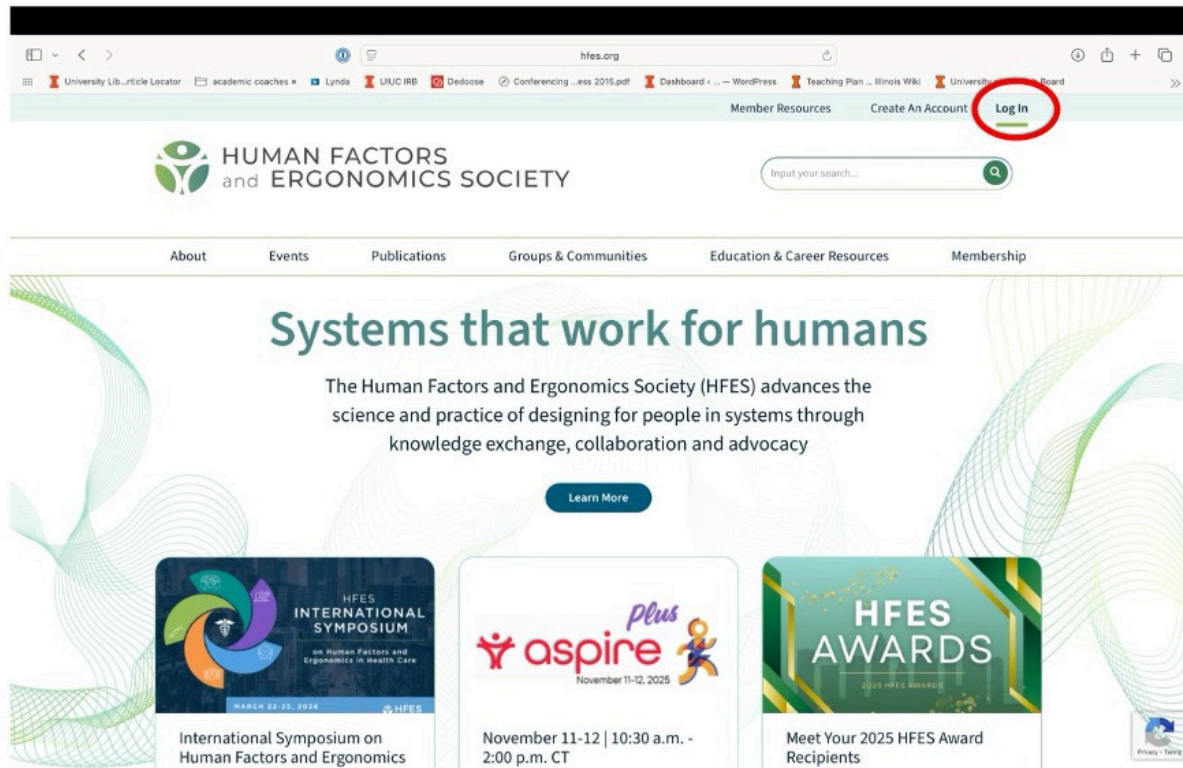
Please watch for and participate in TG elections for vice chair and vice program chair – nominations just closed, and I expect the newsletter will have voting links soon! As a reminder, we are now on the new election cycle where these positions are for 1 year (January – December); both individuals then stay on a second year as chair and program chair, respectively. HCTG will continue to run our own elections for the additional positions on our leadership team, so also watch for those announcements.

A last, extremely important note – this year, registration for the conference did not include the opportunity to join technical groups if you chose to renew your membership at the same time. I am not sure why, but this means that even if you renewed your HFES membership, you did not renew your TG memberships for next year! Here are instructions and screen shots of how to do this – **please renew for next year today!**

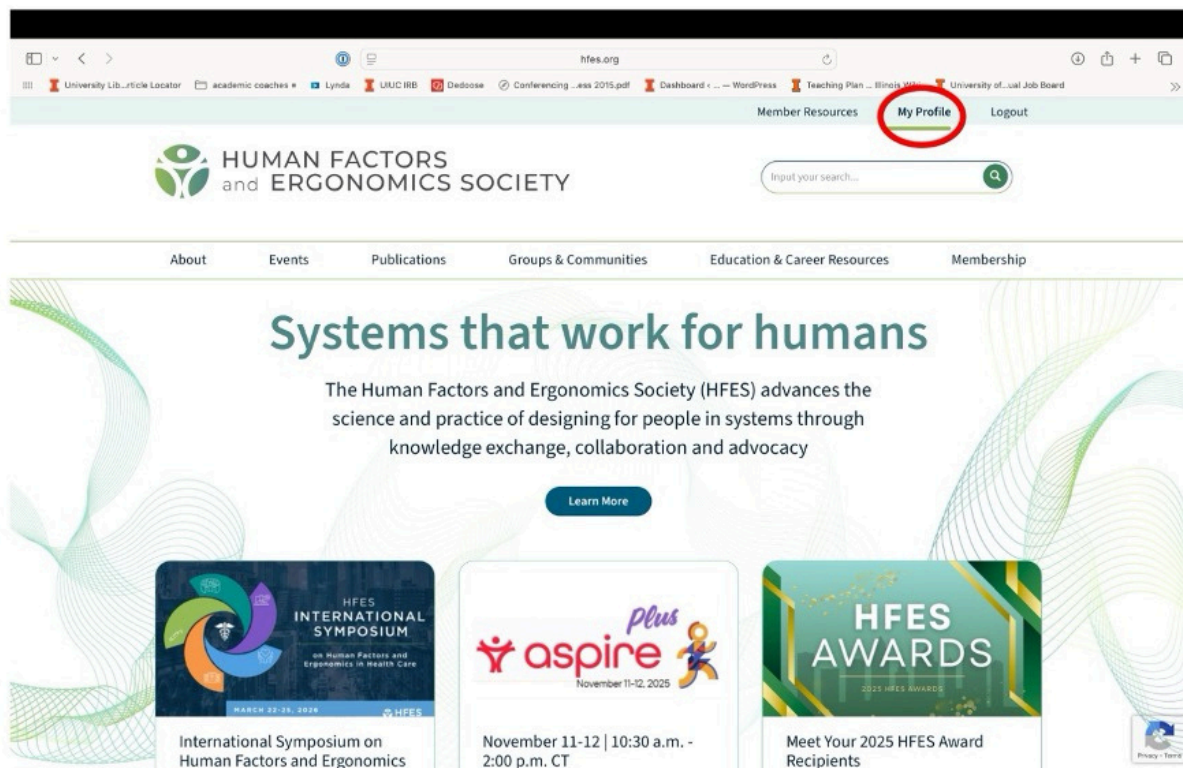
# RENEW YOUR HCTG MEMBERSHIP TODAY!

