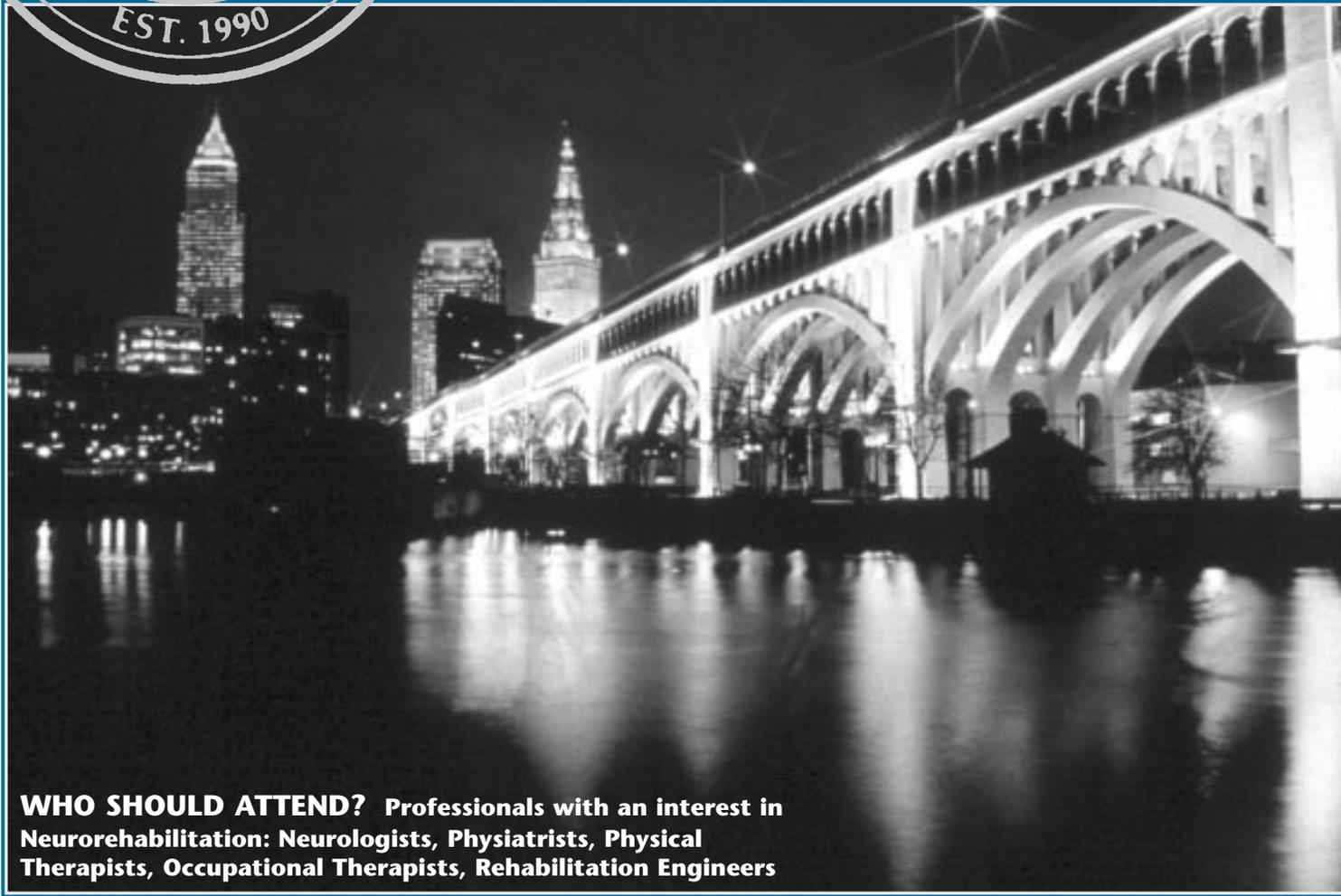


The American Society of
Neurorehabilitation presents:
**Scientific Basis of Neurorehabilitation
for Spinal Cord Injury
and Stroke**



WHO SHOULD ATTEND? Professionals with an interest in
Neurorehabilitation: Neurologists, Psychiatrists, Physical
Therapists, Occupational Therapists, Rehabilitation Engineers

Image supplied by the Convention & Visitors Bureau of Greater Cleveland, photographer Louie Anderson

Saturday, August 9, 2003
Louis Stokes Cleveland VA Medical Center
Cleveland, Ohio

IMPORTANT DEADLINES

Housing: July 7, 2003

Registration: July 7, 2003

VISIT OUR WEBSITE:
WWW.ASNR.COM

PHILOSOPHY AND PURPOSE

The American Society of Neurorehabilitation was formed in 1990 to serve as a forum for diverse medical specialties to meet and exchange information and ideas regarding long term care and rehabilitation of patients with chronic neurological disorders.

