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WELCOME!

Welcome to the virtual version of the 2020 HFES International Symposium on Human Factors and Ergonomics in Health Care. The COVID-19 pandemic interrupted our planned Toronto symposium, as it did our entire lives. We are extremely proud of the many courageous HF/E professionals and healthcare providers who, in one way or another, responded to this crisis and helped out communities around the world. And, indeed this symposium features several late-breaking COVID-19 related sessions.

Spanning four days, this virtual symposium offers a comprehensive program of human factors/ergonomics (HF/E) issues, best practices, lessons learned and unique perspectives related to health care practice, technology, and patient safety. Our content is divided among four main tracks:

- Digital Health
- Hospital Environments
- Medical and Drug Delivery Devices
- Patient Safety Research and Initiatives

The symposium is designed to enable HF/E professionals to disseminate their science, principles, and best practices to the broader health care communities, and to enable these communities, in turn, to provide the HF/E community with the proper context, requirements, and perspectives to better focus future HF/E efforts.

The symposium will kick off with our Opening Plenary Session, on May 19 at 11 EST, “COVID-19: Human Factors on the Frontline” featuring several HF/E professionals working in actual healthcare settings, providing real-time support, guidance and conducting research.

In our Closing Plenary Session, “Help, Now I’m The User! Reflections on Human Factors in Healthcare”, on May 20 at 11 EST, Dr. Joe Cafazzo interviews Dr. Don Norman, one of the greatest critical thinkers in the world of human factors, to reflect on his own health care experiences as well as the need for better integration of human factors methods, principles and perspectives into our future health care system.

We want to thank our symposium track chairs and their committee members for creating a diverse, unique and quality program. Special thanks also to our sponsors, exhibitors, advertisers, student volunteers, session chairs, society leadership, society management and all the other individuals who helped to produce this symposium.

We realize that any virtual event cannot replace the networking and social interactions that are central to an in-person symposium. But we hope that the content being provided across the four days of the symposium will provide you with incredible insight into the cutting-edge human factors and ergonomics work being done in health care systems, academia and private industry around the world!

Enjoy!



Joseph R. Keebler
Embry-Riddle
Aeronautical University
Symposium Chair



Anthony D. Andre
Interface Analysis Associates &
San Jose State University
Symposium Co-Chair

PROGRAM COMMITTEE

The 2020 International Symposium on Human Factors and Ergonomics in Health Care Program Committee consists of experts in a wide variety of domains and organizations.

Symposium Chair – Joseph R. Keebler,
Embry-Riddle Aeronautical University

Symposium Co-Chair – Anthony D. Andre,
Interface Analysis Associates & San Jose State University

Hospital Environments Track

Anjum Chagpar, *Healthcare Human Factors*
Adjhabporn “Nana” Khumlertkit, *Bumrungrad International Hospital*
A. Joy Rivera, *Children’s Hospital of Wisconsin*

Patient Safety Research and Initiatives Track

Katherine Law, *Mayo Clinic*
Isaac Lynch, *UT Southwestern Medical Center*

Digital Health Care Track

Anthony Faiola, *University of Illinois at Chicago*
Plinio Morita, *University of Waterloo*

Medical and Drug-Delivery Devices Track

Korey Johnson, *Bold Insight Inc.*
Christina Mendat, *Human Factors MD*

“Mobile Health Applications for Consumers” Student Design Competition

Michael Rayo, *The Ohio State University*

Student Volunteers

Suzan Ayas, *University of Toronto*
Nadia Amin Somani, *University of Waterloo*
Firdous Hadj-Moussa, *Holland Bloorview Kids Rehabilitation Hospital, University of Toronto*
Dingyu Hu, *San Jose State University*

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SCHEDULE-AT-A-GLANCE

MONDAY, MAY 18

11:00 a.m. – 1:00 p.m. EST

Workshop I: Human Factors Validation of Combination Drug Products (FDA CDER)

1:30 p.m. – 3:30 p.m. EST

Workshop II: Improving the Safety & Effectiveness of Medical Devices Through Human Factors Considerations (FDA CDRH)

4:00 p.m. – 6:00 p.m. EST

Workshop III: Rolling Up Your Sleeves: Human Factors Virtually Hands-On

4:00 p.m. – 6:00 p.m. EST

Workshop IV: Instruction Disruption – Blending Design with HF to Create Highly Effective Information for Use

6:15 p.m. – 8:15 p.m. EST

Workshop V: Unlocking the Secrets of Human Factors at FDA

Note: Workshops 3 and 4 are concurrent.

TUESDAY, MAY 19

10:45 a.m. – 11:00 p.m. EST

Welcome and Opening Remarks
Joe Keebler and Anthony Andre

11:00 a.m. – 12:00 p.m. EST

**Opening Plenary Session:
COVID-19: Human Factors on the Frontline**
Sarah Fouquet, SQ Yin & Shawna Perry

12:15 p.m. – 1:45 p.m. EST

Parallel Sessions (4 tracks)

2:00 p.m. – 3:30 p.m. EST

Parallel Sessions (4 tracks)

3:45 p.m. – 5:15 p.m. EST

Parallel Sessions (4 tracks)

5:30 p.m. – 7:00 p.m. EST

Parallel Sessions (4 tracks)

WEDNESDAY, MAY 20

11:00 a.m. – 12:00 p.m. EST

**Closing Plenary Session:
Help, Now I'm The User!**

A conversation Between Joe Cafazzo and Don Norman

12:15 p.m. – 1:45 p.m. EST

Parallel Sessions (4 tracks)

2:00 p.m. – 3:30 p.m. EST

Parallel Sessions (4 tracks)

3:45 p.m. – 5:15 p.m. EST

Parallel Sessions (4 tracks)

5:30 p.m. – 7:00 p.m. EST

Parallel Sessions (4 tracks)

