# Vestibular Rehabilitation SIG

American Physical Therapy Association/Neurology Section

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# Message from the Chair

#### Anne K. Galgon, PT, PhD, NCS Vestibular Rehab SIG Chair

It is an honor to assume the role of Chair for this engaged special interest group and a privilege to work with so many hardworking individuals, who are committed to serving the interests of therapists who work with vestibular and balance disorders. Our past chair, Susan Whitney PT, PhD, has moved on to a position on the APTA Board of Directors. Over the past five years Sue Whitney has been the force behind this group. She contributed vision, energy and commitment to this position. Above all she had the ability to get people to participate and get things done. In this issue we will pay tribute to the accomplishments of the VRSIG under her tenure.

In addition, Lexi Miles has step up to take the Vice Chair position. This is an important role for the SIG as she facilitates the vestibular programming at CSM. Lexi has developed a CSM preview in this newsletter, which highlights the multiple and exciting vestibular related programs to be presented in Las Vegas in February 2014. Lexi previously led our welcome committee for new members.

Among the educational opportunities at CSM includes a new course entitled <u>Introduction to Vestibular Rehabilitation</u> is included, which will run as a regional course in Boston in November (2013) and a as a precon in Las Vegas (2014). The new course was created with the help (Continued on page 9)



#### Vestibular Rehabilitation SIG Officers:

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For more information go to: http://www.neuropt.org/go/special-interestgroups/vestibular-rehabilitation



### Las Vegas CSM 2014 Vestibular Rehab Sneak Peak

Bv Lexi Miles, MPT, VR SIG Vice Chair

In 2014, CSM will be held in Las Vegas. If you have never attended before, it is a great opportunity for networking with other clinicians and learning the latest treatment techniques. For those of you who routinely attend, we look forward to seeing you again! Here is a summary of the exciting courses and presentations that are being offered this year.

#### Vestibular SIG Sponsored programming: February 4: 3:00-5:00 pm

#### Evaluating and Treating Patients with Vestibular Syndromes in Acute Settings.

Colin Grove, PT, MS, NCS; Michele Campeau, MA, DPT; Nicole Van Heuklon, PT, DPT; Britta Smith, PT, NCS

This session examines how physical therapists manage patients who present with acute vestibular syndromes in settings such as the emergency department, acute care hospital, and inpatient rehabilitation. Three clinical experts will present case studies and discuss clinical reasoning and decisions used to examine and provide intervention to individuals from three diagnostic groups (BPPV, peripheral vestibular hypofunction, and stroke). Specific recommendations regarding modification of examination and interventions to accommodate a variety of challenges unique to acute care settings will be described.

#### February 5: 8:00 am-10:00 am

## Clinical Management of Atypical Vestibular Disorders: Beyond BPPV, Vestibular Neuritis, and Acoustic Neuroma.

Rachel Trommelen, DPT; Laura Morris, PT, DPT, NCS; Janene Holmberg, PT, DPT, NCS

This session will guide the clinician through the examination, differential diagnosis, evaluation, and management of patients with atypical vestibular disorders utilizing an unfolding case study format. The presenters will use audience polling technology to enhance participation and active learning. Some very interesting case studies have been chosen and will remain a mystery for now. We hope you will come to the presentation to see some truly interesting patient presentations!

Immediately following this program will be our SIG business meeting. All who attend will receive tickets to be entered into a drawing for one of a number of fabulous prizes including vestibular text books and video frenzel goggles (see the full list of giveaways in this newsletter edition). We hope to see you there!

#### February 6: 8:00 am - 10:00 am Application of the Vestibular EDGE Task Force Recommendations

The Neurology Section appointed the Vestibular EDGE (Evaluation Database to Guide Effectiveness) Task Force to make recommendations about outcome measures used to evaluate individuals with vestibular disorders. This session will review the process the Vestibular EDGE Task Force used to formulate the recommendations for test and measures. Cases will be presented to highlight how this information can be used in the clinic, academic, and research settings.



## Thank You for Your Service & Welcome to New Officers!

#### By Lisa Heusel-Gillig, PT DPT NCS, VR SIG Nominating Committee Member

We are very fortunate to have so many dedicated people in the Vestibular Rehabilitation (VR) SIG who volunteer serving on the VR Board. Board members spend time coordinating education, advancing knowledge, and expanding our reach to caregivers and patients alike. Each year, we take time to thank those who have shaped our past and welcome new members that are eager to shape our future.

