# THE PROSPER MÉNIÈRE SOCIETY

Fall 2017

# EARLY-BIRD REGISTRATION ENDS DECEMBER 1!

1 Sth International Symposium and Workshops on

# INNER EAR MEDICINE AND SURGERY



Presented by

The Prosper Ménière Society

### March 17-24, 2018

Hotel Theresa in Zell im Zillertal, Austria

#### Deadline for Early-bird Registration December 1, 2017

This week-long continuing education program is intended for practicing otolaryngologists, otologists/ neurotologists, neuroradiologists, and audiologists. It will provide a comprehensive overview of inner ear diseases/disorders and their treatments. Basic and clinical researchers will present lectures and conduct plenary sessions on clinical ramifications of inner ear pathophysiology, state-of-the-art interventions, inner ear organ culture techniques, hair cell regeneration, inner ear fluid dynamics and their alterations in pathophysiologic disorders, and autoimmune inner ear disease.

#### LETTER FROM THE DIRECTOR



Greetings to all! This newsletter is highlighting our Gold Medal Award recipient, Dr. Joel Goebel of the Department of Otolaryngology-Head and Neck Surgery at Washington University School of Medicine in St. Louis, Missouri, USA. Dr. Goebel was nominated and chosen by the members of the Society and has graciously

accepted this honor, which will be bestowed during the Banquet Night (Wednesday evening) during the 18th International Symposium and Workshops on Inner Ear Medicine and Surgery in Zell. A toast and roast will be led by Dr. Allan Rubin, and we all look forward to that!

As our Gold Medal recipient, Dr. Goebel will be making several presentations at the meeting, and his abstracts can be found in this newsletter. I am certainly very excited to hear these presentations!

I hope that you will plan to attend the conference and participate in the presentations. Don't forget that early-bird registration ends the 1st of December! The call for abstracts has been placed on the Prosper Meniere Society website at www. prospermeniere.com. Additional information about meeting registration and hotel accommodations can also be found in this newsletter. Looking forward to seeing you in Zell!

Sincerely,

John Dalffer 2.

#### John Dornhoffer, MD, FACS

Executive Director, Prosper Meniere Society Professor and Chair, Department of Otolaryngology— Head and Neck Surgery University of Arkansas for Medical Sciences

# JOEL A GOEBEL, MD, FACS, FRCS



Dr. Goebel is Professor and Vice
Chairman of the Department of
Otolaryngology-Head and Neck
Surgery at Washington University
School of Medicine in St. Louis,
Missouri USA. He specializes in
Otology and Neurotology and
is the Director of the Dizziness
and Balance Center in the
department. He is the author
of over 130 peer-reviewed
and invited publications and
abstracts and the editor of the
text "Practical Management of the

Dizzy Patient 2<sup>nd</sup> Edition". His current research interests include clinical studies to refine the Gaze Stabilization and the video Head Impulse Test, development of a screening history tool for triage of dizzy patients, and the BalCap vibrotactile device for rehabilitation of chronic imbalance.

# Is Vestibular Neuritis the 'Bell's Palsy' of the Superior Vestibular Nerve?

Vestibular neuritis is an acute vestibular syndrome consisting of severe prolonged vertigo, nausea, and vomiting in the absence of hearing loss or signs of central neurologic dysfunction. Over the last 50 years, numerous studies have characterized this disease process as an acute viral ganglionitis that primarily affects the function of the pars superior (anterior SCC, lateral SCC, and utricle) with sparing of posterior canal and saccular function. Temporal bone studies have identified a significant narrowing at the fundus of the internal auditory canal affecting the superior but not the inferior vestibular nerves (1,2). In similar fashion, Bell's palsy is an acute neuronitis felt to be viral in etiology with swelling and entrapment of the nerve at its narrowest point in the labyrinthine segment next to the geniculate ganglion. In this presentation, an argument will be made for both vestibular neuritis and Bell's palsy as compressive neuropathies triggered by viral inflammation and treated with steroids with or without antiviral agents.