THURSDAY, MAY 21

11:00 a.m. – 6:10 p.m. EST

**Poster Presentations:
Track 1**

11:00 a.m. – 6:10 p.m. EST

**Poster Presentations:
Track 2**

PROGRAM




WORKSHOPS

MONDAY, MAY 18



TIME (EST)	SESSION DETAILS
11:00 a.m. - 1:00 p.m.	<p>WORKSHOP I: Human Factors Validation of Combination Drug Products (FDA CDER) Irene Chan, Division of Medication Error Prevention and Analysis (CDER) FDA; Mishaly Mistry: Division of Medication Error Prevention and Analysis (CDER) FDA</p> <p>This workshop provides a forum for an interactive dialog between the FDA/CDER human factors team and sponsors, consultants and other interested persons regarding human factors (HF) validation of combination drug products. Participants will have opportunities to ask questions to the presenters.</p>
1:00 p.m. - 1:30 p.m.	Sponsor/Exhibitor/Advertiser Presentations
1:30 p.m. - 3:30 p.m.	<p>WORKSHOP II: Improving the Safety & Effectiveness of Medical Devices Through Human Factors Considerations (FDA CDRH) Rita Lin, Human Factors Pre-Market Evaluation Team (CDRH) FDA; Kimberly Konston: Human Factors Pre-Market Evaluation Team (CDRH) FDA</p> <p>This workshop provides a forum for an interactive dialog between FDA/CDHR human factors team and sponsors, consultants and other interested persons regarding human factors (HF) validation of a variety of medical device and systems. Participants will have opportunities to ask questions to the presenters.</p>
3:30 p.m. - 4:00 p.m.	Sponsor/Exhibitor/Advertiser Presentations
4:00 p.m. - 6:00 p.m.	<p>WORKSHOP III: Rolling up Your Sleeves: Human Factors Virtually Hands On (This workshop is concurrent with Workshop IV) Susan McDonald, Ximedica; David Powers, Ximedica</p> <p>This workshop aims to facilitate an initial understanding of how the Human Factors process is applied to device design and development in the medical device space. Based on a blood pressure monitor, we created user profiles, context of use descriptions, a task analysis, and a portion of a UFMEA for this product. These elements come together in a structured workshop that starts with an introduction to the core elements of the Human Factors process. This workshop will cover conducting a task analysis, identification of potential use errors, and creating the UFMEA, including the hazards and harms. This sets the foundation for the areas that a Human Factors Validation study would need to focus on, allowing participants to experience the process and connect the dots from early research to use-error-focused usability studies.</p> <p>WORKSHOP IV: Instruction Disruption – Blending Design with HF to Create Highly Effective Information for Use (This Workshop is Concurrent with Workshop III) Dani Banner, Design Science; Michelle Kannegiser, Design Science; Lindsay Carrabine, Design Science</p> <p>The goal of this workshop is to establish and discuss the intersection of design and human factors principles for the development of information for use. Most attendees of the HFES Healthcare Symposium have a solid foundation in human factors and the regulatory requirements involved in the design of a medical device. This workshop aims to build on that foundation by providing an actionable structure for how to develop Information for Use to support the physical design of a medical device or combination product and, ultimately, create the best user experience.</p>
6:00 p.m. - 6:15 p.m.	Sponsor/Exhibitor/Advertiser Presentations
6:15 p.m. - 8:15 p.m.	<p>WORKSHOP V: Unlocking the Secrets of Human Factors at FDA Ronald Kaye, Human Factors Focus, LLC</p> <p>The workshop will include specific discussion of methods for use-related risk identification, assessment and control risks inherent to the use of medical devices, testing using simulated use methods, residual use-related risk and reporting. The workshop is intended to be interactive; attendees will be encouraged to participate and to bring questions or examples of difficulties for discussion. During the instructional portion, two example medical device UI's (one actual UI and one "hypothetical") will be used to assist in the understanding key concepts. The presentation materials will cover following subjects and include discussion of the relative value of materials submitted to FDA pre-market review, communication to and feedback from FDA for pre-submission and submission HF materials. Observed pitfalls in planning, shortcomings in reported materials, and misinterpretations of FDA feedback familiar to the presenter will be injected throughout the topic areas. The topics will be discussed and completed in time for Q/A from the instructor and moderated class discussion.</p>

Welcome and Plenary Sessions

TUESDAY, MAY 19

TIME (EST)	SESSION DETAILS
10:45 a.m. - 11:00 a.m.	<p>WELCOME AND OPENING REMARKS Joe Keebler, Embry-Riddle Aeronautical University; Anthony Andre, Interface Analysis Associates</p>
11:00 a.m. - 12:00 p.m.	<p>OPENING PLENARY SESSION: COVID-19: Human Factors on the Frontline Sarah Fouquet, Children's Mercy Hospital Kansas City; SQ Yin, KK Women's and Children's Hospital; Shawna Perry, University of Florida College of Medicine</p> <p>While COVID-19 may be a pandemic, it shouldn't be a battle for clinicians to fight alone. Throughout this crisis, we human factors practitioners and champions have stood alongside our healthcare colleagues to face the ever-changing challenges together. Human factors has a role in innovating personal protective equipment (PPE), enhancing workplace safety, strengthening pandemic preparedness plans, and shaping the "new norm" of work and care delivery. As we uncover healthcare's needs and discuss roles and opportunities, COVID-19 reveals how human factors isn't just a patient safety buzzword, but an application of wide-ranging science that partners with clinical operations to save lives.</p> <div style="display: flex; justify-content: space-around; align-items: center;">    </div>

WEDNESDAY, MAY 20

TIME (EST)	SESSION DETAILS
11:00 a.m. - 12:00 p.m.	<p>CLOSING PLENARY SESSION: Help, Now I'm The User! Reflections on Human Factors In Healthcare (A Conversation) Joe Cafazzo, University Health Network; Don Norman, University of California, San Diego and the Nielsen Norman Group</p> <p>Join Joe Cafazzo and Don Norman as they discuss human factors promises and pitfalls in healthcare, including HF challenges related to the COVID-19 pandemic.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>

PROGRAM (CONTINUED)

DIGITAL HEALTH	
TUESDAY, MAY 19	
TIME (EST)	SESSION DETAILS
12:15 p.m. - 1:45 p.m.	<p>SESSION: DH1: Implementing Science and Analytics for Healthcare Change</p> <p>Development and Deployment of a Mobile Health-Technology Platform for Digital Health Research Studies; Spyros Kitsiou, University of Illinois at Chicago</p> <p>Requirements Conflict Resolution in Large Organizations: A Human Factors Case Study of Emergency Medicine Software for the Veterans' Affairs; Blake J. Lesselroth, University of Oklahoma-Tulsa School of Community Medicine; Kathleen Adams, VHA; Ross Speir, VA Office of Human Factors Engineering; Scott Wood, VA Office of Knowledge Based Systems; Jason Saleem, University of Louisville; Meredith Josephs, VA Office of Human Factors Engineering</p>
1:45 p.m. - 2:00 p.m.	Sponsor/Exhibitor/Advertiser Presentations
2:00 p.m. - 3:30 p.m.	<p>SESSION: DH2: Scheduling Elective Surgeries Post-Pandemic: The Need for a Software Solution</p> <p>Emily Patterson, The Ohio State University; Liza Papautsky, University of Illinois at Chicago; Susan Moffatt-Bruce, Royal College of Physicians and Surgeons of Canada; Theodore T. Allen, The Ohio State University</p>
3:30 p.m. - 3:45 p.m.	Sponsor/Exhibitor/Advertiser Presentations
3:45 p.m. - 5:15 p.m.	<p>SESSION: DH3: Student Design Competition (led by Dr. Michael Rayo)</p> <p>FIKA: Workforce Stress Relief; Hanna Barton, David Wilkins, Priya Loganathar, A.J. Lingg, University of Wisconsin-Madison</p> <p>positive.ly; Lindsey Daugherty, Matthew Peel, Harjina Singh, San Jose State University</p> <p>PEHR: Personal Electronic Health Record; Jesse Marquisee, Christine Jefferies, Greg Metzger, Jacob Keller, The Ohio State University</p>
5:15 p.m. - 5:30 p.m.	Sponsor/Exhibitor/Advertiser Presentations
5:30 p.m. - 7:00 p.m.	<p>SESSION: DH4: User Experience and Technology Acceptance</p> <p>Cost vs. Benefit: What Does NVivo Video Analysis of EMR Simulations Add to Our Understanding of User Experience?; Chantal Trudel, Carleton University, Faculty of Engineering and Design, School of Industrial Design; Samantha Lovelace, Carleton University; Catherine Dulude, Children's Hospital of Eastern Ontario; W. James King, Children's Hospital of Eastern Ontario</p> <p>A Comparative Usability Evaluation of Electronic Health Records: Ten Common Critical Errors Discovered; Anthony Go, Healthcare Human Factors; Stephanie Hu, Healthcare Human Factors</p> <p>Older Adults and Healthcare Technology Acceptance: Influence of Advice from their Care Network; Maurita T. Harris, University of Illinois at Urbana-Champaign; Wendy A. Rogers, University of Illinois at Urbana-Champaign</p> <p>Improving Elderly Patient Discharge Summaries; Patrice D. Tremoulet, Rowan University; Priyanka Shah, ECRI Institute</p>

