Evaluation & Management of Dizziness and Imbalance

COURSE INSTRUCTORS

David Zee, MD
& A. Tucker Gleason, PhD

October 23-24, 2015

Courtyard Philadelphia Downtown
21 N. Juniper Street
Philadelphia, PA 19107
(215) 496-3200

COST: $600 until 10/02/15
($650 afterwards)
Hotel Accommodations
Courtyard Philadelphia Downtown
21 N. Juniper Street
Philadelphia, PA 19107
(215) 496-3200
Room Rates: $149
Rates available until 10/01/15

Call hotel directly to make your reservation, mention “Micromedical Technologies VNG Course” to get the special rate
Hotel Website:

Airport & Directions:

AREA AIRPORTS: This hotel does not provide shuttle service

Philadelphia International Airport (PHL) (10mi NE)

Transportation Options:
- Lady Liberty Transportation $10 (one way) upon request
- Estimated Taxi Fare $29 (one way)

Driving Directions:
- Take I-95N to I-676W and exit at Broad Street (Route 611). Stay in the left lane and take the first left turn onto Vine Street. Continue on Vine Street to 12th Street and turn right. Proceed to Market Street and turn right. Follow Market Street toward City Hall and the hotel will be on the right immediately after the first traffic light.

Please visit the PHL website for ground transportation options: http://www.phl.org/passengerinfo/transportationservices/Pages/transport_default.aspx

From I-476 S:

From I-95 S (New Jersey Turnpike):

From I-70 E:

From I-95N:
- At exit 5D, take ramp right for I-495 N toward Port of Wilm/Philadelphia. Keep straight onto I-95 N. At exit 13, take ramp right for PA-291 East toward Valley Forge. Keep straight onto I-76 W. At exit 345, take ramp right toward 30th St. Keep straight onto PA-3 E/Schuylkill Ave. Turn right to stay on PA-3 E/Market St. Turn right onto PA-611 S/S 15th St. Keep straight onto PA-611 N/S Penn Sq. Turn right onto Commerce St. Hotel is on the corner

Please visit the hotel website for specific directions: http://www.marriott.com/hotels/maps/travel/phldc-courtyard-philadelphia-downtown/

Parking: Valet $42 daily, Off-Site: $12 hourly, $35 daily
### COURSE AGENDA*:

**Friday October 23, 2015**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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</thead>
<tbody>
<tr>
<td>7:30-8:00</td>
<td>Registration</td>
</tr>
<tr>
<td>8:00-8:30</td>
<td>Introductions and Course Overview - Dr. Gleason</td>
</tr>
<tr>
<td>8:30-9:00</td>
<td>Vestibular Anatomy and Physiology - Dr. Gleason</td>
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<tr>
<td>9:00-10:00</td>
<td>Office/Bedside Examination of the Dizzy Patient - Dr. Zee</td>
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<tr>
<td>10:00-10:15</td>
<td>Break</td>
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<tr>
<td>10:15-11:15</td>
<td>Ocular Motor System: Basic Anatomy &amp; Physiology - Dr. Zee</td>
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<tr>
<td>11:15-12:30</td>
<td>Recording Eye Movements and Ocular Motor Tests - Dr. Gleason</td>
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<tr>
<td>12:30-1:30</td>
<td>Lunch (Meal Provided)</td>
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<tr>
<td>1:30-2:30</td>
<td>Neurologic Causes of Dizziness &amp; Imbalance</td>
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<tr>
<td></td>
<td>Cerebellum and basal ganglia- Dr. Zee</td>
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<tr>
<td>2:30-3:15</td>
<td>Positional Testing - Dr. Gleason</td>
</tr>
<tr>
<td>3:15-3:30</td>
<td>Break</td>
</tr>
<tr>
<td>3:30-4:30</td>
<td>Hands-on - 3 Stations (Rotate after 20 min)</td>
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<td></td>
<td>Ocular Motor Tests - Course Sponsor Staff</td>
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<td></td>
<td>Dizzy Office Exam - Dr. Zee</td>
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<td>Positional Testing - Dr. Gleason</td>
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<tr>
<td>4:30-5:30</td>
<td>Migraine Associated Vertigo and Meniere’s Disease - Dr. Zee</td>
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**Saturday October 24, 2015**

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>8:00-9:00</td>
<td>BPPV and Other Causes of Positional vertigo - Dr. Zee</td>
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<tr>
<td>9:00-10:00</td>
<td>Stroke Syndromes - Dr. Zee</td>
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<tr>
<td>10:00-10:30</td>
<td>Dehiscence and Fistula, microvascular compression - Dr. Zee</td>
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<tr>
<td>10:30-10:45</td>
<td>Break</td>
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<tr>
<td>10:45-11:15</td>
<td>Caloric, Rotary Chair &amp; VHIT Testing - Dr. Gleason</td>
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<tr>
<td>11:15-12:00</td>
<td>Test Interpretation - Recognizing Patterns - Dr. Gleason</td>
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<tr>
<td>12:00-1:00</td>
<td>Lunch (on your own)</td>
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<tr>
<td>1:00-1:30</td>
<td>Otolith Function - VEMP, SVV &amp; Posturography - Dr. Gleason</td>
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<tr>
<td>1:30-2:00</td>
<td>The Key Differential for Acute Vertigo - Dr. Zee</td>
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<tr>
<td>2:00-2:30</td>
<td>VHIT - Dr. Gleason</td>
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<tr>
<td>2:30-2:45</td>
<td>Break</td>
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<tr>
<td>2:45- 4:00</td>
<td>Hands-on - 3 Stations (Rotate after 20 min)</td>
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<td>VHIT Testing - Course Sponsor Staff</td>
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<td>Particle Repositioning - Dr. Zee</td>
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<td>Calorics - Dr. Gleason</td>
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<tr>
<td>4:00-5:30</td>
<td>Case Presentations &amp; What Else do I want to know - Drs. Zee &amp; Gleason</td>
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*Course Agenda Subject to Change*
David Zee, MD