See instructions below!

Step 1: Go to [www.hfes.org](http://www.hfes.org) – click on “Log In” (top right corner of the window)



Step 2: After logging in, click on “My Profile” (top right part of the window)

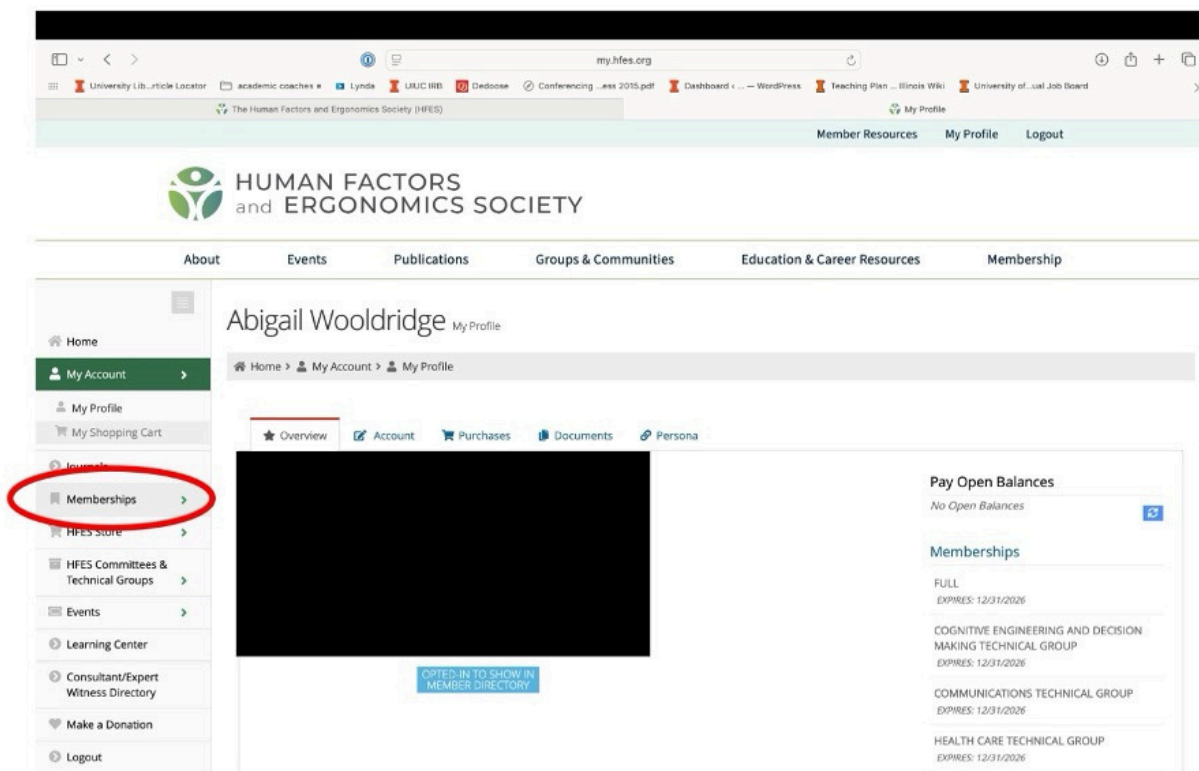




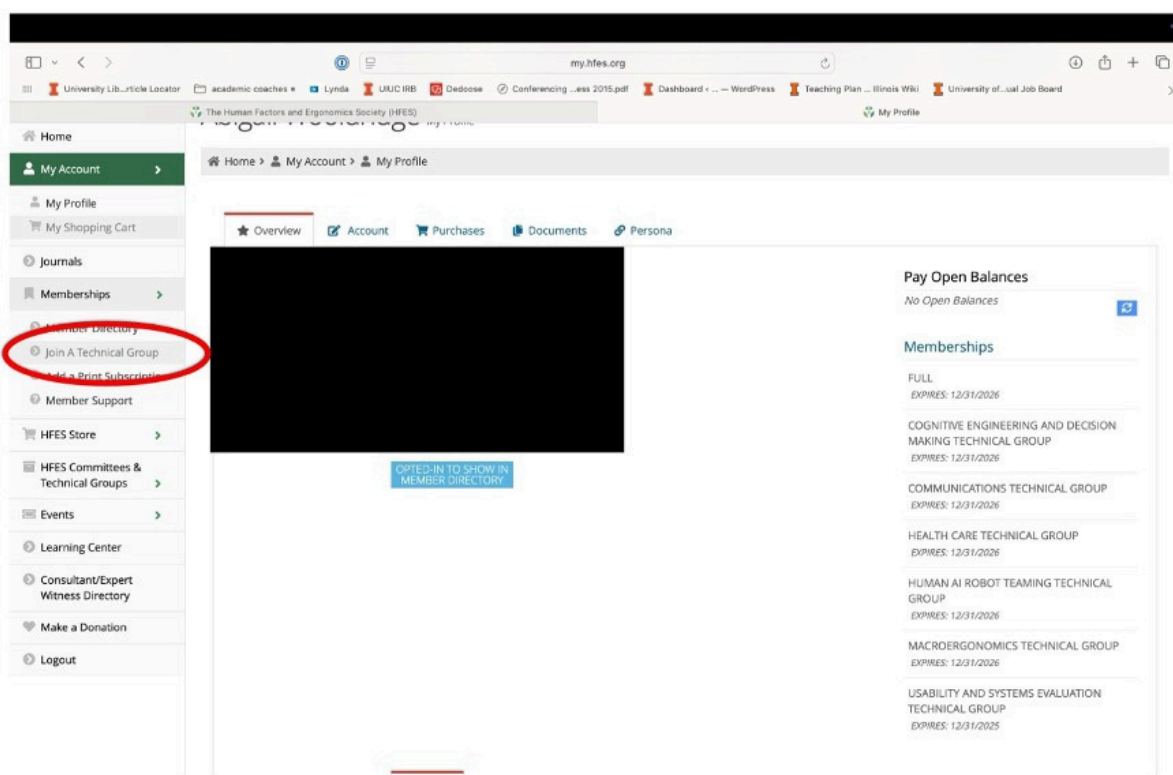
# RENEW YOUR HCTG MEMBERSHIP TODAY!