WEDNESDAY, MAY 20	
TIME (EST)	SESSION DETAILS
12:15 p.m. - 1:45 p.m.	<p>SESSION: DH5: Clinician Workflow and Decision Support Systems</p> <p>Using Computational Ethnography to Measure Changes in Workflow after Implementing Clinical Decision Support; Jeritt Thayer, Children’s Hospital of Philadelphia; Daira Ferro, Children’s Hospital of Philadelphia; Robert Grundmeier, Children’s Hospital of Philadelphia; Levon Utidjian, Children’s Hospital of Philadelphia; Jeffrey Miller, Children’s Hospital of Philadelphia; Joseph Zorc, Children’s Hospital of Philadelphia</p> <p>Human Centered Design Approach to Implementing Electronic Unit Boards in Hospital in-Patient Units; Jennifer Jeon, Sinai Health System; Agata Lawrynczyk, Sinai Health System</p> <p>Mitigating Cardiovascular Risk through User Informed Clinical Decision Support; Laura C. Schubel, Medstar Health National Center for Human Factors in Healthcare; Lucy Stein, Medstar Health National Center for Human Factors in Healthcare; Ronald Romero, Medstar Health National Center for Human Factors in Healthcare; Kristen Miller, Medstar Health National Center for Human Factors in Healthcare</p>
1:45 p.m. - 2:00 p.m.	Sponsor/Exhibitor/Advertiser Presentations
2:00 p.m. - 3:30 p.m.	<p>SESSION: DH6: Human Factors Design in Care Management</p> <p>Designing an mHealth App for Persons Returning from Incarceration: Where You Start May Not Be Where You End Up; Wayne W. Zachary, Starship Health Technologies; Theresa(Tai) Wilkin, Starship Health Technologies; Lisa Puglisi, Yale School of Medicine; Pamela Surkan, Johns Hopkins Bloomberg School of Health; Jerry Smart, Yale School of Medicine; Marc Butler, Starship Health Technologies; Ishita Ferdousi, Starship Health Technologies; Prathmesh Pethkar, Starship Health Technologies</p> <p>User Empathy Is a Critical Ingredient: Designing the Information Hierarchy for Inpatient Shift Handoff Healthcare Technology; Hannah Park, School of Architecture and Design, University of Kansas; Blake Lesselroth, University of Oklahoma-Tulsa School of Community Medicine</p> <p>Addressing Human Factors Challenges in Paediatric Home Care: Development and Evaluation of a Mobile Home Care Communication App; Ryan Tennant, University of Waterloo; Alexandra Leggett, University of Waterloo; Corinna Smith, University of Waterloo; Kate Mercer, University of Waterloo; Lynnea Tan, University of Waterloo; Catherine Burns, University of Waterloo</p>
3:30 p.m. - 3:45 p.m.	Sponsor/Exhibitor/Advertiser Presentations

PROGRAM (CONTINUED)

WEDNESDAY, MAY 20 (CONTINUED)	
TIME (EST)	SESSION DETAILS
3:45 p.m. - 5:15 p.m.	<p>SESSION: DH7: Health Apps and Smart Technologies</p> <p>Extending system performance past the boundaries of predictive algorithms: evaluating graceful extensibility in human-machine teams; Michael Rayo, The Ohio State University</p> <p>Population-Level Estimation of Timing, Duration and Quality of Sleep in Canada: A Smart Thermostat Based Exploratory Study; Kirti S. Sahu, University of Waterloo; Arlene Oetomo, University of Waterloo; Niloofar Jalali, University of Waterloo; Plinio Morita, University of Waterloo</p> <p>Facilitators and Barriers to Clinicians' Use of Health Information Exchange Technologies to Coordinate Medications across Institutions; Alissa L. Russ-Jara, Purdue University College of Pharmacy; Khoa A. Nguyen, University of Florida, College of Pharmacy, Department of Pharmacotherapy and Translational Research; Margie E. Snyder, Purdue University, Department of Pharmacy Practice; Teresa Damush, U.S. Department of Veterans Affairs; Vincent Fan, VA Puget Sound Health Care System; Michael Weiner, U.S. Department of Veterans Affairs; Himalaya Patel, U.S. Department of Veterans Affairs; Steven Sanchez, U.S. Department of Veterans Affairs; Morgan Traylor, U.S. Department of Veterans Affairs, Michelle Robinson, U.S. Department of Veterans Affairs, Peter Taber, VA Salt Lake City Health Care System; Amanda Mixon, VA Tennessee Valley Healthcare System</p>
5:15 p.m. - 5:30 p.m.	Sponsor/Exhibitor/Advertiser Presentations
5:30 p.m. - 7:00 p.m.	<p>SESSION: DH8: Learning and Knowledge Elicitation Applications</p> <p>Blockchain Platform for Consent Management in Healthcare; Pedro Augusto S. Miranda, University of Waterloo; Pedro E. Velmovitsky, University of Waterloo; Jennifer Teague, CSA Group; Plinio Morita, University of Waterloo; Tania Donovska, CSA Group; Helene Vaillancourt, CSA Group</p> <p>Use of Knowledge Elicitation Techniques for Exposure Reporting System Design; Barbara Millet, University of Miami; Erin Kobetz, University of Miami Miller School of Medicine</p> <p>Training Efficacy Study for a Novel Patient Risk Index; Patrice D. Tremoulet, Rowan University; Kathryn Clark, Etiometry, Inc.; Michael McManus, Etiometry, Inc.; Dimitar Baronov, Etiometry, Inc.</p> <p>Patient-Reported Nonroutine Events in Ambulatory Cancer Care; Mahek Mehta, Vanderbilt University; Akhil Choudhary, Vanderbilt University Medical Center; Carrie Reale, Vanderbilt University Medical Center; Shilo Anders, Vanderbilt University; Emma Schremp, Vanderbilt University; Joyce Webb Harris, Vanderbilt University; Daniel France, Vanderbilt University; Laurie Novak, Vanderbilt University; E. Bishop Rhodes, Vanderbilt University; Matthew Weinger, Vanderbilt University Medical Center; Jason Slagle, Vanderbilt University Medical Center</p>

HOSPITAL ENVIRONMENTS	
TUESDAY, MAY 19	
TIME (EST)	SESSION DETAILS
12:15 p.m. - 1:45 p.m.	<p>SESSION: HE1: Human Factors Transforming Health: Network, Practice and Career Updates</p> <p>Ken Catchpole, Medical University of South Carolina; Sarah Fouquet, Children's Mercy Hospital Kansas City; Adjhaporn Khunlertkit, Bumrungrad International Hospital; Shanqing Yin, KK Women's and Children's Hospital; Yushi Yang, Johns Hopkins Health System; Myrte de Alfred, Medical University of South Carolina</p>
1:45 p.m. - 2:00 p.m.	Sponsor/Exhibitor/Advertiser Presentations
2:00 p.m. - 3:30 p.m.	<p>SESSION: HE2: Guidance Provided by CIEHF: Regulatory and Industry</p> <p>Human Factors in the Design and Operation of Ventilators for Covid-19: Noorzaman Rashid, CEO, Chartered Institute of Ergonomics and Human Factors (CIEHF); Sue Hignett, Loughborough University</p>
3:30 p.m. - 3:45 p.m.	Sponsor/Exhibitor/Advertiser Presentations
3:45 p.m. - 5:15 p.m.	<p>SESSION: HE3: Using Simulation-Based Evaluations of Physical And Virtual Mock-Ups To Design Safer Hospital Environments</p> <p>Anjali Joseph, Clemson University; Jonas Shultz, Health Quality Council of Alberta/University of Calgary; Nora Colman, Children's Healthcare of Atlanta; Kiran Hebbar, Children's Healthcare of Atlanta</p>
5:15 p.m. - 5:30 p.m.	Sponsor/Exhibitor/Advertiser Presentations
5:30 p.m. - 7:00 p.m.	<p>SESSION: HE4: Application of Systems Thinking</p> <p>A Precautionary Tale: Two Pediatric Hospitals' Approaches to Redesigning Isolation Precaution Signs; Laura H. Barg-Walkow, Children's Hospital Colorado; James C. Won, Children's Hospital of Philadelphia; Grayson M. Privette, Children's Hospital of Philadelphia; Kelly West, Children's Hospital Colorado; Nicole N. Barnes, Infection Preventionist; Allison Kosydar, Children's Hospital of Philadelphia</p> <p>An Interdisciplinary Effort To Systematically Improve Food Safety in Hospital Operations; Yushi Yang, Johns Hopkins Health System; Lori Paine, Johns Hopkins University; Allen Chen, Johns Hopkins University</p> <p>Observations To Identify Work System Factors Contributing to Retained Foreign Bodies; Rebecca L. Berg, Yale New Haven Health; Anna Lisa Fischer, Yale New Haven Hospital</p> <p>Don't Miss a Beat: Understanding Complex System Factors to Improve Cardiac Telemetry Patient Safety; Melinda J. Jamil, Advocate Aurora Health</p>

