

HFES INTERNATIONAL SYMPOSIUM

on Human Factors and Ergonomics in Health Care

APRIL 12 - 16, 2021 | VIRTUAL SYMPOSIUM

SCHEDULE-AT-A-GLANCE

MONDAY, APRIL 12, 2021 | WORKSHOPS

11:00 AM - 1:30 PM EDT Workshops I, II, III

1:30 PM - 2:00 PM EDT Break

2:30 PM - 5:00 PM EDT Workshops IV, V, VI

5:30 - 6:30 PM EDT Networking Sessions: Symposium Sponsors Session Educational Opportunities Session

TUESDAY, APRIL 13, 2021

10:00 AM - 11:00 AM EDT Coffee with Friends

11:00 AM - 12:00 PM EDT Opening Plenary: Keynote Lecture Believing in ZERO HARM! And Saving the Patient Safety Revolution from the Quicksand of the 'Good Enough' Zone" - John J. Nance

> 12:00 PM - 12:15 PM EDT Break

12:15 PM - 1:30 PM EDT Concurrent Sessions Gold Sponsor Presentations

1:30 PM - 2:00 PM EDT Break

2:00 PM - 3:00 PM EDT Concurrent Sessions

TUESDAY, APRIL 13, 2021

3:00 PM - 3:30 PM EDT Break

3:30 PM - 4:30 PM EDT Concurrent Sessions

4:30 PM - 5:00 PM EDT Chat with Presenters

5:00 PM - 6:00 PM EDT Networking Sessions: Meet the Sponsors Career Opportunities Job Fair Healthcare Human Factors Network

WEDNESDAY, APRIL 14, 2021

10:00 AM - 11:00 AM EDT Coffee with Friends

11:00 AM - 12:00 PM EDT Concurrent Sessions

12:00 PM - 12:30 PM EDT Break

12:30 PM - 1:30 PM EDT Concurrent Sessions

1:30 PM - 2:00 PM EDT Break

2:00 PM - 3:00 PM EDT Concurrent Sessions

3:00 PM - 3:30 PM EDT Break

2 / 2021 INTERNATIONAL SYMPOSIUM ON HUMAN FACTORS AND ERGONOMICS IN HEALTH CARE

SCHEDULE-AT-A-GLANCE

WEDNESDAY, APRIL 14, 2021

3:30 PM - 4:30 PM EDT Student Presentation Sessions

> 4:30 PM - 5:00 PM EDT Chat with Presenters

5:00 PM - 6:00 PM EDT Annual Digital Health Student Design Competition: Winners Presentations

THURSDAY, APRIL 15, 2021

10:00 AM - 11:00 AM EDT Coffee with Friends

11:00 AM - 12:00 PM EDT Concurrent Sessions

12:00 PM - 12:30 PM EDT Break

12:30 PM - 1:30 PM EDT Concurrent Sessions

1:30 PM - 2:00 PM EDT Break

2:00 PM - 3:00 PM EDT Poster Sessions

3:00 PM - 3:30 PM EDT Break

3:30 PM - 4:30 PM EDT Concurrent Sessions

4:30 PM - 5:00 PM EDT Chat with Presenters

THURSDAY, APRIL 15, 2021

5:00 PM - 6:00 PM EDT Networking Sessions: Meet the Sponsors Guitar Shred Happy Hour Magic Happy Hour

FRIDAY, APRIL 16, 2021

10:00 AM - 11:00 AM EDT Coffee with Friends

11:00 AM - 12:00 PM EDT Concurrent Sessions

12:00 PM - 12:30 PM EDT Break

12:30 PM - 1:30 PM EDT Concurrent Sessions

1:30 PM - 2:00 PM EDT Break

2:00 PM - 3:00 PM EDT Concurrent Sessions

3:00 PM - 3:30 PM EDT Break

3:30 PM - 4:30 PM EDT Closing Town Hall Panel: Future Needs

> 4:30 PM - 5:00 PM EDT Chat with Presenters

5:00 - 6:00 PM EDT Closing Networking Event: Closing Remarks Raffle Announcements Future Symposia Suggestions

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DIGITAL HEALTH

DIGITAL HEALTH TUESDAY, APRIL 13, 2021 TIME **SESSION DETAILS** DH1 - The Psychology of Engagement: An Approach for Research and Design for **Lasting Behavior Change** 12:30 a.m. - 1:30 p.m. Session Type: Track Keynote Chair: Greg Hamilton, Mad*Pow Authors: Amy Bucher, Mad*Pow DH2 - COVID Session Type: Oral Presentations Chair: Qiong Nie, University of Illinois at Urbana Champaign Breast Cancer Survivors' Experience of Notification of Cancer Care Delays at the Outset of the COVID-19 Pandemic: An Internet-Based Questionnaire Authors: Elizabeth Lerner Papautsky, University of Illinois at Chicago; Tamara Hamlish, Univerity of Illinois at Chicago 2:00 p.m. - 3:00 p.m. Household and Population Level Behavioural Changes due to COVID-19 Pandemic: A Smart Thermostat Based Comparative Data Analysis Authors: Kirti Sundar Sahu, University of Waterloo; Arlene Oetomo, University of Waterloo; Niloofar Jalali, University of Waterloo; Plinio Morita, University of Waterloo Digital Immunity Passports: Ethical, Legal, and Social Lessons Learned for COVID-19 Authors: Rachele Hendricks-Sturrup, Future of Privacy Forum DH3 - Can Cognitive Assessment Games Save us from Cognitive Decline? **Session Type:** Discussion Panel Chair: Mark Chignell, University of Toronto, Centivizer Inc. 3:30 p.m. - 4:30 p.m. Authors: Mark Chignell, University of Toronto, Centivizer Inc.; J. Bruce Morton, Western University, Brain and Mind Institute; Monika Kastner, North York General Hospital, University of Toronto; Jacques Lee, Schwarz/Reisman Emergency Medicine Institute, Sinai WEDNESDAY, APRIL 14, 2021 **DH4 - Chatbots and Gamification Session Type:** Oral Presentations Chair: Janey Barnes, User-View, Inc **Designing Effective Chatbots for Better Clinical Outcomes** Authors: Andrew Shirk, Magneta Health, LLC Lessons from Game Design for Building Emphatic and Encouraging Digital Health Experience Authors: Oliver Šimko, luducrafts s.r.o., Slovakia 11:00 a.m. - 12:00 p.m. Exploring the Potential of the Stretch Mobile Robot for Older Adults with Mobility **Disabilities** Authors: Travis Kadylak, University of Illinois at Urbana-Champaign; Megan A. Bayles, University of Illinois at Urbana-Champaign; Leonardo Galoso, University of Illinois at Urbana-Champaign; Harshal Mahajan, University of Illinois at Urbana-Champaign; Maxwell Chan, University of Illinois at Urbana-Champaign; Charles C. Kemp, University of Illinois at Urbana-Champaign; Aaron Edsinger, University of Illinois at Urbana-Champaign; Wendy A. Rogers, University of Illinois at Urbana-Champaign

TIME	SESSION DETAILS
	SESSION DETAILS
12:30 p.m 1:30 p.m.	DH5 - Aging and Accessibility Session Type: Oral Presentations Chair: Clayton Rothwell, Infoscitex
	Understanding Health Self-Management Challenges for Older Adults with and without Mobility and Sensory Disabilities Authors: Qiong Nie, University of Illinois at Urbana-Champaign; Wendy Rogers, UIUC
	Lessons Learned from Developing a MCI Virtual Empowerment Program Authors: W. Bradley Fain, Georgia Institute of Technology, Emory University; Elizabeth Mynatt, Georgia Institute for Technology; Kayci Vickers, Emory University School of Medicine; Salimah Laforce, Georgia Institute of Technology; Sarah Farmer, Georgia Institute of Technology; Jeremy Johnson, Georgia Institute of Technology; Matthew Doiron, Emory University School of Medicine; Aparna Ramesh, Georgia Institute of Technology; Tamara Zubatiy, Georgia Institute of Technology; Amy Rodriguez, Emory University School of Medicine
	Assisted Computing - A New Design Paradigm for Apps Used by Seniors Authors: David Platt, Harvard University Extension School, Rolling Thunder Computing
2:00 p.m 3:00 p.m.	DH6 - Remote Health Technologies Session Type: Oral Presentations Chair: Shilo Anders, Vanderbilt University Medical Center
	Design and Development of a Prototype Heads-Up Display that Supports Context- Aware, Semi-Automated, Hands-Free Medical Documentation Authors: Nicolette McGeorge, Charles River Analytics; Susan Latiff, Charles River Analytics; Chris Muller, Charles River Analytics; Lucas Dong, Charles River Analytics; Ceara Chewning, Charles River Analytics; Daniela Friedson-Trujillo, Charles River Analytics; Stephanie Kane, Charles River Analytics;
	Battlefield Medic and Clinician Decision Support Authors: Christopher P. Nemeth, Applied Research Associates, Inc.; Adam Amos-Bonks, Applied Research Associates, Inc.; Natalie Keeney, Applied Research Associates, Inc.; Dawn Laufersweiler, Applied Research Associates, Inc.; Gregory Rule, Applied Research Associates, Inc.; Vitaly Herasevich, Applied Research Associates, Inc.;
3:30 p.m 4:30 p.m.	DH7 Session Type: Oral Presentations Chair: Greg Hamilton, Mad*Pow, USA
	Designing Exposure Notification Applications as Persuasive Technologies to Improve Uptake and Effectiveness Authors: Plinio Morita, University of Waterloo; Kiemute Oyibo, University of Waterloo; Takeru Yasunaga, University of Waterloo; Information Tailoring for Effective Risk Communication: Analysing Contexts of Use of the Digital Counselling System iKNOW for Familial Breast & Ovarian Cancer
	Authors: Frauke Mörike, Technische Universität Berlin, Germany; Christine M. Schmid, Technische Universität Berlin, Germany Data Work for AI-Supported Clinical Tools: Showing Value to Encourage Patient
	Engagement in Providing SBDOH Data Authors: Andrea Barbarin, IBM Design; Astrid Chow, Eleanor Health

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THURSDAY, APRIL 15, 2021		
TIME	SESSION DETAILS	
11:00 a.m. – 12:00 p.m.	DH8 - Behavior Change and Digital Health Session Type: Discussion Panel Authors: Kate Wolin, Circea; Ingrid Melvær Paulin, Rally Health; Gina Merchant, Tandem Diabetes Care; Greg Hamilton, Mad*Pow (Moderator)	
12:30 p.m. – 1:30 p.m.	 DH9 - Collaborative Tele-Health Session Type: Oral Presentations Chair: Megan Salwei, Vanderbilt University Medical Center TechSAge Telewellness Tool: A 'How To' Guide for Facilitating Tele-Technology Delivered Wellness Classes to Older Adults Authors: Tracy Mitzner, Georgia Institute of Technology; Elena Remillard, Georgia Institute of Technology; Kara Cohen, Georgia Institute of Technology; Lelah Cochran, Georgia Institute of Technology 	
	 A User-Centered Need Analysis of Cancer Patient Navigation - An Intersection of Collaborative Work and Collaborative Health IT Authors: Rupa S. Valdez, University of Virginia; Courtney Rogers, University of Virginia; Jennifer McEachin, Fauquier Health; Donna M. Wilson, Massey Cancer Center VCU Health System; Wendy F. Cohn, University of Virginia; Brooke Adams, University of Virginia; Melissa Choi, University of Virginia; Wayne Zachary, Starship Health Technologies Barriers to Family-Centered Care in the Electronic Health Record Authors: Dean Karavite, Children's Hospital of Philadelphia; Ekaterina Nekrasova, Children's Hospital of Philadelphia; Shannon Kelleher, Children's Hospital of Philadelphia; Jeritt Thayer, Children's Hospital of Philadelphia; Brian Jenssen, Children's Hospital of Philadelphia; Robert Grundmeier, Children's Hospital of Philadelphia; Alexander Fiks, Children's Hospital of Philadelphia 	
2:00 p.m 3:00 p.m.	 DH10 - Poster Chats Session Type: Poster Chair: Kathryn Tippey, University of North Carolina A Critical Review of Consumer Health Search Engine Functionalities for Patients with Chronic Health Conditions Authors: Bhavya Bhavya, University of Illinois at Urbana-Champaign; Jessie Chin, University of Illinois at Urbana-Champaign; Chengxiang Zhai, University of Illinois at Urbana-Champaign; Chengxiang Zhai, University of Illinois at Urbana-Champaign; Chengxiang Zhai, University of Illinois at Urbana-Champaign; Chung-Yi Chiu, University of Illinois at Urbana-Champaign A Human Factors Evaluation of Blood Pressure Monitors for Use in MEDSReM 2.0 System Authors: Timothy M. Hale, University of Illinois Urbana-Champaign;Carson Smith, University of Illinois Urbana-Champaign; Jeannie K. Lee, University of Arizona; Kathleen C. Insel, University of Arizona; Wendy A. Rogers, University of Illinois Urbana-Champaign A Scoping Review of Communication on Social Media - Breast Cancer Authors: Nikhil Shetty, Stevens Institute of Technology; Onur Asan, Stevens Institute of Technology A Study of Physicians' Explanatory Reasoning in Re-diagnosis Scenarios: Investigating Explanation Strategies for Al Diagnostic Systems Authors: Lamia Alam, Michigan Technological University; Lamia Alam, Michigan Technological University 	