See instructions below!

Step 3: From your profile, expand the Membership drop down (left pane of window)



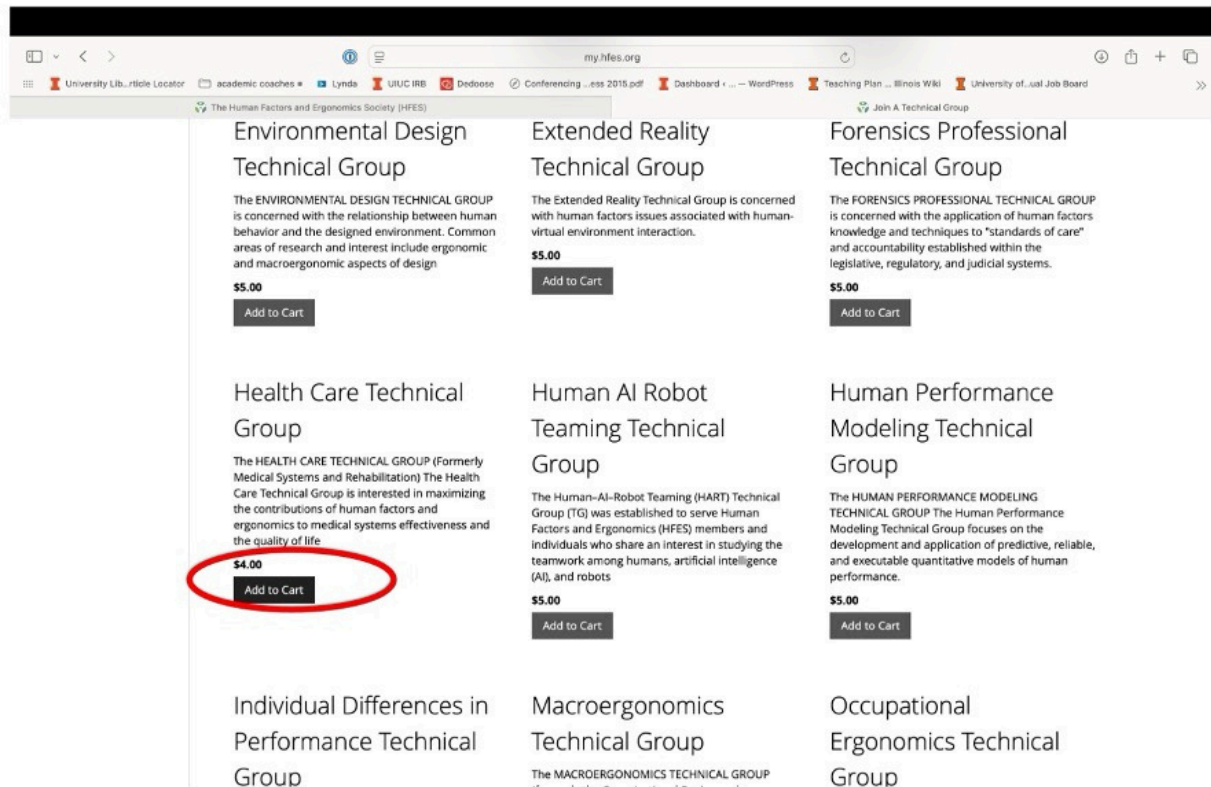
Step 4: Click “Join a Technical Group” (in expanded menu of left pane of the window)