- 1. Goebel JA, O'Mara W, Gianoli G: Anatomic Considerations in Vestibular Neuritis. Otol Neurotol, 22:512-518, 2001. PMID: 11449110
- 2. Gianoli G, Goebel JA, Mowry S, Poomipannit P: Anatomic Differences in the Lateral Vestibular Canals and their Implications in Vestibular Neuritis. Otol Neurotol 26(3), pp. 489-494, 2005. PMID: 15891655

#### Head-mounted Vibrotactile Prosthesis for Rehabilitation of Chronic Imbalance

Maintenance of balance requires optimal use of vestibular, visual, and proprioceptive cues; proper central integration; and appropriate motor responses. In cases of bilateral vestibular failure (BVF), the brain is missing its internal reference frame for verticality and must rely mainly on visual and proprioceptive cues to maintain upright posture in a gravitational field. If additional orientationally correct cues are available (i.e., cane or walking stick). the brain uses these cues to improve stance and mobility. Over the last ten vears, we have studied the utility of head-mounted vibrotactile stimulation as an additional sensory cue in patients with severe BVF, and the results are encouraging (1,2,3). An ongoing trial with our BalCap vibrotactile prosthesis now includes patients with chronic postural instability from a variety of etiologies. This presentation summarizes our work to date and the vision for future applications.

- Goebel JA, Sinks BA, Pyle M, Brey R, Eggers S, Zapala D: Efficacy of the BrainPort® Balance Device in Patients with Severe Bilateral Vestibular Loss: A Multicenter Trial. Assoc Res Otolaryngol Abstr. No. 707, 2008.
- Goebel JA, Sinks BC, Parker BE Jr, Richardson NT, Olowin AB, Cholewiak RW. Effectiveness of Head-Mounted Vibrotactile Stimulation in Subjects with Bilateral Vestibular Loss: A Phase 1 Clinical Trial. Otol Neurotol. 2009 Feb; 30 (2):210-6. PMID: 19106768
- 3. Richardson NT, Clark BR, Parker BE, Sinks BC, Goebel JA. Assistive and rehabilitative effects of head-mounted vibrotactile prosthesis (BALCAP) for chronic postural instability. Feb 23, 2014, 37 Annual Midwinter Meeting, Association for Research in Otolaryngology Poster Presentation.

#### Managing the Dizzy Patient: Lessons Learned Over Thirty Years

The diagnosis and management of the dizzy patient can be a daunting task. Disorders of the labyrinth, eighth nerve, brainstem, cortex, visual system, proprioception, cardiovascular system, and cognition may all create dizziness and imbalance, and the treating physician needs to be aware of the possibilities and create a network of experts in many fields. Although complex, the practitioner must have an organized, repeatable, yet comprehensive system of history-taking, physical exam, and use of vestibular testing and imaging (1,2). In this presentation, we will take a journey over three decades of dizzy patient management and highlight some of the important insights along the way.

- Voelker CCJ, Goebel JA. Chapter 165: Clinical Evaluation of the Patient with Vertigo. Johnson JT, Rosen CA, Bailey's Head and Neck Surgery: Otolaryngology, 5e. Wolters Kluwer/Lippincott Williams and Wilkins, Philadelphia, pg. 2674-2700, 2013. ISBN 9781609136024.
- Roland LT, Kallogjeri D, Sinks BC, Rauch SD, Shepard NT, White JA, Goebel JA. Utility of an Abbreviated Dizziness Questionnaire to Differentiate Between Causes of Vertigo and Guide Appropriate Referral: A Multicenter Prospective Blinded Study. Otol Neurotol. 2015 Dec;36(10):1687-94. doi: 10.1097/ MAO.00000000000000884. PMID:26485598

## Meniere's Disease or Vestibular Migraine—or Both?

The diagnosis of Meniere's disease (MD) has classically been made on the clinical picture of recurrent vertigo, unilateral tinnitus, aural fullness, and fluctuating hearing loss (1). However, in recent years, vestibular migraine (VM) has been recognized by the International Classification of Vestibular Disorders and the International Headache Society as a migraine variant with many of the same features seen in MD (2,3). In some cases, patients have been misdiagnosed with MD whereas others have both disorders. In this presentation, we will explore the clinical features of both diseases and the rationale for considering MD and VM in patients with recurrent vertigo.