The Vestibular Rehabilitation (VR) SIG would like to recognize Susan Whitney, PT PhD NCS ATC FAPTA for her past 5+ years of service as SIG Chair. We would like to congratulate Sue on her recent election to the board to APTA's Board of Directors. She has been instrumental helping develop the task force researching a board certified vestibular specialty, VR SIG advancement, and has been a strong advocate for the VR SIG membership.

The Vestibular Rehabilitation SIG would also like to thank Melissa Bloom PT DPT NCS, the outgoing Nominating Committee Chair for her dedication to our group. She will hopefully continue to be a valued and active member of the VR SIG.

The VR SIG is excited that Anne Galgon PT PhD has agreed to take Sue Whitney's place as the interim Chair. She is an Assistant Professor teaching neurologic PT in the Temple University Physical Therapy Department. She is working on research on management of BPPV specifically in the horizontal canal. She is an avid road biker.

The VR SIG is excited to welcome Lexie Miles as our new Vice Chair. She works full time in the Vestibular Rehab clinic at Froedtert Hospital and the Medical College of Wisconsin, which she started 5 years ago. Twice a month, she volunteers at a clinic that provides free services to people without insurance. She enjoys outdoor activities and sports like gardening, camping, running and cross-country skiing with her family and watching my step-daughter compete on the swim team. She loves to take her son to new places like the zoo, beach, and park and watch him explore.

We also wish to welcome Lisa Dransfield PT DPT, who has been elected for the Nominating Committee. She will join the team in recruiting the future leadership of the VR SIG. Lisa created a *Balance and Vestibular Center* at Associated Neurologists Physical Therapy in Danbury Connecticut, which she has been the Director for 5 years. She has been treating vestibular patients for over 20 years and her passion is to care for dizzy patients in a "full service" multidisciplinary center, in which the Physical/Vestibular Therapist is a primary care- giver. She has authored Vestibular Fact Sheets for patients and physicians for the Neurology Section of the APTA and recently gave a Webinar on "Stop the Spin" (a basic vestibular course) through Gawenda Seminars. She is also a Certified Spiritual Director and a Gestalt Pastoral Care Practitioner. She loves to run and is married to her high school sweetheart and has 3 children: ages 23, 18 and 15.

Thank you all for your willingness to serve!





## A Legacy That Will Be Hard to Beat

By Michelle L. Gutierrez, PT, DSc

It is an honor to be asked to write about Sue Whitney. If you have had the privilege to know Sue, you have known an amazing woman. She is like the Energizer Bunny. She is a phenomenal educator, researcher and clinician and over the last 5 years Sue has been the chair for the Vestibular Rehabilitation Special Interest Group (SIG). She has been a tremendous leader and perhaps one of Sue's major strengths is to find what the people around her excel at, she is able to develop that, and apply their strengths to their full potential. During Sue's term as the Chair, she had over 45 volunteers actively working with her for the betterment of the SIG. She has led the SIG to accomplish a tremendous amount utilizing these volunteers to their strengths.

When Sue was elected Chair of the SIG in 2008, her goals were to make inroads with evidence-based practice, to provide support for reimbursement issues and patient and therapist educational material that all of us must address on a daily basis, and attempt to highlight new findings that can affect our practice. She envisioned providing a list of materials, including biographic references by subject area that members would have access to with a click of the button on the SIG website. She not only met her goals but exceeded. The SIG developed the Abstract of the Week, which over 1000 members receive weekly updates of pertinent issues since Jan 2010. Thirty-three evidence -based Patient Fact Sheets which have been translated into Spanish, Portuguese, Arabic, Chinese and even a Navajo audio podcast, twenty-two Physician Fact Sheets, eighteen podcasts, the Dizzy Pub Fare (since March 2011), APTA fact sheet about vestibular dysfunction, and two regional Vestibular Courses have been developed in the past 5 years to address the evidencebased and new findings with our members' daily practice. International Liaisons to World Confederation of Physical Therapy and Barany Society have been developed, and the start of Vestibular EDGE project (critical literature review of outcome measures) and Vestibular Practice Guidelines were also thanks to Sue's tenacity.

Reimbursement issues have been an important issue our members deal with daily and Sue personally met with Medicare and Centers for Medicare Services (CMS) regarding the CRT CPT code. She found volunteers who are experts in this subject to help the membership with these matters. The SIG continues to update information regarding reimbursement, CPT codes and G codes for billing.