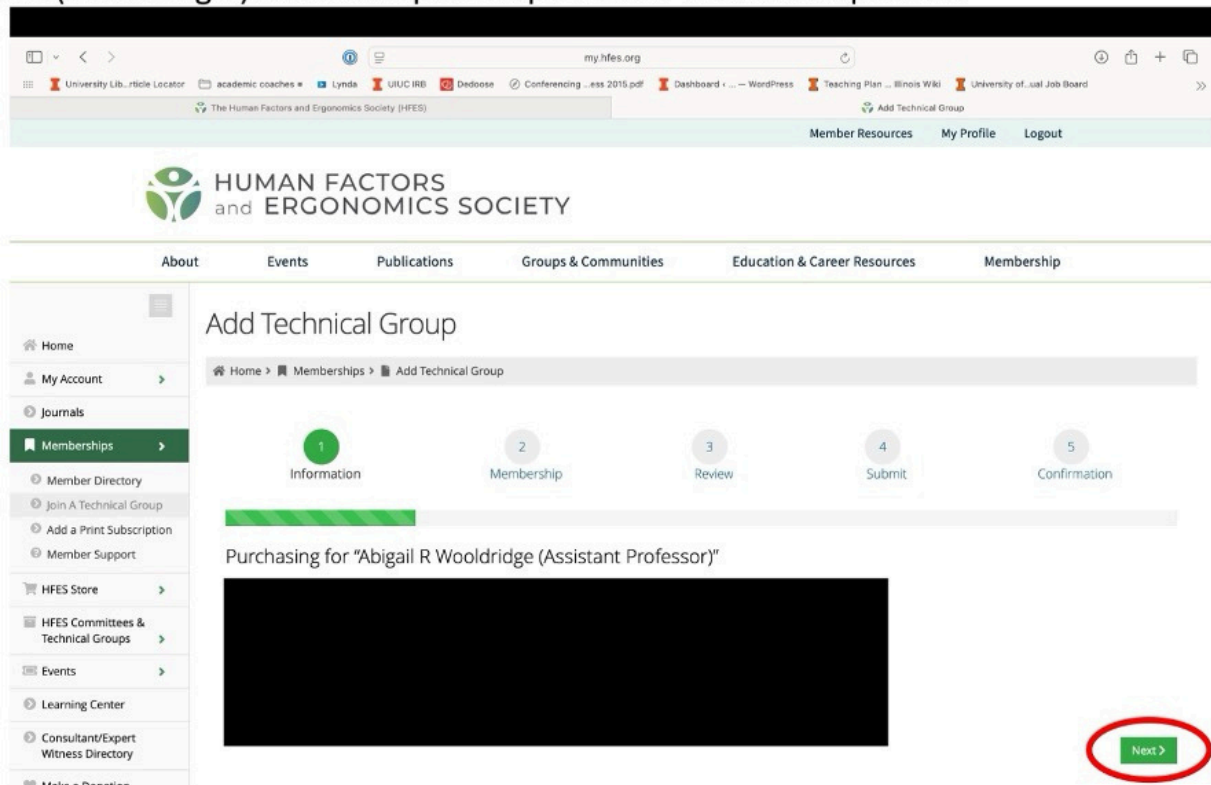
# RENEW YOUR HCTG MEMBERSHIP TODAY!

See instructions below!

## Step 5: Scroll down to HCTG and click “Add to Cart” button



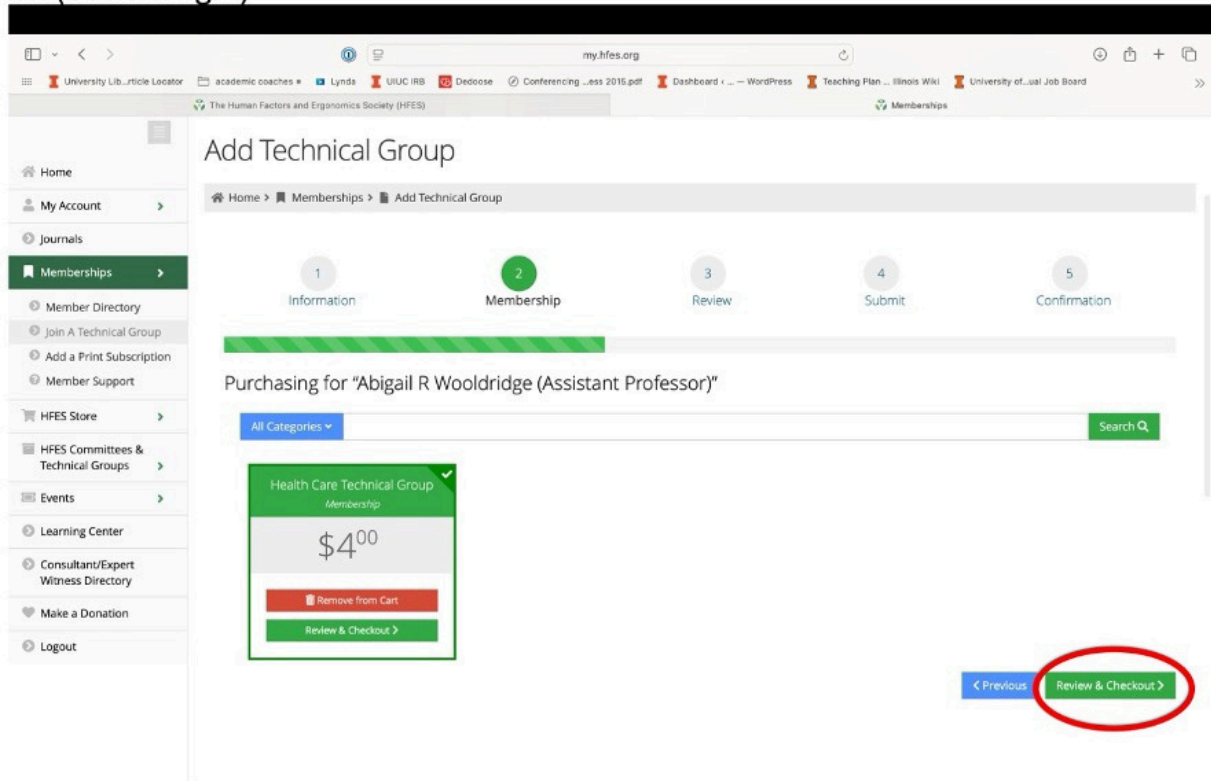
## Step 6: If only joining HCTG, select any affinity groups you want to join then click “Next” button (bottom right). You can repeat steps 4 and 5 to add multiple TGs!