TIME	SESSION DETAILS
	Autonomous Human Monitoring and Activity Recognition for Safety and Health Improvement Authors: Hajar Abedi, University of Waterloo; George Shaker, University of Waterloo; Jennifer Boger, University of Waterloo; Alexander Wong, University of Waterloo; Plinio Morita, University of Waterloo;
	An Analysis of the Current Mobile Technologies Available to Assist Hispanic Minority Youth in Diagnosis and Self-Treatment of Anxiety and Depression Authors: Lixcy Vega, University of Illinois at Urbana-Champaign; Jessie Chin, University of Illinois at Urbana-Champaign
	By the Skin of Our Teeth - Navigating Product Design in a Crisis Authors: Kelsey Gross, Digital Diagnostics
	Characterizing Today's Health Information Technology Toolbox Through a Comprehensive Environmental ScanAuthors: Julia G. Sheehan, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Siddhartha Nambiar, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Tracy C. Kim, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Ronald E. Romero, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Mark S. Smith, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Tracy C. Institute; Thomas M. White, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Sadaf Kazi, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Kristen E. Miller, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Sadaf Kazi, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Kristen E. Miller, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Kristen E. Miller, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Kristen E. Miller, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute; Kristen E. Miller, MedStar Health National Center for Human Factors in Healthcare, MedStar Health Research Institute;
2:00 p.m 3:00 p.m.	Cyber-Situational Awareness in Clinical Trials Using Wearable Device Technology Authors: Elizabeth A. Johnson, University of Arizona; Jane M. Carrington, University of Florida
	Deriving Information Requirements for College Student Mental Health Self- Management Mobile Applications Authors: Xiaomei Wang, Texas A&M University; Alec Smith, Texas A&M University; Bruce Keller, Texas A&M University; Priyanka Ambati, Texas A&M University; David Dishman, Texas A&M University; Farzan Sasangohar, Texas A&M University
	Development of home personas to inform design of consumer health IT Authors: Hanna J. Barton, Department of Industrial and Systems Engineering, University of Wisconsin - Madison; Ellen G. Pflaster, Department of Industrial and Systems Engineering, University of Wisconsin - Madison; Shanmugapriya Loganathar, Department of Industrial and Systems Engineering, University of Wisconsin - Madison; Adati Tarfa, School of Pharmacy, University of Wisconsin - Madison; Department of Industrial and Systems Engineering, University of Wisconsin - Madison; Mary L. Ehlenbach, Department of Pediatrics, University of Wisconsin - Madison; Barbara Katz, Family Voices of Wisconsin; Ryan J. Coller, Department of Pediatrics, University of Wisconsin - Madison; Rupa S. Valdez, Department of Public Health Sciences, University of Virginia; Department of Engineering Systems and Environment, University of Virginia; Nicole E. Werner, Department of Industrial and Systems Engineering, University of Wisconsin - Madison
	Ethical Ergonomics: Telehealth in Context Authors: Carol Ge Gu, University of Illinois at Chicago; Elizabeth Lerner Papautsky, University of Illinois at Chicago; Eric Swirsky, University of Illinois at Chicago
	Etiometry T3 Heuristic Evaluation Authors: Elizabeth Meyeroff, Rowan University; Patrice Tremoulet, Rowan University

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ТІМЕ	SESSION DETAILS	
	DH10 - Poster Chats Session Type: Poster	
	Evaluating Patients' Perceptions of the Use of Secure Messaging for Medication Reconciliation During Transitions of Care Authors: Julianne E. Brady, Center for Healthcare Organization and Implementation Research, VA, Boston Healthcare System; Amy Linsky, Center for Healthcare Organization and Implementation Research, VA Boston Healthcare System; Steven R. Simon, Veterans Administration Greater Los Angeles Healthcare System; Kate Yeksigian, Veterans Administration Boston Healthcare System; Amy Rubin, Boston University; Alan J. Zillich, Purdue University Department of Pharmacy Practice; Alissa L. Russ-Jara, Purdue University Department of Pharmacy Practice	
	Evaluating Older Adults' Attitudes toward Domestic Robot Assistance for	
	Healthcare Tasks Authors: Megan A. Bayles, University of Illinois at Urbana-Champaign; Travis Kadylak, University of Illinois at Urbana-Champaign; Jennifer Lee, University of Illinois at Urbana-Champaign; Wendy A. Rogers, University of Illinois at Urbana-Champaign;	
	Exploring the Acceptance, Barriers, and Needs of Assistive Technology for Wheeled Device Users	
	Authors: Mikaela Frechette, University of Illinois at Urbana-Champaign; Jacob Sosnoff, Department of Kinesiology and Community Health, University of Illinois at Urbana- Champaign	
2:00 p.m 3:00 p.m.	Human Factors and Ergonomics-Based Recommendations for the Use of Teleconsultation Tools in the Cantabrian Health Service (Spain) Authors: Laura Herrero-Urigüen, IDIVAL; Marina Cano-Iglesias, IDIVAL; Mª Paz Álvarez- García, IDIVAL; Rosa Ayesa-Arriola, IDIVAL; Raúl Martínez-Santiago, Servicio Cántabro de Salud; Abraham Delgado, Servicio Cántabro de Salud; Santiago Garcia-Blanco, Cantabrian Ministry of Health;	
	Investigating the Key Persuasive Features for Fitness App Design and Extending the Persuasive System Design Model: A Qualitative Approach Authors: Kiemute Oyibo, University of Waterloo, Canada	
	Left Behind by Society: The Elderly Population and Challenges Faced with TeleHealth	
	Authors: Raquel S. Garcia Duran, Sophic Synergistics LLC; Jennifer Fogarty, PhD, Sophic Synergistics LLC; Cynthia Rando, Sophic Synergistics LLC;	
	Lessons Learned: The Impact of Smartphone Implementation with Emergency Department Nurses	
	Authors: Eryn M. Godwin, Children's Mercy Hospital; Sarah D. Fouquet, Children's Mercy Hospital	
	Mobile Health Platform for Individual and Population-Level Surveillance Authors: Pedro Vemovitsky, University of Waterloo; Plinio Morita, University of Waterloo	
	Morphological Analysis of the Human Lower Lumbar Spine Using Sagittal Magnetic Resonance Imaging (MRI) Scans Authors: Ruoliang Tang, Sichuan University Pittsburgh Institute; Wen Wen, Sichuan University Pittsburgh Institute; Ge Wu, Sichuan University Pittsburgh Institute; Yu Liu, Sichuan University Pittsburgh Institute; Yang Zhang, Sichuan University Pittsburgh Institute;	

TIME	SESSION DETAILS
	Optimizing Public Health Data Collection from Internet of Things Sensors: An Integrated Data-Sharing Platform Authors: Kang Wang, University of Waterloo; Shi Cao, University of Waterloo; Plinio P. Morita, University of Waterloo
	Physicians and their Patience: Redefining Healthcare Relationships through Readability OptimizationAuthors: Rachel V. Ball, University of Central Florida; Dave B. Miller, University of Central Florida; Kathlyn Camargo Macias, University of Central Florida; Mahmoud Ibrahim, University of Central Florida; Ernesto Robalino Gonzaga, University of Central Florida; Olga Karasik, University of Central Florida; Dekai R Rohlsen-Neal, University of Central Florida; Edward A. Ross, University of Central Florida; Ashley M. Hughes, University of Central Florida; Peter A. Hancock, University of Central Florida; Ben D. Sawyer, University of Central Florida
	Powerability, a Mobility Equipment Education App for Caregivers Authors: Cybele Wu; Montana State University
	Psychiatry Transcript Annotation: Human Factors Process Study and Improvements Authors: Srinivasan Sridhar, Montana State University; Nazmul Kazi, Montana State Univesrity; Inidka Kahanda, University of Northern Florida; Bernadette McCrory,
2:00 p.m. – 3:00 p.m.	The Role of Patient Communication Tools in Medication Management After a Regimen ChangeAuthors: Elaine Giletta, Johns Hopkins University School of Medicine; Yushi Yang, Johns Hopkins Health System; Raquel Mayne, Johns Hopkins University - Bloomberg School of Public Health; Rabia Jalalzai, Johns Hopkins University - Bloomberg School of Public Health; Vanessa Hurley, Georgetown University; Nicole Mollenkopf, Johns Hopkins University - School of Nursing; Jessica Schwartz, Johns Hopkins University - School of Medicine; Allen Chen, Johns Hopkins University - School of Medicine; Allen Chen, Johns Hopkins University - School of Medicine; Samantha Pitts, Johns Hopkins University - School of Medicine;
	Tapping into the Apple Healthcare EcosystemAuthors: Riley Gerszewski, Optum
	Telemedicine to Support Postoperative Visits Authors: Samuel Bonet, Texas A&M. Hale, University of Illinois Urbana-Champaign; Ineen Sultana, Texas A&M Farzan Sasangohar, Texas A&M University of Arizona; Ethan Larsen, Children's Hospital of Philadelphia; Feibi Zheng, Houston Methodist Hospital, USA
	The My Diabetes Care Mobile Patient Portal Intervention: Design Sprint and Prototype Testing Authors: William Martinez, Vanderbilt University Medical Center; Shilo Anders, Vanderbilt University Medical Center; Russ Beebe, Vanderbilt University Medical Center; Kryseana Harper, Vanderbilt University Medical Center; Thomas Knoerl, Upstate Medical University - State University of New York; Lyndsay Nelson, Vanderbilt University Medical Center; Audriana Nigg, Vanderbilt University Medical Center; Carrie Reale, Vanderbilt University Medical Center; Trent Rosenbloom, Vanderbilt University Medical Center; Anthony Threatt, ProviderTrust; Tom Elasy, Vanderbilt University Medical Center; The Relationship between Users' Receptiveness to Health Messages and Social Cognitive Beliefs in Persuasive Health Communication; Kiemute Oyibo, University of Waterloo
	The Relationship between Users' Receptiveness to Health Messages and Social Cognitive Beliefs in Persuasive Health Communication Authors: Kiemute Oyibo, University of Waterloo, Canada

THURSDAY, APRI	THURSDAY, APRIL 15, 2021		
TIME	SESSION DETAILS		
	 DH10 - Poster Chats Session Type: Poster Understanding challenges in the Home Environment and Technology Preferences for Home Assessments and Modifications Among Older Adults Undergoing Joint Replacement Surgery: A Qualitative Feasibility Study Authors: Rutali Joshi, Center for Health Facilities Design and Testing, Clemson University; Sahar Mihandoust, Center for Health Facilities Design and Testing, Clemson 		
	 University; Anjali Joseph, Center for Health Facilities Design; Kapil Chalil Madathil, Clemson University Understanding Clinicians' Needs, Requirements, and Perception of a Sepsis Clinical Decision Support System (CDSS) to Support Successful Implementation Authors: Olamide Olatoye, University of Waterloo; Kathleen Andres, SickKids; Erica Patterson, SickKids; Catherine Burns, University of Waterloo, Canada 		
2:00 p.m. – 3:00 p.m.	Usable Does Not Mean Used: Going Beyond Usability to Engage Dementia Caregivers with Mobile Health Technology Authors: Janetta C. Brown, Indiana University; Richard J. Holden, Indiana University; Britain Taylor, Indiana University; Malaz A. Boustani, Indiana University		
	 Usability of Health Information Exchange User Interfaces during Simulated Medication Reconciliation Authors: Himalaya Patel, Veterans Health Administration; April Savoy, Purdue School of Engineering and Technology, Indiana University-Purdue University Indianapolis; Steven L. Sanchez, Veterans Health Administration; Morgan H. Traylor, Veterans Health Administration; Michelle J. Robinson, Veterans Health Administration; Khoa A. Nguyen, Department of Pharmacotherapy & Translational Research, University of Florida; Kenneth S. Boockvar, Geriatrics Research, Education, and Clinical Center, James J. Peters VA Medical Center; Vincent S. Fan, VA Puget Sound Health Care System; Emily Locke, VA Puget Sound Health Care System; Bryan S. Gibson, Center for Informatics, Decision-Enhancement and Analytic Sciences, VA Health Services Research and Develo p.m.ent, George E. Wahlen VA Medical Center; Susan H. Byerly, Geriatric Research, Education, and Clinical Center System; David Haggstrom, Veterans Health Administration; Teresa Damush, Veterans Health Administration; Alissa Russ-Jara, Department of Pharmacy Practice, College of Pharmacy, Purdue University; Michael Weiner, Veterans Health Administration 		
	Usability Study of a Novel Collaborative Health IT in a Pediatric ICU Authors: Avishek Choudhury, Stevens Institute of Technology; Onur Asan, Stevens Institute of Technology; Matthew Scanlon, Medical College of Wisconsin		
	Usability Testing for the Mental Health Evaluation and Lookout Program (mHELP) Application for College Students Authors: Elyssa T. Ramos, Texas A&M University; Xiaomei Wang, Texas A&M University; Bruce Keller, Texas A&M University; Allison Chang, Texas A&M University; Brandon Watanabe, Texas A&M University; Joseph Cahill, Texas A&M University; Farzan Sasangohar, Texas A&M University		
	Using mHealth to Support Health Coaching for Patients with Hypertension Authors: Carl Markert, Texas A&M University; Karim Zahed, Texas A&M University; Farzan Sasangohar, Texas A&M University		