Sue has a focus on getting people interested and involved with vestibular rehabilitation. The SIG created a new member initiative (welcome packet, podcast, and website) and improved contact with the members through social media (Facebook and Twitter) along with a phenomenal update of the website regularly. Attendance at the SIG business meetings and programming increased due to the phenomenal programs and all of the donated objects that are raffled off during the meetings. The donations are thanks to Sue's professional contacts.

With all of the accomplishments during Sue's tenure she always made sure that the volunteers were appreciated and recognized. During the last 5 years the SIG developed the Service to the SIG and the Best Article of the year awards. Sue has laid the groundwork for continued growth of the SIG in an extraordinary way.

We wish Sue the best in her next endeavor as a member of the Board of Directors of the APTA. We know that she will excel due to her leadership ability and team building that she has demonstrated effectively with the Vestibular Rehabilitation SIG. Thank you Sue for your mentorship and friendship.







### Take Home Messages from the 2013 National APTA Conference in Salt Lake City, Utah

By Janene M. Holmberg, PT, DPT, NCS, VR SIG Secretary

This year's National Conference (which was unveiled to in future be called the NEXT CONFERENCE) held in Salt Lake City provided a 7 session series that focused on evidence-based identification and management of complex vestibular disorders called "Updates on Vestibular Disorders" and I was honored to join the expert presentations given by Susan Herdman PhD, Sue Whitney PhD, Michael Shubert PhD, and Anne Mucha DPT. Topics covered included updates on BPPV including excellent reviews of the latest randomized controlled studies of effectiveness especially for horizontal or lateral canal BPPV, comprehensive concussion management, discussion on WHO vertigo and Dizziness core sets form the ICF model and ID and treating a wide variety of central disorders from migraine to stroke. Presentations were weighted for heavy direct case study presentation and eye movement analysis with interactive "turning point" clicker technology utilized where audience participation was demanded.

Some of the biggest highlights for me included:

- Revisiting and new evidence for the diagnosis of Vestibular Paroxysmal (compression of 8<sup>th</sup> cranial nerve) which can account for recurring spontaneous attacks of vertigo lasting seconds in duration for which diagnostic testing confirms unilateral involvement (1)
- New diagnosis CANVAS (Cerebellar Ataxia, Neuropathy, Vestibular Areflexia Syndrome) (2)
- Evidence from the more newly released randomized control trials for lateral or horizontal canal BPPV both for cupulolithiasis and canalithasis (aren't you just dying to know if Appiani is better than log rolling?? (3,4)
- Survival and gait speed (5)
- Quantifying ankle function as important predictor of falls (6)
- Body weighted vests technology (Balanced Body Torso Weighting, BBTW) for improving mobility with severe ataxia (7)
- Increasing evidence for the use of Tai Chi with vestibular disorders (8) (9)
- Use of activity monitors to gradually progress/document activity tolerance and capacity in patients with migraine

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### **CALL FOR NEWSLETTER ARTICLE WRITERS or ARTICLE REVIEWERS!!!**

Do you want to get involved with your SIG?

Consider writing an article for the newsletter or reviewing articles for newsletters! You can write on a topic of your choosing or an appropriate topic could be assigned to you. If you are interested in getting involved with the newsletter, please contact Betsy Grace Georgelos, PT, MS, NCS at <u>Elizabeth.grace@uphs.upenn.edu</u> or Debbie Struiksma PT, NCS at <u>dstruiksma77@aol.com</u>.



### CSM 2014: Vestibular Rehab Sneak Peak

(Continued from page 2)

#### February 6: 11:00 am-1:00 pm

**Translating the Biomechanics of Benign Paroxysmal Positional Vertigo to the Differential Diagnosis and Treatment.** Richard Rabbitt, PhD; Janet Helminski, PT, PhD; Janene Holmberg, PT, DPT, NCS

Dr. Rabbitt is a basic scientist at the University of Utah in Salt Lake City and a leader inner ear Neuroscience research. He has modeled the mechanisms of BPPV and BPPV treatment and has agreed to bring to CSM his physical models of the mechanisms of BPPV.

Come learn from the experts why certain symptoms and nystagmus patterns are generated and what the "ideal" particle repositioning maneuvers are based on the biomechanics of the canals. Case studies using digital oculography recordings will demonstrate translation into clinical practice.