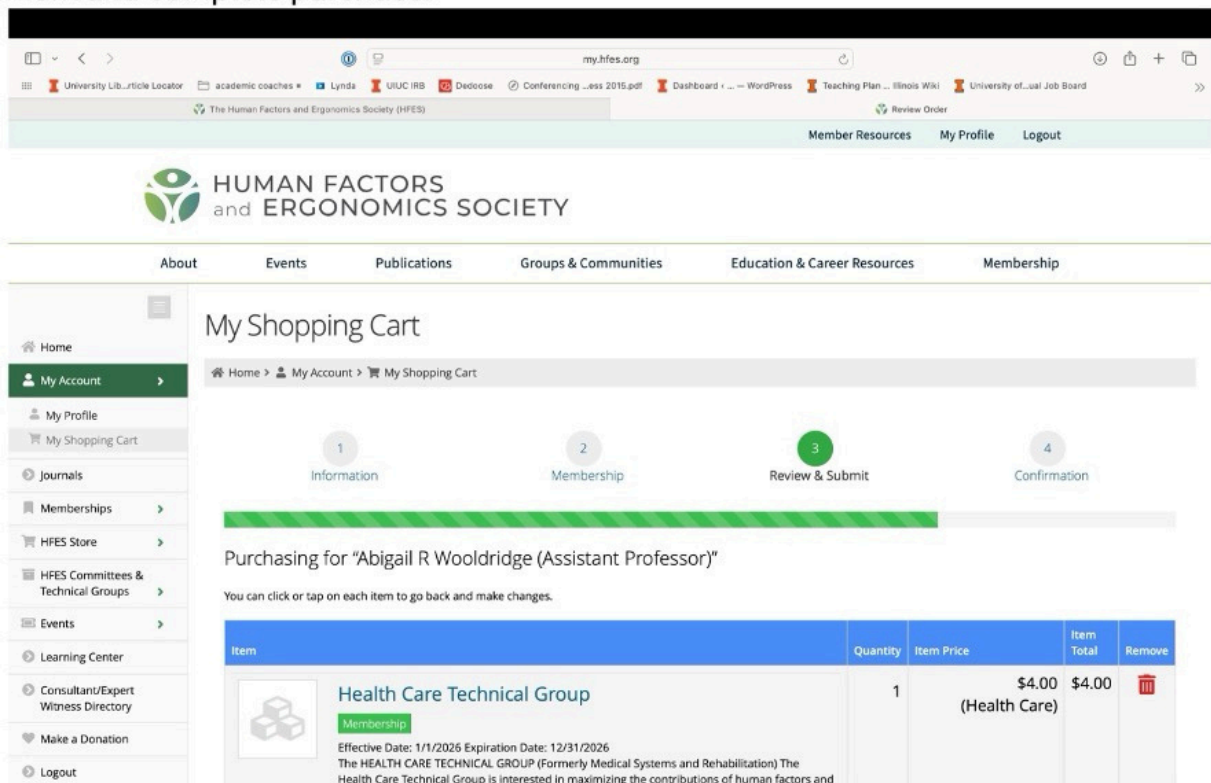
# RENEW YOUR HCTG MEMBERSHIP TODAY!

See instructions below!

Step 7: If you already renewed, next will take you here. Click “Review & Checkout” button (bottom right)



Step 8: Scroll down, reviewing, and click “Checkout” button (bottom right). Enter payment and complete purchase!

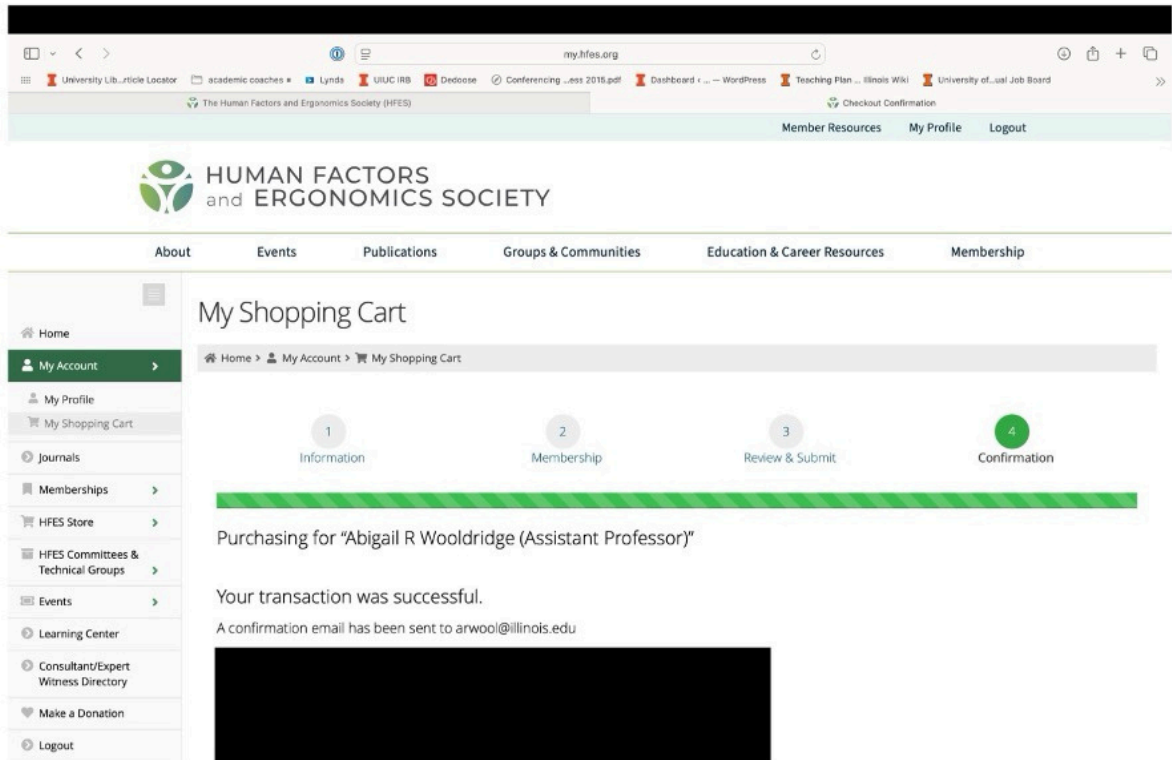




# RENEW YOUR HCTG MEMBERSHIP TODAY!

See instructions below!