THURSDAY, APRIL 15, 2021		
TIME	SESSION DETAILS	
	DH10 - Poster Chats Session Type: Poster	
	Using Simulations to Study Impact of Transtibial Amputations on Long-Term Health of Intact Limb Authors: Ninad Mahajan, Penn State University; Pratima Saravanan, Penn State University; Jessica Menold, Penn State University	
2:00 p.m 3:00 p.m.	Virtual Needs Assessment for Older Adults with Cognitive Impairment Authors: Allura F. Lothary, University of Illinois at Urbana-Champaign; Elizabeth A. Lydon, University of Illinois at Urbana-Champaign; Maurita T. Harris, University of Illinois at Urbana-Champaign; Raksha A. Mudar, University of Illinois at Urbana-Champaign; Wendy A. Rogers, University of Illinois at Urbana-Champaign;	
	Well-Orchestrated Occupational Therapy Telehealth Sessions: Training and Preparation for Safe and Effective Service Delivery Authors: Cynthia Abbott-Gaffney, Temple Unviersity OT Program, Boston University; Karen Jacobs, Boston University	
3:30 p.m 4:30 p.m.	DH11 - Behavior Change and Digital Health Session Type: Discussion Panel Chair: Brittany Anderson-Montoya, Atrium Health	
	Human Factor FHIR-FLIs: Applying SEIPS 2.0 to Cross-Platform App Development Authors: Brittany Anderson-Montoya, Atrium Health; David A. Pearson, Atrium Health, MayJuun; J. Grey Faulkenberry, Children's Hospital of Philadelphia, MayJuun; John D. Manning, Atrium Health, MayJuun	
FRIDAY, APRIL 16, 202	1	
TIME	SESSION DETAILS	
11:00 a.m. – 12:00 p.m.	DH12 - Data Visualizations Session Type: Oral Presentations Chair: Peter J Cho, Duke University	
	Lessons Learned: The Impact of Smartphone Implementation with Emergency Department Nurses Authors: Eryn M. Godwin, Children's Mercy Hospital; Sarah D. Fouquet, Children's Mercy Hospital	
	Methods for Comparing and Improving the Design of Physical Activity Data Visualizations Authors: Peter M. Frackleton, University of Massachusetts Amherst; Jenna Marquard, University of Massachusetts Amherst; Cynthia Jacelon, University of Massachusetts	

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EDUCATION AND SIMULATION

FRIDAY, APRIL 16, 2021		
TIME	SESSION DETAILS	
12:30 p.m 1:30 p.m.	DH13 - Connected Health Technologies Session Type: Oral Presentations Chair: Kapil Chalil Madathil, Clemson University	
	Engaging Patients with Health Information Technology (IT) for Resilient Cancer Care Authors: Megan E. Salwei, Vanderbilt University Medical Center; Carrie Reale, Vanderbilt University Medical Center; Matthew B. Weinger, Vanderbilt University Medical Center; Akhil Choudhary, Vanderbilt University Medical Center; Bishop Rhodes, Vanderbilt University Medical Center; Laurie L. Novak, Vanderbilt University Medical Center; Joyce Harris, Vanderbilt University Medical Center; Jason Slagle, Vanderbilt University Medical Center; Shilo Anders, Vanderbilt University Medical Center; Dan France, Vanderbilt University Medical Center;	
	CovIdentify - Developing Predictive Models for COVID-19 with Wearables Data Authors: Peter Cho, Duke University	
	Investigating Heart Rate Patterns During Hyperarousal Events Among Veterans Who Have Posttraumatic Stress Disorder (PTSD) Authors: Mahnoosh Sadeghi, Texas A&M University; Farzan Sasangohar, Texas A&M University; Anthony McDonald, Texas A&M University	
	DH14 - Practitioner Potpourri Session Type: Oral Presentation Chair:	
	The Future of Pharmacy: Empowering Timely, Intelligent, and Proactive Care Authors: Tara C. Tsang, MedMe Health	
2:00 p.m. – 3:00 p.m.	Update on Guidelines for Mobile Health Applications Authors: Natalie Abts, Genentech; Janey Barnes, User-View, Inc	
	Calculating the Return on Investment of User-Centered Design to Improve Health Care Products and Interfaces Authors: Mary Michaels, Elsevier	
3:30 p.m. – 4:30 p.m.	DH15 - Closing Town Hall - FDA Medical Software Regulations Panel Session Type: Town Hall Authors: Kathryn Tippey, University of North Carolina	
EDUCATION AND	SIMULATION	
TUESDAY, APRIL 13, 20	21	
TIME	SESSION DETAILS	
12:30 p.m 1:30 p.m.	ES1 - Measure Twice, Cut Once: Using Simulation to Get it Right the First Time Session Type: Track Keynote Chair: Ellen Deutsch, Children's Hospital of Philadelphia Authors: Robyn Clay-Williamson, Institute of Health Innovation	

TIME	
TIME	SESSION DETAILS
2:00 p.m 3:00 p.m.	ES2 - Simulation for Improving Patient Care Session Type: Oral Presentations Chair: Gyusung Lee, American College of Surgeons
	In situ Interprofessional Simulation in the Congenital Cardiac Intensive Care Unit using the PEARLS Framework for Systems Integration. Authors: Amy Parker, Cedars-Sinai Medical Center; Amy Rice, Cedars-Sinai Medical Center; Tara Cohen, Cedars-Sinai Medical Center; Nicole Berndsen, Cedars-Sinai Medical Center; Robert Wong, Cedars-Sinai Medical Center; Richard Kim, Cedars-Sinai Medical Center; Jeffrey Barnum, Cedars-Sinai Medical Center; Russell Metcalf-Smith, Cedars-Sinai Medical Center; Pooja Nawathe, Cedars-Sinai Medical Center
	Assessment of Complex Care Teams Situation Awareness of Non-routine Events in Emergency Situations Authors: Shanelle Clarke, Emory University / Children's Healthcare of Atlanta, Marzieh Saghafian, Stanford University, Lillian Su, Lucille Packard Children's Hospital
	Combining Human Factors and Simulation Training to Reduce Falls Authors: Laurie Wolf, Carilion Clinic; Harsh Sanghavi, Carilion Clinic; Amanda Anderson Carilion Clinic
	ES3 -Simulation for Design and Diagnosis Session Type: Oral Presentations Chair: Laurie Wolf, Carilion Clinic
3:30 p.m 4:30 p.m.	Crash Cart Usability: A Method in Simulation & Iterative Design Authors: Matthew Jesso, Carilion Clinic; Yuhao Peng, Carilion Clinic; Amanda Anderson Carilion Clinic
	Foundational Analysis to Support Simulation Training System Design Authors: Christen Sushereba, Unveil Systems LLC, Applied Decision Science; Laura MIlitello, Unveil, LLC, Applied Decision Science; Emily Patterson, Ohio State University; Steve Wolf, Unveil, LLC; Oliver Smith, Unveil, LLC; Christopher San Miguel, Ohio State University
	Comparing Traditional and Augmented Reality Training for Identifying Critical Symptoms for Diagnosing Airway Obstruction Cases: A Pilot Study Authors: Lauren A. Mansour, Ohio State University; Christen Sushereba, Unveil Systems LLC; Laura MIlitello, Unveil, LLC; Christopher San Miguel, Ohio State University; Emily S Patterson, Ohio State University
WEDNESDAY, APRIL 14	l, 2021
TIME	SESSION DETAILS
	ES4 - Simulation for Virtual and Real-World Studies Session Type: Oral Presentations Chair: Timothy Elgin, University of Iowa
11:00 a.m. – 12:00 p.m.	Virtual Reality in Human Factors: Creating Real Options for Virtually Testing Medica Devices Authors: Katelyn Faulks, Ipsos; Trevor D. Johnson, Ipsos; Elizabeth Smyth, Ipsos; Mike Murphy, Ipsos
	Case Study - Benchmarking Immersive Technology Study Results Against Real World Outcomes Authors: Annie Diorio-Blum, Battelle
	Identifying Conflicting Priorities in Hand Sanitizers Among Different Clinical End-

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EDUCATION AND SIMULATION

WEDNESDAY, APRIL 14, 2021		
ТІМЕ	SESSION DETAILS	
12:30 p.m. – 1:30 p.m.	ES5 - Simulation Supporting Learning Session Type: Oral Presentations Chair: Laurie Wolf, Carilion Clinic	
	Linklt: A New Tool for Assessing Structural Knowledge and Providing Formative Feedback Authors: Russell J. Branaghan, Research Collective, Arizona State University; Roger W. Schvaneveldt, Arizona State University; Jennifer Winner, 711 Human Performance Wing - US Air Force Research Laboratory	
	The Catastrophe Theory to Interpret Risky Migration During Medical Emergency Triage: First Empirical Evidences During Task Simulation Authors: Thierry Morineau, University of Southern Brittany, Atlantic Brittany Hospital Centre; Régis Lorguilloux, Atlantic Brittany Hospital Centre; Yasmina Galateau, Atlantic Brittany Hospital Centre; Gaétane Le Palmec, Atlantic Brittany Hospital Centre; Jean-Baptiste Perron, Atlantic Brittany Hospital Centre; Bertrand Boulanger, Atlantic Brittany Hospital Centre	
	Designing an Intelligent Tutoring System (ITS) as a Tool to Support the Training of Mental Health Providers in Core Psychotherapy Competencies. Authors: Emily Friedman, Alacrity Center, University of Washington	
	ES6 - Task Analysis and Simulation Session Type: Oral Presentations Chair: Megan Gregory, Ohio State University College of Medicine	
2:00 p.m 3:00 p.m.	Novel Application of Cognitive Task Analysis: Develo p.m.ent of a Neonatal Mask Ventilation Checklist for Instruction and Assessment Authors: Beverley Robin, Rush University Medical Center; Elizabeth Papautsky, University of Illinois; Joseph deBettencourt, Rush University Medical College	
	When Treatment Algorithms Aren't Enough: Using Simulation to Understand Safety Threats in Anaphylaxis Authors: Maritza Plaza-Verduin, University of Florida; Mary D. Patterson, University of Florida; Rosemarie Fernandez, University of Florida	
	Identifying and Assessing Human Factors Surrounding the Introduction of High Frequency Ventilation During Neonatal Transport with Simulation Authors: Samuel Wong, University of Iowa; Jonathan Klein, University of Iowa; Timothy Elgin, University of Iowa	

	WEDNESDAY, APRIL 14, 2021	
TIME	SESSION DETAILS	
3:30 p.m 4:30 p.m.	ES7 - Student Forum I Session Type: Oral Presentations Chair: Gyusung Lee, American College of Surgeons	
	(Social) Distanced Medical Simulation: Lessons Learned in Virtualizing Resident Central Venous Catherization Authors: Jessica González-Vargas, The Pennsylvania State University; Haroula Tzamaras, The Pennsylvania State University; Jason Martinez, The Pennsylvania State University; Jason Moore, The Pennsylvania State University; Scarlett Miller, The Pennsylvania State University	
	The Development of a Holistic Central Venous Catheterization Simulator for Medical Education Authors: Haroula Tzamaras, The Pennsylvania State University; Dailen Brown, The Pennsylvania State University; Jason Martinez, Penn State Hershey Medical Center; Jessica González-Vargas, The Pennsylvania State University; Jason Moore, The Pennsylvania State University; Scarlett Miller, The Pennsylvania State University	
	Low-Cost Haptic Force Needle Insertion Simulator with Advanced Personalized Learning System Authors: Aoran Peng, The Pennsylvania State University; John Ostrander, The Pennsylvania State University; Noriana Radwan, The Pennsylvania State University; Elizabeth Starkey, The Pennsylvania State University; Jason Moore, The Pennsylvania State University	
THURSDAY, APRIL 15, 2	2021	
TIME	SESSION DETAILS	
11:00 a.m. – 12:00 p.m.	 ES8 - PPE Reuse and Storage- Protecting Healthcare Workers Session Type: Discussion Panel Chair: Devin Doos, Indiana University School of Medicine PPE Reuse and Storage - Protecting Healthcare Workers Authors: Devin Doos, Indiana University School of Medicine; Paul Barach, Wayne State University; Rami Ahmed, Indiana University School of Medicine 	
12:30 p.m. – 1:30 p.m.	ES9 - Student Forum II Session Type: Oral Presentations Chair: Christen Sushereba, Unveil Systems LLC; Applied Decision Science, LLC	
	Understanding Effects of Inverted Motion Control During Robotic Skills Tasks to Cognitive Workload and Performance Authors: Jackie Cha, Clemson University; Juan Antonio Barragan Noguera, Purdue University; Chandru Sundaram, Indiana University School of Medicine; Juan Wachs, Purdue University; Denny Yu, Purdue University	
	Evaluating Psychosocial Support Provided by an Augmented Reality Device for Children with Type 1 Diabetes Authors: Daniel Ullman, Brown University; Elizabeth Phillips, George Mason University; Salomi Aladia, Brown University; Peter Haas, Brown University; Halle S. Fowler, Brown University; Iman S. Iqbal, Brown University; Kaitlyn L. Mi, Brown University; Isabel W. Riches, Brown University; Maya Omori, Brown University; Bertram F. Malle, Brown University	
	Developing an Evidence-Based Clinical Decision-Support System to Enhance Prosthetic Prescription Authors: Pratima Saravanan, Penn State University; Jessica Menold, Pennsylvania State University	