Professor of Neurology
Johns Hopkins Hospital
Baltimore, MD

Dr. Zee is Board Certified by the American Board of Psychiatry and Neurology. Dr. Zee is a Professor of Neurology with secondary appointments in Otolaryngology -- Head and Neck Surgery, Ophthalmology, and Neuroscience. Dr. Zee specializes in vertigo, dizziness and imbalance (including ataxia) and in disorders of eye movements (including nystagmus and strabismus). Dr. Zee is also the director of the Vestibular/Eye Movement Testing Laboratory at Johns Hopkins.

A. Tucker Gleason, Ph.D.

Assistant Professor of Clinical Otolaryngology
Director, Vestibular & Balance Center
University of Virginia Health System, Charlottesville, VA

Dr. Gleason is an Audiologist certified by the American Speech-Language-Hearing Association. Her clinical practice is dizziness & balance disorders and diagnostic audiology. Her research interests are vestibular physiology, cochlear mechanics, and vestibular/visual interaction.

NOTE OF DISCLOSURE:

David Zee

Relevant financial relationships: Honorarium, accommodations & travel expenses provided by Micromedical Technologies, Inc.

Relevant non-financial relationships: None

A. Tucker Gleason

Relevant financial relationships: Accommodations & travel expenses provided by Micromedical Technologies, Inc.

Relevant non-financial relationships: None
CONTINUING EDUCATION:

Evaluation Assessment Tool: A Course Examination will be handed out at the end of the course material covered.

AAA Credits - Micromedical Technologies, Inc. is applying for 1.55 CEU Credits through the American Academy of Audiology (AAA) to offer AAA CEU's for this course. AAA approval of this continuing education activity does not imply endorsement of course content, specific products, or clinical procedures.

Tier 1 Credits - Micromedical Technologies, Inc. is applying for 1.55 CEU Credits (15.5 Credit Hours) through AAA for the American Board of Audiology recertification requirements.

American-Speech-Language-Hearing Association (ASHA):

This program is offered for 1.55 CEUs (Intermediate Level, Professional Area)
INTENDED AUDIENCE

- Audiologists
- Chiropractors
- Neurologists
- Otolaryngologists
- Physical Therapists
- VNG/ENG Technicians

This is an intermediate course for those interested in vestibular testing. Examples of test abnormalities will be discussed and cases used to illustrate how to apply the test results to achieve successful treatment strategies. This course assumes the attendee has a general working knowledge of the anatomy and physiology of the vestibular & balance systems as well as general familiarity and experience with ENG/VNG testing.

LEARNER OUTCOMES

At the completion of this course, the attendee will be able to:

- Describe the vestibule-ocular reflex and its relationship to bedside and laboratory vestibular testing.
- Compare and contrast presenting symptoms of peripheral vs central causes of dizziness and imbalance.
- Describe at least one stroke syndrome associated with vertigo.
- Name 2 or more common patterns of vestibular test results.

REGISTRATION FEES:

Registration fees include course tuition, program materials, refreshments breaks and Friday Lunch. Each participant will receive an email or fax confirming their registration. We expect high interest in this course so register early.

CANCELLATION & REFUND POLICY:

Refund requests will be honored when received in writing within 21 days (10/02/15) before the start of the course. All refunds are subject to a $50.00 processing fee. No refunds will be given 21 days or less before the start of the course. Micromedical Technologies, Inc. reserves the right to cancel or postpone the course due to unforeseen circumstances. In the event of cancellation or postponement, registration fees will be refunded but Micromedical Technologies, Inc. is not responsible for any related costs or charges.

FAX OR MAIL IN THE COURSE REGISTRATION FORM ON FOLLOWING PAGE TO SIGN UP TODAY!
REGISTRATION FORM

☐ Registration: $650.00 after 10/02/15
☐ Early Registration: $600.00 on or before 10/02/15

Name ____________________________________________________________

Specialty/Degree ________________________________________________

Company Name __________________________________________________

Address _________________________________________________________

City ___________________________ State ___ Zip ________________

Ph (____) ______________________ Fax (____) ________________________

Email __________________________________________________________

CEU Required: AAA ID # __________________ ASHA ID # ______________

☐ Check or Money Order, payable to Micromedical Technologies (US funds only)
(a $25 service charge will apply to checks returned for insufficient funds)

Charge My: ☐ Visa ☐ Master Card

Credit Card #

[ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ][ ]

Exp. Date: [____]/[____] 3-Digit Code: [____][____][____]

Name printed on card _____________________________________________

Billing Address of Card if different than above:

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Signature ________________________________________________________

I authorize Micromedical Technologies to charge the amount determined by Micromedical Technologies as registration fees to my credit card.

Please Mail this form to:
Micromedical Technologies
10 Kemp Drive
Chatham, IL 62629
OR call us directly: 800-334-4154
OR FAX to 217-483-4533 OR Register on-line at http://micromedical.com/education.html
CODE: PACCOURSE