











State of the Science Symposia Series:

Impact of Artificial Intelligence on Rehabilitation

Friday, May 10th, 2024

0800 - 1600

Bethesda Auditorium, 6720A Rockledge Drive, Bethesda, MD 20817

or

Virtual utilizing Zoom (Link will be sent after registering)



Please complete our simple registration survey using this link or the QR code to the left:

tinyurl.com/soss24

Presented by:

The Center for Rehabilitation Science Research

Musculoskeletal Injury Rehabilitation Research for Operational Readiness

Department of Physical Medicine and Rehabilitation

Uniformed Services University for the Health Sciences

Department of Rehabilitation
Walter Reed National Military Medical Center
Defense Health Agency

School of Health and Rehabilitation Sciences
Human Engineering Research Laboratories
University of Pittsburgh

US Department of Veterans Affairs

PRESENTED BY THE CENTER FOR REHABILITATION SCIENCE RESEARCH AND MUSCULOSKELETAL INJURY REHABILITATION RESEARCH FOR OPERATIONAL READINESS, THE DEPARTMENT OF PHYSICAL MEDICINE AND REHABILITATION AT THE UNIFORMED SERVICES UNIVERSITY FOR THE HEALTH SCIENCES; THE DEPARTMENT OF REHABILITATION, WALTER REED NATIONAL MILITARY MEDICAL CENTER; THE EXTREMITY TRAUMA AND AMPUTATION CENTER OF EXCELLENCE; AND THE UNIVERSITY OF PITTSBURGH SCHOOL OF HEALTH AND REHABILITATION SCIENCES, HUMAN ENGINEERING RESEARCH LABS.

Course Directors:

Rory A. Cooper, PhD: Director/CEO, Human Engineering Research Laboratories, VA Pittsburgh Healthcare System Associate Dean for Inclusion, School of Health and Rehabilitation Sciences, University of Pittsburgh

Colonel (ret.) Paul F. Pasquina, MD, *Professor & Chair, Department of PM&R and Director, Center for Rehabilitation Sciences Research, USUHS; Chief, Department of Rehabilitation, Walter Reed National Military Medical Center*

Michelle Nordstrom, OTR/L, Assistant Professor, Department of PM&R and Director Allied Health, USUHS. Department of Rehabilitation, Walter Reed National Military Medical Center.

Tawnee L. Sparling, MD, Assistant Professor, Department of PM&R and Medical Director Amputee Care, Director Combat Casualty Care, USUHS. Department of Rehabilitation, Walter Reed National Military Medical Center.

Jenny Yuan, MD PhD, Assistant Professor, Department of PM&R and Vice Chair for Research, USUHS. Department of Rehabilitation, Walter Reed National Military Medical Center.

Overview and Objectives

The overall objective of this symposium is to provide participants with an overview regarding the current state of and developmental pathways for the use of artificial intelligence in physical medicine and rehabilitation. The course will identify and explore the potential of ongoing research in this burgeoning field and how best to harness this novel toolset to improve patient care and health outcomes. Additionally, there will be a strong focus on alignment, synchronization and integration for future research and rehabilitation initiatives.

Who Should Attend

The content of the sessions will benefit civilians, veterans, and military service members, their families, caregivers, community-based organizations, government agency personnel, healthcare providers and trainees, who are interested in novel ways to mitigate injury, enhance recovery, improve rehabilitation, function, and community reintegration of individuals with neuro-musculoskeletal conditions, including military service members and veterans with war-related injuries.

We gratefully acknowledge the support of The Paralyzed Veterans of America for this symposium.



State of the Science Symposium: Artificial Intelligence $$\operatorname{May}\ 10,2024$$

May 10 th , 2024	
0730 – 0800	Check-in and Registration
0800 – 0815	Introduction Paul F. Pasquina, MD Department Chair, Department of Physical Medicine and Rehabilitation Uniformed Services University, WRNMMC
0815 – 0900	AI Usage in Invention Rory A. Cooper, PhD Founder/Director, Human Engineering Research Laboratories University of Pittsburgh, Department of Veterans Affairs
0900 – 0945	Impact of Generative AI on Peer-Reviewed Publishing Walter Frontera, MD, PhD Chair, Department of Physical Medicine and Rehabilitation Vanderbilt University
0945 – 1030	Generative AI on Rehabilitation and Medical Documentation Bambang Parmanto, PhD Professor and Chair, Department of Health Information Management School of Health and Rehabilitation Sciences University of Pittsburgh
1030 – 1115	AI for Measuring Rehabilitation Outcomes Arun Jayaraman, PT, PhD Director Max Nader Center for Rehabilitation Technologies & Outcomes Research Shirley Ryan Ability Lab
1115 – 1200	Artificial Intelligence in Rehabilitation Diagnostics Levent Ozcakar, MD Full Professor Hacettepe University Medical School, Ankara, Turkey
1200 – 1300	Lunch
1300 – 1345	AI Supported Human Performance Lt. Col. Joshua R. Duncan, MD, MPH, FAAP Assistant Dean for Assessment Preventative Medicine and Biostatistics, Uniformed Services University
1345 – 1400	Impact of State of the Science on Military Medicine LTG (ret) Eric Schoomaker, MD, PhD Professor Emeritus, Department of Military and Emergency Medicine Uniformed Services University of the Health Sciences
1400 – 1420	Remarks Joseph Caravalho, Jr., MD, MG President and CEO Henry M. Jackson Foundation for the Advancement of Military Medicine
1420 – 1445	Remarks BG Thad J. Collard Deputy Commanding General- Operations, U.S. Army MEDCOM

State of the Science Symposium: Artificial Intelligence

May 10, 2024

1445 – 1455 Remarks

Jonathan Woodson, MD, MSS, FA

President

Uniformed Services University of the Health Sciences

1455 – 1500 Cake Cutting

1500 – 1545 Viewing of "Bumps in the Road"

Q&A Afterwards

1545 – 1600 Closing Remarks and Questions

Paul F. Pasquina, MD

Department Chair, Department of Physical Medicine and Rehabilitation

Uniformed Services University, WRNMMC

State of the Science Symposium: Artificial Intelligence

May 10, 2024

Accreditation Statement:

In support of improving patient care, this activity has been planned and implemented by the University of Pittsburgh and Department of Veterans Affairs, Uniformed Services University of the Health Sciences, Walter Reed NMMC, Paralyzed Veterans of America. The University of Pittsburgh is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Physician (CME)

The University of Pittsburgh designates this live activity for a maximum of 4.75 AMA PRA Category 1 CreditsTM. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Other health care professionals will receive a certificate of attendance confirming the number of contact hours commensurate with the extent of participation in this activity.

Disclosure Statement:

No members of the planning committee, speakers, presenters, authors, content reviewers and/or anyone else in a position to control the content of this education activity have relevant financial relationships with any companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Disclaimer Statement:

The information presented at this program represents the views and opinions of the individual presenters, and does not constitute the opinion or endorsement of, or promotion by, the UPMC Center for Continuing Education in the Health Sciences, UPMC / University of Pittsburgh Medical Center or Affiliates and University of Pittsburgh School of Medicine. Reasonable efforts have been taken intending for educational subject matter to be presented in a balanced, unbiased fashion and in compliance with regulatory requirements. However, each program attendee must always use his/her own personal and professional judgment when considering further application of this information, particularly as it may relate to patient diagnostic or treatment decisions including, without limitation, FDA-approved uses and any off-label uses.

Please visit our website for details and information on future symposia and events, at www.herl.pitt.edu.