The ASNR is dedicated to improving patient care, fostering and encouraging research, and teaching and training in areas of neurorehabilitation.

The 2003 Workshop is part of a series of continuing medical education courses being presented annually

by the American Society of Neurorehabilitation with the support of the Section on Neurorehabilitation of the American Academy of Neurology. The entire program consists of courses dealing with stroke, head injury, spinal cord injury, and general neurorehabilitation. These topics are covered by intensive courses offered every two to three years.

Participants will receive a certificate attesting to the completion of the course material.

COURSE DESCRIPTION

This one-day workshop provides an intensive educational experience in clinical neurorehabilitation related to stroke and spinal cord injury. Recent studies have shown that specific interventions can improve neurologic recovery. This workshop will not simply present this information, but will provide an in-depth look at the practical application of this knowledge to improve clinical patient management. New practice techniques will be presented and optimal realistic application of recent advances will be discussed by a highly skilled staff of experts selected for both their scientific rigor and their clinical acumen in this area. In addition to “state-of-the-art” didactic sessions, the practical “hands-on” clinical focus will include workshops and interactive sessions with users of different forms of rehabilitation technology.

Sessions will include:

Facilitation of upper extremity motor recovery including the use of electrical stimulation and robot aided motor sensory training; facilitation of recovery of gait and mobility including gait lab analysis; use of EEG signals to control prosthetic devices; facilitation of recovery of laryngeal function and swallowing; and use of pulsatile lavage and other techniques to treat and prevent pressure sores.

Faculty includes numerous recognized leaders in the field of neurorehabilitation carefully selected for their expertise and teaching ability.

This course is designed for professionals interested in neurorehabilitation. It is one of the annual educational programs sponsored by the American Society of Neurorehabilitation. The program will provide expertise across multiple areas of the subspecialty.

COURSE SETTING

The Louis Stokes Cleveland VA Medical Center is a center of excellence for the treatment of Spinal Cord Injury and Rehabilitation Research within the Department of Veterans Affairs. Located in the University Circle District of Cleveland, the Louis Stokes Cleveland VA Medical Center provides a broad range of programs at every level of care including inpatient, outpatient, transitional care, and day treatment.

The Louis Stokes Cleveland VA Medical Center is located in close proximity to Severence Hall, the home of the world-renowned Cleveland Symphony, the Cleveland Museum of Art, the Cleveland Museum of Natural History, and the campus of Case Western Reserve University.

Programs are offered for individuals with brain injury, stroke, spinal cord disorders, multiple sclerosis, and pain. Specialized services also include aquatic therapy, electrical stimulation, state-of-the-art skin care, and adapted driver training. The Louis Stokes VA Medical Center is closely affiliated with the Cleveland FES (functional electrical stimulation) Center, which is a biomedical research consortium devoted to improving the lives of individuals with neurological disorders.

The Louis Stokes Cleveland VA Medical Center is accredited by the Commission on the Accreditation of Rehabilitation Facilities (CARF), including special accreditation in Spinal Cord Injury and Inpatient Rehabilitation, and the Joint Commission for the Accreditation of Healthcare Organizations (JCAHO).

LEARNING OBJECTIVES

Following the completion of this course, the participant will be able to:

- Describe rehabilitation techniques that are relevant for people with motor impairments after stroke and spinal cord injury.
- Discuss various approaches to the treatment of loss of motor function in people with stroke and spinal cord injury.
- Select appropriate rehabilitation techniques for treating motor impairment based upon a patient's needs.
- Specify to patients the benefits and disadvantages of different rehabilitation techniques for reducing motor impairments after stroke and spinal cord injury.
- Explain the role of robot aided sensory motor stroke training.
- List advantages and limitations of functional electrical stimulation for treating upper extremity motor loss and improving standing, transfers, and ambulation in people with deficits due to spinal cord injury and stroke.
- Summarize the role of interventions including pulsatile lavage, functional electrical stimulation, and pressure alerting in the practical treatment of pressure sores.