### Pre-conference Course Offerings:

#### 2-day Preconference Course: ABC's of Vestibular Rehabilitation. February 2-3, 2014

Led by a stellar and diverse group of vestibular rehab therapists from across the country, this course is a comprehensive offering designed to meet the needs of individuals wishing to enhance their understanding of vestibular rehabilitation in order to effectively manage a range of patients with vestibular disorders and to identify individuals requiring referral for specialty support. The course will include an in-depth review of the anatomy and physiology of the vestibular and oculomotor systems with application to the differential diagnosis of disorders of the vestibular system including BPPV, unilateral and bilateral vestibular disorders, central vestibular disorders and dizziness of a non-vestibular origin. Additionally, the evaluation and management of postural control deficits associated with vestibular dysfunction will be addressed. Laboratory sessions will be utilized to enhance the development of psychomotor skills in evaluation and management techniques associated with vestibular rehabilitation.

#### 1-day Precon Course: Concussion: Latest Advances in Evaluation, Prognosis, and Management of Athletes. February 3, 2014

The course is sponsored by the Sports Section and led by Anne Mucha, DPT, NCS. The faculty will provide updates on the latest in the medical management of the person post-concussion and provide examination and treatment tips for persons with mild-TBI. Cases and clicker technology will be utilized throughout the presentations including didactic information about cervical dizziness and exertional training.





### National Conference 2013 Re Cap: Take Home Messages Continued from page 5

Further information discussed in the case studies included:

- 1. Dr. Herdman's case study showing evidence of positional nystagmus secondary to fistula and the continued controversy of membranous versus boney fistula beyond the well documented Superior Canal Dehiscence Syndrome.
- Dr. Whitney argued and reminded us that if a patient reports/presents with a severe inability to walk it isn't just BPPV (not to be confused with just difficulty walking)
- Dr. Shubert discussed and introduced the audience to the new Vestibular Head Impulse or vHIT goggles that are and have just been released on the market and argued compellingly with case study the need to start including vertical head impulse testing (LARP's or Left Anterior Right Posterior and RALP's or Right Anterior Left Posterior) in our testing.
- 4. Dr. Mucha's presented an excellent case on convergence spasm and differentiating spasm from oculomotor deficit with monocular testing as well as the importance of careful screening with use of infrared goggles (fixation removed) and with gaze demands
- 5. We were reminded that it is a strong central finding to get a vertical nystagmus provoked to horizontal after head shake and that after head shaking nystagmus (paretic in nature) can be induced in cases of lateral canal BPPV
- Dr. Shubert argued for the importance of stopping in center before completing roll testing bilaterally to allow velocity storage to fully discharge so don't get confusing results on roll testing.
- 7. I loved Dr. Herdman's description of BPPV being caused by rocks becoming "unglued" and that

- (cont.) Subjective Visual Vertical can be off with in patients with BPPV immediately after CRT (Gall, 1999) as the brain needs to get use to and establish a new straight (Gall 1999).
- She noted anecdotally that in her practice premedication not often used, if anything is needed to control nausea then Phenergan was advocated for as it is short acting. She reported still no indication for the use of vibration during Canalith repositioning (Hain, 2000) unless can't elicit or having difficulty repositioning and again no evidence for post treatment precautions (Massoud, 1996)
- Janet Helminski's systematic review was highlighted as a good resource for evidence. (Helminski 2010, PTJ)
- We were reminded that Liberatory Maneuver (a.k.a. Semont Maneuver) is contraindicated with patients who have history of osteoporosis WITH A HISTORY of fracture
- 11. Dr Herdman argued that the theoretical concept of "canalith jam" (clumped or blocked canal) that has been proposed to explain the rare phenomenon where a violent persistent nystagmus/vertigo is elicited during Canalith Reposition is most likely NOT a reason for this rare phenomenon as you have to have endolymph motion to get symptoms.
- 12. I was able to argue, through 2 case studies, both for the existence of Anterior canal Benign Paroxysmal Positional Vertigo (AC BPPV) and potential confusing/overlapping presentations with central positional nystagmus. I also presented a case where a modification of forced prolonged positioning was used to treat a resistive case of anterior canal BPPV. The very existence of anterior canal BPPV has been questioned with strong controversy existing in the literature and to expert opinion.

