



David Geffen
School of Medicine

20th Annual UCLA Symposium

Pulmonary Function and Exercise Testing

Practical Approaches for the Healthcare Practitioner



October 16-17, 2014

**Disney's Grand Californian Hotel® & Spa
Anaheim, CA**

CME OFFICE OF
CONTINUING
MEDICAL
EDUCATION

DAVID GEFKEN SCHOOL OF MEDICINE at UCLA

Pulmonary Function and Exercise Testing

Practical Approaches for the Healthcare Practitioner

Course Description

This two-day course addresses background physiology, technological issues, data quality, interpretation of results and reporting with an emphasis on the practical application of this knowledge to everyday patient testing. The didactic sessions will be interspersed with practical demonstrations offering hands-on experience for the delegates as well as poster sessions which offer opportunities for the interpretation of real clinical cases.

Objectives

At the conclusion of this program, participants will be able to:

- Understand the purposes of pulmonary function and clinical exercise testing.
- Describe the specific indications and circumstances when referral for pulmonary function or exercise testing might be considered.
- Formulate informed decisions about equipment and protocols for pulmonary function and clinical exercise testing.
- Analyze and assess the key physiological variables of pulmonary function and exercise tests including normal and abnormal response patterns.
- Utilize state-of-the-art equipment for pulmonary function and clinical exercise testing in small groups; discuss and evaluate the data obtained.
- Interpret case examples of the most common pathophysiological response patterns seen in pulmonary function and clinical exercise testing.

Target Audience

This course is aimed towards physicians and allied healthcare personnel in the fields of respiratory disease, cardiovascular disease, sports medicine, laboratory management and patient testing.

Course Director

Christopher B. Cooper, MD
Professor of Medicine and Physiology*

Course Faculty

Igor Barjaktarevic, MD
Assistant Professor*

Brett A. Dolezal, PhD
Assistant Project Scientist*

Eric C. Kleerup, MD
Clinical Professor of Medicine*

Donald P. Tashkin, MD
Emeritus Professor of Medicine*

*Division of Pulmonary and Critical Care
Medicine, David Geffen School of Medicine
at UCLA

Accreditation

The Office of Continuing Medical Education, David Geffen School of Medicine at UCLA is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Office of Continuing Medical Education, David Geffen School of Medicine at UCLA designates this live activity for a maximum of 14 *AMA PRA Category 1 Credits™*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

Disclosure

The FDA has issued a concept paper that classifies commercial support of scientific and educational programs as promotional unless it can be affirmed that the program is “truly independent” and free of commercial influence. In addition to independence, the FDA requires that nonpromotional, commercially supported education be objective, balanced, and scientifically rigorous.

The policy further states that all potential conflicts of interest of the CME staff and faculty be fully disclosed to the program’s participants.

We, at the David Geffen School of Medicine at UCLA, fully endorse the letter and spirit of these concepts.

20th Annual UCLA Symposium

Pulmonary Function and Exercise Testing

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THURSDAY, OCTOBER 16, 2014

Clinical Exercise Testing

- 8:00 REGISTRATION AND BREAKFAST
- 8:30 PURPOSE OF EXERCISE TESTING
Christopher B. Cooper, MD
- Basic exercise physiology
 - Exercise test nomenclature
 - Evaluation of the exercise response
 - Specific applications
- 9:00 INSTRUMENTATION AND TESTING METHODS
Brett A. Dolezal, PhD
- Choice of ergometer
 - Metabolic measurement systems
 - Peripheral measurements
 - Protocol selection
- 9:30 NORMAL AND ABNORMAL RESPONSE PATTERNS I
Brett A. Dolezal, PhD, Christopher B. Cooper, MD
- Aerobic capacity (maximum oxygen uptake)
 - Functional capacity
 - Metabolic, gas exchange or lactate threshold
 - Cardiovascular limitation
 - Chronotropic index
- 10:15 COFFEE
- 10:30 NORMAL AND ABNORMAL RESPONSE PATTERNS II
Christopher B. Cooper, MD, Brett A. Dolezal, PhD
- Ventilatory limitation
 - Ventilatory efficiency
 - Flow-volume curves
 - Gas exchange variables
 - Muscle metabolism
- 11:15 INCREMENTAL EXERCISE TEST I: DEMONSTRATION
Brett A. Dolezal, PhD, Christopher B. Cooper, MD
- 12:30 LUNCH
- 1:30 TEST INTERPRETATION AND TROUBLESHOOTING
Christopher B. Cooper, MD
- Review of results of incremental test
 - Threshold detection
 - Identification of technical problems

- 2:00 DEVELOPMENT OF THE EXERCISE TEST REPORT
Christopher B. Cooper, MD
- Systematic approach to test interpretation
 - Selection of tabular data and graphical displays
 - Summarizing the results
- 2:15 INCREMENTAL EXERCISE TEST II: DELEGATE PARTICIPATION
Christopher B. Cooper, MD
- 3:30 TEA
- 3:45 POSTER SESSION WITH CASE EXAMPLES
Faculty Facilitators
- 5:00 PANEL DISCUSSION AND QUESTIONS
- 5:10 ADJOURN

