Wireless, Skin-Like Sensors for the Human Body

John Rogers, PhD
Louis Simpson and Kimberly Querrey Professor, Departments of Materials Science and Engineering, Biomedical Engineering, Neurological Surgery, Electrical and Computer Engineering, Mechanical Science and Engineering and Chemistry
Director, Center for Bio-Integrated Electronics

Learning Objectives:

1. Learn about the latest in body-integrated electronic systems
2. Gain familiarity with various clinically relevant modes of use for these technologies
3. Learn about the range of on-going clinical studies that utilize these platforms
4. Understand the challenges and opportunities in broad deployment and commercialization

Sound Processing in the Brain: What Have We Learned from Concussion in Athletes?

Nina Kraus, PhD
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Communication Sciences; Neurobiology; Otolaryngology
Northwestern University
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Cynthia R. LaBella, MD
Division of Orthopaedic Surgery and Sports Medicine
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Learning Objectives:

1. Explain why auditory processing is vulnerable to head injury.
2. Describe how auditory processing difficulty manifests itself in concussed children.
3. Identify some examples of frequency-following response deficits seen after a concussion.

Impact of Wearable Technology in Enhancing Human Ability

Arun Jayaraman, PT, PhD
Director, Max Nader Center for Rehabilitation Technologies & Outcomes Research
Director & Business Development Officer, Office of Translational Research
Associate Professor, Department of Physical Medicine & Rehabilitation and
Department of Physical Therapy & Human Movement Sciences
Northwestern University

Learning Objectives:

1. To discuss brief history on the perceived need for wearable technology for rehabilitation and people with disabilities
2. To discuss strategies for using wearable sensor technology to monitor patients in the continuum of care model.
3. To discuss strategies for using wearable robots for therapy and personal mobility for individuals with disability.

Disclosures & Important Information

- This educational activity is being presented without the provision of commercial support and without bias or conflict of interest from the planners and presenters.
- Registrants will be notified within 24 hours prior to the symposium if there is a cancellation.
- Successful completion of this educational activity requires full attendance (no partial credit will be given), as well as the completion of an evaluation form. Nurses seeking contact hours must also provide their license number at the time of registration.
- This continuing nursing education activity is currently being reviewed for continuing education contact hours by the Northwestern University Clinical and Translational Sciences Institute. Provider approved by the California Board of Registered Nursing, Provider Number CPN 15198.
- Please contact ACCR at accr@northwestern.edu for more information.