

Course Description

The course and workshop will offer training in how to perform as well as interpret electrodiagnostic studies. Emphasis will be placed on the basic aspects of electrophysiology including waveform interpretation. Detailed examinations of using electrodiagnostics to understand the cellular mechanism and pathogenesis of disease and therapy will be provided. A wet-lab will provide hands-on training on how to perform ERGs and an interactive workshop will provide experience in ERG interpretation.

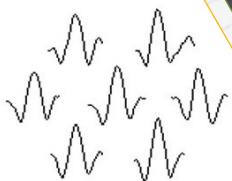
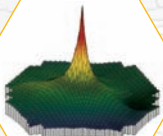
Who Should Attend

This activity is intended for research ophthalmologists and vision scientists as well as students, post-doctoral fellows, and laboratory technicians who are interested in gaining or expanding knowledge in electrophysiology. It is also intended for those who are interested in learning the techniques in performing electroretinograms and trouble-shooting as well as the basics of waveform interpretation.

Objectives

Following the program, the attendee will be able to:

- Understand and interpret electroretinogram waveforms
- Use the electroretinogram to assist in research studies
- Perform an electroretinogram
- Trouble-shoot electroretinography



General Information

Registration

Saturday, June 2, 2007 from 7:00am to 7:30am

Location

Johns Hopkins University School of Medicine, Wilmer Eye Institute, Patz Hall, 600 N. Wolfe Street, Baltimore, MD.

Directions to campus parking garages will be mailed with your confirmation notice, or visit our registration website to access this information, www.hopkinsmedicine.org/wilmer/conf
Johns Hopkins is smoke-free.

Note – For Saturday courses only: Parking is available in the Washington Street Garage at no charge.

Fees

REGISTRATION CUT-OFF DATE – May 31, 2007.
EARLY REGISTRATION BY May 25, 2007.

Methods of Payment: By credit card or check prior to the meeting. On-site payments not available. We cannot accept cash.

Payment must accompany registration form. A \$50 late fee applies to registrations received after May 25, 2007. Foreign payments must be by credit card or with a U.S. Dollar World Money Order. The registration fee includes instructional materials, refreshment breaks and lunch.

Scientists/Physicians/Students/Fellows/Technicians\$425

You will receive a confirmation by e-mail if you have provided your e-mail address. Otherwise confirmation will be sent by mail. If you have not received it by May 25, 2007 call (866) 760-2005 to confirm that you are registered. Certificates of attendance will be provided on the day of the conference.

The Johns Hopkins University reserves the right to cancel or postpone any course due to unforeseen circumstances. In this event, the University will refund the registration fee but is not responsible for travel expenses.

Tuition Refund Policy

A handling fee of \$100 is deducted for cancellation. Refund requests must be received by fax or mail by May 25, 2007. No refunds will be made thereafter. Transfer of registration to another Johns Hopkins conference in lieu of cancellation is not possible.

Hotel and Travel Information

Tremont Suite Hotel, 222 Saint Paul Place, Baltimore
Ph: (800) 873-6668 or (410) 727-2222 • FAX (410) 685-4216

Hotel Reservation Cut-Off Date: May 25, 2007
Check-in time is 4:00 pm

Located just a short walk from Baltimore's Inner Harbor, the Tremont Suite Hotel is an all-suite hotel, each unit with complete kitchens and separate sleeping quarters. Call the hotel directly to make your reservation. Specify that you are attending the Johns Hopkins Electrophysiology meeting to receive the special room rate of \$139 single/\$139 double, plus tax. Complimentary transportation will be provided to the meeting. Both valet and self-parking are available at an additional charge.

Call United Airlines at (800) 521-4041 for discounted rates and refer to Meeting ID Number 549TJ.

Americans with Disabilities Act

The Johns Hopkins University School of Medicine fully complies with the legal requirements of the ADA and the rules and regulations thereof. Please notify us if you have any special needs.