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### **AAO-HNSF Adopts Position Statement on Vestibular Rehab**

Debbie Struiksma, PT, NCS, VR SIG Newsletter Co-Editor

At the 2013 Academy of Otolaryngology - Head and Neck Surgery Annual Meeting, Col. Kim Gottshall PT, PhD had the opportunity to meet with the Equilibrium Committee in her role as Physical Therapy Consultant. She serves as the Practice Liaison for the VRSIG and utilizes various opportunities to educate the medical community on Vestibular Rehabilitation. Her participation in the Equilibrium Committee allows her to represent the Physical Therapy profession as well as the VRSIG. Col. Gottshall reported that the meeting was very positive and further demonstrated the national acknowledgement for the use of Vestibular Rehabilitation as a valid intervention for individuals with dizziness and disequilibrium.

The American Academy of Otolaryngology practice and advocacy guidelines position statement regarding Vestibular Rehabilitation was adopted as follows:

"Vestibular Rehabilitation, or Balance Retraining Therapy, is a scientifically based and clinically valid therapeutic modality for the treatment of persistent dizziness and postural instability due to incomplete compensation after peripheral vestibular or central nervous system injury. Vestibular rehabilitation is a valid form of therapy for dizziness and imbalance resulting from the medical or surgical treatment of vertigo disorders and for acute vertigo or persistent imbalance that may result from a variety of peripheral vestibular disorders. Balance Retraining Therapy is also of significant benefit for fall prevention in the elderly patient who may suffer from multiple sensory and motor impairments or for those who have sensory disruption with moving visual information."

The VRSIG leadership encourages you to utilize the position statement in challenging reimbursement issues you face in your practice and educating the medical community on the validity of Vestibular Rehabilitation.



## **Call for Nominations**

Jennifer M. Nash, PT, DPT, NCS, Nominating Committee Chair

If you are looking for a way to get more involved, serving as VR SIG officer is a great way to do so. The positions of Chair and a member of the Nominating Committee are up for election this year. We currently have 1 possible candidate for the Nominating Committee position and one candidate for the Chair position. We are especially looking for at least one more candidate for each position and we warmly welcome all volunteers for either position.

Volunteering as VR SIG officer is an excellent opportunity to get involved in the APTA leadership and to grow as a clinician. It is an exciting time to get involved with the SIG as we have taken on several new projects recently. In the upcoming year we will be working on providing more exciting VR specific podcasts, starting a VR journal club, offering a basic vestibular rehabilitation course, newsletter expansion and cell phone apps. (continued on page 11)

## **Message from the Chair**

(Continued from page 1)

of many individuals, but I would like to thank Jen Nash and Janet Callahan who lead the course development. The Introduction Course and the <u>Advance Vestibular Course</u> is sponsored by the Neurology Section and information can be found at

#### http://www.neuropt.org/education/neurology-sectiondeveloped-courses,

As I take on this interim position until the elections in the spring, my goals is to keep the SIG moving and looking forward. One of the reasons I became active in the Vestibular Rehab SIG is because it was always getting things done. I went to my first SIG meeting at CSM in 1997 in Dallas Texas. There may have been about 15 or so people present sitting in a large circle. I remember Susan Herdman (the first VRSIG chair) discussing some SIG business, and then Tara Denham presenting ideas on how to improve oculomotor function in patients. Due to the initial vision of Susan Herdman to form this SIG and all of the following chairs' contributions, Britta Smith, Denise Gobert and Sue Whitney, the SIG has grown and increased its capability in serving our members. Not only has the SIG facilitated an increased number and scope of vestibular related presentations at CSM, we have developed multiple resources to benefit clinicians including: abstract or the week, the dizzy pub fare, pod casts, fact sheets, newsletters, payment information, all of which are all easily accessed on our webpage and are spreading out through our Facebook page

(https://www.facebook.com/pages/Vestibular-Rehab-SIG/171279872890036) and tweets (Vestibular Rehab SIG @VestibularRehab). In comparison to our early days the number of people attending our programs and using our resources on-line is staggering. I want to commend all the individuals again who keep these resources smoothly running during this transition in SIG leadership.