EDUCATION AND SIMULATION

THURSDAY, APRIL 15, 2021		
TIME	SESSION DETAILS	
	ES10 - Poster Session Type: Posters Chair: Ganesh Sankaranarayanan, UT Southwestern Medical Center	
	Are You Paying Attention? An Examination on the Potential Differences between Real-World and Augmented Reality Training for Tactical Combat Casualty Care Authors: Claire Hughes, Design Interactive; Ernesto Ruiz, Design Interactive; Cali Fidopiastis, Design Interactive; Kay Stanney, Design Interactive (United States)	
	Assessing the Ergonomic Design of a New Back Table for Perioperative Nurses Authors: Ketan Prakash Thakur, Rochester Institute of Technology; Pranav Madhav Kuber, Rochester Institute of Technology; Masoud Abdollahi, Rochester Institute of Technology; David Wenker, Rochester Institute of Technology; Mafaaz Kandrikar, Rochester Institute of Technology; Ehsan Rashedi, Rochester Institute of Technology	
2:00 p.m 3:00 p.m.	Comparing Traditional and Augmented Reality Training for Identifying Critical Symptoms for Diagnosing Airway Obstruction Cases: A Pilot Study Authors: Lauren A. Mansour, The Ohio State University; Christen Sushereba, Unveil Systems LLC; Laura Militello, Unveil Systems LLC; Christopher San Miguel, The Ohio State University; Emily S. Patterson, The Ohio State University	
	Comparisons of Weighted NASA-TLX and SURG-TLX for Simulated Laparoscopic Tasks Authors: Jiahui Ma, Montana State University; Bernadette McCrory, Montana State University; David Claudio, Montana State University	
	Creation of a High Fidelity, Cost Effective, Real World Surgical Simulation for Surgical Education Authors: Elizabeth De La Rosa, University of San Francisco California; Edward H. Kim, University of California San Francisco; Lygia Stewart, University of California San Francisco	
	Foundational Analysis to Support Simulation Training System Design Authors: Christen Sushereba, Unveil Systems LLC; Applied Decision Science, LLC; Laura MIlitello, Unveil, LLC; Applied Decision Science, LLC; Emily Patterson, The Ohio State University; Steve Wolf, Unveil, LLC; Oliver Smith, Unveil, LLC; Christopher San Miguel, The Ohio State University	

TIME	SESSION DETAILS
2:00 p.m 3:00 p.m.	ES10 - Poster Session Type: Posters
	Health Technology @ Illinois Innovating for Health Authors: Nicole Holtzclaw-Stone, University of Illinois Urbana-Champaign; Gabrielle Choo-Kang, University of Illinois Urbana-Champaign; Asif Huq, University of Illinois Urbana-Champaign; Tia King, University of Illinois Urbana-Champaign; Amrutha Kumaran, University of Illinois Urbana-Champaign; Neva Manalil, University of Illinois Urbana-Champaign; Marlene Robles Granda, University of Illinois Urbana-Champaign; Wendy A. Rogers, University of Illinois Urbana-Champaign
	Identifying and Assessing Human Factors Surrounding the Introduction of High Frequency Ventilation During Neonatal Transport with Simulation Authors: Samuel Wong, University of Iowa; Jonathan Klein, University of Iowa; Timothy Elgin, University of Iowa
	Is Remote Human Factors Testing an Acceptable Approach for Human Factors Validation Authors: Anil R Kumar, San José State University; Kevin Cluff, BioWork Engineering, LLC; Tim McLeroy, Noble
	Mindful Hand Hygiene and Self-Guided Training Using a Mobile Phone App Authors: Dr. Joan Cahill, Trinity College Dublin, Ireland; Alison Kay, Trinity College Dublin; Vivienne Howard, Trinity College Dublin; Prof Gerard Lacey, Trinity College Dublin; Siji George, Bon Secours Hospital; Ber Mulcahy, Bon Secours Hospital; Eva Ziampra, Beaumon Hospital, Dublin, Ireland; Richie Harte, Learnovate; Frank O Reilly, Learnovate; Fidelma Fitpatrick, Beaumont Hospital; Rachel Alex Nolan, Tallaght Hospital
	Physiological Effects of Augmented Reality Training for Tactical Combat Casualty Care (TCCC): Variations in Length of Exposure, Breaks, and Technological Modality Authors: Ernesto Ruiz, Design Interactive; Claire Hughes, Design Interactive; Kay Stanney, Design Interactive
	Psychological Aspects of Augmented Reality Training for Tactical Combat Casualty Care Authors: Jennifer Riley, Design Interactive; Kay Stanney, Design Interactive; Ernesto Ruiz, Design Interactive; Claire Hughes, Design Interactive
	Teaching Cognitive Interviewing Skills for Adverse Event Investigation Authors: Jonathan Stewart, BETA Healthcare Group, Lund University; Al Duke, BETA Healthcare Group
	Teaching Patient Mobility in the ICU Using a Simulated Patient Authors: Zachary R. Krom, Cedars-Sinai Medical Center; Louise A. Wall, LAC+USC Medical Institution; Jose Chavez, Cedars-Sinai Medical Center; Tara Cohen, Cedars- Sinai Medical Center

THURSDAY, APRIL 15, 2021			
TIME	SESSION DETAILS		
2:00 p.m 3:00 p.m.	ES10 - Poster Session Type: Posters		
	Trend Analysis of Healthcare Research in Human Factors over the Past 47 Years Authors: Salim A. Mouloua, University of Central Florida; Rachel Ball, University of Central Florida; Mustapha Mouloua, University of Central Florida; James Ferraro, University of Central Florida		
	Using Simulated Handover to Assess Team-Based Competencies in A Virtual Environment Authors: Mozhdeh Sadighi, University of Texas Southwestern Medical Center; Elizabeth H. Lazzarra, Embry-Riddle Aeronautical University; Meghan Michael, University of Texas Southwestern Medical Center; Jessica Hernandez, University of Texas Southwestern Medical Center; Chrissy Chan, University of Texas Southwestern Medical Center; Ian Shields, University of Texas Southwestern Medical Center; Ian Shields, University of Texas Southwestern Medical Center; Richard Preble, University of Texas Southwestern Medical Center; Mary E. Phelps, University of Texas Southwestern Medical Center; Scott Tannenbaum, gOE; Philip Greilich, University of Texas Southwestern Medical Center		
3:30 p.m 4:30 p.m.	ES11 - Challenges and Controversies: An Open Discussion Session Type: Discussion Chairs: Ellen Deutsch, Children's Hospital of Philadelphia and Ganesh Sankaranarayanan, UT Southwestern Medical Center		
FRIDAY, APRIL 16, 202	FRIDAY, APRIL 16, 2021		
TIME	SESSION DETAILS		
11:00 a.m 12:00 p.m.	ES12 - Covid-19 and Social Networking Session Type: Discussion Panel Chair: Mary Patterson, University of Florida		
	COVID 19 and Social Networking: Information Sharing Across Systems with In Situ Simulation Authors: Mary Patterson, University of Florida; Sarah Henrickson Parker, Virginia Tech University; Rosemarie Fernandez, University of Florida		

FRIDAY, APRIL 16, 2021		
TIME	SESSION DETAILS	
12:30 p.m 1:30 p.m.	ES13 - Student Forum III Session Type: Oral Presentations Chair: Ellen Deutsch, Children's Hospital of Philadelphia and Ganesh Sankaranarayanan, UT Southwestern Medical Center	
	Using Affordable at Home VR to Evaluate Training Methods for Medical Devices Authors: Imani Murph, North Carolina State University; Mitchell McDonald, North Carolina State University; Khalaeb Richardson, North Carolina State University; Michael Wilkinson, North Carolina State University; Scott Robertson, Georgia Institute of Technology; Amita Karunakaran, Georgia Institute of Technology; Maribeth Gandy Coleman, Georgia Institute of Technology; Vicky Byrne, KBR; Anne Collins McLaughlin, North Carolina State University	
	How Educational Institutions are Preparing Students for Medical Handoffs Authors: Kimberly N. Williams, Embry-Riddle Aeronautical University; Joseph R. Keebler, Embry-Riddle Aeronautical University; Elizabeth H. Lazzara, Embry-Riddle Aeronautical University	
2:00 p.m 3:00 p.m.	ES14 - Simulation, Human Factors and Design Session Type: Oral Presentations Chair: Timothy Elgin, University of Iowa	
	'But How Do We Do That? What Do We Need?' - Using Multidisciplinary Simulation to Learn How to Safely Facilitate Radiological Imaging for Ventilated Neonates Authors: Lucine Nahabedian, Royal Wolverhampton NHS Trust, United Kingdom; Annabel Copeman, Royal Wolverhampton NHS Trust; Rob Negrine, Royal Wolverhampton NHS Trust	
	Partnering Simulation with Human Factors: Shift Change Safety Checks Authors: Laura H. Barg-Walkow, Children's Hospital Colorado; Christopher S. Nichols, Children's Hospital Colorado, Jana K. Strangfeld, Children's Hospital Colorado; Jessica L. Perdue, Children's Hospital Colorado	
	Synergy: Development of an Interdisciplinary Curriculum for Clinical Learners and Design Students Authors: Hannah Park, University of Kansas, School of Architecture and Design; Blake Lesselroth, University of Oklahoma-Tulsa, Department of Medical Informatics	
3:30 p.m 4:30 p.m.	ES15 - Closing Town Hall Session Type: Town Hall Chair: Ellen Deutsch, Children's Hospital of Philadelphia and Ganesh Sankaranarayanan, UT Southwestern Medical Center	

HEALTHCARE EN	HEALTHCARE ENVIRONMENTS		
TUESDAY, APRIL 13, 2	TUESDAY, APRIL 13, 2021		
TIME	SESSION DETAILS		
12:30 p.m 1:30 p.m.	HE1 - Drinking the Human Factors Kool-Aid: Breaking Down Barriers to Grow a Hospital Human Factors Program Session Type: Track Keynote Chair: Brittany Anderson-Montoya, Atrium Health Authors: Dr. Terry Fairbanks, MedStar Health		
2:00 p.m. – 3:00 p.m.	 HE2 - Surgical Ergonomics - Current state and future directions Session Type: Discussion Panel Chair: M. Susan Hallbeck, Mayo Clinic Authors: Geeta Lal, University of Iowa Hospitals and Clinics; Susan Hallbeck, Mayo Clinic; Claudia Corwin, University of Iowa Hospitals and Clinics; Kristin Chrouser, University of Michigan Medical School, Veterans Administration 		
3:30 p.m 4:30 p.m.	 HE3 - COVID Environment - Communication Session Type: Oral Presentations Chair: Ken Catchpole, Medical University of South Carolina Incorporating Human Factors into a Healthcare System's COVID-19 Pandemic Communication Strategy Authors: Rebecca L. Butler, MedStar Health; Lucy C. Stein, MedStar Health; Ann Katherine Hoobler, MedStar Health; Erica L. Hoenig, MedStar Health; Laura M. Lee, MedStar Health, Kathryn M. Kellogg, MedStar Health Evaluation of a Commercial Communication Technology to Support ICU Procedures and Isolated Care during COVID-19 Authors: Garry Mann, Alfred Health, Monash University; Frank Smolenaers, Alfred Health, Monash University; Paul Tynan, Alfred Health; Christopher Mason, Alfred Health; Stuart Marshall, Alfred Health, Monash University Writing Stop on a Yield Sign - Exploration of a Failure of Unified COVID Pandemic Messaging 		
	Messaging Authors: Michael Kirchhoff, Cooper University Health Care		