- Lopez-Escamez JA, Carey J, Chung WH, Goebel JA, Magnusson M, Mandalà M, Newman-Toker DE, Strupp M, Suzuki M, Trabalzini F, Bisdorff A. Diagnostic criteria for Meniere's disease. J Vestib Res. 2015;25(1):1-7. doi: 10.3233/ VES-150549. PMID: 25882471
- 2. Thomas Lempert,, Jes Olesen, Joseph Furman, John Waterston, Barry Seemungal,, John Carey, Alexander Bisdorff,, Maurizio Versino,, Stefan Evers, and David Newman-Toker. Vestibular Migraine: Diagnostic Criteria. Journal of Vestibular Research 22 (2012)167–172
- 3. BA Neff, JP Staab, SD Eggers, MI Carlson, WR Schmitt, KM Van Abel, DK Worthington, CW Beatty, CL Driscoll, NT Shepard. Auditory and vestibular symptoms and chronic subjective dizziness in patients with Meniere's disease, vestibular migraine, and Meniere's disease with concomitant vestibular migraine. Otol Neurotol 33 (2012), 1235-1241.

# 018ABSTRACTS

#### **PURPOSES/OBJECTIVES**

Upon completion of this course, participants should be able to:

- DESCRIBE the pathophysiology of inner ear disorders
- **IDENTIFY AND DISCUSS** appropriate medical and/or surgical treatment regimens for Ménière's disease and other diseases of the inner ear, including tinnitus
- ASSESS the indications and basic interpretations of diagnostic findings for vertiginous patients
- **REVIEW** implantable hearing devices and cochlear implants
- UNDERSTAND inner ear fluid dynamics and homeostasis in the normal and hydropic inner ear
- **DESCRIBE** the three-dimensional spatial organization of the membranous labyrinth
- **UTILIZE** the video Head Impulse Test (vHIT) of all semicircular canals properly and be able to identify artifacts and errors and interpret results
- REVIEW the physiological basis and clinical interpretation of the new tests of otolith function: oVEMPS and cVEMPS

#### **TOPICS**

#### BASIC SCIENCE

- Anatomy and physiology of the cochlear and vestibular system
- Inner ear pharmacology

#### **DIAGNOSIS OF VESTIBULAR DISORDERS**

- Imaging techniques
- Vestibular testing: Head Impulse Test
- VNG
- cVEMPS and oVEMPS

#### SURGICAL AND MEDICAL MANAGEMENT OF VESTIBULAR DISORDERS

- Migraine therapy
- Perfusions: dexamethasone and gentamicin
- Low-pulse generators
- Surgery

#### SURGICAL AND MEDICAL MANGEMENT OF HEARING LOSS

- Implantable hearing devices: BAI, middle ear, and cochlear implants
- Hearing aids

#### **COCHLEAR IMPLANTS**

- Surgical techniques: soft insertion, hearing preservation, and hybrids
- Unilateral vs bilateral
- Age of implantation

#### TINNITUS

■ What's new?



# March 17-24, 2018

#### REGISTRATION

☐ YES, please register me for the symposium.

Zip	Country	Telephone	
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100 □ Member Late Fee	\$500 □ Non-member Fee \$5	500 □ Non-member Late Fee \$60	0
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The Prosper Ménière Society

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#### **GROUND TRANSPORTATION**

We recommend flying into the Munich airport. Ground transportation is available from the Munich airport to Hotel Theresa via Four Seasons Travel at **www.airport-transfer.com**. When booking your shuttle, make sure to use "Zell am Ziller" as the final destination!

To become a member of the Prosper Ménière Society, please fill out a Membership Application at

www.prospermeniere.com

#### **HOTEL THERESA**

**The Hotel Theresa** is a very popular ski resort, so the **Prosper Ménière Society** has reserved a block of rooms at a special price. Make sure you ask for the **Prosper Ménière Society** room rate.

We encourage you to please book your room early so that you will not miss out on the great accommodations of this hotel. Please visit the hotel's website at www.theresa.at.

#### **Room Rates:**

- 175 Euros per person per night in double occupancy
- 205 Euros per night in single occupancy

Please contact the hotel directly and ask for the **Prosper Ménière** room rate. E-mail at info@theresa.at or contact by telephone (+43(0)5282 2286 0) or fax (+43(0) 5282 4235).

For ski areas, ski rates, and ski packages visit: www. zillertalski.at or www.zillertalarena.com

#### The room rate includes:

- Voluminous breakfast buffet
- Lunch buffet from midday to 4 p.m.
- A marvelous five-course dinner with menus to choose from
- Guided hiking, skiing, and tobogganing tours
- Exercise room
- Indoor and outdoor heated pool with Jacuzzi
- Sauna zone with multiple saunas, Tuscany court and large relaxing area
- And much, much more