PROGRAM (CONTINUED)

WEDNESDAY, MAY 20

TIME (EST)	SESSION DETAILS
12:15 p.m. - 1:45 p.m.	<p>SESSION: HE5: Human Factors in Hospital Operations</p> <p>How to Successfully Embed Human Factors Into Hospital Operations; Carleene Banez, Humber River Hospital; Stefano Gelmi, Humber River Hospital; Jennifer Jeon, Sinai Health System; Emily Rose, Providence Healthcare</p> <p>Operating Room Black Box - Using Data to Improve Surgical Safety; Teodor Grantcharov, Unity Health</p>
1:45 p.m. - 2:00 p.m.	Sponsor/Exhibitor/Advertiser Presentations
2:00 p.m. - 3:30 p.m.	<p>SESSION: HE6: Significant Impacts of Healthcare Environment</p> <p>Validation of the Design for Mass Adaptation Method - A Case for Safer Medical Training; Selin Üreten, Hamburg University of Technology; Johanna Spallek, Hamburg University of Technology; Ece Uereten, Advanced Interface Design Lab, Systems Design Engineering, University of Waterloo; Dieter Krause, Hamburg University of Technology</p> <p>Quantification of Operating Room Distractions and their Effects on Intraoperative Adverse Events Using Near-Naturalistic Dataset; Suzan Ayas, University of Toronto; Lauren Gordon, International Centre for Surgical Safety; Birsen Donmez, University of Toronto; Teodor Grantcharov, University of Toronto</p> <p>Team Trust and Performance in Pediatric Trauma; Sarah Coppola, Johns Hopkins University; Kristen Webster, University of Louisville Health; Ayse Gurses, Johns Hopkins University</p>
3:30 p.m. - 3:45 p.m.	Sponsor/Exhibitor/Advertiser Presentations
3:45 p.m. - 5:15 p.m.	<p>SESSION: HE7: The Role of Human Factors in Healthcare: 2020 and Beyond</p> <p>Brittany L. Anderson-Montoya, Atrium Health; Ken R. Catchpole, Medical University of South Carolina; Robert Turner, Luminex Corporation; A. Joy Rivera, Children's Hospital of Wisconsin; Laura Barg-Walkow, Children's Hospital Colorado</p>
5:15 p.m. - 5:30 p.m.	Sponsor/Exhibitor/Advertiser Presentations
5:30 p.m. - 7:00 p.m.	<p>SESSION: HE8: Human Factors and COVID-19: Lessons Learned</p> <p>Prone Patients with COVID-19: An Evaluation of Equipment and Methods; Neal Wiggermann, Hill-Rom</p> <p>Human Factors in Acute Hospital Settings During COVID 19: Designing 'New Normal' For Operations; Sarah Parker, Virginia Tech Carilion School of Medicine</p>

MEDICAL AND DRUG-DELIVERY DEVICES

TUESDAY, / LOCATION: HARBOUR B

TIME (EST)	SESSION DETAILS
12:15 p.m. - 1:45 p.m.	<p>SESSION: MDD1: Human Factors Considerations for Post-Market Surveillance and Total Product Life Cycle</p> <p>Meaningful Data – How To Increase Value of Usage Data of Medical Systems; Linda de Valk, Philips; Angelique Brosens-Kessels, Philips</p> <p>MAUDE & Recall Data for Usability: Helping Manufacturers Use Event Reporting Effectively for Medical Device Risk Mitigation and Design Improvement; Tara Feuerstein, Farm Design; Tara Daugherty, Farm Design; Teresita Liebel, Farm Design</p> <p>An Analysis of FDA Adverse Event Reporting Data for Trends in Medical Device Use Error; Benjamin M. Knisely, University of Maryland; Camille Levine, University of Maryland; Kush C. Kharod, University of Maryland; Monifa Vaughn-Cooke, University of Maryland</p>
1:45 p.m. - 2:00 p.m.	<p>Sponsor/Exhibitor/Advertiser Presentations</p>
2:00 p.m. - 3:30 p.m.	<p>SESSION: MDD2: Human Factors Case Studies in Clinical Use Environments</p> <p>Human Factors Considerations for Healthcare Robotics; Alix Dorfman, Emergo By UL - Human Factors Research & Design; Merrick Kossack, Emergo By UL - Human Factors Research & Design; Tricia Gibo, Emergo By UL - Human Factors Research & Design</p> <p>The Potential of Time-Compressed Speech-Based Notifications for Patient Monitoring Contexts; Penelope Sanderson, The University of Queensland; Alexandra Neary, The University of Queensland; Emma Knight, The University of Queensland; Garry Mann, The University of Queensland; Alison Utting, The University of Queensland; Isaac Salisbury, The University of Queensland; Simon Li, Lingman University; Robert Loeb, University of Florida College of Medicine</p> <p>It Depends on the Experience! Understanding and Supporting the Needs of “Injection-Experienced Users”; Michael Lau, Insight Innovation Center; Christoph Jordi, Ypsomed AG</p>
3:30 p.m. - 3:45 p.m.	<p>Sponsor/Exhibitor/Advertiser Presentations</p>
3:45 p.m. - 5:15 p.m.	<p>SESSION: MDD3: Remote and Safe In-Person Testing of Medical Devices (Panel)</p> <p>Anthony D. Andre, Interface Analysis Associates; Charles Mauro, Mauro Usability Science; Corey Johnson, Bold Insight; Allison Strohlic, Emergo UL; Michael Wiklund, Emergo UL</p>
5:15 p.m. - 5:30 p.m.	<p>Sponsor/Exhibitor/Advertiser Presentations</p>
5:30 p.m. - 7:00 p.m.	<p>SESSION: MDD4: Design Considerations for Devices, Packaging, and Labeling</p> <p>Designing Ergonomic Instruments for Use by Female Surgeons; Michael E. Wiklund, Emergo By UL; Bryce Rutter, Metaphase Design Group Inc.; Betsy Goodrich, Manta Product Development Inc.; Erica Sutton, University of Louisville</p> <p>Designing the First Digital IFU; Anke Adenwala, Bold Insight; Ben Bartfeld, External Consultant to Otsuka; Jackie Ulaszek, Bold Insight</p> <p>Beyond Packaging: Confronting the Challenges of User Preconceptions Regarding Instructions; Trevor D. Johnson, Ipsos; Joy Borgardt, AbbVie; Timothy Johnson, Pharmacy; Laurie McKenna, Abbvie; James Myers, Ipsos; Corey T. Cook, Ipsos</p> <p>Your Drug or Mine? Managing Product Differentiation Hazards; Natalie Abts, Genentech; Valerie Fenster, Kaleidoscope Innovations; Molly Story, Sanofi; Leah Taylor, Agilis Consulting; Shannon Hoste, Enable Injections; Aly McDonald, Genentech</p>

PROGRAM (CONTINUED)