COURSE DIRECTORS

Robert L. Ruff, MD, PhD
Louis Stokes Cleveland VA Medical Center

Case Western Reserve University
FES Center, Cleveland, OH

KEYNOTE SPEAKERS

Hermano Igo Krebs, PhD
Massachusetts Institute of Technology
Cambridge, MA

John W. McDonald III, MD, PhD
Washington University School of Medicine
St. Louis, MO

LOCAL FACULTY

Kath Bogie, PhD
MetroHealth Medical Center
Case Western Reserve University
FES Center, Cleveland, OH

Chester Ho, MD
Louis Stokes Cleveland VAMC
Case Western Reserve University
FES Center, Cleveland, OH

Steven I. Reger, PhD
Cleveland Clinic Foundation
Cleveland, OH

John Chae, MD
MetroHealth Medical Center
Case Western Reserve University
FES Center, Cleveland, OH

Kevin Kilgore, PhD
MetroHealth Medical Center
Case Western Reserve University
FES Center, Cleveland, OH

Dawn Taylor, PhD
Louis Stokes Cleveland VAMC
MetroHealth Medical Center
Case Western Reserve University
FES Center, Cleveland, OH

Graham Creasey, MD
Louis Stokes Cleveland VAMC
MetroHealth Medical Center
Case Western Reserve University
FES Center, Cleveland, OH

E. Byron Marsolais, MD, PhD
Case Western Reserve University
FES Center, Cleveland, OH

Ronald Triolo, PhD
Louis Stokes Cleveland VAMC
MetroHealth Medical Center
Case Western Reserve University
FES Center, Cleveland, OH

Janis J. Daly, PhD, MS
Louis Stokes Cleveland VAMC
Case Western Reserve University
FES Center, Cleveland, OH

P. Hunter Peckham, PhD
Louis Stokes Cleveland VAMC
MetroHealth Medical Center
Case Western Reserve University
FES Center, Cleveland, OH

Dustin Tyler, PhD
Louis Stokes Cleveland VAMC
MetroHealth Medical Center
Case Western Reserve University
FES Center, Cleveland, OH

SOCIAL EVENT

Friday, August 8

Cleveland Indians vs. Anaheim Angels

Tickets: \$25.00 each

Arrive early to see the Cleveland Indians take on the Anaheim Angels on Friday, August 8. The game starts at 7:30 pm. Tickets can be reserved through the ASNR on a first-come, first-serve basis. Please indicate the number of tickets requested on the registration form. The RTA (Rapid Transit) has trains running to and from University Circle directly to Jacobs field.

Course Outline

SATURDAY, AUGUST 9, 2003:

7:30 - 8:00 A.M. **Registration**

8:00 – 8:10 A.M. Welcome and Course Overview
Robert L. Ruff, MD, PhD

Spinal Cord Injury Motor Applications

8:10 – 8:50 A.M. **Keynote:** Strategies for Spinal Cord Repair After Spinal Cord Injury
John W. McDonald III, MD, PhD

8:50 – 9:10 A.M. Upper Extremity Programs to Improve Hand Function and Independence
Kevin Kilgore, PhD

9:10 – 9:30 A.M. Lower Extremity – Strategies to Improve Transfers and Gait
Ron Triolo, PhD

9:30 – 9:50 A.M. Improving Bladder and Bowel Control in Patients with Spinal Cord Injury
Graham Creasey, MD

9:50 – 10:10 A.M. Preventing and Treating Pressure Sores in People with Spinal Cord Injury
Kath Bogie, PhD and Chester Ho, MD

10:10 – 10:30 A.M. Using Brain Activity for Assistive Technology Control
Dawn Taylor, PhD

10:30 – 10:45 A.M. **Break**

Stroke Applications

10:45 – 11:25 A.M. **Keynote:** Applying Robotic Technology for Motor Rehabilitation After Stroke
Hermano Igo Krebs, PhD

11:25 – 11:45 A.M. Upper Extremity – Shoulder Subluxation and Arm/Hand Mobility
John Chae, MD

11:45A.M. – 12:05 P.M. Combining Functional Electrical Stimulation (FES) and Partial –Weight Supported Treadmill Training to Enhance Gait Training
Janis Daly, PhD, MS

12:05 – 12:25 P.M. New Strategies for Treatment of Dysphagia After Stroke
Dustin Tyler, PhD

12:25 – 1:25 P.M. **Working Lunch:** (not for CME Credit)
This is a time for participants to interact with presenters and individuals using different types of supportive technology.

Interactive Sessions

1:30 – 3:30 P.M. **Participant/Subject: Breakout Workshop Session 1**
(choose up to four sessions, each session is 30 minutes)

Session 1A: SCI – Standing, Transfer and Walking – *Ronald Triolo, PhD & E. Byron Marsolais, MD, PhD*

Session 1B: SCI – Upper Extremity Function – *Kevin Kilgore, PhD & P. Hunter Peckham, PhD*

Session 1C: Stroke: Walking – *Janis J. Daly, PhD, MS*

Session 1D: Stroke: Upper Extremity – *John Chae, MD & Janis J. Daly, PhD, MS*

Session 1E: Bladder Stimulation System – *Graham Creasey, MD*

3:30 - 3:45 P.M. **Break**

3:45 – 5:45 P.M. **Participant/Equipment: Breakout Workshop Session 2**
(choose up to four sessions, each session is 30 minutes)