Step 9: Your renewal is successful when you get to this screen!



If you have any questions, you can contact us at



<https://www.hctg.hfes.org>



<https://twitter.com/HFESHealthTG>



HFESHealthcareTG@gmail.com



<https://www.linkedin.com/groups/3753043/>

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# HEALTH CARE TECHNICAL GROUP BOARD

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Champaign

ARCHES Faculty Fellow  
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## Highlights of the ASPIRE Health Care Technical Group Meeting

The Health Care Technical Group received a grand total of 107 submissions this year. Each submission was reviewed by 2-4 reviewers. A total of 67 members reviewed (12% decrease from 2024).

We sincerely thank all of our reviewers for their support. We hope you will consider reviewing for us next year, we would greatly appreciate it!



### Submissions

We had a 24% increase submissions from ASPIRE 2024. We had a total of 107 submissions:

- 57 lectures
- 29 posters
- 9 panels
- 7 industry/practitioner case studies
- 4 alternative formats
- 1 demonstration



### Accepted

At ASPIRE we had a total of 92 accepted submissions:

- 23 lectures
- 56 posters
- 8 panels
- 4 industry/practitioner case studies
- 1 alternative format



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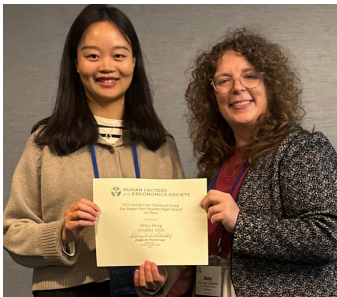
# ASPIRE Health Care Technical Group Awards



## 2025 Robert L. Wears Early Career Awardee Hanna Barton, PhD

Dr. Hanna Barton is Research Director of the Emergency Care Systems Laboratory and Scientist II in the Department of Emergency Medicine at UW-Madison. Hanna graduated from UW-Madison with a PhD in Industrial and Systems Engineering. The goal of their research program is to design and implement health information technology to support high-quality, equitable, and humane care across the life journey for all through advancements in human factors engineering approaches.

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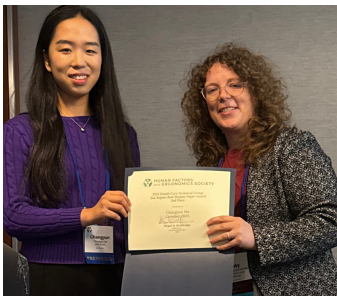


## 2025 HCTG Sue Bogner Student Paper Award Shiyu Deng - 1st Place Award

Co-authors: Jinwoo Oh; Nathan Lau; Sarah Parker

Paper: Changes in Visual Attention Allocation during Psychomotor Skill Training in Laparoscopic Surgery: A Longitudinal Eye Tracking Study

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## 2025 HCTG Sue Bogner Student Paper Award Changyun Ma - 2nd Place Award

Co-authors: Chloe Miller; Gabriel Gazetta; Paul Reddipogu; Kaori Tanaka; Sabrina Casucci; Matthew Hackett; Jack Norfleet; Rahul Rahul; Steven Schwaitsberg; Suvranu De; Lora Cavuoto

Paper: Physiological differences between emergency medicine residents and novices during cricothyrotomy: Evidence from brain, eye, and heart rate measurements

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## 2025 HCTG Sue Bogner Student Paper Award Zehaan Walji - 3rd Place Award

Co-authors: Reyansh Badhwar; Parshva Dave; Changwon Son; Junho Park; Shane Virani

Paper: Multi-Agent Systems (MAS) for Remote Healthcare with Enhanced Efficiency and Trust through Quantum-Model Methodology and Validation

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## Travel Scholarships

Scholarship amount was \$500 each:

- Samuel Koscelny
- Eleanore Scheer
- Connor Wurst
- Sakshi Taori
- Shiyu Deng
- Armina Mim





## Health Care Technical Group Mentorship Program



The HFES Health Care Technical Group (HCTG) is developing a mentorship program to match mentors and mentees within our technical group. The goal of the program is to establish mentor-mentee relationships among HFES HCTG members to (1) foster connections between members, (2) provide support to junior members (i.e., students and postdoctoral fellows), and (3) advance the contributions of the HCTG in the HFES Circle of Excellence. The first step in this process is to gauge interest from our members in participating in the program as a mentor or mentee.

We would like you to complete a survey to evaluate your interest in engaging in the mentorship program. Our goal is to understand the number of members interested in serving as a mentor or mentee, potential areas of interest for the program, and expectations for time commitment. This survey should take approximately 5-10 minutes to complete. By taking this survey, you are not agreeing to participate in the program as a mentor or mentee.

To complete the survey, click the link below or scan the QR code.