TUESDAY, MARCH 10 (CONTINUED) / LOCATION: HARBOUR B	
TIME (EST)	SESSION DETAILS
12:15 p.m. - 1:45 p.m.	<p>SESSION: MDD5: Human Factors Submissions: Strategies for Preventing and Responding to FDA Requests for Additional Information</p> <p>Jim Kershner, Eli Lilly; Paul Blowers, AbbVie; Natalie Abts, Genetech; Irene Chan, CDER;</p>
1:45 p.m. - 2:00 p.m.	Sponsor/Exhibitor/Advertiser Presentations
2:00 p.m. - 3:30 p.m.	<p>SESSION: MDD6: Evangelizing Human Factors in Medical Device Design</p> <p>On Your Best Behavior: Applying the Science of Behavior Change to Medical Device Design; Kate F. MacNamee, Farm Design, Inc.; Laurie Reed, Farm Design, Inc.</p> <p>Functionality, Usability, Look & Feel, and Evaluation (FULE) Methodology: A Case Study of User-Centered Design for an Autonomic Medical Device; Ela Pincu, Ben-Gurion University of The Negev; Yuval Bitan, Ben-Gurion University of The Negev</p> <p>A Continuum of Human Factors Considerations from Medical Device Development to Hospital Implementation; Fiona F. Tran, Medtronic; Shanjing Yin, KK Women's and Children's Hospital</p> <p>Do This, Not That: Applying the Science of Behavior Change to Medical Device Design; Kate F. MacNamee, Farm Design, Inc.; Laurie Reed, Farm Design, Inc.</p>
3:30 p.m. - 3:45 p.m.	Sponsor/Exhibitor/Advertiser Presentations
3:45 p.m. - 5:15 p.m.	<p>SESSION: MDD7: Best Practices in Human Factors Methods and Analysis</p> <p>Do We Really Know Our Users? A Scientific Approach to Defining User Groups for Human Factors Studies; MaryBeth Privitera, HS Design</p> <p>Establishing a Foundation for Effective Evaluation of Critical Tasks within an HF Validation Protocol; Rachel Aronchick, Emergo By UL; Laura Birmingham, Emergo By UL</p> <p>A Framework for Conducting Residual Risk Analysis and Developing Compelling Commentaries; Andrea Dwyer, Emergo By UL; Erin Davis, Emergo By UL</p> <p>How Does Robotic Surgery Influence Teamwork and Team Outcomes? An Overview of Methodology and Preliminary Findings; Jordan E. Rogers, Embry-Riddle Aeronautical University; Elizabeth Lazzara, Embry-Riddle Aeronautical University</p>
5:15 p.m. - 5:30 p.m.	Sponsor/Exhibitor/Advertiser Presentations
5:30 p.m. - 7:00 p.m.	<p>SESSION: MDD8: FDA and Health Canada Perspectives</p> <p>FDA and Health Canada Perspectives, Hanniebey Wiyor, Center for Devices and Radiological Health (CDRH) FDA; Irene Chan, Center for Drug Evaluation and Research (CDER) FDA; Grant Kealey, Medical Device Directorate, Health Canada</p>

PATIENT SAFETY RESEARCH AND INITIATIVES

TUESDAY, MAY 19

TIME (EST)	SESSION DETAILS
12:15 p.m. - 1:45 p.m.	<p>SESSION: PSRI1: Addressing the Needs of Vulnerable Patient Populations</p> <p>Improving Sleep Quality for Intensive Care Unit Patients with Frequent Awakenings; Bryan T. Romito, UT Southwestern Medical Center</p> <p>Let Us Be Heard: Improving Reporting of Unintended Events at Clements University; Timothy Shutter, UT Southwestern Medical Center; Seth Bohman, UT Southwestern Medical Center; Isaac Lynch, UT Southwestern Medical Center</p>
1:45 p.m. - 2:00 p.m.	<p>Sponsor/Exhibitor/Advertiser Presentations</p>
2:00 p.m. - 3:30 p.m.	<p>SESSION: PSRI2: Influencing Behavior Change During and After COVID-19</p> <p>Influence & Persuasive Technology; Gregory Seese, Johns Hopkins University Applied Physics Laboratory</p> <p>(Resistance) Barriers to Compliance; Jason Spitaletta, ISC Johns Hopkins Applied Physics Laboratory</p> <p>Motivational Design; Jihye Song, University of Central Florida</p>
3:30 p.m. - 3:45 p.m.	<p>Sponsor/Exhibitor/Advertiser Presentations</p>
3:45 p.m. - 5:15 p.m.	<p>SESSION: PSRI3: Perioperative Handoffs</p> <p>Implementation Science Approach for Handoff Redesign; Philip E. Greilich, University of Texas Southwestern Medical Center</p> <p>Cognitive Aids for Successful Implementation of Perioperative Handoff Improvement; Jamie L. Sparling, Massachusetts General Hospital/Harvard Medical School</p>
5:15 p.m. - 5:30 p.m.	<p>Sponsor/Exhibitor/Advertiser Presentations</p>
5:30 p.m. - 7:00 p.m.	<p>SESSION: PSRI4: The Patient in Patient Safety: Unique Perspectives of Researchers that are Also Patients</p> <p>Elizabeth L. Papautsky, University of Illinois at Chicago; Richard Holden, Indiana University School of Medicine</p>

PROGRAM (CONTINUED)

WEDNESDAY, MAY 20	
TIME (EST)	SESSION DETAILS
12:15 p.m. - 1:45 p.m.	<p>SESSION: PSRI5: Hot Topics at the National Level</p> <p>Patient Engagement and Prescription Opioid Use in Perioperative Pain Management; Anping Xie, Johns Hopkins University; Yea-Jen Hsu, Johns Hopkins University; Mariel Villanueva, Johns Hopkins University; Marie Hanna, Johns Hopkins University; David Slupek, Kansas City University of Medicine and Biosciences;</p> <p>The Changing Landscape in Home Care Agency Payment Models and the Implication for Opportunities for Human Factors Researchers; Ellen J. Bass, Drexel University</p>
1:45 p.m. - 2:00 p.m.	Sponsor/Exhibitor/Advertiser Presentations
2:00 p.m. - 3:30 p.m.	<p>SESSION: PSRI6: Hospital-Industry Human Factors Collaborations</p> <p>Joseph Keebler, Embry-Riddle Aeronautical University; Sarah Fouquet, Children's Mercy Hospital; Barbara Chaparro, Embry-Riddle Aeronautical University; Liz Lazzara, Embry-Riddle Aeronautical University; Thomas Looke, US Anesthesia Partners</p>
3:30 p.m. - 3:45 p.m.	Sponsor/Exhibitor/Advertiser Presentations
3:45 p.m. - 5:15 p.m.	<p>SESSION: PSRI7: The Whos and Hows to Carrying Out Novel Approaches to Research</p> <p>Through the Eyes of Hemophilia Patients: Eye Tracking Intravenous Self-Infusion; Joseph S. O'Brian, Research Collective; Anders Orn, Research Collective; Natalie Celmer, Research Collective; Emily Hildebrand, Research Collective; Russell J. Branaghan, Research Collective</p> <p>Using an Escape Room as a Novel Approach to Evaluate Teamwork in Healthcare; Tara N. Cohen, Cedar-Sinai Medical Center; Andrew C. Griggs, Embry-Riddle Aeronautical University; Kate Cohen, Cedar-Sinai Medical Center; Elizabeth Lazara, Embry-Riddle Aeronautical University; Joseph Keebler, Embry-Riddle Aeronautical University; Shawn Doherty, Embry-Riddle Aeronautical University; Bruce Gewertz, Cedars-Sinai Medical Center</p> <p>Development of a Web-App to Reduce Intraoperative Fatigue for the Surgeon and the Surgical Team; M. Susan Hallbeck, Mayo Clinic</p> <p>Challenges in the Use of Sensors and Wearables in Research; Kristin Chrouser, University of Michigan/VA Ann Arbor</p>
5:15 p.m. - 5:30 p.m.	Sponsor/Exhibitor/Advertiser Presentations
5:30 p.m. - 7:00 p.m.	<p>SESSION: PSRI8: Patient Safety in the Operating Room</p> <p>Deep Inferior Epigastric Perforator (DIEP) Flaps by Dinner: Increasing Operative Efficiency Utilizing a Multidisciplinary Team Approach; Minh-Doan T. Nguyen, Mayo Clinic; Christin A. Harless, Mayo Clinic; Katherine W. Arendt, Mayo Clinic; Katherine Law, Mayo Clinic; M. Susan Hallbeck, Mayo Clinic; Anna Linden, Mayo Clinic</p> <p>A Proactive Risk Assessment Framework to Enhance Patient Safety: Analysis of Unintended Retained Foreign Objects in Operating Rooms; Maryam Tabibzadeh, California State University, Northridge; Zarna Patel, California State University, Northridge</p> <p>Emergency Crisis Checklists for the Operating Room - What Are They, and How Can They Improve Patient Safety?; Aalok V. Agarwala, Massachusetts Eye And Ear/Harvard Medical School</p>