TIME	SESSION DETAILS
11:00 a.m. – 12:00 p.m.	HE4 - Built Environment Session Type: Oracle Presentations Chair: A. Joy Rivera, Froedtert Hospital
	Effects of Operating Room Size on Flow Disruptions in Robotic-Assisted Surgery Authors: Falisha Kanji, Cedars-Sinai Medical Center; Tara Cohen, Cedars-Sinai Medical Center; Myrtede Alfred, Medical University of South Carolina; Ashley Caron, Cedars- Sinai Medical Center; Samuel Lawton, Medical University of South Carolina; Stephen Savage, Medical University of South Carolina; Daniel Shouhed, Cedars-Sinai Medical Center; Jennifer Anger, Cedars-Sinai Medical Center; Ken Catchpole, Medical University of South Carolina
	Creating Healthy Soundscapes to Support Care Providers Authors: Erica E. Ryherd, University of Nebraska – Lincoln; Bethany R. Lowndes, University of Nebraska Medical Center; Ilene Busch Vishniac, Sonavi Labs; Victoria Kennel, University of Nebraska Medical Center
	System Safety in Non-Operating Room Anesthesia Authors: Myrtede Alfred, Medical University of South Carolina; Abigail Herman, Medical University of South Carolina; Dulaney Wilson, Medical University of South Carolina; Candance Jaruzel, Medical University of South Carolina; Catherine Tobin, Medical University of South Carolina; Samuel Lawton, Medical University of South Carolina; JG Reves, Medical University of South Carolina; Dave Neyens, Clemson University; Ken Catchpole, Medical University of South Carolina
12:30 p.m. – 1:30 p.m.	HE5 - Surgical Environment Session Type: Oral Presentations Chair: Farzan Sasangohar, Houston Methodist Hospital
	Surgical Team Perceptions of Operating Room Environments during Robot-Assisted Surgery Authors: Lora Cavuoto, University at Buffalo; Denny Yu, Purdue University; Justin Suriel, University at Buffalo; Patrick Murphy, University at Buffalo; Gene Yang, University at Buffalo; Dimitrios Stefanidis, Indiana University ;Steven D. Schwaitzberg, University at Buffalo
	Challenges and Opportunities of Ergonomics Research in the Operating Room from an Individual Researcher's Perspective Authors: Tianqi G. Smith, Mayo Clinic
	Objective and Subjective Workload Evaluation in the Operating Room: A Study on DIEP Flap Surgeries Authors: Tianke Wang, Mayo Clinic; Hamid Norasi, Mayo Clinic; Christin Harless, Mayo Clinic; Minh-Doan Nguyen, Mayo Clinic; Susan Hallbeck, Mayo Clinic
2:00 p.m 3:00 p.m.	HE6 - COVID-19 Pandemic Responses in Hospitals: Human Factors Contributions Session Type: Discussion Panel Chair: Laura Barg-Walkow, Children's Hospital Colorado Authors: Laura H. Barg-Walkow, Children's Hospital Colorado; Sarah D. Fouquet, Children's Mercy Hospital; Laurie D. Wolf, Carilion Clinic; Myrtede C. Alfred, Medical University of South Carolina; Rebecca L. Berg, Yale New Haven Health; Rollin J. (Terry) Fairbanks, MedStar Health

HEALTHCARE ENVIRONMENTS

3:30 p.m 4:30 p.m. HE Set Ch Pro in Au Do Ins Ph Au Un THURSDAY, APRIL 15, 2021	ESSION DETAILS E7 - Student Forum ession Type: Oral Presentations hairs: Brittany Anderson-Montoya, Atrium Health and Rammohan Maikala, rovidence Regional Medical Center roactive Risk Assessment of Vulnerabilities for Diversion of Controlled Substances Ontario Hospitals uthors: Maaike de Vries, University of Toronto; Mark Fan, North York General Hospital; orothy Tscheng, Institute for Safe Medication Practices (ISMP); Michael Hamilton, istitute for Safe Medication Practices (ISMP); Patricia Trbovich, University of Toronto hysical and Mental Workload in Vascular Surgery uthors: Hamid Norasi, Mayo Clinic; Emmanuel Tetteh, Mayo Clinic, Iowa State niversity; M. Susan Hallbeck, Mayo Clinic; Victor J. Davila, Mayo Clinic reating a Safer Patient Room Environment: The Contribution of Patient Bed Height uthors: Dorothy Taylor, University of Utah; Andrew Merryweather, University of Utah;
3:30 p.m 4:30 p.m. THURSDAY, APRIL 15, ZZ1	ession Type: Oral Presentations hairs: Brittany Anderson-Montoya, Atrium Health and Rammohan Maikala, rovidence Regional Medical Center roactive Risk Assessment of Vulnerabilities for Diversion of Controlled Substances ontario Hospitals uthors: Maaike de Vries, University of Toronto; Mark Fan, North York General Hospital; orothy Tscheng, Institute for Safe Medication Practices (ISMP); Michael Hamilton, istitute for Safe Medication Practices (ISMP); Patricia Trbovich, University of Toronto hysical and Mental Workload in Vascular Surgery uthors: Hamid Norasi, Mayo Clinic; Emmanuel Tetteh, Mayo Clinic, Iowa State niversity; M. Susan Hallbeck, Mayo Clinic; Victor J. Davila, Mayo Clinic reating a Safer Patient Room Environment: The Contribution of Patient Bed Height
3:30 p.m 4:30 p.m. Ph Au Un Cru Au Jar THURSDAY, APRIL 15, 2021	 Ontario Hospitals uthors: Maaike de Vries, University of Toronto; Mark Fan, North York General Hospital; orothy Tscheng, Institute for Safe Medication Practices (ISMP); Michael Hamilton, istitute for Safe Medication Practices (ISMP); Patricia Trbovich, University of Toronto hysical and Mental Workload in Vascular Surgery uthors: Hamid Norasi, Mayo Clinic; Emmanuel Tetteh, Mayo Clinic, Iowa State niversity; M. Susan Hallbeck, Mayo Clinic; Victor J. Davila, Mayo Clinic reating a Safer Patient Room Environment: The Contribution of Patient Bed Height
Au Un Au Jar THURSDAY, APRIL 15, 2021	uthors: Hamid Norasi, Mayo Clinic; Emmanuel Tetteh, Mayo Clinic, Iowa State niversity; M. Susan Hallbeck, Mayo Clinic; Victor J. Davila, Mayo Clinic reating a Safer Patient Room Environment: The Contribution of Patient Bed Height
Au Jar THURSDAY, APRIL 15, 2021	
	anice Morse, University of Utah
TIME	1
	ESSION DETAILS
Se	E8 - Patient Population and Patient-Caregiver Experience ession Type: Oral Presentations hair: Myrtede Alfred, Medical University of South Carolina
11:00 a.m 12:00 p.m. 11:00 a.m 12:00 p.	edesigning Communication and Care for Children with Type 1 Diabetes and their amilies uthors: Eric S. Kirkendall, Wake Forest School of Medicine, Cincinnati Children's ospital Medical Center; Patrick W. Brady, Division of Endocrinology, Cincinnati hildren's Hospital Medical Center; Department of Pediatrics, University of Cincinnati ollege of Medicine; Jennifer A. Ehrhardt, Cincinnati Children's Hospital Medical Center; epartment of Pediatrics, University of Cincinnati College of Medicine; Richard Ruddy, incinnati Children's Hospital Medical Center; Department of Pediatrics, University f Cincinnati College of Medicine; Sarah D. Corathers, Division of Endocrinology, incinnati Children's Hospital Medical Center; Department of Pediatrics, University f Cincinnati College of Medicine; Sarah D. Corathers, Division of Endocrinology, incinnati Children's Hospital Medical Center; Department of Pediatrics, University f Cincinnati College of Medicine; Tosha B. Wetterneck, General Internal Medicine, niversity of Wisconsin School of Medicine and Public Health; Kathleen E. Walsh, ivision of General Pediatrics, Boston Children's Hospital; Harvard Medical School esigning for the Disability Community: Creating Responsive Experiences and ealth Systems uthors: Rupa S. Valdez, University of Virginia oing Agile to Protect Hospital Patient Safety and Experiences in Crisis uthors: Richard J. Holden, Indiana University School of Medicine; Regenstrief Institute,

THURSDAY, APRIL 15, 2021	
ТІМЕ	SESSION DETAILS
12:30 p.m. – 1:30 p.m.	 HE9 - Methodologies and Challenges Associated with Exploring Flow Disruptions in Hospital Environments Session Type: Discussion Panel Chair: Tara N Cohen, Cedars-Sinai Medical Center Authors: Tara N. Cohen, Cedars-Sinai Medical Center; Anjali Joseph, Clemson University; Nora Colman, Children's Healthcare of Atlanta
2:00 p.m 3:00 p.m.	 HE10 - Poster Chats Session Type: Posters Chairs: Brittany Anderson-Montoya, Atrium Health and Rammohan Maikala, Providence Regional Medical Center An Assessment of Passive Upper Extremity Exoskeletons during Transthoracic Echocardiograms Authors: Jordyn Koenig, Iowa State University; Merri Bremer, Mayo Clinic; Garvan Kane, Mayo Clinic; Gary Mirka, Iowa State University; Kirk Wang, Mayo Clinic; Susan Hallbeck, Mayo Clinic Applying a Systems Approach to Human Factors in Healthcare Design and Investigations Authors: Miranda Cornelissen, Acmena Group Pty Ltd Applying Human Factors Methods to Improve Healthcare Risk Management Tools Authors: Carleene Banez, Healthcare Insurance Reciprocal of Canada; Jodi Carruthers, Healthcare Insurance Reciprocal of Canada; Stefano Gelmi, Healthcare Insurance Reciprocal of Canada; Arlene Kraft, Healthcare Insurance Reciprocal of Canada; Trevor Hall, Healthcare Insurance Reciprocal of Canada; Catherine Gaulton, Healthcare Insurance Reciprocal of Canada

HEALTHCARE ENVIRONMENTS

THURSDAY, APRIL 15,	2021
ТІМЕ	SESSION DETAILS
	HE10 - Poster Chats Session Type: Posters Chairs: Brittany Anderson-Montoya, Atrium Health and Rammohan Maikala, Providence Regional Medical Center
	Analyzing Quality of Care for Hospitalized Patients with Parkinson's Disease Authors: Grant D. Starkey, University of Nebraska Medical Center; Bethany Lowndes, University of Nebraska Medical Center
	Building Personas for Care-Seeking Older Adults with Acute Illness Authors: Sheryl A. Krause, University of Wisconsin-Madison; Ricky J. Magana, University of Wisconsin-Madison; Rachel A. Rutkowski, University of Wisconsin- Madison; Shanmmugapriya Loganathar, University of Wisconsin-Madison; Manish N. Shah, University of Wisconsin-Madison; Sandhya Seshadri, University of Rochester; Craig R. Sellers, University of Rochester; Nicole E. Werner, University of Wisconsin- Madison
	Development of a New User-centered Design for Respiratory Protection in Hospitals for Tackling a Supply Crisis Authors: Aishwarya Uniyal, Rochester Institute of Technology; Pranav Madhav Kuber, Rochester Institute of Technology; Alex Lobos, Rochester Institute of Technology; Mindy Magyar, Rochester Institute of Technology; Ehsan Rashedi, Rochester Institute of Technology
2:00 p.m 3:00 p.m.	Evaluation of Physical Risk Factors and Mental Load in a Healthcare Facility in Southern Chile Authors: Mervyn Marquez, Universidad Austral de Chile, Chile; Valentina Nino, Montana State University; Barbara Awe, Universidad Austral de Chile, Chile; Jusbeth Zambrano, Universidad Austral de Chile, Chile
	Examining the Influence of Power Distance on Psychological Safety Within Healthcare Teams Authors: Divya Krishnakumar, College of Liberal Arts and Sciences, University of Illinois at Chicago; College of Applied Health Sciences, University of Illinois at Chicago; Rachel Caskey, College of Medicine, University of Illinois at Chicago; Ashley M. Hughes, College of Applied Health Sciences, University of Illinois at Chicago; Center of Innovations in Chronic, Complex Healthcare (CINCCH), Edward Hines JR VA Medical Center
	Exploring Opportunities to Improve Patient and Provider Experience with Telemedicine Appointments in Female Pelvic Medicine and Reconstructive Surgery Authors: Tara N. Cohen, Cedars-Sinai Medical Center; Eunice Choi, Cedars-Sinai Medical Center, Falisha F. Kanji, Cedars-Sinai Medical Center; Victoria Scott, Cedars- Sinai Medical Center; Karyn S. Eilber, Cedars-Sinai Medical Center; Jennifer T. Anger, Cedars-Sinai Medical Center
	Exploring the Impact of Legislative and Procedural Changes on Long-Term Care Homes in Ontario - An Interdisciplinary Approach to Knowledge Creation and Communication Authors: Dawson Clark, Carleton University; Chantal Trudel, Carleton University; Amy Hsu, Bruyère Research Institute; Aneurin Bosley, Carleton University of Industrial Design, Carleton University;