To Register or for Further Information

Online at www.hopkinsmedicine.org/wilmer/conf
By Phone: (866) 760-2005
By Fax: (866) 760-2006
For Confirmation: (866) 760-2005

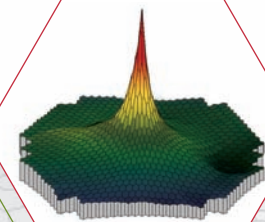
See *Diagnosys ERG Systems* at ARVO; Booths 613 & 615, Fort Lauderdale, FL and at ISCEV in Hyderabad, India.

Electrophysiology in Animal Models of Eye Disease

Conference and Training Workshop

June 2-3, 2007

Johns Hopkins University
School of Medicine
Wilmer Eye Institute
600 N. Wolfe Street
Baltimore, MD



*The
Wilmer Eye Institute
at The Johns Hopkins University
School of Medicine*

Division of Visual Physiology
Wilmer Eye Institute
Johns Hopkins University School of Medicine
Wilmer B1 - 53, 600 N. Wolfe St.
Baltimore, MD 21287



Faculty

Course Director

Neal Adams, MD

Chief of Division of Visual Physiology
The Wilmer Eye Institute
Baltimore, Maryland

Conference Co-Director

Elia J. Duh, MD

Assistant Professor of Ophthalmology
The Wilmer Eye Institute
Baltimore, Maryland

Guest Faculty

Bruce Doran, BA

President
Private Industry
Diagnosys, LLC

Anne L. Fitzgerald, DVM, DACLAM, DABT

Director, In Vivo Toxicology
Drug Safety Research and Development
Pfizer Global Research and Development
Ann Arbor, Michigan

Laura J. Frishman, PhD

Moore's Professor and Associate Dean
University of Houston College of Optometry
Houston, Texas

Jeffrey A. Jamison, PhD

Senior Scientist III
Retina Research
Alcon Laboratories
Fort Worth, Texas

Andras M. Komaromy, Dr.Med.Vet., PhD

Assistant Professor of Ophthalmology
Department of Clinical Studies
School of Veterinary Medicine
University of Pennsylvania
Philadelphia, Pennsylvania

John G. Robson, PhD

Senior Research Professor of Vision Science
University of Houston College of Optometry
Houston, Texas

Yves Sauve, PhD

Assistant Professor of
Ophthalmology and Physiology
Department of Physiology
University of Alberta
Edmonton, Alberta

Kai Ming Zhang, MS

Department of Biological Sciences
Allergan Inc.
Santa Ana, California

Program

Saturday, June 2, 2007

Morning

7:00 - 7:30

Registration and Continental Breakfast

2:45 - 3:30

ERG in Animal Models of AMD, Glaucoma, and Diabetes: Applications in Drug Discovery

Jeffrey A. Jamison, PhD
Applying the ERG to drug discovery in animal models of human eye disease.

7:30 - 7:40

Introduction: Functionally Dissecting the Retina

Neal Adams, MD

7:40 - 8:40

Cellular Basis of ERG Signals

Laura J. Frishman, PhD

An introduction to the cellular mechanisms involved in generating retinal electric currents – an update on the current understanding of the cellular origins of various waveforms.

3:30 - 4:05

Measuring ERG Changes in Rodent Models of Diabetes

Elia J. Duh, MD

An exploration into detecting early ERG changes in rodent models of diabetes.

8:40 - 9:10

Technology of ERG

Bruce Doran, President of Diagnosys LLC

A talk on the current technology of ERG and how the technology records waveforms, filters signals, and minimizes noise.

4:05 - 4:20

Break

4:20 - 4:50

Multifocal ERG — Techniques and Interpretation in Animal Models

Neal Adams, MD

An exploration of a novel multi-focal stimulator for improved understanding of retinal physiology in health and disease in rodents.

9:10 - 9:55

ERG Testing Protocols in Large Animal Models

Andras M. Komaromy, Dr.Med.Vet., PhD

A focused talk on methodologies of ERG testing in large animals.

4:50 - 5:30

Psychophysical and Peripheral Field Testing in Rodent Models of Retinal Degenerations and Therapies

Yves Sauve, PhD

A detailed talk on perimetry-like testing of peripheral fields using multi-unit recordings and other psychophysical visual assessment methodologies.