POSTER PRESENTATIONS

TRACK 1	
THURSDAY, MAY 21	
TIME (EST)	SESSION NAME
11:00 a.m. - 1:00 p.m.	<p>(PSRI) - Teaching Patient Safety for Medical Students and Hospital Staff; Yoel Donchin, Hebrew University; Yuval Bitan, Ben-Gurion University of The Negev</p> <p>(HE) - Redesigning the Delivery of Cancer Care: A Patient-Centered Planning Against Cancer (PACE-PLAN) Checklist; Christie Kang, University of Illinois at Chicago; Trang Pham, University of Illinois at Chicago; Rachel Mason, Nationwide Children's Hospital; Ashley M. Hughes, University of Illinois at Chicago</p> <p>(PSRI) - Preliminary Interview Study on the Opioid Prescription Decision Making Process; Xiaomei Wang, University at Buffalo; Emilie Roth, Roth Cognitive Engineering; Tracy Kim, National Center for Human Factors in Healthcare, Medstar Health, Jessica Arora, University at Buffalo; Ella Franklin, National Center for Human Factors in Healthcare, Medstar Health; Aaron Z. Hettinger, National Center for Human Factors in Healthcare, MedStar Health; Ann Bisantz, University at Buffalo</p> <p>(DH) - Monitoring the Health Effects of Heatwaves using Smart Home Technology; Arlene Oetomo, University of Waterloo; Plinio Morita, University of Waterloo</p> <p>(MDD) - Designing for and Testing with Impaired Users; Teresita C. Liebel, Farm Design Inc.; Tara Feuerstein, Farm Design</p> <p>(PSRI) - Measuring Information Management at MCI Simulation: Instruments Evaluation and Comparison; Omer Perry, Ben-Gurion University of The Negev; Eli Jaffe, Magen-David-Adom; Yuval Bitan, Ben-Gurion University</p> <p>(DH) - A Design of Mobile Application for Ultrasound Bladder Monitoring System Based on Usability Engineering; Sang Eun Park, Yonsei University; Won Seuk Jang, Yonsei University; Hyun Gyeong Oh, Yonsei University; Jeong Uk Choi, Yonsei University</p> <p>(HE) - Healing Culture - How Patients and Staff Benefit from Art and Cultural Events in Healthcare Environments; Insa K. Shrader, Healing Concept</p> <p>(MDD) - Unique Challenges in User Interface Design for Medical Devices That Use Predictive Algorithms; Yuval Bitan, Ben-Gurion University of The Negev; Emily Patterson, Ohio State University</p> <p>(PSRI) - Human Factors: Bridging Artificial Intelligence and Patient Safety; Avishek Choudhury, Stevens Institute of Technology; Onur Asan, Stevens Institute of Technology</p> <p>(HE) - Bringing Cognitive Perspectives in Qualitative Methods to the Applied Health Sciences PhD Curriculum; Elizabeth L. Papautsky, University of Illinois at Chicago; Vera Kaelin, University of Illinois at Chicago; Haleh Vatani, University of Illinois at Chicago</p>
1:00 p.m. - 1:20 p.m.	<p>Sponsor/Exhibitor/Advertiser Presentations</p>
1:20 p.m. - 4:00 p.m.	<p>(DH) - Mobile Health Platform for Individual and Population Level Surveillance; Pedro E. Velmovitsky, University of Waterloo; Plinio Morita, University of Waterloo</p> <p>(MDD) - How to Develop Digital Instructions: Identifying Needs and Potential Solutions; Rebecca Williamson, Ipsos; Trevor Johnson, Ipsos; Corey Cook, Ipsos</p> <p>(HE) - Cognitive Work Analysis Models of Neuro-Critical Care; Ece Uereten, University of Waterloo; Victoria McCredie, University of Toronto; Catherine M. Burns, Advanced Interface Design Lab</p> <p>(PSRI) - Health-IT Related Safety Hazards: Establishing a Human Factors Integrated Approach to a Health IT Safety Program at an Academic, Tertiary Care Pediatric Center; Amina Khan, The Children's Hospital of Philadelphia; Dean Karavite, The Children's Hospital of Philadelphia; Naveen Muthu, The Children's Hospital of Philadelphia; Brooke T. Luo, Children's Hospital of Philadelphia; Ursula Nawab, The Children's Hospital of Philadelphia; James C. Won, The Children's Hospital of Philadelphia; Eric Shelov, The Children's Hospital of Philadelphia</p>

TRACK 1

POSTER PRESENTATIONS

(CONTINUED)

THURSDAY, MAY 21

TIME (EST)

SESSION NAME

1:20 p.m. - 4:00 p.m.
(Continued)

- (MDD) - Driving the Medical Industry to Adopt HFE - What Other Countries Can Learn From the USA's Experience;** Michael E. Wiklund, Emergo By UL
- (HE) - What is the Burden Associated With Patient and Caregiver Work? A Targeted Literature Review;** Elizabeth L. Papautsky, University of Illinois at Chicago; Jennifer Winner, Air Force Research Laboratory
- (DH) - Using Large Smart Home Datasets to Assess the Sleep Quality;** Niloofar Jalali, University of Waterloo; Arlene Oetomo, University of Waterloo; Kirti Sahu, University of Waterloo; Plinio Morita, University of Waterloo
- (MDD) - Conducting Expert Reviews of Complex Systems: A How-to Guide;** Celeste Greenbaum, Ximedica
- (HE) - Using a Fuzzy Framework for Applying King's Theory of Goal Attainment to Improve Hospital Acquired Infection Resilience;** Lisa S. Platt, University of Florida; Ann E. Fronczek, Binghamton University
- (DH) - Heuristic Evaluation of a Pilot Telemedicine System for Stroke Evaluation in Ambulances; Hunter Rogers, Clemson University;** Kapil Chalil Madathil, Clemson University; Nathan McNeese, Clemson University; Amal Ponathil, Clemson University; James McElligott, Medical University of South Carolina; Christine Holmstedt, Medical University of South Carolina; Anjali Joseph, Clemson University
- (PSRI) - Improving Identification and Distinguishability of Medication Labels;** Abed S. Fahoum, Industrial Engineering and Management; Yuval Bitan, Ben-Gurion University
- (HE) - Application of Mobile Eye Tracking to Healthcare Environments;** Farzan Sasangohar, Texas A&M University/Houston Methodist Hospital; Missie Smith, Oakland University; Denny Yu, Purdue University; Allan Fong, MedStar National Center for Human Factors in Healthcare; Ethan Larsen, Houston Methodist Research Institute
- (MDD) - How Do Surgeon Preferences and Technique Variance Affect Outcome?;** Anastasia Axiopoulou, Wright State University; Katherine Lin, Miami Valley Hospital; Keith Watson, Miami Valley Hospital; Ph.D.
- (DH) - A Comprehensive Survey of Preference for Personal Health Record Features in Patients with Diabetes;** Benjamin M. Knisely, University of Maryland; Monifa Vaughn-Cooke, University of Maryland
- (HE) - From Theory to Application: Bridging the Gap from Academia to the Clinically Embedded Human Factors Practitioner;** Brittany L. Anderson-Montoya, atrium Health
- (MDD) - Naloxone Kit Analysis Workshop: A Hands-on Activity to Teach Human Factors of Medical Device Design;** Chris Bouwmeester, University of Toronto

4:00 p.m. - 4:20 p.m.

Happy Hour

4:20 p.m. - 6:10 p.m.