IME	SESSION DETAILS
	HE10 - Poster Chats (continued) Session Type: Posters Chairs: Brittany Anderson-Montoya, Atrium Health and Rammohan Maikala, Providence Regional Medical Center Human Factors-Based Development of a Pediatric Elliptical Machine for
	Rehabilitation and Fitness Authors: Rumena Begum, Montana State University; Bernadette McCrory, Montana State University
	Improving Genetics Clinic Efficiency and Capacity Using Design/Human Factors
	Methods Authors: Maryam Attef, School of Industrial Design, Carleton University; Chantal Trudel, School of Industrial Design, Carleton University; Kym Boycott, The Children's Hospital of Eastern Ontario; Mireille Cloutier, The Children's Hospital of Eastern Ontario; Meredith Gillespie, The Children's Hospital of Eastern Ontario
	Social Network Analysis of Diversion of Controlled Substances in Canadian Hospitals: A Study Protocol Authors: Troy Francis, Institute of Health Policy, Management and Evaluation; University of Toronto; Maaike de Vries, Institute of Health Policy, Management and Evaluation; University of Toronto; Mark Fan, North York General Hospital; Valeria Rac, Institute of Health Policy, Management and Evaluation; University of Toronto; Patricia
	Trbovich, Institute of Health Policy, Management and Evaluation; University of Toronto
2:00 p.m 3:00 p.m.	Symbiotic Design Application in Healthcare: Preventing Hospital AcquiredInfectionsAuthors: Mengyun Li, The Ohio State University; Dane Morey, The Ohio StateUniversity; Michael F. Rayo, The Ohio State University
	Testing the Perception of Demonstration Medication Warning Labels Authors: Sabina M. Patel, San Jose State University; Neekole A. Acorda, San Jose State University; Daniel J. Mabie, San Jose State University; Matthew A. Peel, San Jose State University; Sarah D. Fouquet, Children's Mercy Hospital Kansas City; University of Missouri, Kansas City; Evan M. Palmer, San Jose State University
	The Psychological Impact of the Workplace Environment in Critical Care - A Qualitative Exploration Authors: Kate Grailey, Imperial College London, United Kingdom; Stephen Brett, Imperial College London, United Kingdom
	Towards Reducing Risk of Injury in Nursing: Design and Analysis of a New Passive Exoskeleton for Torso Twist Assist Authors; Pranav Madhav Kuber, Rochester Institute of Technology; Ehsan Rashedi, Rochester Institute of Technology
	Vigilance in Cardiac Telemetry Monitoring: Performance Outcomes and Effects on Operators' Cognitive and Affective States Authors: Matthew T. Nare, Suttons Creek, Inc.; Gabriella M. Hancock, California State University, Long Beach
	Virtual Reality Situated Knowledge Acquisition and Manipulation informs Space Medical Workstation Design Requirements Authors: Mark A. Hollister, National Institute of Aerospace, Virginia Polytechnic Institute and State Universit; Kara A. Latorella, NASA Langley Research Center; Kevin Greer, Analytical Mechanics Associates Inc.; Daniel J. Charewicz, Analytical Mechanics

THURSDAY, APRIL 15, 2021			
ТІМЕ	SESSION DETAILS		
3:30 p.m 4:30 p.m.	 HE11 - Building and Being Extra: Successes and Failures in Helping at the Frontlines Session Type: Discussion Panel Chair: Michael F. Rayo, The Ohio State University Authors: Michael F. Rayo, Ohio State University; Shawna Perry, University of Florida Jacksonville; Raj Ratwani, MedStar Health; Kenneth Catchpole, Medical University of South Carolina; Shanqing Yin, KK Women's & Children's Hospital, Singapore 		
FRIDAY, APRIL 16, 202	FRIDAY, APRIL 16, 2021		
TIME	SESSION DETAILS		
11:00 a.m 12:00 p.m.	HE12 - Clinically Embedded Human Factors for Medical Devices Session Type: Discussion Panel Chair: Brittany Anderson-Montoya, Atrium Health Authors: Brittany Anderson-Montoya, Atrium Health; Tandi Bagian, Veterans Health Administration; Allison Muniak, Vancouver Coastal Health; Christopher Flewwelling, Healthcare Human Factors, Toronto General Hospital		
12:30 p.m 1:30 p.m.	 HE13 - Potpourri Session Type: Oral Presentations Chair: Brittany Anderson-Montoya, Atrium Health High Reliability Organizing (HRO): practical applications in human factors integration Craig L. Clapper, Craig Clapper LLC 		
	Standardizing Crash Carts Using Collaborative Design Methods and Usability Testing Melinda J. Jamil, Advocate Aurora Health; Kari Congenie, Advocate Aurora Health		
	Optimizing Healthcare Provider Performance: Mental Skills Training to Make Average Performance Excellent		
2:00 p.m 3:00 p.m.	 HE14 - Methodologies and Challenges Associated with Exploring Flow Disruptions in Hospital Environments Session Type: Discussion Panel Chair: Myrtede Alfred, Medical University of South Carolina Authors: Myrtede Alfred, Medical University of South Carolina; Enid Montague, DePaul University; Kristin P. Tully, University of North Carolina Chapel Hill; Natalie Benda, Weill Cornell Medicine 		
3:30 p.m 4:30 p.m.	HE15 - Closing Town Hall Session Type: Town Hall Chair: Brittany Anderson-Montoya, Atrium Health and Rammohan Maikala, Providence Regional Medical Center		

MEDICAL AND DRUG DELIVERY DEVICES

TUESDAY, APRIL 13, 2021

TIME	SESSION DETAILS	
12:30 p.m. – 1:30 p.m.	MD1 - Rigorously Applying HFE in Medical Product Development - Does it Actually Save Lives and Prevent Injuries? Session Type: Discussion Panel Chair: Michael Wiklund, Emergo by UL Authors: Michael Wiklund, Emergo by UL; Edmond Israelski, AbbVie; Matthew Weinger, Vanderbilt University; Anthony Andre, Interface Analysis Associates; Steve Wilcox, Design Science Group, LLC	
2:00 p.m 3:00 p.m.	 MD2 - Human Factors and Advanced Technology Session Type: Oral Presentations Chair: Adam Shames, Core Human Factors, Inc. "AI Factors" Authors: Shimeng Du, Spectral MD; Kevin Plant, Spectral MD The Influence of Human Factors and Ergonomics on Data-Driven Design Criteria for a Handheld Skin Screening System Authors: Alexandra Soleil Bornstein, Minneapolis Veterans Affairs Health Care System Interacting with the Untouchable Medical Device: The Human Factors of Augmented Reality Authors: MaryBeth Privitera, HS Design, University of Cincinnati 	
3:30 p.m. – 4:30 p.m.	 MD3 - Human Factors Design Session Type: Oral Presentations Chair: M Robert Garfield, Abbott Navigating the Gray Area of Post- HF Validation Design Changes: The Impact of Design Changes and How to Assess Them Authors: Laura Birmingham, Emergo by U; Stephanie Larsen, Emergo by UL "User Mishandling": A failure to Design for Users and Use Environment Authors: Carolyn Hartzell, Farm, a Flex Company Design for What I Do, Not for What I Say: The Reality of Participant-Reported Root Causes Authors: Sarah C. Fairchild, Bresslergroup Inc; Steven M. Beighley, Core Human Factors, Inc.; Leeland Rogers, University of Delaware 	
WEDNESDAY, APRIL 14, 2021		
TIME	SESSION DETAILS	
11:00 a.m 12:00 p.m.	MD4 - Leveraging and Communicating the Value of Pre-Validation Human Factors Work in Your Human Factors Strategy Session Type: Discussion Panel Chair: Molly Story, Sanofi Authors: Molly Story, Sanofi; Shannon Hoste, Agilis Consulting; Mary Beth Privitera, HS Design, University of Cincinnati	

MEDICAL AND DRUG DELIVERY DEVICES

WEDNESDAY, APRIL 14, 2021	
TIME	SESSION DETAILS
12:30 p.m 1:30 p.m.	MD5 - Individual Differences, Similarities, and Inclusion Session Type: Oral Presentations Chair: Sarai Westbrook, Research Collective
	The Human Factors of Aesthetics Authors: Sean Hagen, BlackHagen Design
	Novice vs. Expert: User Experience Levels, and Their Influence on Device Design Authors: Kate MacNamee, Ximedica
	Minding the Gap: A Human Factors Approach to Developing More Inclusive Medical Devices Authors: Matthew Marber, Emergo by UL; Rachel Bartels, Eli Lilly and Company; Sammy Levy, Emergo by UL; Jay Ahuja, Emergo by UL
2:00 p.m 3:00 p.m.	 MD6 - Methodological Considerations I Session Type: Oral Presentations Chair: Beth Loring, Loring Human Factors, Inc. Selecting and Justifying User Surrogates for Human Factors Regulatory Submissions: A Framework for Analyzing and Measuring User Capabilities During Design, Evaluation and Validation Activities Authors: Melissa R. Lemke, Human Ability Design; Lauren Ross, University of Detroit Mercy; Michael Avalos, University of Detroit Mercy; Jayla Anderson, University of Detroit Mercy; Megan O. Conrad, PhD, University of Detroit Mercy Considerations for Leveraging Human Factors Data in Combination Products Authors: Rachel Poker, AstraZeneca Beepers and the Beeped: Designing Medical Device Sounds with People Who Actually Have to Hear Them Authors: Yoko Sen, Sen Sound; Avery Sen, Sen Sound; Andreas Walden, Philips Medical Systems, Germany
3:30 p.m 4:30 p.m.	 MD7 - Human Factors in a Multi-Component World: Use-Related Risk Analysis, Validation, and Related Regulatory Considerations for System of Systems Session Type: Discussion Panel Chair: Sami Durrani, Eli Lilly and Company, Tufts University Authors: Sami Durrani, Eli Lilly and Company, Tufts University; Allison Strochlic, Emergo by UL; HFR&D Hanniebey Wiyor, US FDA; Leah Swanson, Baxter, Kevin Ten Brink, Johnson & Johnson Robotics and Digital Solutions

THURSDAY, APRIL 15, 2021	
TIME	SESSION DETAILS
11:00 a.m 12:00 p.m.	MD8 - Remote Research Session Type: Oral Presentations Chair: Laurie Reed, Farm Design Inc.
	Virtual Observation: The Power of Observation and Research Iteration Authors: Tom Donnelly, Branding Science; Jason Mandelbaum, Branding Science; Hiba Rahman-Vyas, Branding Science
	A Case Study: Remote Usability Evaluation on a Ventilator Developed to Address the COVID-19 Pandemic Authors: Denise Forkey, UserWise, Inc.; Shannon Clark, UserWise, Inc.
	Remote Research: Making it Work and Why You Should Make it Part of Your Post- Pandemic Research Plan Authors: Emily Borst, Design Science Group, LLC; Michelle Kannegiser, Design Science Group, LLC; Anna O'Donnell, Design Science Group, LLC
12:30 p.m 1:30 p.m.	MD9 - Methodological Considerations II Session Type: Oral Presentations Chair: Richard Newman, BlackHagen Design
	Conducting User Research Amidst Unpredictability and Constraints: Lessons Learned During the COVID Pandemic Authors: Adrienne Erdman, Cambridge Consultants; Kaitlyn Leidl, Cambridge Consultants
	Post-Market Human Factors Engineering Requirements. A Roadmap to Comply with European Union Medical Devices Regulations' Post-Market Surveillance Expectations Authors: Yvonne Limpens, Emergo by UL, Netherlands; Natalie Shortt, Emergo by UL, United Kingdom
	Creativity Under Constraints: Innovations in Usability Testing in Response to COVID-19 Authors: Andrea Dwyer, Emergo by UL; Rachel Aronchick, Emergo by UL

