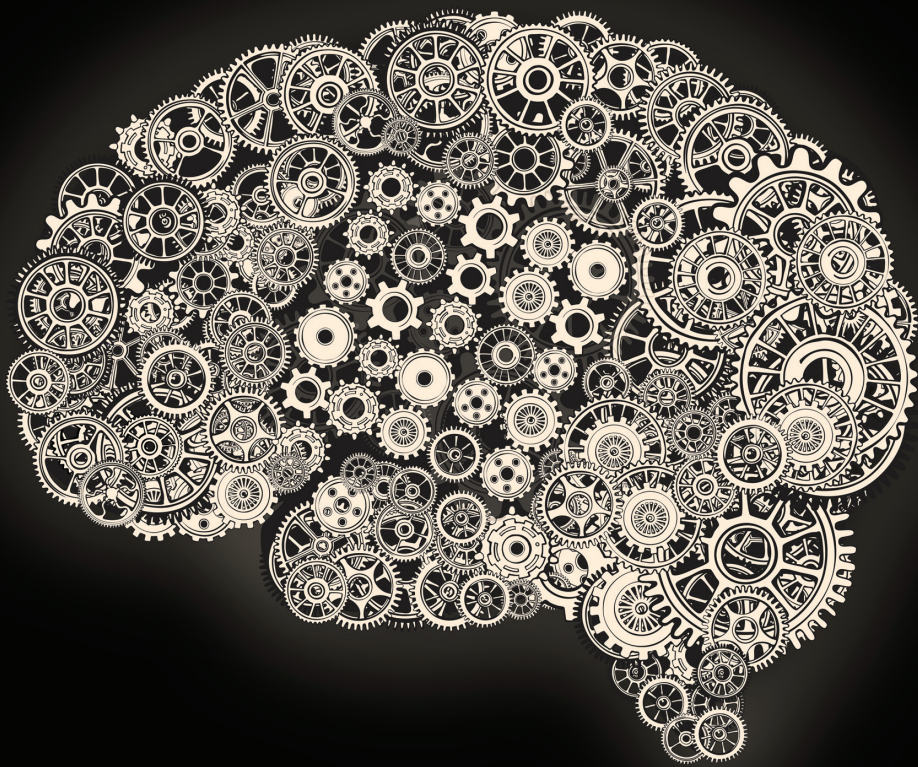


7TH INTERNATIONAL WORKSHOP ON ADVANCES IN ELECTROCORTICOGRAPHY



THURSDAY, NOVEMBER 13 -
FRIDAY, NOVEMBER 14, 2014

MARRIOTT WARDMAN PARK
2660 Woodley Road, NW
Washington, DC 20008 USA

National Center for Adaptive Neurotechnologies
Wadsworth Center



WHO SHOULD ATTEND

This program has been carefully designed to appeal to two target audiences. The program will be of interest to the scientist with an interest in theory and application of electrocorticographic (ECoG) signals recorded from the surface of the brain in humans or animals. The program will also have a strong appeal to neurologists, neurosurgeons, or clinical neurophysiologists whose practice involves functional brain mapping for epilepsy surgery or non-epilepsy lesionectomies.

ABOUT THE SYMPOSIUM

Electrocorticography (ECoG) is the technique of interacting with the brain electrically by stimulating or recording from the surface of the brain. ECoG has been used for decades for select clinical purposes – most commonly to identify functional and epileptic brain areas in people with epilepsy – and occasionally for research. The important role of ECoG for basic research and its potential to create a new range of clinical applications have long been under-appreciated.

Over the past several years, the unique qualities of ECoG have become widely and increasingly recognized by scientists engaged in basic and translational research. Basic research suggests that ECoG can elucidate brain function in ways that cannot be readily achieved using other imaging modalities, and translational research is producing exciting new ECoG-based applications that are already becoming available in the clinic.

This two-day ECoG workshop highlights current understanding and advances in scientific, engineering, and clinical domains that are relevant to ECoG recordings in humans or animals. It will be the 7th workshop in a highly successful workshop series. It follows an informal workshop at the American Epilepsy Society Annual Meeting in 2008, the first formal ECoG workshop in Upstate New York in 2009, the second ECoG workshop in San Diego, CA, in 2010 (satellite to SfN), the third ECoG workshop in Washington, DC, in 2011 (satellite to SfN), the fourth ECoG workshop in New Orleans, LA, in 2012 (satellite to SfN), the fifth ECoG workshop in San Diego, CA, in 2013 (satellite to SfN), and the sixth ECoG workshop in Berlin, Germany, in March 2014. To date, the results of these workshops have been reported in four highly visible Proceedings articles that were published by *Epilepsy and Behavior*.