Session 2A: Pressure Lavage with Stimulated Pressure Sores – *Chester Ho, MD and Kath Bogie, PhD*

Session 2B: Pressure Mapping, Seating Alerting Systems – *Steven I. Reger, PhD*

Session 2C: Partial-Weight Supported Treadmill/Surface Electrical Stimulation – *Janis J. Daly, PhD, MS*

Session 2D: Upper Extremity Robot – *Janis J. Daly, PhD, MS*

Session 2E: Motion Analysis System – *Ronald Triolo, PhD*

5:45 P.M. **Adjourn**

Registration Form - American Society of Neurorehabilitation – August 9, 2003, Workshop

DEADLINE: July 7, 2003 (Pre-registration is required)

Return this form with payment to: American Society of Neurorehabilitation; 5841 Cedar Lake Road, Suite 204; Minneapolis, MN 55416; Phone (952) 545-6324, Fax (952) 545-6073

\$250 ASNR Members \$350 Non-members \$100 Student/non-physician (Includes continental breakfast and lunch)

First Name: _____ Last Name: _____ Degree: _____

Institution: _____

Street Address: _____

City, State, Zip: _____

Phone: _____ Fax: _____ E-mail: _____

Registration Fees – All fees in US dollars

ASNR Member \$250 Non-member \$350 Student/ Non-Physician \$100

SPECIAL NEEDS: Please check if you require additional accommodations to participate fully in the program. Someone in our office will contact you.

Social Event: Cleveland Indians vs. Anaheim Angels

Please reserve _____ number of tickets. \$25.00 per ticket. Ticket fees must accompany reservation form.

Student Verification

I certify that the registrant is a student.

Name of Department Head

Signature

Breakout Session 1 (Choose up to four Sessions)

- Session 1A: SCI: Standing, Transfer & Walking
- Session 1B: SCI: Upper Extremity Function
- Session 1C: Stroke – Walking
- Session 1D: Stroke – Upper Extremity
- Session 1E: Bladder Stimulation System

Breakout Session 2 (Choose up to four Sessions)

- Session 2A: Pressure Lavage with Simulated Sores
- Session 2B: Pressure Mapping, Seating Alerting
- Session 2C: Partial-Weight Supported Treadmill/SES
- Session 2D: Upper Extremity Robot
- Session 2E: Motion Analysis System

Cancellations can only be made by written request. Cancellations and requests for refunds are processed at no charge if received before July 7, 2003. No refunds will be issued for cancellations received after July 7, 2003.

Payment Information (payment must accompany Registration Form)

Please check: Check/Money order (US funds) Check # _____ Amount \$ _____

A \$20 service charge will apply to checks returned for insufficient funds.

To pay by credit card fax the registration form with information indicated below to (952) 545-6073.

Visa Master Card American Express Amount Approved \$ _____

Credit Card # _____ Expiration Date _____

Name as it appears on card: _____ Signature _____



American Society of Neurorehabilitation
5841 Cedar Lake Road, Suite 204
Minneapolis, MN 55416

Don't miss this
unique opportunity for
one-on-one
contact with
recognized leaders in
the neurorehabilitation
field.

*Come early to see the
Cleveland Indians take
on the Anaheim Angels
at 7:30 pm on Friday,
August 8, 2003.
Tickets are available
for sale through
the ASNR*

HOUSING & TRANSPORTATION

Hotel accommodations are available at the Glidden House, 1901 Ford Drive, Cleveland, Ohio, 44106.

Phone (216) 231-8900 or (800) 759-8358, Fax (216) 231-2130. Conference rates are \$139.00 single or \$149.00 double. Please call the Glidden House directly for reservations and request group rates for the American Society of Neurorehabilitation. Reservations made after July 7 will be on a space available basis. Cancellations must be made 24 hours before arrival.

Note: The Circlelink shuttle provides complimentary transportation throughout the University Campus. The RTA provides transportation throughout Cleveland and into the University Campus for a fee of \$1.50 one way.

CME CREDIT

This activity has been planned and implemented in accordance with the Essential Areas and Policies of the Accreditation Council for Continuing Medical Education (ACCME) through the joint sponsorship of the Minnesota Medical Association (MMA) and the American Society of Neurorehabilitation. The Minnesota Medical Association is accredited by the ACCME to provide continuing medical education for physicians.

The MMA designates this educational activity for a maximum of 8.0 category 1 credits toward the AMA Physician's Recognition Award. Each physician should claim only those credits that he/she actually spent in the activity.

Note: CME Certificates will be mailed to attendees and faculty approximately four to six weeks after the course.

QUESTIONS?

American Society of Neurorehabilitation
5841 Cedar Lake Road, Suite 204
Minneapolis, MN 55416

Phone: (952) 545-6324
Fax: (952) 545-6073
Email: asnrlmsi.com