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THURSDAY, APRIL 15, 2021	
TIME	SESSION DETAILS
2:00 p.m. – 3:00 p.m.	MD10 - Poster Chats Session Type: Poster
	BD Evolve Human Factors Develo p.m.ent and Testing Authors: Aditya Jagannathan, Becton Dickinson
	Clinically Based Task Analysis: A Multi-Tiered Development Approach Authors: Mike Brown, Meddux Develo p.m.ent Corporation
	Considerations for Translating Medical Devices Under Development from the Clinic to the Home: A Case Study in Providing Chronic Wound Care Authors: Ellen Bass, Drexel University; Justine Sefcik, Drexel University; Elease McLaurin, Drexel University; Rose Ann DiMaria Ghalili, Drexel University
	Development of a Self-Injection Syringe Testing System Authors: Scott Tew, University of Utah; Kevin Cluff, BioWork Engineering, LLC; Frank Drews, University of Utah; Ed Halpern, AbbVie; Andrew Merryweather, University of Utah
	High Fidelity Formative Studies at Low Fidelity Costs: Leveraging Overlapping User Groups Between Products to Get More Information for Less Authors: Chris Collins, Genentech; Christine Rachel Joseph, Genentech; Natalie Abts, Genentech
	How to Combat Negative Transfer of Learning during Medical Device Develo p.m.ent Authors: Ariana Perez, UserWise, Inc.;Shannon Clark, UserWise, Inc.
	Human Factors Testing Sample Size Requirements: Is It Time to Reevaluate? Authors: Savannah Esteve, UserWise, Inc.; Shannon Clark, UserWise, Inc.; Denise Forkey, UserWise, Inc.
	Instructions for Use Design: Understanding International Regulatory Guidance for Multi-Country Product Launches Authors: Michelle Jahn Holbrook, Bold Insight; Tracey Morrison, Bold Insight; Katie Pingrey, Bold Insight
	Integrating Human Factors into the Product Develo p.m.ent Process – Development of BD Intevia™ 1mL Two-Step Disposable Autoinjector Authors: Claire Lageat, Becton Dickinson; John Simpson, Becton Dickinson; Claire Ramus, Becton Dickinson; Karima Yadi, Becton Dickinson
	Medical Device Cybersecurity: Products Must be Both Accessible for Users and Impenetrable for Cybercriminals Authors: Lauren Jensen, Agilis Consulting Group; Michelle Jump, MedSec; Shannon Hoste, Agilis Consulting Group

ГІМЕ	SESSION DETAILS
	MD10 - Poster Chats Session Type: Poster
	Medical Device Human Factors Submissions: Identifying and Understanding Key Differences in Regulatory Guidance Across the Globe Authors: Michelle Jahn Holbrook, Bold Insight; Stephanie Wiltman, Bold Insight
	Multi-Faceted Assessment of the Ergonomics in Medical Device Manufacturing Authors: Bukola Saliu, Montana State University; Bernadette McCrory, Montana State University; Robert Bradley, Mesa Laboratories
	Reducing Infusion Pump-Related Medication Errors: The Use of a "Mental Model" to Guide Drug Library Development and Implementation Authors: Tyler Morrissey, University of Colorado / Children's Hospital Colorado; Patricia Cutting, University of Colorado / Children's Hospital Colorado; Kim Strupp, University of Colorado / Children's Hospital Colorado; Laura Barg-Walkow, University of Colorado / Children's Hospital Colorado; Gina Whitney, University of Colorado / Children's Hospital Colorado
	Self-Administration of High Viscosity and High Volume (1-2 ml) Biologic Drugs with Simple, Ergonomic, Syringe-Based Injection Technology Authors: Tzvetelina Chevolleau, Becton Dickinson, Pharmaceutical Systems; Megan Lan, Becton Dickinson, Pharmaceutical Systems
2:00 p.m 3:00 p.m.	Suggesting a Usability Guideline for the Robot-assisted Gait Training System through the Usability Evaluation Authors: Junhee Choi, Seoul National University Hospital, Seoul National University Bioengineering; Saram Lee, Transdisciplinary Department of Medicine & Advanced Technology, Seoul National University Hospital; Sung Yong Cho, Medical Device Usability Testing Center, Seoul National University Hospital; Department of Urology, Seoul National University Hospital; Jung Chan Lee, Department of Biomedical Engineering, Seoul National University College of Medicine; Department of Medical Device Develo p.m.ent Support, Seoul National University Hospital
	Tips and Best Practices for Conducting In-Person User Experience Research with Vulnerable Populations in the COVID-19 Era Authors: Michelle Jahn Holbrook, Bold Insight; Michael Rakauskas, AbbVie
	Usability Testing of Ultrasonic Surgical Instrument for Lower Eyelid Surgery Authors: JeongUk Choi, Yonsei University; WonSeuk Jang, Yonsei University; SangEun Park, Yonsei University
	User Experience Improvement in Manual Self-injection of Viscous Solutions with 8mm Ultra-thin Wall Needle Syringes (BD Neopak™ XtraFlow™) Authors: Aurelie Pager, Becton Dickinson (BD); Sivan Koskas, Becton Dickinson (BD)
	Using Visual Aids to Increase Adherence, Comprehension and Recall of Medical Instructions, Health Education, and Medical Device Instructions Authors: Katherine Lee, San José State University, Bresslergroup Inc; Dan Nathan- Roberts, San José State University

MEDICAL AND DRUG DELIVERY DEVICES

THURSDAY, APRIL 15, 2021	
ТІМЕ	SESSION DETAILS
3:30 p.m. – 4:30 p.m.	MD11 - When, How, Why and Watch-outs for Knowledge Tasks Session Type: Discussion Panel Chair: Maureen Halligan, Cambridge Consultants Authors: Maureen Halligan, Cambridge Consultants; Melanie Turieo, Cambridge Consultants; Molly Story, Sanofi; Robert Stephens, Medtronic, Surgical Innovations, Limor Hochberg, Bose Corporation, Health Division
FRIDAY, APRIL 16, 202	1
ТІМЕ	SESSION DETAILS
11:00 a.m 12:00 p.m.	MD12 - Stories and Lessons: What Works (And Doesn't) in Collaboration Between your Human Factors Team and Key Team Stakeholders? Session Type: Discussion Panel Chair: Edmond Israelski, AbbVie Authors: Shannon Hoste, Agilis Consulting; Natalie Abts, Genentech; Xin Feng, PhD, Becton Dickinson; Jessie Huisinga, PhD, Agilis Consulting
12:30 p.m. – 1:30 p.m.	 MD13 - Human Factors Research Session Type: Oral Presentations Chair: Considerations for Planning and Conducting Pre-clinical HF Validation Studies Authors: Tim Visich, Farm Design Inc.; Tara Daugherty-Long, Farm Design Inc. Utilizing Multiple Research Methods to Understand In-Home IV Infusions: Exploring a Use Environment to Provide Flexible Future Treatment Options Authors: Sujani Nannapaneni, AbbVie; Christy Nachtigall, Design Science Group, LLC; Angela Muriset, Design Science Group, LLC Clinical Usability Studies
2:00 p.m 3:00 p.m.	Authors: Thomas Stüdeli, F. Hoffmann-La Roche Ltd, Switzerland; Limor Hochberg, Bose Corporation, Health Division MD14 - FDA Panel Session Type: Discussion Panel Chairs: Anthony Andre, Interface Analysis Associates; Russell Branaghan, Arizona
3:30 p.m 4:30 p.m.	State University; and Sean Hagen, BlackHagen Design MD15 - Closing Town Hall - Emerging Challenges in Combination Drug Product and Medical Device Design and Validation Session Type: Town Hall Chair: Sean Hagen, BlackHagen Design, Mr.

PATIENT SAFETY AND RESEARCH INITIATIVES

TUESDAY, APRIL 13, 2021

ТІМЕ	SESSION DETAILS
12:30 p.m 1:30 p.m.	 PS1- Human Factors Approaches to Incorporating AI into Healthcare Session Type: Track Keynote Chair: Shilo Anders, Vanderbilt University Medical Center Authors: Shilo Anders, Vanderbilt University Medical Center; Yuval Bitan, Ben-Gurion University, Israel; Emily S. Patterson, Ohio State University; Anne Miller, Cerner; Narges Razavian, New York University Langone
2:00 p.m 3:00 p.m.	 PS2 - Surgery Process Improvements Session Type: Oral Presentations Chair: Sadaf Kazi, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine Investigating the Effectiveness of the Pre-anesthesia Induction Patient Safety (PIPS) Checklist: Comparison of Two Implementation Strategies Authors: Megan E. Gregory, Ohio State University College of Medicine; Thomas D. Looke, Advent Health; Shirley Sonesh, Sonnenschein Consulting, LLC; Ashley M. Hughes, University of Illinois at Chicago, Edward Hines JR VA Medical Center; Julie Pepe, Advent Health; Eduardo Salas, Rice University A New Baseline: Refining Observer Training for Studies in the Operating Room Samuel Lawton, Medical University of South Carolina Authors: Myrtede Alfred, Medical University of South Carolina; Falisha Kanji, Cedars-Sinai Medical Center; John Del Gaizo, Medical University of South Carolina; Falisha Kanji, Cedars-Sinai Medical Center; John Del Gaizo, Medical University of South Carolina; Falisha Kanji, Cedars-Sinai Medical Center; John Del Gaizo, Medical University of South Carolina; Falisha Kanji, Cedars-Sinai Medical Center; John Del Gaizo, Medical University of South Carolina; Ken Catchpole, Medical University of South Carolina Prevalence of Surgical Flow Disruptions Across Intraoperative High- and Low-Workload Phases in Cardiac Surgery Authors: Lauren R. Kennedy-Metz, Harvard Medical School, Veterans Administration Boston Healthcare System; Roger D. Dias, Brigham and Women's Hospital; Annette M. Phillips, Veterans Administration Boston Healthcare System; Suzana Zorca, Veterans Administration Boston Healthcare System; Kay Leissner, Veterans Administration Boston Healthcare System;

TUESDAY, APRIL 13, 2021	
SESSION DETAILS	
PS3 - Teamwork and Workflow Session Type: Oral Presentations Chair: Sadaf Kazi, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine	
Improving the Provision of Cancer Care: The Need for Integrating Human Factors Authors: Elizabeth H. Lazzara, Embry-Riddle Aeronautical University; Elizabeth Papautsky, University of Illinois at Chicago; Shilo Anders, Vanderbilt University	
Assessing Surgical Teamwork Competencies During Moments of Uncertainty, and their Relationship to Adverse Events, Using OR Black Box Authors: Taylor Incze, University of Toronto; Sonia Pinkney, University Health Network; Mark Fan, North York General Hospital; Patricia Trbovich, University of Toronto	
Identifying Performance Options and Constraints on Everyday Clinical Practice: Applying Cognitive Work Analysis to Emergency Department Care Authors: Elizabeth Austinn Institute of Health Innovation; Brette Blakelyn Institute of Health Innovation; Paul Salmon, University of the Sunshine Coast, Centre for Human Factors and Sociotechnical Systems; Jeffrey Braithwaiten Institute of Health Innovation; Robyn Clay-Williamsn Institute of Health Innovation	
l, 2021	
SESSION DETAILS	
PS4 - Focusing the Safety Spotlight: How Safety Intelligence can Inform Systemic Patient Safety Initiatives Session Type: Discussion Panel Chair: Trevor Hall, Healthcare Insurance Reciprocal of Canada, University of Toronto Authors: Anthony Soung Yee, Healthcare Insurance Reciprocal of Canada ; Trevor Hall, Healthcare Insurance Reciprocal of Canada; Tracey Herlihey, NHS England and NHS Improvement, United Kingdom; Jennifer Jeon, Sinai Health; Patricia Trbovich, North York General Hospital, University of Toronto	

WEDNESDAY, APRIL 14, 2021	
TIME	SESSION DETAILS
12:30 p.m 1:30 p.m.	 PS5 - Medication Safety Session Type: Oral Presentations Chair: Kylie Gomes, MedStar Health Nurse Prospective Memory Demands in Inpatient Medication Administration: Gaps and Design Opportunities Authors: Sadaf Kazi, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine; Deanna-Nicole Busog, MedStar Health National Center for Human Factors in Healthcare; Long La, MedStar Health National Center for Human Factors in Healthcare; Sonita Bennett, MedStar Health National Center for Human Factors in Healthcare; Raj M. Ratwani, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine; Ella Franklin, MedStar Health National Center for Human Factors in Healthcare
	The Case for Human-Centered Research on the Complex Patient Journey of Deprescribing Authors: Jordan R. Hill, Department of Medicine, Indiana University School of Medicine; Alissa L. Russ-Jara, Department of Pharmacy Practice, College of Pharmacy, Purdue University; Noll L. Campbell, Department of Pharmacy Practice, College of Pharmacy, Purdue University; Richard J. Holden, Regenstrief Institute, Inc.
	A Human Factors Approach towards Designing Apps to Support Opioid Tapering for Chronic Noncancer Pain in Primary Care Settings Authors: Sadaf Kazi, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine; Kelly Smith, MedStar Health Institute for Quality and Safety; Ella Franklin, MedStar Health National Center for Human Factors in Healthcare; Deanna-Nicole Busog, MedStar Health National Center for Human Factors in Healthcare; Ronald Romero, MedStar Health National Center for Human Factors in Healthcare; Robin Littlejohn, MedStar Health National Center for Human Factors in Healthcare; Aaron Zachary Hettinger, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine; Kristen E. Miller, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine
2:00 p.m 3:00 p.m.	 PS6 - RCA/Risk Analysis Session Type: Oral Presentations Chair: Sadaf Kazi, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine Integrating Human Factors into RCA^2: A Qualitative Case Study Authors: Demetrius Solomon, University of Wisconsin-Madison; Laura Wood, University of Wisconsin-Madison; Scott Shappell, Embry-Riddle Aeronautical University; Douglas Wiegmann, University of Wisconsin-Madison Investigating the Use of Bowtie Analysis as a Prospective Risk Assessment Technique in Healthcare Authors: Ron McLeod, Ron McLeod Ltd.; Paul Bowie, NHS Education for Scotland; Institute of Health and Wellbeing,, United Kingdom
	Learning from Root Cause Analysis (RCA) Actions that use Standardization to Address Patient Safety Concerns Authors: Helen J.A. Fuller, Department of Veterans Affairs; Tim Arnold, Department of Veterans Affairs

