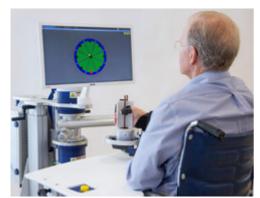






REHABILITATION ROBOTICS CONFERENCE 2017:

JUNE 2-4 O WHITE PLAINS, NY













This activity has been approved for AMA PRA Category 1 Credit(s)™

We invite medical professionals, therapists and students with a minimum of a Bachelor's degree in a relevant field to a 3 day event exploring updates, innovation and research surrounding robotics for neuro-rehabilitation.







DIRECTORS

Dylan J. Edwards, Ph.D., P.T.

Director, Brain Stimulation and Robotics Laboratory, Burke Medical Research Institute, White Plains, NY Assoc. Professor of Clinical Neurophysiology, Department of Neurology, Weill Cornell Medical College, New York, NY

Hermano Igo Krebs, Ph.D.

Principal Research Scientist and Lecturer, Newman Laboratory for Biomechanics and Human Rehabilitation, Mechanical Engineering Department, Massachusetts Institute of Technology, Cambridge, MA

OBJECTIVES

At the conclusion of this activity, participants should be able to:

- 1. Better identify the motor learning principles and neurophysiology underlying rehabilitation robotic therapy
- 2. Explain the clinical applications of robotic therapy
- 3. Identify existing neurorehabilitation therapies that may be augmented or complemented by rehabilitation robotics
- 4. Recognize barriers to the adoption and integration of robotic technology
- 5. Discuss potential strategies to overcome barriers to the adoption of rehabilitation robotics
- 6. Incorporate new research findings and develop new strategies for the use of robotics in treating patients with neurological impairments

APPROPRIATE FOR:

- PHYSICIANS
- NEUROLOGISTS
- GERIATRICIANS
- REHABILITATION SPECIALISTS
- RESIDENTS/FELLOWS
- MEDICAL STUDENTS
- PROGRAM DIRECTORS
- ALL ALLIED HEALTH PROFESSIONALS INTERESTED IN NEUROREHABILITATION

<u>Cost</u>: **\$500**

Space is limited-register early

For more information contact: burke.weill.cornell.edu/
rehabrobotics2017

COURSE OUTLINE

| Time | Event | Speaker | Affiliation | Topic |
|-------------|------------------------------|------------------------------|---------------------------------|--|
| Day 1: Fric | day June 2nd | | | |
| 8:00-9:00 | Registration | | | |
| 9:00-9:10 | Opening | Dr Edwards/ Dr Krebs | Cornell & BMRI/MIT | Opening remarks |
| 9:10-9:15 | Welcome | Dr Rajiv R. Ratan | Cornell & BMRI | Welcome |
| 9:15-10:15 | Key note #1 | Dr Joel Stein | Columbia/Cornell University | The acceptance and growth of rehabilitation robotic |
| 10:15-10:30 | Refreshments | | | |
| | | | | Underlying neuroscience and motor learning of |
| 10:30-11:30 | Key note #2 | Dr Neville Hogan | MIT | rehabilitation robotics |
| 11:30-12:30 | Keynote #3 | Dr Mar Cortes | Cornell & BMRI | Robotics and SCI |
| 12:30-1:30 | Lunch | | | |
| | | K. Zoe Tsagaris, Avrielle | | |
| | | Rykman Peltz, Heather | | |
| | | Pepper Lane, Mollyanne | | |
| 1:30-2:45 | Workshop #1 Part 1 | Tessler | Cornell & BMRI | Hands on with robotic technologies- upper limb |
| 2:45-3:00 | Refreshments | | | |
| | | Wilhelmina Zanders, Amy | | |
| 3:00-4:15 | Workshop #1 Part 2 | Bialek, Seaon Moore | Cornell & BMRI | Hands on with robotic technologies- lower limb |
| 4:15-4:30 | Closing | Dr Edwards/ Dr Krebs | MUCOLONNA MARKANIA ANTONIA | Closing remarks |
| Day 2: Sat | turday June 3rd | | | |
| 8:00-8:30 | Registration/light breakfast | | | |
| 8:30-9:30 | Keynote #4 | Dr Dylan Edwards | Cornell & BMRI | Adjuncts to rehabilitation robotic therapy |
| 9:30-10:15 | Keynote #5 | Dr Carolin Dohle | Cornell & BMRI | Integration of robotics in the clincal environment |
| | Refreshments | | | |
| 10:30-11:15 | | Dr Michael Reding | Cornell & BMRI | Who can use robotics in the clinic? |
| 11:15-12:00 | | Dr Marc Campo | Mercy College | Occupational health and robotics |
| 11.15-12.00 | Keynote #7 | Dr Campo/Dr Reding/ Dr | Wercy College | occupational nearth and robotics |
| 12-00-12-30 | Panel Discussion | Dohle | | Opinions: implementation of robotics program |
| | Lunch | Donie | | Opinions. Implementation of robotics program |
| 12.30-1.30 | Curicii | | | |
| 1:30-2:30 | Keynote #8 | Dr Bruce Volpe | Northwell & Feinstein Institute | Revolution of rehabilitation robotics |
| | | K. Zoe Tsagaris, Avrielle | | |
| | | Rykman Peltz, Heather | | |
| | | Pepper Lane, Mollyanne | | |
| | | Tessler, Wilhelmina Zanders, | | Clinical reasoning, outcome measures, and |
| 2:30-3:30 | Workshop #2 | Amy Bialek, Seaon Moore | Cornell & BMRI | evaluations for robotics |
| 3:30-3:45 | Refreshments/re-group | | | |
| | | K. Zoe Tsagaris, Avrielle | | |
| | | Rykman Peltz, Heather | | |
| | | Pepper Lane, Mollyanne | | |
| | | Tessler, Wilhelmina Zanders, | | |
| 3:45-4:45 | Workshop #3 | Amy Bialek, Seaon Moore | Cornell & BMRI | Robot & human motor control in clinical population |
| 4:45-5:00 | Closing | Dr Edwards/ Dr Krebs | | Closing remarks |
| Day 3: Sur | nday June 4th | | | |
| 8:00-8:30 | Registration/light breakfast | | | |
| 8:30-9:30 | Keynote #9 | Dr John Krakauer | John Hopkins University | Why did we ever think robotics would help? |
| 9:30-10:30 | Keynote #10 | Dr Hermano Igo Krebs | MIT | Current MIT research projects |
| | Refreshments | - Tremiene Be mees | | The state of the s |
| | Keynote #11 | Dr George Wittenberg | University of Maryland | Reaching, robots, and rehabilitation |
| 10.45-11:50 | Keynote wil | or dedige wittenberg | Rehabilitation Institute of | neaching, robots, and renabilitation |
| 11:30-12:30 | Keynote #12 | Dr Arun Jayaraman | Chicago | Future of rehab robotic research and practice |
| | Course Evaluation | Or Privil Jayardillall | cincago | Evaluation forms to be completed |
| | | De Edwarde / De Venha | | |
| 12:45-1:00 | Closing | Dr Edwards/ Dr Krebs | | Closing remarks |

CONFERENCE VENUE

The conference will be held at the stunning campus of Burke Medical Research Institute and Burke Rehabilitation Hospital:

785 Mamaroneck Avenue White Plains, NY 10605