I also want to commend the individuals doing research in vestibular rehabilitation and the excellent clinicians who create great outcomes in patients with vestibular and balance disorders every day. This work does not go unnoticed by other health professionals. Recently, at the American Academy of Otolaryngology-Head and Neck Surgery Annual meeting, there was a reaffirmation of the

practice and advocacy guideline position statement on Vestibular Rehabilitation. Essentially, this group states that "Vestibular rehabilitation and balance therapy is a scientifically based and a clinically valid therapeutic modality for treatment of persistent dizziness and postural instability" across a variety of vestibular and balance disorders. Thanks to Kim Gottshall, our practice liaison, who worked on the position statement at this meeting. This endorsement is vital to our practice. It is also vital that we continue to support efforts to further describe our practice and disseminate the research on the efficacy of Vestibular Rehabilitation. The APTA and Neurology Section, with contributions of many of VRSIG members are working on several initiatives in this area including, the Vestibular EDGE task force lead by Matt Scherer and a task force to develop clinical practice guidelines in vestibular rehabilitation lead by Courtney Hall, Susan Herdman and Susan Whitney.

In reflecting on our past, on our current endeavors and on moving forward I recently reread our Mission. The mission states: "The Vestibular Rehabilitation Special Interest Group (VR SIG) is to provide a forum for APTA Neurology Section members who have a common interest in the promotion of health, wellness, optimal function, and quality of life for individuals with balance and vestibular disorders. The VRSIG is committed to facilitating advances in physical therapy for patient management, education, research and health care policy that reflect the needs of those we serve."

It is very clear that various individuals of the SIG are working hard to fulfill this mission, but the work is not done. To facilitate advances in our practice we need ideas and support from our members. Your ideas as well as willingness to volunteer are what keep this SIG moving forward. Your talents and contributions will be much appreciated. Please consider this an open invitation to participate in our forum. All are welcome to contact us at any time. I am looking forward to meeting and talking with many of you at our Business meeting at CSM.

Anne Galgon PT, PhD, NCS

## 2014 Vestibular Rehabilitation SIG Business Meeting Give-Aways

Don't forget about the Vestibular Rehabilitation SIG business meeting at CSM. We will again have many wonderful prizes to fortunate attendees through our **Raffle Giveaways.** Every attendee receives a raffle ticket upon entering the meeting and many fantastic items will be awarded. We would like to acknowledge and send a sincere *thank you* to the individuals and companies who generously contribute to the Raffle giveaways each year.

MicroMedical Technologies for the <u>Micromedical InView Goggles</u>. (<u>http://www.micromedical.com</u>)



- Visual Health Information for <u>the balance and vestibular kits and geriatric VHI kits</u>. (<u>http://www.vhikits.com</u>)
- **P** IOS Press for the one year **online subscription of Journal of Vestibular Research.**
- Plural Publishing, Inc. and Gary Jacobson for the book "<u>Balance Function Assessment and</u> <u>Management"</u>. (<u>http://www.pluralpublishing.com/publication\_bfaam.htm</u>)
- FA Davies for copies of the book "<u>Vestibular Rehabilitation, 3rd Edition</u>" by Susan Herdman







CSM 2013: Vestibular Rehab Sneak Peek (continued from page 6)

The Federal Physical Therapy Section is also sponsoring 2 presentations that may be of interest to you:

#### February 4: 11:00 am-1:00 pm

**Virtual Reality-Based Rehabilitation for Injured Service Members** Jose Dominguez, PT, OCS; Kim Gottshall PT, PhD; Alison Linber DPT, ATC; Christopher Rabago MPT, PhD.

Virtual reality (VR) systems combine hardware, software, and human-computer interface technologies to promote interaction with simulated 'virtual' environments. This presentation will highlight clinical cases and empirical results from VR-based rehabilitations programs at 4 military treatment and clinical research facilities. These facilities utilize VR systems ranging from low-cost, video gaming consoles to expensive, fully-immersive platforms like the Computer-Assisted Rehabilitation Environment (CAREN). VR-based rehabilitation tools are accessible to clinicians and can be customized to promote functional interactions with realistic, challenging environments while maintaining full safeties and controls.

#### February 4: 3:00-5:00 pm

**Post deployment Rehabilitation of Mild Traumatic Brain Injury: A Team Approach** Kim Gottshall, PT, PhD; Steve Pluth, PhD; Michael Podlenski, PTA; Kim Singer, OT

The team approach to the patient with post deployment mild traumatic brain injury will be presented by a vestibular physical therapist, occupational therapist, neuropsychologist, and physical therapist working with polytrauma. Novel treatments utilizing CAREN virtual reality training, iPad applications, driving simulators, and salsa dance will be presented. The key roles of each team member will be stressed and emphasis will be made on the need for these patients to be managed by a truly interdisciplinary team.

If you have any ideas for future programming, please contact Lexi Miles at <u>lexirmiles@gmail.com</u>. Thank you!