WEDNESDAY, APRIL 14, 2021	
TIME	SESSION DETAILS
3:30 p.m 4:30 p.m.	PS7 - Student Forum Session Type: Oral Presntations Chair: Sadaf Kazi, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine
	Using Heuristic Design Methods to Build a Home Kit for Remote Monitoring of Parkinson's Disease Authors: Noha Algahimi, University of Nebraska Medical Center; Bethany Lowndes, University of Nebraska Medical Center
	Trends of Non-Fatal Helicopter Emergency Medical Service Accident-Related
	Injuries Authors: Richard J. Simonson, Embry-Riddle Aeronautical University; Joseph R. Keebler, Embry-Riddle Aeronautical University; Alex Chaparro, Embry-Riddle Aeronautical University
	On the Benefits and Challenges Implementing an Incident Learning System in an Academic Radiation Oncology Department Authors: Dominic J. DiCostanzo, Ohio State University; Emily S. Patterson, Ohio State University
THURSDAY, APRIL 15, 2021	
ТІМЕ	SESSION DETAILS
11:00 a.m 12:00 p.m.	 PS8 - Human Factors and Telehealth: Opportunities for Research, Design, and Implementation Session Type: Discussion Panel Chair: Joseph Keebler, Embry-Riddle Aeronautical University Authors: Rupa S. Valdez, University of Virginia; Ram Dixit, MedStar Health; Kylie M. Gomes, MedStar Health; Peter Hoonakker, University of Wisconsin-Madison; Courtney C. Rogers, University of Virginia
TIME	SESSION DETAILS
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12:30 p.m. – 1:30 p.m.	PS9 - Health Information/Tech Session Type: Oral Presentations Chair: Patrice Tremoulet, Rowan University
	Rapid Prospective Risk Assessment of Mobile Products in Healthcare Authors: Margo Kabel, Veterans Health Administration; Marian Daum, Veterans Health Administration, Department of Veterans Affairs; Tim Arnold, Veterans Health Administration
	Effective, Safe, and Measurable Implementation of Predictive Healthcare Solutions Authors: Susan Harkness Regli, University of Pennsylvania Health System; Michael Draugelis, University of Pennsylvania Health System; Jon Pomeroy, University of Pennsylvania Health System; Corey Chivers, University of Pennsylvania Health System; Asaf Hanish, University of Pennsylvania Health System; Michael Becker, University of Pennsylvania Health System; Katherine R. Courtright, University of Pennsylvania Health System; Nina R. O'Connor, University of Pennsylvania Health System; C. William Hanson, III, University of Pennsylvania Health System
	Easier Said Than Done - Challenges in Recognizing when Health Technology Contributes to Patient Safety Events Authors: Amina Khan, Children's Hospital of Philadelphia; Dean Karavite, Children's Hospital of Philadelphia; Ursula Nawab, Children's Hospital of Philadelphia; Brooke Luo, Children's Hospital of Philadelphia; Naveen Muthu, Children's Hospital of Philadelphia; James Won, Children's Hospital of Philadelphia; Eric Shelov, Children's Hospital of Philadelphia; Bimal Desai, Children's Hospital of Philadelphia
2:00 p.m 3:00 p.m.	PS10 - Poster Chats Session Type: Poster
	Chair: Patrice Tremoulet, Rowan University
	At Home Remote Ethnography Authors: Joseph Johnson, BlackHagen Design; T. Ryan Hilgers, BlackHagen Design
	Contributing Factors of Medication Errors in Nursing Practice Authors: Nazanin Ghavami, San José State University; Dan Nathan-Roberts, San José State University
	Examining the Mothers Feeling of Safety, Location, Devices Used, and Type of
	Birthing Attendant Present Authors: Yasmeen Odeh, San José State University; Dan Nathan-Roberts, San José State University
	Exploring Older Adults' Internalizations and Misconceptions Regarding Antihypertensive Medication Management
	Authors: Kenneth Blocker, University of Illinois at Urbana-Champaign; Wendy Rogers, University of Illinois at Urbana-Champaign
	Health Information Technology Usability Contributions to Medication Errors and Patient Safety Events
	Authors: Adeel R. Iqbal, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine; Codrin A. Parau, MedStar Health National Center for Human Factors in Healthcare; Christopher W. Bonk, MedStar Health National Center for Human Factors in Healthcare; Sadaf Kazi, MedStar Health National Center for Human Factors in Healthcare, Georgetown University School of Medicine; Aaron Z. Hettinger, MedStar Health National Center for Human Factors in

PROGRAM

ТІМЕ	SESSION DETAILS
	Implications for the Physical Design of the Postnatal Care Unit from a Targeted Analysis of Issues with Accessing the Bathroom at Night in the Acute Care Setting: A Secondary Analysis Authors: Varshita Chirumamilla, Ohio State University; Joe M. Gerard, Ohio State University; Alison E. Sweeney, University of North Carolina; Kristin P. Tully, University of North Carolina; Alison M. Stuebe, University of North Carolina; Emily S. Patterson, Ohi State University
	Larger Numbered Absolute Risk Reduction and Other Risk Reduction Formats in the Medical Intervention Effect: Perceived Effectiveness, Understandability, and Intention to Recommend by Physicians Authors: Soyun Kim, Seoul National University Medical Research Center, South Korea; Seungsik Hwang, Seoul National University Graduate School of Public Health, South Korea; Young Kyung Do, Seoul National University College of Medicine, South Korea
	Maternal Mortality Litigation Review Authors: Sanjana Kothari, Ohio State University; Emily S. Patterson, Ohio State University
	Patient Work of COVID-19 Self-Management: A Review of Patient-Facing Guidance Authors; Nickhil A. Rawat, University of Illinois at Chicago; Elizabeth Lerner Papautsky University of Illinois at Chicago
2:00 p.m 3:00 p.m.	Patient-Partnered Team Science is Key to Patient-Centered Care Authors: Elizabeth Lerner Papautsky, University of Illinois at Chicago; Martha Carlson, NA; Maryam Lustberg, Ohio State University
	Treatment Burden: Opportunities and Barriers for Supporting Interprofessional Collaborative Care Authors: Elizabeth Papautsky, University of Illinois at Chicago; Jennifer Winner, Air Force Research Laboratory
	Urine Dipsticks Use: Process Standardization from a Human Factors Approach Authors: Marina Cano Iglesias, IDIVAL; Laura Herrero Urigüen, IDIVAL; Elena Rojo Santos, HvV; Lourdes Escobar Hoyos, HUMV; Javier González González, HUMV; Verónica Vejo Landaida, HUMV; José Lorenzo Guerra Diez, HUMV
	User-Centered Design in Operational Projects: Illustration with Central Venous Access Device Documentation Authors: Swaminathan kandaswamy, Emory University; Anne Gill, Emory University, Childrens Healthcare of Atlanta; Shellie Wood, Children's Healthcare of Atlanta; Leah Mckay, Children's Healthcare of Atlanta; Jessica Hike, Children's Healthcare of Atlanta; Melissa Popkin, Children's Healthcare of Atlanta; Heather Maude, Children's Healthcare of Atlanta; Crawford Johnston, Children's Healthcare of Atlanta; Tenia White, Children Healthcare of Atlanta; Evan Orenstein, Children's Healthcare of Atlanta, Emory University
	Who Watches the Watchmen? Physician Burnout in the 21st Century Authors: Logan M. Gisick, Embry-Riddle Aeronautical University; Joseph R. Keebler, Embry-Riddle Aeronautical University; Elizabeth H. Lazzara, Embry-Riddle Aeronautical University

THURSDAY, APRIL 15, 2021				
TIME	SESSION DETAILS			
3:30 p.m 4:30 p.m.	PS11 - Late Breaking Session Type: Oral Presentations Chair: Patrice Tremoulet, Rowan University			
	What vs. How: Incorporating Human Factors with CLABSI Prevention through a Cap Cleaning Study Laura H. Barg-Walkow, Children's Hospital Colorado; Kelly D. Reichert, Children's Hospital Colorado			
	Quality Improvement Process for General Surgery Clinic: Incorporating FrailtyScreeningElizabeth De La Rosa, University of California San Francisco, Veterans AdministrationSan; Francisco Health Care System; Sanziana A. Roman, University of California SanFrancisco; James C. Iannuzzi, University of California San Francisco			
FRIDAY, APRIL 16, 2021				
ТІМЕ	SESSION DETAILS			
11:00 a.m. – 12:00 p.m.	 PS12 - Special Populations Session Type: Oral Presentations Chair: Elizabeth Papautsky, University of Illinois at Chicago, UNIVERSITY OF ILLINOIS Exploring Health Challenges & Response Strategies Among Older Deaf Adults Authors: Shraddha A. Shende, University of Illinois at Urbana-Champaign; Lyndsie M. Koon, University of Kansas; Megan A. Bayles, University of Illinois at Urbana-Champaign; Jenny Singleton, University of Texas; Wendy A. Rogers, University of Illinois at Urbana-Champaign 			
	Can We Use Design Approaches to Increase Comfort and Reduce Suffering at the End-of-Life? A Focused Literature Review Authors: Meg Schwellnus, Carleton University; Chantal Trudel, Carleton University; Zsofia Orosz, Ontario Centres for Learning, Research and Innovation in Long-Term Care at Bruyere			
	Improving Elderly Patient Care Coordination by Focusing on Outpatient Providers' Needs Authors: Patrice Tremoulet, Rowan University, ECRI; Jon Tyler Kurtz, Rowan University; Ryan Stroka, Rowan University			

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FRIDAY, APRIL 16, 2021		
TIME	SESSION DETAILS	
12:30 p.m. – 1:30 p.m.	PS13 Session Type: Oral Presentations Chair: Patrice Tremoulet, Rowan University	
	Effects of COVID-19 on College Students' Mental Health in the United States: Interview and Survey Studies Authors: Xiaomei Wang, Texas A&M University; Bruce Keller, Texas A&M University; Changwon Son, Texas A&M University; Sudeep Hegde, Clemson University, Texas A&M University; Alec Smith, Texas A&M University; Farzan Sasangohar, Texas A&M University	
	Macrocognition in Pediatric Cardiac Intensivists: Understanding the Differences Between CHD-experts and Non-Experts Authors: Azadeh Assadi, Hospital for Sick Children, University of Toronto; Peter Laussen, Boston Children's Hospital; Patricia Trbovich, University of Toronto	
	Key Premarket Considerations for Improving Medication Safety Authors: Rebecca Lamis, Institute for Safe Medication Practices (ISMP), Medication Safety Board	
2:00 p.m. – 3:00 p.m.	PS14 - Health Tech and Decision Making Session Type: Oral Presentations Chair: Patrice Tremoulet, Rowan University	
	Telemedicine Security Challenges and Solutions Authors: Crystal M. Fausett, Embry-Riddle Aeronautical University; Megan Christovich, Embry-Riddle Aeronautical University; Jarod Parker, Embry-Riddle Aeronautical University; John Baker, Embry-Riddle Aeronautical University; Joseph Keebler, Embry- Riddle Aeronautical University	
	Understanding Complex Older Adult Decision-Making while Selecting Over-the- Counter Medication from the Community Pharmacy: A Hierarchical Task Analysis Authors: Ashley Morris, University of Wisconsin-Madison, School of Pharmacy; Aaron Gilson, University of Wisconsin-Madison, School of Pharmacy; Michelle Chui, University of Wisconsin-Madison, School of Pharmacy; Ka Xiong, Wisconsin Department of Health Services; Rich Holden, Indiana University	
	Driving Change Through Collaboration: The Partnership for Health IT Patient Safety 2020 Projects Authors: Robert C. Giannini, ECRI, Partnership for Health IT Patient Safety; Patricia Giuffrida, ECRI, Partnership for Health IT Patient Safety	
3:30 p.m 4:30 p.m.	PS15 - The Patient in Patient Safety: Contemporary Issues, from COVID-19 to Citizen Science Session Type: Town Hall Chair: Elizabeth Papautsky, University of Illinois at Chicago	
	Authors: Elizabeth Papautsky, University of Illinois at Chicago; Richard Holden, Indiana University School of Medicine; Rupa Valdez, University of Virginia	

40 / 2021 INTERNATIONAL SYMPOSIUM ON HUMAN FACTORS AND ERGONOMICS IN HEALTH CARE



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Collect Facts

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