- (PSRI) - Health Literacy in Informed Consent Safety Language: Formative Study Results;** Chandler N. Coleman, University of Illinois at Chicago; AbbVie; James Duhig, AbbVie
- (DH) - Designing Pictograms for Privacy Agreements (PA);** Amethyst Kuang, University of Waterloo; Laura Fadrique, University of Waterloo; Larissa Mazza, University of Waterloo; Jennifer Teague, CSA Group; Tania Donovska, CSA Group; Helen Vaillancourt, CSA Group; Plinio Morita, University of Waterloo
- (MDD) - A Cost Effective and User-Centered Approach to Adapting the EpiPen Auto-Injector for Safer Use;** Julie Harrison, Georgia Institute of Technology; Zack Tidler, Georgia Institute of Technology
- (HE) - Escape Rooms in Healthcare Research: A Review of the Literature;** Andrew C. Griggs, Embry-Riddle Aeronautical University; Tara N. Cohen, Cedars-Sinai Medical Center; Elizabeth H. Lazzara, Embry-Riddle Aeronautical University; Joseph Keebler, Embry-Riddle Aeronautical University; Shawn M. Doherty, Embry-Riddle Aeronautical University

TRACK 1

WEDNESDAY, MAY 20

TIME (EST)	SESSION DETAILS
<p>4:20 p.m. - 6:10 p.m. (Continued)</p>	<p>(DH) - Effect of Difference in EHR Configuration on User Outcomes: Scoping Literature Review; Rida Zainab, Stevens Institute of Technology; Onur Asan, Stevens Institute of Technology</p> <p>(PSRI) - Objectively Identifying Operating Room Distractions with Eye-Tracking: A Pilot Study; Amalia M. Gil, University of Toronto & International Centre for Surgical Safety - St. Michael's Hospital; Michael Shulman, International Centre for Surgical Safety; Lauren Gordon, International Centre for Surgical Safety; Tomas Saun, University of Toronto; Teodor Grantcharov, University of Toronto</p> <p>(MDD) - Surgical Simulation: Simulating Realistic Use in Human Factors Validation Testing Using Study Models; Ali Decker, Userwise, Inc.; Shannon Clark, Userwise, Inc.</p> <p>(DH) - A Simplified System Usability Scale (SUS) for Cognitively Impaired and Older Adults; Richard J. Holden, Indiana University School of Medicine</p> <p>(PSRI) - Abstraction Hierarchy for Understanding the Primary Care Office to De-prescribe Medication in Older Adults; Taylor Kunkes, University at Buffalo; Andrew Baumgartner, University at Buffalo; Hwei-Yen "Winnie" Chen, University at Buffalo; Ranjit Singh, University at Buffalo; Robert Wahler, University at Buffalo; Collin Clark, University at Buffalo; Laura Levon Brady, University at Buffalo</p> <p>(PSRI) - Quantitative Evidence Supporting Distributed Situation Awareness Model of Patient Flow Management; Abdulrahman A. Alhaider, Virginia Tech; Nathan Lau, Virginia Tech; Paul Davenport, Carilion Clinic; Melanie Morris, Carilion Clinic</p> <p>(HE) - A Review of Antimicrobial Stewardship Activities in the Intensive Care Units through the Lens of Human Factor; Ayokunle Olagoke, University of Illinois at Chicago; Azra Wazir, University of Illinois at Chicago; Harveen Kaur, University of Illinois at Chicago; Ashley M. Hughes, University of Illinois at Chicago</p>

POSTER PRESENTATIONS

(CONTINUED)

TRACK 2

MONDAY, MARCH 9

TIME (EST)	SESSION NAME
11:00 a.m. - 1:00 p.m.	<p>(DH) - Preferences for Health Information Technologies Among US Students; Rida Zainab, Stevens Institute of Technology; Onur Asan, Stevens Institute of Technology</p> <p>(HE) - A Socio-Technical Analysis of Sepsis Detection in the Neonatal Intensive Care Unit; Dean Karavite, The Children's Hospital of Philadelphia; Naveen Muthu, The Children's Hospital of Philadelphia; Gerald Shaeffer, The Children's Hospital of Philadelphia; Robert Grundmeier, The Children's Hospital of Philadelphia</p> <p>(MDD) - Methods to Maximize Use Studies Pre-Architecture Freeze; Andrew G. Rogers, Key Tech; Chet Larrow, Key Tech</p> <p>(PSRI) - Improving Training Transfer in Health Care: Application and Extension of a Conceptual Model; Megan E. Gregory, The Ohio State University College of Medicine; Daniel M. Walker, The Ohio State University College of Medicine; Clayton D. Rothwell, The Ohio State University College of Medicine; Ann McAlearney, The Ohio State University College of Medicine</p> <p>(DH) - Privacy and Trust in Healthcare IoT Data Sharing: A Snapshot of Users Perspectives; Laura Fadrique, University of Waterloo; Plinio Morita, University of Waterloo</p> <p>(DH) - Rethinking Privacy Agreements (PA); Laura Fadrique, University of Waterloo; Amethyst Kuang, University of Waterloo; Larissa Mazza, University of Waterloo; Jennifer Teague, CSA Group; Tania Donovska, CSA Group; Helne Vaillancourt, CSA Group; Plinio Morita, University of Waterloo</p> <p>(HE) - Applying Human Factors Principles on Telemedicine Web Portal to Address User Accessibility and Usability Issues in Elderly Population; Dia Rahman, University of Waterloo</p> <p>(DH) - The Effects of Digital Health Interventions on Oncological Disease Treatment Outcomes with Implications for Work Systems: A Systematic Literature Review; Christopher N. Sinatra, Stevens Institute of Technology; Onur Asan, Stevens Institute of Technology</p> <p>(PSRI) - Making the Case for Patient Centered Design: A Review of Patient Safety Events from Parent Interaction with the Patient Portal; Dean Karavite, The Children's Hospital of Philadelphia; Amina Khan, The Children's Hospital of Philadelphia; Naveen Muthu, The Children's Hospital of Philadelphia; Brooke Luo, The Children's Hospital of Philadelphia; Gregory Lawton, The Children's Hospital of Philadelphia; Robert Grundmeier, The Children's Hospital of Philadelphia; Lisa Biggs, The Children's Hospital of Philadelphia; Anthony Luberti, Children's Hospital of Philadelphia; Khoi Dang, The Children's Hospital of Philadelphia</p> <p>(HE) - Comparing Auditory and Tactile Cues to Inform Clinicians of Patients' Vital Signs; May Gellert, Ben-Gurion University of The Negev; Nuphar Katzman, Ben-Gurion University of The Negev; Jessica Klein, Vanderbilt University</p> <p>(HE) - The Impact of Adjunctive Equipment on Intraoperative Subjective and Objective Workload of Surgeons; Liyun Yang, Mayo Clinic; Melissa M. Morrow, Mayo Clinic, Usa; Samuel R. Money, Mayo Clinic; Andrew J. Meltzer, Mayo Clinic; M.S. Hallbeck, Mayo Clinic</p> <p>(PSRI) - Informing the Design of Mental Health Smartphone Apps for Adolescents; Crystal Fausett, San Jose State University; Jenny Lee, San Jose State University; Eryn Godwin, Children's Mercy Hospital Kansas City; Evan Palmer, San Jose State University; Sarah Fouquet, Children's Mercy Hospital Kansas City</p>
1:00 p.m. - 1:20 p.m.	Sponsor/Exhibitor/Advertiser Presentations