[HFES HCTG Mentorship Survey Link](https://umn.qualtrics.com/jfe/form/SV_0VDex4lnkTZxefA)



[https://umn.qualtrics.com/jfe/form/SV\\_0VDex4lnkTZxefA](https://umn.qualtrics.com/jfe/form/SV_0VDex4lnkTZxefA)

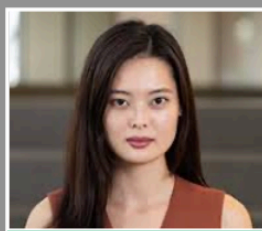
# WEBINAR



## FEATURING



**Susan Hallbeck,  
PhD**



**Jackie Cha, PhD**



**Philip Haigh, MD**

Moderated By: David Neyens, PhD and Brittany Anderson-Montoya, PhD

## Connecting Human Factors/ Ergonomics Theory with Applications in Healthcare: Physical Ergonomics and Exoskeletons in Surgery

**Friday, November 21<sup>st</sup>  
1:00 – 2:30 PM ET**



**Register here:**

**[https://smithbucklin.zoom.us/webinar/register/WN\\_nWNambxARYKAod8tEAV-JA-/registration](https://smithbucklin.zoom.us/webinar/register/WN_nWNambxARYKAod8tEAV-JA-/registration)**



PRESENTED BY THE HUMAN FACTORS TRANSFORMING HEALTHCARE, HFES HEALTH CARE TECHNICAL GROUP, AND SOCIETY OF SURGICAL ERGONOMICS





## PRACTICIONER'S CORNER

### Bridging Research and Operations: Building the Emergency Care Systems Lab



Hanna Barton, Ph.D.

Research Director of the  
Emergency Care Systems  
Lab

Human Factors and  
Health Systems Engineer

BerbeeWalsh Department  
of Emergency Medicine at  
the University of  
Wisconsin–Madison.

The Emergency Care Systems Lab (ECSL) at UW–Madison was created to address two persistent challenges in healthcare. First, operational teams generate remarkable insights through everyday problem-solving, but those innovations often stay local and undocumented. Second, research teams produce valuable methods and evidence that rarely make their way back to the front lines in clear, practical ways. ECSL was designed to bridge that divide by creating a structure where research and operations inform, strengthen, and accelerate each other.

Embedded within the Emergency Department, ECSL works closely with clinical and operational leaders as real system challenges unfold. We identify where human factors and systems thinking can support ongoing operational priorities, then partner with leaders to turn that work into rigorous, generalizable, and publishable knowledge. A core part of my role is helping teams recognize not only the challenges they are addressing, but the innovative solutions they have already created—and translating those insights into contributions that can benefit the broader healthcare community. For more complex issues, I link leaders with the diverse expertise within our Research Core so their improvement efforts are supported by the right methods, theories, and analytical tools.

This model also offers meaningful benefits to our Research Core. Direct access to real operational problems allows researchers to design studies, develop grant proposals, and train students in ways that are tightly aligned with the needs of the health system. Rather than generating research questions in isolation, our teams can anchor their work in concrete pain points surfaced by clinicians—whether it's understanding and predicting fatigue among first-responders, evaluating the impact of the built environment on staff workload and workflow, or supporting the rollout of AI-enabled tools. This alignment strengthens the relevance of our grant submissions, accelerates the translation of research into practice, and gives trainees an authentic view of how the emergency department works.

Ultimately, ECSL is becoming a shared engine for both operational improvement and scientific discovery. By creating a space where leaders, clinicians, and researchers work side-by-side, we ensure that emergency care systems evolve with intention—and that the insights generated along the way are visible, interpretable, and usable far beyond our own institution.

For updates and resources, visit: <https://linktr.ee/emergency.care.systems.lab>

#### Be Heard in our Newsletter!

Do you or someone you know have a story to tell, news, or insights to share? We want to hear from you! Click [here](#) or scan the QR code to join our newsletter community. Let's shine a spotlight on your ideas!





# ACADEMIC'S CORNER

## Improving Care Coordination for Complex and Underserved Patient Populations through Human Factors and Health Informatics

### **1. How does your background in human factors and modeling inform your approach to improving care coordination for patients with complex and chronic conditions?**

Like many professionals in the field, I have built my skillset in human factors and have chosen clinical applications that are of interest to me and well-suited for applying that skillset. In my case, this means applying the science of teamwork in complex sociotechnical systems. Patients high with comorbidities often have multiple appointments with primary care and specialists that require management in order to prevent hospitalizations. More recently, I've been applying this science to the world of cancer screening.

### **2. What are some of the most common challenges in coordinating care for underrepresented minority patients, and how can sociotechnical systems approaches address them?**

Unfortunately, outpatient health services are often recognized as teams in name only. The ability to partner closely with underserved patient populations can be greatly hindered.

### **3. How do dashboards, customized alerts, and other informatics tools improve decision-making and patient safety at the point of care?**

In my experience, they don't! Not on their own anyway. This is where us as HF professionals need to dig deeper and ask the hard questions so that the tools, including clinical decision support systems (like alerts), that are introduced into the clinical care environments are actually giving end users a resource they need to do their work rather than "just another thing to do"! I say this passionately and frequently! Unfortunately, well-intended developers often sit in a vacuum, where they create a tool for a singular use or purpose. They often aren't thinking about the complex realities in which clinical work is performed, the interdependencies, and the co-occurrence of their "helpful" tool with all of the other mental and time demands of frontline providers. When we develop for work as imagined, rather than work as performed, we are setting the system up to reap unintended consequences of health information technologies rather than the potential benefits.

### **4. Can you share an example of a successful intervention or study where human factors methods helped optimize care coordination in an outpatient setting?**

Intervention success is complicated! But, this is an excellent question. In the outpatient realm, I've found that the more burden we can remove from the primary care provider, the more successful an intervention will be. For instance, we've streamlined referral processes for preventative care interventions in the record to help share patient information securely and efficiently with outside entities. This enabled us to, with the patient's recorded permission, send their information to a smoking cessation service covered by their insurance. While this intervention may not seem novel, the introduction of an electronic referral bypasses the need for provider having to fax patient information and/or patient having to remember to contact the outside entity manually. We've seen an uptick in smoking cessation at the partnering health system as a result.