LEARNING OBJECTIVES

At the conclusion of this conference, the participant should be able to:

- Discuss the nature of brain signals recorded electrocorticographically (ECoG).
- Know about emerging understanding of ECoG physiology and of emerging techniques to record it.
- Have an overview of current efforts in ECoG-based neuroscience.
- Contrast standard electrical brain stimulation and real-time functional ECoG mapping.
- Discuss the role of high frequency ECoG in functional assessment of brain activity.
- Recognize the emerging value of high frequency ECoG recordings in the evaluation of epilepsy surgery candidates and lesionectomy candidates.

ACCREDITATION

Albany Medical College is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Albany Medical College designates this live activity for a maximum of *9.75 AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

TUITION

Tuition	By October 17, 2014:	After October 17, 2014:
Single Day Registration	\$195.00	\$220.00
Students	\$170.00	\$170.00
Two Day Registration	\$280.00	\$340.00
Students	\$250.00	\$250.00

Tuition includes admission to the symposium lunch and beverage breaks.

TUITION REFUND POLICY

Tuition refunds, are possible if notification is received by November 10. After that date, no refunds will be issued. Refunds will be processed upon receipt of a written request.

NEED INFORMATION?

For information regarding the conference, contact the Office of Continuing Medical Education by phone at (518) 262-5828, fax at (518) 262-5679 or e-mail at pricej@mail.amc.edu.

For emergency calls during the conference, call the Marriott Wardman Park at (202) 328-2000.

WEB SITES

Conference Website - www.ecog.info

The Marriott Wardman Park -

www.marriott.com/hotels/travel/wasdt-washington-marriott-wardman-park

Albany Medical Center - www.amc.edu

CONFIRMATION

All registrants will receive a confirmation. If you register and do not receive a confirmation notice within one week of your registrations, please call the Office of Continuing Medical Education at (518) 262-5828 to be sure we have received your information.

SPECIAL NEEDS

Should you have a disability, dietary restrictions, or require other special arrangements, please call the Office of CME by September 15 to discuss your needs.

ATTIRE

Attire during the conference sessions is neat casual. Since everyone has a different comfort level, we suggest that you bring a sweater or light jacket.

ON-LINE SYLLABUS

Printed syllabus material will **NOT** be available at the conference. If syllabus material is available, it will be posted on-line prior and after the conference. In order to receive access to the syllabus material, you must provide your e-mail address on the registration form. You will receive access information via e-mail. If you do not receive access information, please call (518) 262-5828.

ACKNOWLEDGEMENT

We gratefully acknowledge the following organizations for providing support for this conference:

US Army • PMT • Fondazione Neurone • g.tec • CorTec

7TH INTERNATIONAL WORKSHOP ON A

DAY 1 - THURSDAY, NOVEMBER 13, 2014

- 8:45a-9:00a **Welcome and Introduction**
Gerwin Schalk, PhD, and Anthony Ritaccio, MD
- 9:00a-9:45a **Keynote Address**
David Poeppel, PhD, NYU
- 9:45a-10:00a **Break**
- 10:00a-10:45a **The Value of Seizure Semeiology in Epilepsy**
Mohamad Koubeissi, MD, George Washington University
- 10:45a-11:15a **Break**
- 11:15a-12:00p **The Expanding Clinical Relevancies
of Electroconvulsive Therapy**
Anthony Ritaccio, MD, Albany Medical College
- 12:00p-1:00p **Lunch**
- 1:00p-1:45p **Biomarkers of Memory Encoding and Retrieval**
Michael Kahana, PhD, University of Pennsylvania
- 1:45p-2:00p **Break**
- 2:00p-2:45p **A Few More Things We Can Learn About the
Default Mode Network from Intracranial EEG**
Jean-Philippe Lachaux, Lyon Neuroscience Research Center
- 2:45p-3:15p **Break**
- 3:15p-4:00p **ECoG of Paralyzed Patients**
Takufumi Yanagisawa, MD, PhD, Osaka University
- 4:00p-4:15p **Break**
- 4:15p-5:00p **Properties of Large-Scale Brain Networks During
Sensorimotor Processing**
Gerwin Schalk, PhD, Wadsworth Center