TRACK 2

MONDAY, MARCH 9

TIME (EST)	SESSION NAME
1:20 p.m. - 4:00 p.m.	<p>(DH) - Systems Committee Active Assisted Living (SyC-AAL); Plinio Morita, University of Waterloo; Paul Boissonneault, Champlain Local Health Integration Network (LHIN); Tania Donovska, CSA Group; Laura Fadrique, University of Waterloo</p> <p>(HE) - Utilizing Ethnography to Understand Pharmacy Responses to Changing Standards of Practice; Ranjan Nayyar, Design Science Consulting, Inc; Paul Blowers, AbbVie</p> <p>(MDD) - Universal Design: Considerations for Accessibility, Inclusivity, and Equality in Medical Device Development; Matthew Marber, Emergo By UL; Alexandra Benbadis, Emergo By UL</p> <p>(DH) - Commercialization of Consumer mHealth and Wearable Technology in Canada; Dia Rahman, University of Waterloo; Plinio Morita, University of Waterloo</p> <p>(MDD) - Training Decay Selection for Usability Validation: Pilot Study Methodology for an FDA Research Grant; Kelli Sum, San Jose State University; Shannon Clark, Userwise, Inc.; Lana Sneath, Userwise, Inc.; Dan Nathan-Roberts, San Jose State University</p> <p>(HE) - Pediatric Inpatient Clinical Deterioration: A Socio-Technical Analysis; Gerald Shaeffer, The Children's Hospital of Philadelphia; Naveen Muthu, The Children's Hospital of Philadelphia; Janine Cockerham, The Children's Hospital of Philadelphia; Sanjiv Mehta, The Children's Hospital of Philadelphia; Christopher Bonafide, The Children's Hospital of Philadelphia</p> <p>(DH) - Effect of Difference in EHR Configuration on User Outcomes: Systematic Literature Review; Rida Zainab, Stevens Institute of Technology; Onur Asan, Stevens Institute of Technology</p> <p>(MDD) - Testing the Untestable: Mitigating Simulation Bias During Usability Testing; Nicholas R. Unger, Blackhagen Design</p> <p>(HE) - A Computational Ethnographic Approach to Evaluating Alert Acceptance; Gerald Shaeffer, The Children's Hospital of Philadelphia; Naveen Muthu, The Children's Hospital of Philadelphia; Haley Hlela, The Children's Hospital of Philadelphia; Char Witmer, The Children's Hospital of Philadelphia; Dean Karavite, The Children's Hospital of Philadelphia; Eric Shelov, The Children's Hospital of Philadelphia</p> <p>(DH) - Using Direct Observations of Front-Line Teams to Support Real-Time Machine Fitness Assessment; Morgan E. Reynolds, The Ohio State University; Dane Morey, The Ohio State University; Michael F. Rayo, The Ohio State University</p> <p>(PSRI) - The Evaluation of Influential Factors on Nurses' Situation Awareness in Inpatient Settings: A Systematic Review; Josh Avalos, Pennsylvania State University, University Park; Yiqi Zhang, Pennsylvania State University, University Park; Onur Asan, Stevens Institute of Technology</p> <p>(MDD) - 3 Levels of Usability Review - A Successful Approach for Integrating Usability in Development Projects; Linda de Valk, Philips; Frank Versteegh, Philips; Eline Hooijman, Philips; Barbara Van Nuland-Rezelman, Philips</p> <p>(DH) - Organizational Considerations from HFE to Speed Up the Adoption of AI-Related Technology in Medical Diagnostics; Hongwei Wang, Cornell University; Onur Asan, Stevens Institute of Technology</p> <p>(DH) - Navigating the Medication Maze: Informing EHR Design to Support Home Healthcare Medication Management Services Workflow and Communication; Elease J. Mclaurin, Drexel University; Ellen J. Bass, Drexel University; Kathryn Bowles, University of Pennsylvania; Sockolow. Phd</p> <p>(HE) - Assessment and Comparative Evaluation of Functional Fidelity Associated with Manikin Simulators; James P. Bliss, Leidos, Inc.; Jennifer Winner, 711th Human Performance Wing; Douglas Hodge, Case Western Reserve University</p> <p>(MDD) - Considerations for Including Patients Actively Exhibiting Symptoms During Usability Testing; Stephanie Larsen, Emergo By UL; Ella Engels, Emergo By UL</p>
4:00 p.m. - 4:20 p.m.	Happy Hour

POSTER PRESENTATIONS

(CONTINUED)

MONDAY, MARCH 9

TIME (EST)

SESSION NAME

4:00 a.m. - 6:10 p.m.

(DH) - Evaluation of Teamwork Transition Technology (T³) to Support Team SA During Pediatric Trauma Care Transitions; Bat-Zion "Betsy" Hose, University of Wisconsin-Madison; Pascale Carayon, University of Wisconsin-Madison; Peter Hoonakker, University of Wisconsin-Madison; Tom Brazelton, University of Wisconsin-Madison; Beth Eithun, University of Wisconsin-Madison; Michelle Kelly, University of Wisconsin-Madison; Jonathan Kohler, University of Wisconsin-Madison; Joshua Ross, University of Wisconsin-Madison; Deborah Rusy, University of Wisconsin-Madison; Shannon Dean, University of Wisconsin School of Medicine And Public Health

(HE) - Facilitators and Barriers to Ambulatory Electronic Survey Collection; Zoe Pruitt, Medstar Health National Center for Human Factors in Healthcare; Laura Schubel, Medstar Health National Center for Human Factors in Healthcare; Christian Boxley, Medstar Health National Center for Human Factors in Healthcare; Robin Littlejohn, MedStar Health National Center for Human Factors in Healthcare; Chun-Ju His, Agency for Healthcare Research and Quality, Deliya Wesley, MedStar Health National Center for Human Factors in Healthcare

(MDD) - Methods to Maximize Use Studies Pre-Architecture Freeze; Andrew G. Rogers, Key Tech; Chet Larrow, Key Tech

(PSRI) - Multi-Level Workarounds in Providing Safe, Effective Care for Children with Medical Complexity in the Home; Hanna Barton, University of Wisconsin Madison; Nawang Singhe, University of Wisconsin Madison, Department of Industrial and Systems Engineering; Priya Loganathar, University of Wisconsin Madison; Ryan Collier, University of Wisconsin-Madison; Nicole Werner, University of Wisconsin Madison

(DH) - Air Pollution And Global Health: Designing A Knowledge Translation Tool; Nadia A. Somani, University of Waterloo; Shahan Salim, School of Public Health And Health Systems, University of Waterloo, Waterloo; Raphael M. Nobrega, Student; Plinio Morita, University of Waterloo

(PSRI) - Valuable, But Not Useful: Barriers to Use in Implementation of Patient Reported Outcomes; Zoe Pruitt, Medstar Health National Center for Human Factors in Healthcare; Laura Schubel, Medstar Health National Center for Human Factors in Healthcare; Ram Dixit, Medstar Health National Center for Human Factors in Healthcare; Robin Littlejohn, MedStar Health National Center for Human Factors in Healthcare; Chun-Ju Hsiao, Agency for Healthcare Research and Quality; Deliya Wesley, MedStar Health National Center for Human Factors in Healthcare

(HE) - Beating the Bugs: The Role of Diagnostic Testing in Antimicrobial Stewardship; Harveen Kaur, University of Illinois at Chicago; Ashley Hughes, University of Illinois at Chicago; Ayokunle Olagoke, University of Illinois at Chicago

(DH) - A Human-Factors Approach to Healthcare Data Visualization Challenges; Tatiana S. Bevilacqua, University of Waterloo; Plinio Morita, University of Waterloo

(MDD) - The Whole Package - Evaluating Medical Product Packaging; Allison Stochlic, Emergo By UL; Andrea Dwyer, Emergo By UL

(HE) - A Review of Antimicrobial Stewardship Activities in the Intensive Care Units through the Lens of Human Factor; Ayokunle Olagoke, University of Illinois at Chicago; Azra Wazir, University of Illinois at Chicago; Harveen Kaur, University of Illinois at Chicago; Ashley M. Hughes, University of Illinois at Chicago

(DH) - Recurrence Quantification Analysis of Postural Stability with Pendant-Based IMU under Varying Balance Conditions; Shubo Lyu, Pennsylvania State University; Hui Yang, Pennsylvania State University; Stephen Piazza, Pennsylvania State University; Phd; Andris Freivalds, Pennsylvania State University

TRACK 2



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See You Next Year in Orlando, Florida!

March 21-24, 2021



Loews Sapphire Falls Resort