9:55 - 10:10

Break

10:10 - 10:50

Electroretinography in Rodent Models of Retinal Degenerations and Therapies

Yves Sauve, PhD

A detailed talk on methodologies of ERG testing in rodents, focusing on distinguishing between rod and cone function and focus on the double flash protocol.

5:30 - 6:15

Sweep VEP for Acuity Testing in Non-Primates

Kai Ming Zhang, MS

A detailed talk on the use of sweep VEP in non-primate models for testing ophthalmic drugs.

10:50-11:55

Interpreting the ERG in Animal Models

John G. Robson, PhD

A detailed examination of how the ERG can be used to dissect the retina and determine the cell-types affected in animal models of retinal disease.

6:15

Break for Dinner

11:55 - 12:30

Species Differences in ERG Testing

Laura J. Frishman, PhD

An introduction to the inter-species variations in retinal physiology in relation to ERG testing.

Sunday, June 3, 2007

Morning

7:30 - 7:00

Continental Breakfast

8:00 - 11:00

Concurrent Sessions (Rotating Workshops, 45 minutes each)

Workshop 1

Interactive Interpretation Module

Workshop 2

Introduction on How to Perform and ERG

Workshop 3

Practical Aspects of Connecting Animals: Species Differences

Workshop 4

Software Use and Full Test on Rodent Models

11:00 - 11:15

Break

11:15 - 12:00

Panel Session & Discussion: Questions and Answers Role of ERG in Basic Science

12:00

Adjourn; Please complete and return the Evaluation

12:30 - 1:30

Lunch with the Speakers

Afternoon

1:30 - 2:00

Use of UV Stimulator for ERGs in Rodents

Neal Adams, MD

An exploration of a novel UV stimulator for improved understanding of retinal physiology in health and disease in rodents.

2:00 - 2:45

Non-Clinical Safety Testing of Ophthalmic Drugs

Anne L. Fitzgerald, DVM, DACLAM, DABT

An examination of methods used for pre-clinical safety testing of ophthalmic compounds, focusing on the ERG protocol.

Space is Limited. Early Registration is Suggested.
This schedule is subject to change.

Registration Form

Electrophysiology in Animal Models of Eye Disease: Conference and Training Workshop

Preferred method of registration: On-line or by fax

To Register: On-line: www.hopkinsmedicine.org/wilmer/conf
By phone: (866) 760-2005 By fax: (866) 760-2006

Or mail this form to the Johns Hopkins University,
Visual Physiology Conference, Wilmer B1-53,
600 N. Wolfe Street, Baltimore, MD 21287.

Include check payable to **JOHNS HOPKINS UNIVERSITY**,
or include credit card information below.

PAYMENT MUST ACCOMPANY FORM TO CONFIRM YOUR REGISTRATION.

Please type or print clearly:

last name first name middle initial

primary degree (for name badge) primary specialty

preferred mailing address

city state zip + 4 code country

daytime telephone fax number

e-mail:

You will receive confirmation notice by e-mail if you provide your e-mail address.

Registration Fees:

Scientists/Physicians/Students/Fellows/Technicians..... \$425

For registrations received after May 25, 2007, include a \$50 late fee.

Total amount enclosed \$ _____

Credit Card Registrations

VISA MASTERCARD DISCOVER AMEX

Card # _____ - _____ - _____ Exp. Date _____

Name as it appears on card. Please print clearly.

Signature _____ Date _____

What do you hope to learn by attending this course?

Space is Limited.

Early Registration is Suggested.

Please notify us if you have any special needs.

Tuition Remission for Johns Hopkins University Faculty and Staff:

Approved JHU Tuition Remission Voucher and Professional Development Form attached.

(To obtain forms, go to <http://hrnt.jhu.edu/benefits/tuition.cfm>)

Tuition Remission Voucher and Professional Development Form to come

Check Status: Physician Allied Health Professional

Return this registration to:

Johns Hopkins University
Visual Physiology Conference
Wilmer B1-53
600 N. Wolfe Street
Baltimore, MD 21287