### **5. What emerging trends or technologies in health informatics do you see having the greatest impact on improving care quality and equity for diverse patient populations.**

Artificial intelligence. Without a doubt. AI is on the rise and its implementation in healthcare is increasing exponentially. Unfortunately, the adoption of AI- like with any new tool or product, will introduce benefits and unintended consequences. It's an emerging area of work for both human trust in automated systems (for when the AI takes over a specific task such that it acts as a highly automated system) and human-AI teaming (for when the AI can share ideas, provide input, and boost the team's overall cognitive abilities). However, as we pilot and finesse the implementation of AI- particularly generative AI- in settings that serve underserved patient populations, this will enable providers to provide better and more patient-centered care, allowing ambient listening AI technologies to take care of charting while they focus on the patient interactions.



Ashley Hughes, PhD

Associate Professor in the  
Department of Medicine

Research Informaticist in  
the Center for Clinical  
Informatics Research and  
Education within the  
Population Health  
Research Institute

MetroHealth at Case  
Western Reserve  
University's School of  
Medicine

#### **Be Heard in our Newsletter!**

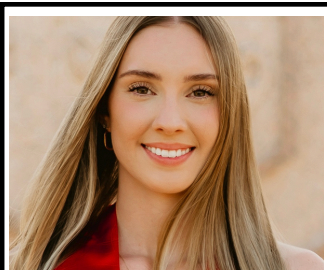
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# STUDENT'S CORNER

## Tips for New Members: How to Get the Most Out of Our HFES Student Chapter



Abigail Loddeke

PhD Student  
Human Factors  
Psychology

Department of  
Psychological Sciences

Texas Tech University



Mesoma Iloanusi

PhD Student  
Human Factors  
Psychology

Department of  
Psychological Sciences

Texas Tech University

Being part of the HFES StudentChapter is a great way to connect with others who share your interests in human factors and ergonomics. You'll meet students and faculty working on a wide range of projects, learn about their research, and discover opportunities for collaboration and mentorship. These connections can help you develop your own interests, gain valuable insights, and build relationships that support your academic and professional growth.

New members should make the most of the events and activities the chapter offers. Attending the annual HFES conference is one of the best ways to get involved, it's a chance to learn about new research, attend workshops, and network with professionals across the field.

On campus, try to participate in guest speaker sessions,

monthly socials, and volunteer activities. These experiences not only strengthen your knowledge of human factors but also help you become an active part of the community.

To contribute meaningfully, show up and engage. Attend chapter meetings regularly, ask questions, and introduce yourself to others. Volunteering to help with events or joining a committee is another great way to build experience and connect with members outside of regular meetings. The more involved you are, the easier it becomes to form real connections and feel part of the group.

A common misconception is that HFES is just another organization where everyone works on their own. In reality, it's a collaborative community focused on shared learning and growth. Members exchange ideas, support one another, and often work together on research or outreach efforts. Once you experience this collaboration, you'll see how much you can gain by being active and engaged.

One thing I wish I had known when I first joined is how many opportunities HFES provides beyond the student chapter. There are technical groups that focus on specific research areas, regional events, and volunteer positions within the larger organization. Getting involved in these early can help you explore different career paths, expand your network, and find where you fit best within the field.

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# KID'S SUBMISSION

Calling all young artists!

Does your child or any young family member ever ask questions like "Why do doctors wear masks?" or "Why is there a blinking light at crosswalks?" If you find yourself smiling at their endless curiosity, here's a fun way to channel it!

We are inviting kids to submit a drawing inspired by their "why" questions about safety, human factors, or healthcare! Whether it is wondering why the hospital always feels so cold or why we need fire drills at school, we want to see their creativity shine!

Submit their work to for a chance to win a surprise prize!



## Instructions for submission:

- 1 Submission: Anyone aged 0-17 can submit their original artwork. Whether it's a colorful masterpiece or a simple doodle, we want to see your unique interpretation!
- 2 Selection: All submissions will be featured in our next newsletter for everyone to admire.
- 3 Voting: After the newsletter is published, a poll will be available for readers to vote on their favorite drawings.
- 4 Prizes: Winners will be selected based on votes and will receive a surprise prize!

To participate, simply click [here](#) or scan the QR code.





# THE FUN CORNER

Let's get inspired!



"We don't redesign humans. We redesign the system within which humans work."

-Terry Fairbanks  
Senior Vice President and  
Chief Quality & Safety Officer,  
MedStar Health  
Executive Director, MedStar  
Institute for Quality & Safety

Let's laugh together!



Why did the hospital staff love checklists?

Because even heroes need a little help remembering things!

Want to submit a joke or a quote?



Do you have a joke that never fails to make people laugh or an inspirational quote that brightens someone's day? Share your wit and wisdom with us! Submit your favorite joke or uplifting quote, and we'll feature the best ones in our upcoming newsletter. Let's spread laughter and positivity together!

To participate, simply click [here](#) or scan the QR code.



## WE WANT TO HEAR FROM YOU!



We value your input and expertise, and we invite you to contribute to our upcoming newsletter! Your feedback, insights, and contributions help us create content for our community. Here's how you can get involved:

- 1** *Feedback on Newsletter:* Have thoughts or suggestions about our newsletter? Share your feedback on the current content or suggest topics you would like to see covered in future editions.
- 2** *Content Submissions:* Do you have an article, story, or announcement you would like to share with our audience? We welcome your contributions, project update, event announcement, or success story for publication in our newsletter.
- 3** *Job or Grant Opportunities:* Are you aware of any job openings in your organization? Or know of any grants or funding opportunities that could benefit our community? Share the details with us so we can include them in our newsletter. Let's support each other in finding meaningful opportunities.

To participate, simply click [here](#) or scan the QR code.