ADVANCES IN ELECTROCORTICOGRAPHY

DAY 2 - FRIDAY, NOVEMBER 14, 2014

- 8:15a-8:30a **Introduction**
Anthony Ritaccio, MD, and Gerwin Schalk, PhD
- 8:30a-9:15a **Imaging Functional and Epileptic Networks
with Cortical Stimulation**
Riki Matsumoto, MD, PhD, Kyoto University
- 9:15a-9:30a **Break**
- 9:30a-10:15a **Rapid and Minimally-Invasive Functional Cortical and White
Matter Mapping by Intraoperative Real-time ECoG Analysis**
Kyousuke Kamada, MD, PhD, Asahikawa Medical University
- 10:15a-10:45a **Break**
- 10:45a-11:30a **The Implant Effect – Insights from Chronic Ambulatory
Electrocorticogram Recording**
Martha J. Morrell, MD, Neuropace
(CME Credit is NOT available for this lecture)
- 11:30a-11:45a **Break**
- 11:45a-12:30p **Current and Future Applications of EEG- and ECoG-Based
Brain-Computer Interfaces**
Christoph Guger, PhD, g.tec Medical Engineering
(CME Credit is NOT available for this lecture)
- 12:30p-1:30 **Lunch**
- 1:30p-2:15p **Macro and Microscale Views of Focal Seizure Initiation,
Spread and Termination**
Sydney S. Cash, MD, PhD, Harvard Medical School
- 2:15p-2:30p **Break**
- 2:30p-3:15p **Individualized Cortical Electrodes for
Gyral and Sulcal Recording**
Masayuki Hirata, MD, PhD, Osaka University
- 3:15p-3:45p **Break**
- 3:45p-4:30p **A Fully-Integrated Miniature 64-Channel, 225uW
Wireless Electrocorticographic Neural Sensor**
Jan M. Rabaey, PhD, UC Berkeley
- 4:30p-4:45p **Break**
- 4:45p-5:30p **High-Resolution Monkey ECoG Reveals Feedforward and
Feedback Mechanisms and their Interaction**
Pascal Fries, MD, PhD, Ernst Strüngmann Institute
- 5:30p **Reception**

FACULTY

COURSE DIRECTORS

RESEARCH

GERWIN SCHALK, PhD

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Wadsworth Center

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(INSERM)

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New York University

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Graduate School of Medicine

Osaka University

Osaka, Japan

CONFERENCE REGISTRATION FORM

NOVEMBER 13-14, 2014

7TH INTERNATIONAL WORKSHOP ON ADVANCES IN ELECTROCORTICOGRAPHY

TUITION *(Only paid registrations can be accepted.)*

	By October 17, 2014	After October 17, 2014
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Students	\$170.00	\$170.00
Two Day Registration	\$280.00	\$340.00
Students	\$250.00	\$250.00

Name & Degree *(as to appear on conference materials):* _____

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Month of Birth Date of Birth First 4 Characters of First Name

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Institution/Affiliation: _____

Department: _____

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E-mail Address *(You must provide an e-mail address to gain access to the on-line syllabus):* _____

PLEASE REGISTER ME FOR THE FOLLOWING SESSIONS:

- Thursday, November 13, 2014 Friday, November 14, 2014
 Both Thursday & Friday, November 13-14, 2014

PLEASE INDICATE METHOD OF PAYMENT:

- My check for \$ _____, payable to Albany Medical College is enclosed.
 Please charge my credit card for the amount of \$ _____.
(For credit card payment, complete information below.)
 MasterCard Visa American Express Discover

NAME AS IT APPEARS ON CARD:

Card Number: _____ Exp. Date: ____/____/____

Signature: _____

METHOD OF REGISTRATION: MAIL OR FAX

RETURN THIS FORM WITH PAYMENT TO:

Office of Continuing Medical Education
Electrocorticography Workshop
Albany Medical College, Mail Code – 1 J408
47 New Scotland Avenue, Albany, New York 12208-3479

FAX: (518) 262-5679 registrations accepted for Visa, MasterCard, Discover and American Express only. Fax registrations without credit card payment cannot be processed. This is a secure fax. Please register one person per form. This form may be photocopied.

OFFICE USE ONLY

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