FRIDAY, OCTOBER 17, 2014

Pulmonary Function Testing

- 8:30 REGISTRATION AND BREAKFAST
- 9:00 INTRODUCTION TO THE PULMONARY FUNCTION LABORATORY
Eric C. Kleerup, MD
- Organization
 - Certification
 - Staffing
 - Patient safety
- 9:20 SPIROMETRY
Donald P. Tashkin, MD
- Equipment
 - Methodology
 - Quality assurance
 - Interpretation
- 10:00 LUNG VOLUMES
Christopher B. Cooper, MD
- Equipment
 - Methodology
 - Quality assurance
 - Interpretation
- 10:40 COFFEE



- 11:00 DIFFUSING CAPACITY
Eric C. Kleerup, MD
- Equipment
 - Methodology
 - Quality assurance
 - Interpretation
- 11:40 ARTERIAL BLOOD GASES AND CO-OXIMETRY
Igor Barjaktarevic, MD
- Equipment
 - Methodology
 - Quality assurance
 - Interpretation
- 12:20 LUNCH
- 1:10 DEMONSTRATIONS OF PULMONARY FUNCTION TESTING
*Eric C. Kleerup, MD,
Donald P. Tashkin, MD*
- 2:10 SPECIAL TESTS OF RESPIRATORY SYSTEM MECHANICS
Christopher B. Cooper, MD
- Airways resistance
 - Forced oscillation technique
 - Lung and chest wall compliance
 - Respiratory muscle strength
- 2:50 SPECIAL TESTS INVOLVING ARTERIAL BLOOD GASES
Igor Barjaktarevic, MD
- Shunt studies
 - P₅₀
 - High altitude simulation tests
 - Oxygen titration tests
- 3:30 TEA
- 3:50 POSTER SESSION WITH CASE EXAMPLES
Faculty Facilitators
- 5:10 PANEL DISCUSSION AND QUESTIONS
- 5:20 ADJOURN

General Information

Dates: October 16-17, 2014

Tuition:

\$600 physicians by September 12, 2014

\$650 physicians late registration

\$450 non-physicians by September 12, 2014

\$500 non-physicians late registration

\$350 1 day physician fee

\$275 1 day non-physician fee

Location:

Disney's Grand Californian Hotel® & Spa

1600 S. Disneyland Drive

Anaheim, CA 92802

(714) 520-5005

Room reservation: <https://disneyland.disney.go.com/grand-californian-hotel/>

A room rate of \$249/night plus taxes has been secured for this event. Call (714) 520-5005 to reserve a guest room. Mention the UCLA Pulmonary Function & Exercise Testing Symposium when placing the reservation.

Reservations must be made no later than Monday, September 15, 2014 to receive this special rate.

Reservations requests received after the cut-off date will be accepted on a space and rate availability.

Parking:

\$15 Self Parking, \$22 Valet/Overnight

Refunds

A service charge of \$75 will be withheld from all refunds (full refund if course is canceled or rescheduled). Requests must be in writing and received by September 15, 2014. You may fax your refund request to (310) 794-2624.

Enrollment

ONLINE: Use your American Express, MasterCard, Visa or Discover card. Go to www.cme.ucla.edu/courses and click on 20th Annual UCLA Symposium Pulmonary Function and Exercise Testing.

FAX: Fax the completed enrollment form with charge card information and authorizing signature to (310) 794-2624.

PHONE: Use your American Express, MasterCard, Visa or Discover card. Call (310) 794-2620.

MAIL: Use the attached enrollment form. If you need more, photocopy the original.

Information

If you have any questions about this or any other program, please contact the UCLA Office of Continuing Medical Education at (310) 794-2620 or visit our website at www.cme.ucla.edu.



Please print clearly and be sure to include your charge card information and your authorizing signature.

Course No: M145-8

20th Annual UCLA Symposium Pulmonary Function and Exercise Testing: Practical Approaches for the Healthcare Practitioner

Registration Fee	Fee
\$600 physicians by September 12, 2014	
\$650 physicians late registration	
\$450 non-physicians by September 12, 2014	
\$500 non-physicians late registration	
\$350 1 day physician fee	
\$275 1 day non-physician fee	

Name (First/Middle/Last)☐ Male☐ FemaleDegree

Home Address

City / State / Zip

Area Code/Daytime PhoneFax

E-mail AddressLast 4 Digits of Social Security Number

Specialty

- Online:

Go to www.cme.ucla.edu/courses and click on 20th Annual UCLA Symposium Pulmonary Function and Exercise Testing.
- Fax:

Fax the completed enrollment form with charge card information and authorizing signature to (310) 794-2624.
- Phone:

Call the Office of Continuing Medical Education at (310) 794-2620.
- Mail:

Mail the enrollment form to:
Office of Continuing Medical Education
David Geffen School of Medicine at UCLA
10920 Wilshire Blvd., Suite 1060
Los Angeles, CA 90024-6512

☐ Check enclosed payable to: *The Regents of the University of California*

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