Call For nominations (continued from Page 8)

Meetings occur monthly in the form of one hour conference calls. During these calls we discuss information affecting vestibular rehabilitation and the therapists who perform it. Past topics have included: billing, Medicare rules, current laws and research, patient/physician fact sheets, the International Neurological Physical Therapy Association, CSM program planning, investigation of VR specialty certification, and new clinical practice guidelines. We also work diligently to make the VR SIG the most useful for all our members.

The SIG Chair is responsible for supervising the assignments of the SIG officers, leading monthly meetings, and submitting reports to the section. The Nominating Committee is responsible for preparing a slate of candidates each year and assisting with the election process. A full job description is listed on the Neurology Section website.

Both positions require that candidates have been Neurology Section members for at least two years prior to the election. Each positions serves as SIG leadership for a three year term. If you are interested in running, or if you know someone you would like to nominate, for one of these positions, contact any member of the nominating committee and we will send you an application. We look forward to hearing from you!

Jen Nash, Lisa Heusel-Gillig, Lisa Dransfield



### National Conference 2013 Re Cap: Take Home Messages (Continued from page 7)

- 12. (continued from page 7) I stressed that if anterior canal BPPV was suspected that it should be able to be elicited in both supine head hang and prone with side of involvement potentially further clarified with side lying "nose down" Brandt-Daroff position that has been advocated by some experts for treatment of AC cupulolithiasis. Patient's with suspect isolated AC BPPV should be carefully evaluated for any other accompanying central nervous system signs/symptoms. The bottom line is that there can be multiple false positives (presentations that look like AC BPPV) that must be ruled out first to rule in AC BPPV including opposite side Posterior Canal BPPV, uncompensated inferior neuritis, central positional nystagmus/vertigo, and just spontaneous reversal or neurologic discharge related to severe case of PC BPPV.
- 13. Lastly, I didn't get a chance to go to many other sessions but did catch Diane Nicols, PT, NCS and Susan Ryerson's, PT, DSc most excellent presentation called Anticipatory Postural Adjustments (APA's): Translating Research findings to the Clinic on improving postural control in patients with CNS pathology which I feel has a lot of generalizability for any of us who deal with balance disorders in general. Discussion included defining APA's which are postural reactions that allow proper scaling/responses to perturbations which happen 100-200ms before active motions that allow us to efficiently keep our limits of Stability (LOS) within our base of support (BOS). APA's differ from Compensatory Postural Reactions (CPR) as CPR's are triggered reactions following a disturbance the bottom line being that if you don't have good APA's then you'll have to have larger more cumbersome CPR's. What I felt was an important take home was that APA's develop as a response to ERROR or loss of balance and as soon as we have our patient's touch or hang on to something we decreased their use to develop/facilitate APA's. Bottom line is as I have so often felt, WE NEED TO MINIMIZE TOUCH IF YOU WANT better balance TO DEVELOP!!!! Also, as former NDT clinician, it is great to see new better defined evidence as to why the trunk needs to be attended to as core source of stabilizing!!! APA's are modified/facilitated by changes in direction, loads (heavier the better), and speed (more speed demands the more APA demands). We need to realize that if you unload (pool or harness) there will be smaller APA's, however this is MUCH BETTER THAN IN PARALLEL BARS where APA's disappear and in the pool where you are most likely training something else.
- 13. (cont.) APA's are dependent on our initial posture so increasing awareness of static alignment is needed. The cool news is that you can work for APA's in sitting and THEY do carry over to standing (NOT TASK SPECIFIC, can you believe, YEAH)!!!! Some activities recommended included more aggressive dynamic sitting activities that included increased weights/resistance, speed, and direction changes (better to work in sitting faster responses prior to moving to standing if too unstable), lots of weight bearing on paretic limbs while moving with opposite limb, use Body weight support (BWS) versus wrong or early use of an Assistive Device (AD), and utilizing tasks that develop momentum to throw off balance like standing in corners with fast, large arm rotations and/or kicking activities. We need to make sure we know what motivates patients as this influences motor responses and frequently remind patients that it is desirable that they feel unstable and loose their balance. Also advocated was drop/catch/lift/hitting tasks (including T ball work) and "kettle ball" swings and bowling ball releases that tap into inertial motions to program the body to hold after perturbations. Bottom line is that force platform data of the APA shows that these exercises are increasing the APA directly and physiologically.

#### **REFERENCES:**

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